INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
We make Indiana a cleaner, healthier place to live.

Mitchell E. Daniels, Jr.
Governor

Thomas W. Easterly
Commissioner

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

TO: Interested Parties / Applicant

DATE: July 3, 2007

RE: Steel Dynamics, Inc / 183-17160-00030

FROM: Nisha Sizemore
Chief, Permits Branch
Office of Air Quality

Notice of Decision: Approval – Effective Immediately

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

If you wish to challenge this decision, IC 4-21.5-3-7 and IC 13-15-6-1(b) or IC 13-15-6-1(a) require that you file a petition for administrative review. This petition may include a request for stay of effectiveness and must be submitted to the Office of Environmental Adjudication, 100 North Senate Avenue, Government Center North, Room 1049, Indianapolis, IN 46204.

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

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

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

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

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

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

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

Enclosures
FNTVOP.dot 03/23/06

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
We make Indiana a cleaner, healthier place to live.

Mitchell E. Daniels, Jr.
Governor

Thomas W. Easterly
Commissioner

100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251
(317) 232-8603
(800) 451-6027
www.IN.gov/idem

PART 70 OPERATING PERMIT
OFFICE OF AIR QUALITY

Steel Dynamics, Inc. Structural and Rail Division
2601 County Road 700 East
Columbia City, Indiana 46725

(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.

Except as otherwise stated in 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. Except as otherwise stated in this permit, 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.11, Emergency Provisions.

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

Operation Permit No.: T183-17160-00030	
Issued by: Nisha Sizemore Nisha Sizemore, Chief Permits Branch Office of Air Quality	Issuance Date: July 3, 2007 Expiration Date: July 3, 2011

TABLE OF CONTENTS

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

C.11 Compliance Monitoring [326 IAC 2-7-5(3)] [326 IAC 2-7-6(1)]
C.12 Monitoring Methods [326 IAC 3] [40 CFR 60] [40 CFR 63]

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

C.13 Emergency Reduction Plans [326 IAC 1-5-2] [326 IAC 1-5-3]
C.14 Risk Management Plan [326 IAC 2-7-5(12)] [40 CFR 68]
C.15 Response to Excursions and Exceedances [326 IAC 2-7-5] [326 IAC 2-7-6]
C.16 Actions Related to Noncompliance Demonstrated by a Stack Test [326 IAC 2-7-5] [326 IAC 2-7-6]

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

C.17 Emission Statement [326 IAC 2-7-5(3) (C) (iii)] [326 IAC 2-7-5(7)] [326 IAC 2-7-19(c)] [326 IAC 2-6]
C.18 General Record Keeping Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-6] [326 IAC 2-2] [326 IAC 2-3]
C.19 General Reporting Requirements [326 IAC 2-7-5(3) (C)] [326 IAC 2-1.1-11] [326 IAC 2-2] [326 IAC 2-3]

Stratospheric Ozone Protection

C.20 Compliance with 40 CFR 82 and 326 IAC 22-1

Ambient Air Monitoring

C.21 Post Construction Ambient Monitoring [326 IAC 2-2-4]

Source Wide Hazardous Air Pollutant (HAP) Limitations

C.22 Source Wide Hazardous Air Pollutant (HAP) Limitations [326 IAC 2-4.1-1]

D.1 **FACILITY OPERATION CONDITIONS - - EAFs, LMS and CCs** 30

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

D.1.1 EAFs Operation Limitation [326 IAC 2-1.1-5] [326 IAC 2-2]
D.1.2 Nitrogen Oxides (NO_x) - PSD Best Available Control Technology [326 IAC 2-2]
D.1.3 General Provisions Relating to NSPS [326 IAC 12-1] [40 CFR Part 60, Subpart A]
D.1.4 Particulate Matter (PM) [40 CFR Part 60, Subpart AAa]
D.1.5 Particulate Matter (PM/ PM_{10}) - PSD Best Available Control Technology [326 IAC 2-2]
D.1.6 Sulfur Dioxide (SO_2) - PSD Best Available Control Technology [326 IAC 2-2]
D.1.7 Carbon Monoxide (CO) - PSD Best Available Control Technology [326 IAC 2-2]
D.1.8 Carbon Monoxide (CO) [326 IAC 9-1]
D.1.9 Volatile Organic Compounds (VOC) - PSD BACT [326 IAC 2-2]
D.1.10 Lead - PSD Best Available Control Technology [326 IAC 2-2]
D.1.11 Mercury - PSD Best Available Control Technology [326 IAC 2-2]
D.1.12 Fluorides- PSD Best Available Control Technology [326 IAC 2-2]
D.1.13 Hazardous Air Pollutant (HAP) Limitations [326 IAC 2-1.1-4] [326 IAC 2-2] [326 IAC 2-4.1-1]
D.1.14 Visible Emission Limitations - PSD Best Available Control Technology [326 IAC 2-2]
D.1.15 Visible Emission Limitations [40 CFR Part 60, Subpart AAa]
D.1.16 Ladle Metallurgy Station (LMS) PSD Best Available Control Technology [326 IAC 2-2]
D.1.17 Continuous Casters (CCs) PSD Best Available Control Technology [326 IAC 2-2]
D.1.18 Preventive Maintenance Plan (PMP) [326 IAC 1-6-3] [326 IAC 2-7-5(13)]
D.1.19 Clean Unit [326 IAC 2-2.2]

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

D.1.20 EAFs Baghouse Operation [326 IAC 2-2] [326 IAC 2-7-6(6)]
D.1.21 Testing Requirements [326 IAC 2-1.1-11] [40 CFR 60.275a]

SECTION A SOURCE SUMMARY

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

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

The Permittee owns and operates a stationary steel beam mini mill.

Source Address:	2601 County Road 700 East, Columbia City, Indiana 46725
Mailing Address:	2601 County Road 700 East, Columbia City, Indiana 46725
General Source Phone Number:	(260) 625-8100
SIC Code:	3312
NAICS:	331111
County Location:	Whitley
Source Location Status	Attainment for all criteria pollutants
Source Status:	1 of 28 Listed Source Categories Major source, under PSD Program Major source, under Part 70 Program Minor Source, CAA Section 112 Clean Units

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

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

(a) Electric Arc Furnaces (EAFs) - - Stack 1
Two (2) single shell electric arc furnaces (EAFs), identified as EAF-1a and EAF-1b constructed in 2002. These furnaces operate at a nominal combined rate of 300 tons of molten steel per hour and utilize a direct-shell evacuation control (DEC) system ("fourth hole" duct), an overhead roof exhaust system consisting of a segmented canopy hood, scavenger duct, and cross-draft partitions.

These furnaces utilize the following emission control technologies:

(i) A DEC for carbon monoxide (CO) and volatile organic compounds (VOC) emissions;

(ii) Low NO_x/oxyfuel burners (combustion control) for nitrogen oxide (NO_x) emissions; and

(iii) A baghouse (identified as EAF Baghouse, ID# 1) for particulate (PM and PM_{10}) emissions.

The particulate and lead emissions escaping the DEC system are collected by the overhead roof exhaust system and exhaust through a stack identified as EAF Baghouse stack (Stack 1).

There are no roof monitors in the meltshop.

(b) Ladle Metallurgy Station (LMS) - - Stack 1
One (1) ladle metallurgy refining station (LMS) (ID# 3a) constructed in 2002 with a nominal rate of 300 tons of steel per hour.

The LMS particulate emissions are collected by the overhead roof exhaust system and exhaust through the common EAF Baghouse stack (Stack 1).

(c) Continuous Casters (CCs) - - Stack 1
The two (2) continuous casters are limited to a nominal combined casting capacity of 300 tons of steel per hour.

(1) One (1) continuous caster (CC) (ID# 3k), constructed in 2002, with a nominal casting rate of 200 tons of steel per hour.

(2) One (1) continuous caster, identified as ID# 42a, (to be constructed under SSM183-18426-00030), with a nominal casting rate of 200 tons of steel per hour.

The particulate emissions from the continuous casters are collected by the overhead roof exhaust system and exhaust through the common EAF baghouse stack (Stack 1).

(d) Preheaters - - Stack 1
(1) Four (4) natural gas-fired low NO_x ladle preheaters (ID#s 3b through 3e), constructed in 2002, each with a nominal heat input rate of 10 million British thermal units per hour (MMBtu/hr).

(2) One (1) natural gas-fired low NO_x tundish nozzle preheater (ID# 3g), constructed in 2002, with a nominal heat input rate of 10 MMBtu/hr.

(3) Two (2) natural gas-fired low NO_x tundish preheaters (ID#s 3h and 3i), constructed in 2002, each with a nominal heat input rate of 5 MMBtu/hr.

(4) One (1) natural gas-fired Tundish Nozzle Preheater, identified as (ID# 3m) (to be constructed under SSM183-18426-00030), nominally rated at 10 MMBtu/hr.

(5) One (1) natural gas-fired Tundish Preheater, identified as (ID# 3n), constructed in 2002, nominally rated at 10 MMBtu/hr.

Combustion emissions from the preheaters exhaust inside the building, and are collected by the overhead roof exhaust system and ducted to the EAFs Baghouse.

(e) Dryers - - Stack 1
(1) Two (2) natural gas-fired low NO_x ladle dryers (ID# 3f) constructed in 2002 and (ID# 3l), (to be constructed under SSM183-18426-00030) each with a nominal heat input rate of 10 MMBtu/hr.

(2) One (1) natural gas-fired low NO_x tundish dryer (ID# 3j), constructed in 2002, with a nominal heat input rate of 5 MMBtu/hr.

(3) One (1) natural gas-fired Tundish Dryer, identified as (ID# 3o) (to be constructed under SSM183-18426-00030), nominally rated at 5 MMBtu/hr.

Combustion emissions from the dryers exhaust inside the building, and are collected by the overhead roof exhaust system and ducted to the common EAFs Baghouse.

(f) Reheat Furnaces - - Stack 2 and Stack 41
(1) One (1) natural gas-fired low NO_x reheat furnace (RH) (ID# 2) constructed in 2002, with a nominal heat input rate of 260 MMBtu/hr.

Combustion and process emissions from the RH (ID# 2) exhaust through a stack identified as Stack 2.

(2) One (1) natural gas-fired low NOx reheat furnace, identified as ID# 41 (to be constructed under SSM183-18426-00030), with a nominal heat input rate of 260 MMBtu/hr.

Combustion and process emissions from this reheat furnace (ID# 41) exhaust through a stack, identified as Stack 41.

(g) Ladle Vacuum Degasser (LVD) and LVD Boiler - - Stack 40
One (1) ladle vacuum degasser (LVD) (ID# 40), constructed in 2003 with a nominal capacity of 300 tons per hour of steel and one (1) boiler constructed in 2003 to power the LVD. The LVD Boiler (ID# 40) has a nominal heat input capacity of 41.8 MMBtu/hr, and uses natural gas as the primary fuel, with propane as an emergency back up fuel.

Gases from the LVD are directed to the boiler for combustion in the boiler. Emissions from the boiler exhausts through a stack identified as Stack 40.

(h) One (1) EAF dust storage silo (ID# 4), constructed in 2002, equipped with a bin vent filter for particulate control.

(i) Eight (8) raw material storage silos (ID#s 5 through 12), and the associated raw material receiving station, constructed in 2002.

Each silo is equipped with a bin vent filter for particulate control.

(j) A slag handling and processing area (ID# 14) constructed in 2002, operated by an independent contractor, with a nominal rated capacity of 250 tons per hour.

This processing area consists of slag pot dumping, deskulling, slag cooling, digging of slag pits by a front-end loader, loading of grizzly feeder by a front-end loader, crushing, screening, conveyor transfer points, loading of materials into piles, storage piles, load out of materials from piles, and vehicle movement around piles.

This processing area utilizes the following equipment: one (1) grizzly/feeder, three (3) conveyors, one (1) single deck screen, one (1) primary crusher, one (1) by-pass conveyor, one (1) screen, and seven (7) stackers.

(k) Transporting on paved roadways and parking lots, unpaved roadways, and unpaved areas around slag storage piles and steel scrap piles constructed in 2002.

(l) One (1) cooling tower (ID# 13), constructed in 2002, with a nominal water flow of 15,000 gallons per minute.

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

This stationary source also includes the following insignificant activities, as follows:

1. Specifically regulated insignificant activities, as defined in 326 IAC 2-7-1(21):

(a) Grinding and machining operations controlled with fabric filters, scrubbers, mist collectors, wet collectors and electrostatic precipitators with a design grain loading of less than or equal to three one-hundredths (0.03) grains per dry standard cubic foot and a gas flow rate less than or equal to four thousand (4,000) actual cubic feet per minute, including the following: deburring, buffing, polishing, abrasive blasting, pneumatic conveying and woodworking operations. [326 IAC 6-3-2]

(b) Natural gas-fired combustion sources with heat input equal to or less than ten million (10,000,000) British thermal units per hour. [326 IAC 2-2]

(c) The following equipment related to manufacturing activities not resulting in the emission of HAPs: brazing, cutting torches, soldering, welding. [326 IAC 6-3-2]

(d) Paved and unpaved roads and parking lots with public access. [326 IAC 2-2]

2. Other Insignificant activities:

(a) Degreasing operations that do not exceed one hundred forty-five (145) gallons per twelve (12) months, except if subject to 326 IAC 20-6.

(b) Cleaners and solvents characterized as:
(1) having a vapor pressure equal to or less than two (2.0) kilo Pascals fifteen (15) millimeters of mercury or three-tenths (0.3) pound per square inch measured at thirty-eight (38) degrees Centigrade (one hundred (100) degrees Fahrenheit); or
(2) having a vapor pressure equal to or less than seven-tenths (0.7) kilo Pascal (five (5) millimeters of mercury or one-tenth (0.1) pound per square inch) measured at twenty (20) degrees Centigrade (sixty-eight (68) degrees Fahrenheit); the use of which, for all cleaners and solvents combined, does not exceed one hundred forty-five (145) gallons per twelve (12) months.

(c) A gasoline fuel transfer dispensing operation handling less than or equal to one thousand three hundred (1,300) gallons per day and filling storage tanks having a capacity equal to or less than ten thousand five hundred (10,500) gallons. Such storage tanks may be in a fixed location or on mobile equipment.

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

(e) Equipment used exclusively for the following:
(1) Packaging lubricants and greases.
(2) Filling drums, pails, or other packaging containers with lubricating oils, waxes and greases.

(f) Production related activities, including the application of: oils; greases, lubricants; and nonvolatile material; as temporary protective coatings.

(g) Closed loop heating and cooling systems.

(h) Solvent recycling systems with batch capacity less than or equal to one hundred (100) gallons.

(i) Water based activities, including activities associated with the treatment of wastewater streams with an oil and grease content less than or equal to one percent (1%) by volume.

(j) Quenching operations used with heat treating processes.

(k) Repair activities, including the replacement or repair of electrostatic precipitators, bags in baghouses, and filters in other air filtration equipment.

(l) Conveyors as follows:
(1) Covered conveyors for coal or coke conveying of less than or equal to three hundred sixty (360) tons per day.
(2) Covered conveyors for solid raw material, including limestone conveying of less than or equal to seven thousand two hundred (7,200) tons per day for sources other than mineral processing plants constructed after August 31, 1983.

(m) Blowdown for the following: Sight glass; Boiler; Cooling tower; Compressors; and Pumps.

A.4 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) except as provided by 326 IAC 2-7-3, 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, T183-17160-00030, is issued for a fixed term of five (5) years from the issuance date of this permit, as determined in accordance with IC 4-21.5-3-5(f) and IC 13-15-5-3. Subsequent revisions, modifications, or amendments of this permit do not affect the expiration date of this permit.

(b) If IDEM, OAQ, upon receiving a timely and complete renewal permit application, fails to issue or deny the permit renewal prior to the expiration date of this permit, this existing permit shall not expire and all terms and conditions shall continue in effect, including any permit shield provided in 326 IAC 2-7-15, until the renewal permit has been issued or denied.

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

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

(a) the condition is modified in a subsequent permit action pursuant to Title I of the Clean Air Act; or

(b) the emission unit to which the condition pertains permanently ceases operation.

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

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

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

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

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

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

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

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

(b) For information furnished by the Permittee to IDEM, OAQ, the Permittee may include a claim of confidentiality in accordance with 326 IAC 17.1. When furnishing copies of requested records directly to U. S. EPA, the Permittee may assert a claim of confidentiality in accordance with 40 CFR 2, Subpart B.

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

(a) Where specifically designated by this permit or required by an applicable requirement, any application form, report, or compliance certification submitted shall contain certification by a responsible official of truth, accuracy, and completeness. This certification shall state that,

based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.

(b) One (1) certification shall be included, using the attached Certification Form or another form meeting the requirements of 326 IAC 2-7-4(f), with each submittal requiring certification. One (1) certification may cover multiple forms in one (1) submittal.

(c) A responsible official is defined at 326 IAC 2-7-1(34).

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

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

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

and

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

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

(c) The annual compliance certification report shall include the following:

(1) The appropriate identification of each term or condition of this permit that is the basis of the certification;

(2) The compliance status;

(3) Whether compliance was continuous or intermittent;

(4) The methods used for determining the compliance status of the source, currently and over the reporting period consistent with 326 IAC 2-7-5(3); and

(5) Such other facts, as specified in Sections D of this permit, as IDEM, OAQ, may require to determine the compliance status of the source.

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

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

(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.

(b) A copy of the PMPs shall be submitted to IDEM, OAQ, upon request and within a reasonable time, and shall be subject to review and approval by IDEM, OAQ. IDEM, OAQ, may require the Permittee to revise its PMPs whenever lack of proper maintenance causes or is the primary contributor to an exceedance of any limitation on emissions or potential to emit. The PMPs do not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

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

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

(a) An emergency, as defined in 326 IAC 2-7-1(12), is not an affirmative defense for an action brought for noncompliance with a federal or state health-based emission limitation, except as otherwise provided in 326 IAC 2-7-16.

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

(a) Pursuant to 326 IAC 2-7-15, the Permittee has been granted a permit shield. The permit shield provides that compliance with the conditions of this permit shall be deemed compliance with any applicable requirements as of the date of permit issuance, provided that either the applicable requirements are included and specifically identified in this permit or the permit contains an explicit determination or concise summary of a determination that other specifically identified requirements are not applicable. The Indiana statutes from IC 13 and rules from 326 IAC, referenced in conditions in this permit, are those applicable at the time the permit was issued. The issuance or possession of this permit shall not alone constitute a defense against an alleged violation of any law, regulation or standard, except for the requirement to obtain a Part 70 permit under 326 IAC 2-7 or for applicable requirements for which a permit shield has been granted.

This permit shield does not extend to applicable requirements which are promulgated after the date of issuance of this permit unless this permit has been modified to reflect such new requirements.

(b) If, after issuance of this permit, it is determined that the permit is in nonconformance with an applicable requirement that applied to the source on the date of permit issuance, IDEM, OAQ, shall immediately take steps to reopen and revise this permit and issue a compliance order to the Permittee to ensure expeditious compliance with the applicable requirement until the permit is reissued. The permit shield shall continue in effect so long as the Permittee is in compliance with the compliance order.

(c) No permit shield shall apply to any permit term or condition that is determined after issuance of this permit to have been based on erroneous information supplied in the permit application. Erroneous information means information that the Permittee knew to be false, or in the exercise of reasonable care should have been known to be false, at the time the information was submitted.

(d) Nothing in 326 IAC 2-7-15 or in this permit shall alter or affect the following:

(1) The provisions of Section 303 of the Clean Air Act (emergency orders), including the authority of the U.S. EPA under Section 303 of the Clean Air Act;

(2) The liability of the Permittee for any violation of applicable requirements prior to or at the time of this permit's issuance;

(3) The applicable requirements of the acid rain program, consistent with Section 408(a) of the Clean Air Act; and

(4) The ability of U.S. EPA to obtain information from the Permittee under Section 114 of the Clean Air Act.

(e) This permit shield is not applicable to any change made under 326 IAC 2-7-20(b)(2) (Sections 502(b)(10) of the Clean Air Act changes) and 326 IAC 2-7-20(c)(2) (trading based on State Implementation Plan (SIP) provisions).

(f) This permit shield is not applicable to modifications eligible for group processing until after IDEM, OAQ, issued the modifications. [326 IAC 2-7-12(c)(7)]

(g) This permit shield is not applicable to minor Part 70 permit modifications until after IDEM, OAQ, has issued the modification. [326 IAC 2-7-12(b)(8)]

B.13 Prior Permits Superseded [326 IAC 2-1.1-9.5] [326 IAC 2-7-10.5]

(a) All terms and conditions of permits established prior to T183-17160-00030 and issued pursuant to permitting programs approved into the state implementation plan have been either:

(1) incorporated as originally stated,

(2) revised under 326 IAC 2-7-10.5, or

(3) deleted under 326 IAC 2-7-10.5.

(b) Provided that all terms and conditions are accurately reflected in this permit, all previous registrations and permits are superseded by this Part 70 operating permit.

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

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

B.15 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. Not withstanding this condition a deviation required to be reported pursuant to an applicable requirement 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 as required by 326 IAC 2-7-4(a)(2), 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 Aresponsible 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)(D)(i) and 326 IAC 2-7-12(c)(1), minor Part 70 permit modification procedures may be used for Part 70 modifications involving the use of economic incentives, marketable Part 70 permits, emissions trading, and other similar approaches to the extent that such minor Part 70 permit modification procedures are explicitly provided for in the applicable State Implementation Plan (SIP) or in applicable requirements promulgated or approved by the U.S. EPA.

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

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

(1) The changes are not modifications under any provision of Title I of the Clean Air Act;

(2) Any preconstruction approval required by 326 IAC 2-7-10.5 has been obtained;

(3) The changes do not result in emissions which exceed the limitations provided in this permit (whether expressed herein as a rate of emissions or in terms of total emissions);

(4) The Permittee notifies the:

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

and

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

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

(5) The Permittee maintains records on-site, on a rolling five (5) year basis, which document all such changes and emission trades that are subject to 326 IAC 2-7-20(b), (c), or (e). The Permittee shall make such records available, upon reasonable request, for public review.

Such records shall consist of all information required to be submitted to IDEM, OAQ, in the notices specified in 326 IAC 2-7-20(b)(1), (c)(1), and (e)(2).

(b) The Permittee may make Section 502(b)(10) of the Clean Air Act changes (this term is defined at 326 IAC 2-7-1(36)) without a permit revision, subject to the constraint of 326 IAC 2-7-20(a). For each such Section 502(b)(10) of the Clean Air Act change, the required written notification shall include the following:

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

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

(3) Any change in emissions; and

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

The notification which shall be submitted is not considered an application form, report or compliance certification. Therefore, the notification by the Permittee does not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

(c) Emission Trades [326 IAC 2-7-20(c)]
The Permittee may trade emissions increases and decreases at the source, where the applicable SIP provides for such emission trades without requiring a permit revision, subject to the constraints of Section (a) of this condition and those in 326 IAC 2-7-20(c).

(d) Alternative Operating Scenarios [326 IAC 2-7-20(d)]
The Permittee may make changes at the source within the range of alternative operating scenarios that are described in the terms and conditions of this permit in accordance with 326 IAC 2-7-5(9). No prior notification of IDEM, OAQ, or U.S. EPA is required.

(e) Backup fuel switches specifically addressed in, and limited under, Section D of this permit shall not be considered alternative operating scenarios. Therefore, the notification requirements of part (a) of this condition do not apply.

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

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

(b) Any modification at an existing major source is governed by the requirements of 326 IAC 2-2-2 and/or 326 IAC 2-3-2.

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

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

(a) Enter upon the Permittee's premises where a Part 70 source is located, or emissions related activity is conducted, or where records must be kept under the conditions of this permit;

(b) As authorized by the Clean Air Act, IC 13-14-2-2, IC 13-17-3-2, and IC 13-30-3-1, have access to and copy any records that must be kept under the conditions of this permit;

(c) As authorized by the Clean Air Act, IC 13-14-2-2, IC 13-17-3-2, and IC 13-30-3-1, inspect any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit;

(d) As authorized by the Clean Air Act, IC 13-14-2-2, IC 13-17-3-2, and IC 13-30-3-1, sample or monitor substances or parameters for the purpose of assuring compliance with this permit or applicable requirements; and

(e) As authorized by the Clean Air Act, IC 13-14-2-2, IC 13-17-3-2, and IC 13-30-3-1, utilize any photographic, recording, testing, monitoring, or other equipment for the purpose of assuring compliance with this permit or applicable requirements.

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

(a) The Permittee must comply with the requirements of 326 IAC 2-7-11 whenever the Permittee seeks to change the ownership or operational control of the source and no other change in the permit is necessary.

(b) Any application requesting a permit revision that recognizes 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 2-7-5(3)][326 IAC 2-7-6][62 FR 8314] [326 IAC 1-1-6]

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

SECTION C SOURCE OPERATION CONDITIONS

Entire Source

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

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

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

C.2 Opacity [326 IAC 5-1]

Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-1 and 326 IAC 5-1-3 (Temporary Alternative Opacity Limitations), opacity shall meet the following, unless otherwise stated in this permit:

(a) Opacity shall not exceed an average of forty percent (40%) in any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.

(b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.

C.3 Open Burning [326 IAC 4-1] [IC 13-17-9]

The Permittee shall not open burn any material except as provided in 326 IAC 4-1-3, 326 IAC 4-1-4 or 326 IAC 4-1-6. The previous sentence notwithstanding, the Permittee may open burn in accordance with an open burning approval issued by the Commissioner under 326 IAC 4-1-4.1. 326 IAC 4-1-3 (a)(2)(A) and (B) are not federally enforceable.

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

The Permittee shall not operate an incinerator or incinerate any waste or refuse except as provided in 326 IAC 4-2 and 326 IAC 9-1-2.

C.5 Fugitive Dust Emissions [326 IAC 6-4]

The Permittee shall not allow fugitive dust to escape beyond the property line or boundaries of the property, right-of-way, or easement on which the source is located, in a manner that would violate 326 IAC 6-4 (Fugitive Dust Emissions). 326 IAC 6-4-2(4) is not federally enforceable.

C.6 Fugitive Particulate Matter Emission Limitations [326 IAC 6-5] [326 IAC 2-2]

Pursuant to 326 IAC 6-5 (Fugitive Particulate Matter Emission Limitations), and 326 IAC 2-2, fugitive particulate matter emissions shall be controlled according to the plan submitted to IDEM and maintained on site.

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

The Permittee shall comply with the applicable provisions of 326 IAC 1-7 (Stack Height Provisions), for all exhaust stacks through which a potential (before controls) of twenty-five (25) tons per year or more of particulate matter or sulfur dioxide is emitted.

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

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

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

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

(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 applicable procedures approved by IDEM, OAQ.

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

Indiana Department of Environmental Management
Compliance Data Section, Office of Air Quality
100 North Senate Avenue
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 5) days prior to the end of the initial forty-five (45) day period.

Compliance Requirements [326 IAC 2-1.1-11]

C.10 Compliance Requirements [326 IAC 2-1.1-11]

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 applicable methods approved by the commissioner or the U. S. EPA.

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

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

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

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

C.13 Emergency Reduction Plans [326 IAC 1-5-2] [326 IAC 1-5-3]

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

(a) The Permittee prepared and submitted written emergency reduction plans (ERPs) consistent with safe operating procedures on May 11, 2003.

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

C.14 Risk Management Plan [326 IAC 2-7-5(12)] [40 CFR 68]

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

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

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

(a) When the results of a stack test performed in conformance with Section C.9 - 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, no later than thirty (30) days after receipt of the test results. The Permittee shall take appropriate action to minimize excess emissions from the affected facility while the response actions are being implemented.

(b) A retest to demonstrate compliance shall be performed no later than one hundred twenty (120) days after 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.17 Emission Statement [326 IAC 2-7-5(3)(C)(iii)][326 IAC 2-7-5(7)][326 IAC 2-7-19(c)][326 IAC 2-6]

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

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

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

The statement must be submitted to:

Indiana Department of Environmental Management
Technical Support and Modeling Section, Office of Air Quality
100 North Senate Avenue,
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.18 General Record Keeping Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-6] [326 IAC 2-2] [326 IAC 2-3]

(a) Records of all required monitoring data, reports and support information required by this permit shall be retained for a period of at least five (5) years from the date of monitoring sample, measurement, report, or application. These records shall be physically present or electronically accessible at the source location for a minimum of three (3) years. The records may be stored elsewhere for the remaining two (2) years as long as they are available upon request. If the Commissioner makes a request for records to the Permittee, the Permittee shall furnish the records to the Commissioner within a reasonable time.

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

(c) If there is a "project" (as defined in 326 IAC 2-2-1 (qq) and 326 IAC 2-3-1 (ll)) at an existing emissions unit, or at a source with Plantwide Applicability Limitation (PAL), that is not part of a "major modification" (as defined in 326 IAC 2-2-1 (ee) and 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 326 IAC 2-3-1 (mm), the Permittee shall comply with following:

(1) Before beginning actual construction of the "project" (as defined in 326 IAC 2-2-1 (qq) and/or 326 IAC 2-3-1 (ll) at an existing emissions unit, document and maintain the following records:
  (A) A description of the project.
  (B) Identification of any emissions unit whose emissions of a regulated new source review pollutant could be affected by the project.
  (C) A description of the applicability test used to determine that the project is not a major modification for any regulated NSR pollutant, including:
    (i) Baseline actual emissions;
    (ii) Projected actual emissions;
    (iii) Amount of emissions excluded under section 326 IAC 2-2-1(rr)(2)(A)(iii) and/or 326 IAC 2-3-1(mm)(2)(A)(iii) and
    (iv) An explanation for why the amount was excluded, and any netting calculations, if applicable.

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

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

C.19 General Reporting Requirements [326 IAC 2-7-5(3)(C)] [326 IAC 2-1.1-11] [326 IAC 2-2] [326 IAC 2-3]

(a) The Permittee shall submit the attached Quarterly Deviation and Compliance Monitoring Report or its equivalent. Any deviation from permit requirements, the date(s) of each deviation, the cause of the deviation, and the response steps taken must be reported. This report shall be submitted no later than thirty (30) days after the end of the reporting period. The Quarterly Deviation and Compliance Monitoring Report shall include the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

(b) The report required in (a) of this condition and reports required by conditions in Section D of this permit shall be submitted to:

Indiana Department of Environmental Management
Compliance Data Section, Office of Air Quality
100 North Senate Avenue,
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 no later than thirty (30) days after 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) Reporting periods are based on calendar years, unless otherwise specified in this permit. For the purpose of this permit "calendar year" means the twelve (12) month period from January 1 to December 31 inclusive.

(f) If the Permittee is required to comply with the recordkeeping provisions of (c) in Section C.18- General Record Keeping Requirements for any "project" (as defined in 326 IAC 2-2-1 (qq) and/or 326 IAC 2-3-1 (ll) at an existing emissions unit, and the project meets the following criteria, then the Permittee shall submit a report to IDEM, OAQ:

(1) The annual emissions, in tons per year, from the project identified in (c)(1) in Section C.18- General Record Keeping Requirements exceed the baseline actual emissions, as documented and maintained under Section C.18- 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.18- General Record Keeping Requirements (c)(1)(C)(ii).

(g) The report for a project at an existing emissions unit shall be submitted within sixty (60) days after the end of the year and contain the following:

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

(2) The annual emissions calculated in accordance with (c)(2) and (3) in Section C.18 - General Record Keeping Requirements.

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

(4) Any other information that the Permittee wishes to include in this report,

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.18 - General Record Keeping Requirements available for

review upon a request for inspection by IDEM, OAQ. The general public may request this information from the IDEM, OAQ under 326 IAC 17.1.

Stratospheric Ozone Protection

C.20 Compliance with 40 CFR 82 and 326 IAC 22-1

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

(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.

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

Post Construction Ambient Monitoring

C.21 Post Construction Ambient Monitoring [326 IAC 2-2-4]

Pursuant to PSD Significant Source Modification SSM183-18426-00030, issued November 18, 2005 and 326 IAC 2-2-4, the two (2) ambient monitoring sites established at locations approved by IDEM, OAQ under PSD Permits CP183-10097-00030 and PSD Significant Source Modification SSM183-12692-00030 shall continue to operate for an additional 36 months from the initial start of the proposed modification:

(a) A downwind monitoring site near the maximum impact area (Annual Maximum Impact Area: UTM East 639300 and UTM North 4553700) shall measure PM_{10}, ozone, and the following meteorological parameters:
- - wind speed,
- - wind direction, and
- - outdoor temperature.

After the 36-month period, the Permittee may petition IDEM, OAQ, to cease the monitoring activities and the department shall grant such petition no later than 45 days after receipt of the petition if it is established that the PM_{10} and ozone levels continue to comply with the NAAQS and that the plant has minimal impact on air quality.

(b) A monitoring site upwind from the maximum impact area shall measure PM_{10}.

After the 36-month period, the Permittee may petition IDEM, OAQ, to cease the monitoring activities and the department shall grant such petition no later than 45 days after receipt of the petition if it is established that the PM_{10} levels continue to comply with the NAAQS and that the plant has minimal impact on air quality.

(c) The monitors shall meet the operating and maintenance criteria contained in the Indiana Department of Environmental Management, Office of Air Quality, Quality Assurance Manual. Additionally, a monitoring QA plan must be submitted and approved by IDEM, OAQ, if there are any changes to the QA plan.

(d) Ambient data along with precision and accuracy data from the monitors shall be submitted on a quarterly basis in a format approved by the Commissioner no later than sixty (60) days after the end of the quarter being reported.

Source Wide Hazardous Air Pollutant (HAP) Limitations

C.22 Source Wide Hazardous Air Pollutant (HAP) Limitations [326 IAC 2-4.1-1]

(a) Any single HAP emissions from the entire source shall be less than ten (10) tons per year.

(b) Any combination of HAPs emissions from the entire source shall be less than twenty-five (25) tons per year.

Therefore, the requirements of 326 IAC 2-4.1-1 (New Source Toxics Control) do not apply.

SECTION D.1 FACILITY OPERATION CONDITIONS

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

(a) Electric Arc Furnaces (EAFs) - - Stack 1
Two (2) single shell electric arc furnaces (EAFs), identified as EAF-1a and EAF-1b. These furnaces operate at a nominal combined rate of 300 tons of molten steel per hour and utilize a direct-shell evacuation control (DEC) system ("fourth hole" duct), an overhead roof exhaust system consisting of a segmented canopy hood, scavenger duct, and cross-draft partitions.

These furnaces utilize the following emission control technologies:

(i) A DEC for carbon monoxide (CO) and volatile organic compounds (VOC) emissions;

(ii) Low NO_x/oxyfuel burners (combustion control) for nitrogen oxide (NO_x) emissions; and

(iii) A baghouse (identified as EAF Baghouse, ID# 1) for particulate (PM and PM_{10}) emissions.

The particulate and lead emissions escaping the DEC system are collected by the overhead roof exhaust system and exhaust through a stack identified as EAF Baghouse stack (Stack 1). There are no roof monitors in the meltshop.

(b) Ladle Metallurgy Station (LMS) - - Stack 1
One (1) ladle metallurgy refining station (LMS) (ID# 3a) with a nominal rate of 300 tons of steel per hour.

The LMS particulate emissions are collected by the overhead roof exhaust system and exhaust through the common EAF Baghouse stack (Stack 1).

(c) Continuous Casters (CCs) - - Stack 1
The two (2) continuous casters are limited to a nominal combined casting capacity of 300 tons of steel per hour.

(1) One (1) continuous caster (CC) (ID# 3k) with a nominal casting rate of 200 tons of steel per hour.

(2) One (1) continuous caster, identified as (ID# 42a), with a nominal casting rate of 200 tons of steel per hour.

The particulate emissions from the continuous casters are collected by the overhead roof exhaust system and exhaust through the common electric arc furnace baghouse stack (Stack 1).

(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 EAFs Operation Limitation - PSD Best Available Control Technology [326 IAC 2-1.1-5] [326 IAC 2-2]

Pursuant to PSD Significant Source Modification SSM183-18426-00030 issued November 18, 2005 and 326 IAC 2-1.1-5 (Air Quality Requirements) and 326 IAC 2-2 Prevention of Significant Deterioration (PSD), the Permittee shall operate the electric arc furnaces (EAFs) at a maximum combined rate of:

(a) 300 tons of molten steel per hour, and

(b) 2,628,000 tons of molten steel per 12-consecutive month period, with compliance determined at the end of each month.

D.1.2 Nitrogen Oxides (NO_x) - PSD Best Available Control Technology [326 IAC 2-2]

(a) Pursuant to PSD Permits CP183-10097-00030, issued July 7, 1999, amended by Significant Source Modification SSM183-12692-00030, issued January 10, 2001 and 326 IAC 2-2 (PSD - Control Technology Review; Requirements), the EAF auxiliary burners shall be equipped with Low NO_x/oxyfuel burners.

(b) Pursuant to PSD Significant Source Modification SSM183-18426-00030, issued November 18, 2005 and 326 IAC 2-2 (PSD - Control Technology Review; Requirements), the NO_x emissions from the EAFs Baghouse stack shall not exceed 0.35 pounds per ton of steel produced and 105 pounds of NO_x per hour, based on a three (3) hour block average.

D.1.3 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 EAFs except when otherwise specified in 40 CFR Part 60, Subpart AAa.

D.1.4 Particulate Matter (PM) [40 CFR Part 60, Subpart AAa]

Pursuant to 40 CFR Part 60, Subpart AAa (Standards of Performance for Steel Plants: Electric Arc Furnaces and Argon-Oxygen Decarburization Vessels Constructed After August 7, 1983) and PSD Permits CP183-10097-00030, issued July 7, 1999, amended by PSD Significant Source Modification SSM183-12692-00030, issued January 10, 2001, the filterable PM emissions from the EAFs Baghouse shall not exceed 0.0052 grains per dry standard cubic feet.

D.1.5 Particulate Matter (PM/PM_{10}) - PSD Best Available Control Technology [326 IAC 2-2]

Pursuant to PSD Significant Source Modification SSM183-18426-00030, issued November 18, 2005 and 326 IAC 2-2 (PSD - Control Technology Review; Requirements):

(a) Filterable PM/PM_{10} emissions from the EAFs shall be controlled by a baghouse.

(b) Filterable PM/PM_{10} emissions from the EAFs Baghouse shall not exceed 0.0018 grains per dry standard cubic feet and 14.4 pounds of filterable particulate per hour based on a 3-hour block average.

(c) The total PM/PM_{10} (filterable and condensable PM_{10}) emissions from the EAFs Baghouse shall not exceed 0.0052 grains per dry standard cubic feet and 41.6 pounds of filterable and condensable particulate per hour based on a 3-hour block average.

(d) There shall be no roof monitors in the melt shop.

The meltshop shall be located in a total enclosure subject to general ventilation that maintains the meltshop at a lower than ambient pressure to ensure in-draft through any doorway opening.

Ventilation air from the total enclosure shall be conveyed to the meltshop EAFs Baghouse.

(e) The cross-draft partitions surrounding the EAFs shall promote good capture efficiency for the meltshop EAFs Baghouse.

(f) A segmented canopy hood constructed above the EAFs and divided into separate sections with dampers shall be operated in a manner that will maximize the draft directly above the point of greatest emissions.

D.1.6 Sulfur Dioxide (SO_2) - PSD Best Available Control Technology [326 IAC 2-2]

(a) Pursuant to PSD Significant Source Modification SSM183-18426-00030 issued November 18, 2005 and 326 IAC 2-2 Prevention of Significant Deterioration (PSD), SO_2 emissions

from the EAFs shall be controlled in accordance with the Scrap Management Program (SMP) (Section E.2)

(b) Pursuant to PSD Significant Source Modification SSM183-18426-00030 issued November 18, 2005 and 326 IAC 2-2 Prevention of Significant Deterioration (PSD), the SO_2 emissions from the EAFs Baghouse stack shall not exceed 0.25 pounds per ton of steel and 75 pounds of SO_2 per hour based on a three (3) hour block average.

(c) Pursuant to PSD Permits CP183-10097-00030, issued July 7, 1999, amended by PSD Significant Source Modification SSM183-12692-00030, issued January 10, 2001 and amended by Permit Amendment 183-18658-00030, issued May 5, 2004 and 326 IAC 2-1.1-11:

(1) The sulfur content of the direct reduced iron (DRI), charge carbon, and injection carbon added into the EAFs shall not exceed the following:

Raw Material	Sulfur Content (%)
direct reduced iron (DRI)	0.20
charge carbon	0.6
injection carbon	2.5

(2) The Permittee may utilize the following alternative mixture of sulfur content of the charge carbon and injection carbon added into the EAFs:

Raw Material	Sulfur Content (%)
charge carbon	2.0
injection carbon	4.0

The Permittee shall not use DRI when charging this alternative mixture to the EAFs.

(3) The Permittee shall obtain vendor certifications and/or analyses to verify that shipments of DRI, charge carbon, and injection carbon do not exceed the thresholds stated in Conditions D.1.6(c)(1) and D.1.6(c)(2).

D.1.7 Carbon Monoxide (CO) - PSD Best Available Control Technology [326 IAC 2-2]

(a) Pursuant to PSD Permits CP183-10097-00030, issued July 7, 1999, amended by PSD Significant Source Modification SSM183-12692-00030, issued January 10, 2001 and 326 IAC 2-2 (PSD - Control Technology Review; Requirements), the CO emissions from the EAF shall be controlled by thermal oxidation and maintaining a negative pressure at the direct-shell evacuation control (DEC) system air gap.

(b) Pursuant to PSD Significant Source Modification SSM183-18426-00030 issued November 18, 2005 and 326 IAC 2-2 Prevention of Significant Deterioration (PSD), the CO emissions from the EAFs Baghouse stack shall not exceed 2.0 pounds per ton of steel produced and 600 pounds of CO per hour, based on a three (3) hour block average.

D.1.8 Carbon Monoxide (CO) [326 IAC 9-1]

Pursuant to PSD Permits CP183-10097-00030, issued July 7, 1999, amended by PSD Significant Source Modification SSM183-12692-00030, issued January 10, 2001 and 326 IAC 9-1 (Carbon Monoxide Emission Limits), the Permittee shall not allow the discharge of CO from the EAF unless the waste gas stream is controlled by a direct-flame afterburner, boiler, or other approved method. The Permittee has elected thermal oxidation at the direct-shell evacuation control (DEC) system air gap.

D.1.9 Volatile Organic Compounds (VOC) - PSD Best Available Control Technology [326 IAC 2-2]

(a) Pursuant to PSD Permits CP183-10097-00030, issued July 7, 1999, amended by PSD Significant Source Modification SSM183-12692-00030, issued January 10, 2001 and 326 IAC 2-2 (PSD - Control Technology Review; Requirements), the VOC emissions from the EAFs shall be minimized in accordance with the Scrap Management Program (SMP) (Section E.2) and shall be controlled by thermal oxidation and maintaining a negative pressure at the direct shell evacuation control (DEC) system air gap.

(b) Pursuant to PSD Significant Source Modification SSM183-18426-00030 issued November 18, 2005 and 326 IAC 2-2 Prevention of Significant Deterioration (PSD), the VOC emissions from the EAFs Baghouse shall not exceed 0.09 pounds per ton of steel and 27 pounds of VOC per hour, based on a three (3) hour block average.

(c) These VOC limits are as defined in 326 IAC 1-2-90.

D.1.10 Lead - PSD Best Available Control Technology [326 IAC 2-2]

(a) Pursuant to PSD Significant Source Modification SSM183-18426-00030 issued November 18, 2005 and 326 IAC 2-2 (PSD - Control Technology Review; Requirements), the lead emissions from the EAFs shall be:

(1) minimized in accordance with the Scrap Management Program (SMP) (Section E.2), and

(2) controlled by a baghouse.

(b) Pursuant to PSD Significant Source Modification SSM183-18426-00030 issued November 18, 2005 and 326 IAC 2-2 Prevention of Significant Deterioration (PSD), the lead emissions from the EAFs Baghouse stack shall not exceed 0.00048 pounds per ton of steel and 0.144 pounds of lead per hour, based on a three (3) hour block average.

D.1.11 Mercury - PSD Best Available Control Technology [326 IAC 2-2]

(a) Pursuant to PSD Significant Source Modification SSM183-18426-00030, issued November 18, 2005 and 326 IAC 2-2 (PSD - Control Technology Review; Requirements), the mercury emissions from the EAFs shall be:

(1) minimized in accordance with the Scrap Management Program (SMP) (Section E.2), and

(2) controlled by a baghouse.

(b) Pursuant to PSD Significant Source Modification SSM183-18426-00030 issued November 18, 2005 and 326 IAC 2-2 Prevention of Significant Deterioration (PSD), the mercury emissions from the EAFs Baghouse stack shall not exceed 5.21×10^{-4} pounds per ton of steel and 0.1563 pounds of mercury per hour, based on a three (3) hour block average.

D.1.12 Fluorides- PSD Best Available Control Technology [326 IAC 2-2]

(a) Pursuant to PSD Significant Source Modification SSM183-18426-00030 issued November 18, 2005 and 326 IAC 2-2 (PSD - Control Technology Review; Requirements), the fluoride emissions from the EAFs shall be:

(1) minimized by using the granular type of Fluorspar, instead of the powdered type and

(2) controlled by a baghouse.

(b) Pursuant to PSD Significant Source Modification SSM183-18426-00030 issued November 18, 2005 and 326 IAC 2-2 Prevention of Significant Deterioration (PSD), the fluoride

emissions from the EAFs Baghouse stack shall not exceed 0.01 pounds per ton of steel and 2.09 pounds of Fluorides per hour based on a three (3) hour block average.

D.1.13 Hazardous Air Pollutant (HAP) Limitations [326 IAC 2-1.1-4] [326 IAC 2-2] [326 IAC 2-4.1-1]

Pursuant to PSD Significant Source Modification SSM183-18426-00030 issued November 18, 2005 and 326 IAC 2-1.1-4, the Permittee shall not allow:

(a) Beryllium to be emitted from the EAFs Baghouse stack in a quantity equal to or greater than 8.6×10^{-5} pounds per hour.

(b) Manganese compounds to be emitted from the EAFs Baghouse stack in a quantity equal to or greater than 2.28 pounds per hour.

Compliance with the Beryllium limitation will assure that the requirements of 326 IAC 2-2 Prevention of Significant Deterioration (PSD) do not apply for beryllium, and compliance with these limitations will assure that the requirements of 326 IAC 2-4.1-1 (New Source Toxics Control) do not apply to the source.

D.1.14 Visible Emission Limitations - PSD Best Available Control Technology [326 IAC 2-2]

Pursuant to PSD Permits CP183-10097-00030, issued July 7, 1999, amended by PSD Significant Source Modification SSM183-12692-00030, issued January 10, 2001 and 326 IAC 2-2 (PSD - Control Technology Review; Requirements)

(a) Visible emissions from the EAFs Baghouse stack (Stack 1) shall not exceed three percent (3%) opacity based on a six-minute average (24 readings taken in accordance with 40 CFR Part 60, Appendix A, Method 9).

(b) Particulate matter (PM and PM_{10}) emissions generated during furnace operations shall be captured by the melt shop roof canopy and ducted to the EAFs Baghouse such that visible emissions generated by the EAFs shall not exceed three percent (3%) opacity based on a six-minute average (24 readings taken in accordance with 40 CFR Part 60, Appendix A, Method 9) when emitted from any building opening.

(c) Inspections and preventive measures shall be performed as prescribed in the Preventive Maintenance Plan.

Compliance with the above opacity limitations shall also satisfy the requirements of 326 IAC 5-1-2 (Opacity Limitations) under Condition C.2 - Opacity.

D.1.15 Visible Emission Limitations [40 CFR Part 60, Subpart AAa]

Pursuant to PSD Permits CP183-10097-00030, issued July 7, 1999, amended by PSD Significant Source Modification SSM183-12692-00030, issued January 10, 2001 and 40 CFR 20.272a(a), the Permittee shall not cause to discharge into the atmosphere from the EAFs any gases that:

(a) Exit from the EAF Baghouse Stack 1 and exhibit three percent (3%) opacity or greater; and

(b) Exit from the melt shop, and due solely to the operations of the EAFs, exhibit six percent (6%) opacity or greater.

Compliance with the above opacity limitations shall also satisfy the requirements of 326 IAC 5-1-2 (Opacity Limitations) under Condition C.2 - Opacity.

D.1.16 Ladle Metallurgy Station (LMS) - PSD Best Available Control Technology (BACT) [326 IAC 2-2]

Pursuant to PSD Significant Source Modification SSM183-18426-00030, issued November 18, 2005, and 326 IAC 2-2 Prevention of Significant Deterioration (PSD), the filterable and condensable PM/PM_{10} emissions from the ladle metallurgy station (LMS) (ID# 3a) shall be controlled by the existing EAFs Baghouse.

D.1.17 Continuous Casters (CCs) - PSD Best Available Control Technology (BACT) [326 IAC 2-2]

(a) Pursuant to PSD Significant Source Modification SSM183-18426-00030, issued November 18, 2005 and 326 IAC 2-2 Prevention of Significant Deterioration (PSD), the filterable and condensable PM/PM_{10} emissions from the continuous caster (CC) (ID# 3k) shall be controlled by the existing EAFs Baghouse.

(b) Pursuant to PSD Significant Source Modification SSM183-18426-00030 issued November 18, 2005 and 326 IAC 2-2 Prevention of Significant Deterioration (PSD), the filterable and condensable particulate matter (PM/PM_{10}) emissions from the second continuous caster (ID# 42a) shall be controlled by the existing common EAFs Baghouse.

D.1.18 Preventive Maintenance Plan (PMP) [326 IAC 1-6-3] [326 IAC 2-7-5(13)]

Pursuant to PSD Permits CP183-10097-00030, issued July 7, 1999, amended by PSD Significant Source Modification SSM183-12692-00030, issued January 10, 2001 and 326 IAC 1-6-3, a Preventive Maintenance Plan (PMP), in accordance with Condition B.10 - Preventive Maintenance Plan (PMP) of this permit, is required for the EAFs and LMS and their associated control devices.

D.1.19 Clean Unit [326 IAC 2-2.2]

(a) EAFs (EAF-1a and EAF-1b), LMS (ID# 3a), and CC (ID# 3k)

(1) Pursuant to PSD Significant Source Modification SSM183-18426-00030 issued November 18, 2005 and 326 IAC 2-2.2, the:

EAFs (EAF-1a and EAF-1b),
LMS (ID# 3a), and
CC (ID# 3k)

are classified as Clean Units for:

(A) NO_x,
(B) PM/PM_{10},
(C) SO_2,
(D) CO,
(E) VOC,
(F) Lead,
(G) Mercury, and
(H) Fluorides.

(2) The Clean Unit designations for the EAFs, LMS, and CC are in effect for ten (10) years from the issuance date of this permit.

(3) In order to maintain the clean unit designations for the EAFs, LMS, and CC, the Permittee shall comply with the following:

(4) The EAFs, LMS, and CC (designated as clean units) shall comply with the emissions limitations or work practice requirements in the following conditions as part of the BACT:

(A)	D.1.1	EAF Operation Limitation (all pollutants),
(B)	D.1.2	Nitrogen Oxides (NO_x) - PSD BACT,
(C)	D.1.5	Particulate Matter (PM/ PM_{10}) - PSD BACT,
(D)	D.1.6	Sulfur Dioxide (SO_2) - PSD BACT,
(E)	D.1.7	Carbon Monoxide (CO) - PSD BACT,
(F)	D.1.9	Volatile Organic Compounds (VOC) - PSD BACT,
(G)	D.1.10	Lead - PSD BACT,
(H)	D.1.11	Mercury - PSD BACT,
(I)	D.1.12	Fluorides- PSD BACT,
(J)	D.1.14	Visible Emission Limitations - PSD BACT,

(K) D.1.16 Ladle Metallurgy Station (LMS) PSD BACT,
(L) D.1.17(a) Continuous Casters (CCs) PSD BACT, and
(M) D.1.22 CO and VOC CEMS Requirement.

(b) Continuous Caster (ID# 42a)

(1) Pursuant to PSD Significant Source Modification SSM183-18426-00030 issued November 18, 2005 and 326 IAC 2-2.2 (Clean Unit), the continuous caster (ID# 42a) is classified as Clean Unit for filterable and condensable particulate matter (PM/PM_{10}) and opacity.

(2) The Clean Unit designation for this continuous caster (ID# 42a) is in effect for ten (10) years from its initial start up.

(3) In order to maintain the clean unit designation for the continuous caster (ID# 42a), the Permittee shall comply with the continuous caster (ID# 42a) filterable and condensable particulate matter (PM/PM_{10}) and Opacity PSD BACT limits.

(c) EAFs (EAF-1a and EAF-1b), LMS (ID# 3a), and CCs (ID# 3k and ID# 42a)

(1) In addition, the EAFs, LMS, and CCs shall comply with all applicable requirements per 326 IAC 2-7 contained in this permit.

(2) No physical change or change in the method of operation shall be undertaken at these emissions units that would allow them to operate in a manner inconsistent with the physical or operational characteristics of the emission units.

(3) The EAFs, LMS, and CCs (designated as clean units) are subject to the following requirements:

(A) Any project at these emissions units for which actual construction begins after the effective date of the clean unit designations and before the expiration date shall be considered to have occurred while the emissions units were clean units.

(B) If a project at these emission units does not cause the need for a change in the emission limitations or work practice requirements in this permit for these units that were adopted in conjunction with BACT and the project would not alter any physical or operational characteristics that formed the basis for the BACT determination, the clean unit designations remain unchanged.

(C) If a project causes the need for a change in the emission limitations or work practice requirements in this permit for these units that were adopted in conjunction with BACT or the project would alter any physical or operational characteristics that formed the basis for the BACT determination, then the clean unit designations shall expire upon issuance of the necessary permit modifications, unless the units requalify as clean units. If the Permittee begins actual construction on the project without first applying to modify the emissions unit's permit, the clean unit designations shall expire immediately prior to the time when actual construction of this project begins.

(D) A project that causes emissions units to lose their clean unit designations shall be subject to the applicability requirements of 326 IAC 2-2-2(d)(1) through 326 IAC 2-2-2(d)(4) and 326 IAC 2-2-2(d)(6).

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

D.1.20 EAFs Baghouse Operation [326 IAC 2-2] [326 IAC 2-7-6(6)]

Pursuant to PSD Significant Source Modification SSM183-18426-00030, issued November 18, 2005 and 326 IAC 2-2 Prevention of Significant Deterioration (PSD), the EAFs Baghouse shall be in operation and control emissions at all times when the electric arc furnaces (EAFs), Ladle Metallurgy Station (LMS) and/or Continuous Casters (CCs) are in operation.

D.1.21 Testing Requirements [326 IAC 2-1.1-11] [40 CFR 60.275a]

(a) NO_x

Pursuant to PSD Significant Source Modification SSM183-18426-00030 issued November 18,2005 and 326 IAC 2-1.1-11, the Permittee shall test for NO_x on the EAFs Baghouse stack (Stack 1) within 60 days after achieving maximum capacity of the modification, but no later than 365 days after start up of the modification, utilizing methods as approved by the Commissioner.

Pursuant to PSD Significant Source Modification SSM183-18426-00030 issued November 18, 2005 and 326 IAC 2-1.1-11, this NO_x test shall be repeated at least once every 2.5 years from the date of the last valid compliance demonstration.

(b) Filterable and Condensable PM/PM_{10}

Pursuant to PSD Significant Source Modification SSM183-18426-00030 issued November 18, 2005 and 326 IAC 2-1.1-11, the Permittee shall test for PM/PM_{10} on the EAFs Baghouse stack (Stack 1) within 60 days after achieving maximum capacity of the modification, but no later than 365 days after start up of the modification, utilizing methods as approved by the Commissioner.

Pursuant to PSD Significant Source Modification SSM183-18426-00030 issued November 18, 2005 and 326 IAC 2-1.1-11 and 40 CFR 60.275a, this filterable and condensable PM/PM_{10} test shall be repeated at least once every five (5) years from the date of the last valid compliance demonstration, utilizing 40 CFR Part 60, Appendix A, Method 5, Method 201 or 201A, Method 202 or other methods as approved by the Commissioner.

(c) Lead

Pursuant to PSD Significant Source Modification SSM183-18426-00030 issued November 18, 2005 and 326 IAC 2-1.1-11, the Permittee shall stack test for lead on the EAFs Baghouse stack (Stack 1), utilizing Method 12 and a method detection level which is below the emission limit, within 60 days after achieving maximum capacity of the modification, but no later than 365 days after start up of the modification, utilizing methods as approved by the Commissioner.

Pursuant to PSD Significant Source Modification SSM183-18426-00030 issued November 18, 2005 and 326 IAC 2-1.1-1, this lead test shall be repeated at least once every year from the date of the last valid compliance demonstration.

(d) SO_2

Pursuant to PSD Significant Source Modification SSM183-18426-00030 issued November 18, 2005 and 326 IAC 2-1.1-11, the Permittee shall test for SO_2 on the EAFs Baghouse stack (Stack 1) within 60 days after achieving maximum capacity of the modification, but no later than 365 days after start up of the modification, utilizing methods as approved by the Commissioner.

Pursuant to PSD Significant Source Modification SSM183-18426-00030 issued November 18, 2005 and 326 IAC 2-1.1-11, this SO_2 test shall be repeated at least once every 2.5 years from the date of the last valid compliance demonstration.

(e) Mercury
Pursuant to PSD Significant Source Modification SSM183-18426-00030 issued November 18, 2005 and 326 IAC 2-1.1-11, the Permittee shall test for mercury on the EAFs Baghouse stack (Stack 1) within 60 days after achieving maximum capacity of the modification, but no later than 365 days after start up of the modification, utilizing methods as approved by the Commissioner.

Pursuant to PSD Significant Source Modification SSM183-18426-00030 issued November 18, 2005 and 326 IAC 2-1.1-1, this mercury test shall be repeated at least once every year from the date of the last valid compliance demonstration.

(f) Fluorides
Pursuant to PSD Significant Source Modification SSM183-18426-00030 issued November 18, 2005 and 326 IAC 2-1.1-11, the Permittee shall test for fluorides on the EAFs Baghouse stack (Stack 1) within 60 days after achieving maximum capacity of the modification, but no later than 365 days after start up of the modification, utilizing methods as approved by the Commissioner.

Pursuant to PSD Significant Source Modification SSM183-18426-00030 issued November 18, 2005 and 326 IAC 2-1.1-11, this fluorides test shall be repeated at least once every five (5) years from the date of the last valid compliance demonstration.

(g) Manganese
Pursuant to PSD Significant Source Modification SSM183-18426-00030 issued November 18, 2005 and 326 IAC 2-1.1-11, the Permittee shall test for manganese on the EAFs Baghouse stack (Stack 1) within 60 days after achieving maximum capacity of the modification, but no later than 365 days after start up of the modification, utilizing methods as approved by the Commissioner.

Pursuant to PSD Significant Source Modification SSM183-18426-00030 issued November 18, 2005 and 326 IAC 2-1.1-11, this manganese test shall be repeated at least once every five (5) years from the date of the last valid compliance demonstration.

(h) Testing shall be conducted in accordance with C.9 - Performance Testing.

D.1.22 CO and VOC Continuous Emission Rate Monitoring Requirement [326 IAC 2-1.1-11] [326 IAC 3-5]

(a) Pursuant to PSD Permits CP183-10097-00030, issued July 7, 1999, amended by PSD Significant Source Modification SSM183-12692-00030, issued January 10, 2001 and 326 IAC 2-1.1-11 and 326 IAC 3-5-1(d), the Permittee shall calibrate, certify, operate, and maintain a continuous emission monitoring system (CEMS) for measuring CO and VOC emissions rates in pounds per hour from the EAFs Baghouse stack (Stack 1) in accordance with 326 IAC 3-5-2 and 326 IAC 3-5-3.

(b) Pursuant to PSD Significant Source Modification Permit SSM183-18426-00030 issued November 18, 2005, 326 IAC 2-1.1-11 and 326 IAC 3-5-4(a), the Permittee shall submit to IDEM, OAQ, within ninety (90) days after installation of a new monitor, a complete written continuous monitoring standard operating procedure (SOP). If revisions are made to an existing SOP, updates shall be submitted to IDEM, OAQ biennially.

(c) Pursuant to PSD Permits CP183-10097-00030, issued July 7, 1999, amended by PSD Significant Source Modification SSM183-12692-00030, issued January 10, 2001 and 326 IAC 2-1.1-11, the Permittee shall record the output of the system and shall perform the required record keeping, pursuant to 326 IAC 3-5-6, and reporting, pursuant to 326 IAC 3-5-7.

(d) 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.

(e) Whenever the CO or VOC continuous emission monitor is malfunctioning or will be down for calibration, maintenance, or repairs for a period of six (6) hours or more, the Permittee shall perform once per day operational status inspections of the equipment that is important to the performance of the DEC, canopy hood and 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. This requirement does not replace the routine monthly inspections of the same equipment.

D.1.23 Visible Emission Observations and Continuous Opacity Monitoring (COM) [326 IAC 2-1.1-11] [326 IAC 3-5] [40 CFR 60.273a]

(a) Pursuant to 326 IAC 2-1.1-11, 326 IAC 3-5, and 40 CFR 60.273a and PSD Permit Significant Source Modification SSM183-18426-00030, issued November 18, 2005.

(1) The Permittee shall calibrate, certify, operate, and maintain a continuous monitoring system (COMS) to measure opacity from the EAFs Baghouse stack (Stack 1) in accordance with 326 IAC 3-5-2 and 3-5-3.

(2) The Permittee shall submit to IDEM, OAQ, within (90) days after installation of a new monitor, a complete written continuous monitoring standard operating procedure (SOP). If revisions are made to the SOP, updates shall be submitted to IDEM, OAQ biennially.

(b) All COMs shall meet the performance specifications of 40 CFR 60, Appendix B, Performance Specification No. 1, and are subject to monitor system certification requirements pursuant to 326 IAC 3-5.

(c) In the event that a breakdown of a COMS occurs, a record shall be made of the times and reasons of the breakdown and efforts made to correct the problem.

(d) Whenever a COMS is malfunctioning or is down for maintenance or repairs for a period of twenty-four (24) hours or more and a backup COMS is not online within twenty-four (24) hours of shutdown or malfunction of the primary COMS, the Permittee shall provide a certified opacity reader, who may be an employee of the Permittee or an independent contractor, to self-monitor the emissions from the emission unit stack.

(1) Visible emission readings shall be performed in accordance with 40 CFR 60, Appendix A, Method 9, for a minimum of five (5) consecutive six (6) minute averaging periods beginning not more than twenty-four (24) hours after the start of the malfunction or down time.

(2) Method 9 opacity readings shall be repeated for a minimum of five (5) consecutive six (6) minute averaging periods at least twice per day during daylight operations, with at least four (4) between each set of readings until a COM is online.

(3) Method 9 readings may be discontinued once a COM is online.

(4) Any opacity exceedances determined by Method 9 readings shall be reported with the Quarterly Opacity Exceedances Reports.

(e) Nothing in this permit shall excuse the Permittee from complying with the requirements to operate a continuous opacity monitoring system pursuant to 326 IAC 3-5 and 40 CFR 60.

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

D.1.24 Bag Leak Detection System (BLDS) [326 IAC 2-2]

Pursuant to PSD Significant Source Modification SSM183-18426-00030 issued November 18, 2005:

(a) The Permittee shall operate continuous bag leak detection systems (BLDS) for the EAFs Baghouse. The bag leak detection systems (BLDS) shall meet the following requirements:

(1) The bag leak detection systems (BLDS) must be certified by the manufacturer to be capable of detecting particulate matter emissions at concentrations of 0.0018 grains per actual cubic foot or less.

(2) The bag leak detection system (BLDS) sensor must provide output of relative particulate matter loading.

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

(4) The bag leak detection system (BLDS) shall be operated in a manner consistent with available written guidance from the U.S. Environmental Protection Agency or, in the absence of such written guidance, the manufacturer's written specifications and recommendations for operation, and adjustment of the system.

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

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

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

(8) Each sensor should be inspected at least once per month to remove any build-up of material that may collect on the probe or insulator.

(9) Monthly QA checks shall be performed to ensure the monitor is operating properly. If the results of the response test or electronics drift check are not favorable, the cause shall be investigated and any malfunctions corrected.

(b) In the event of a bag leak detection system alarm:

(1) The affected compartments will be shut down as soon as possible until the failed units have been repaired or replaced.

(2) Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the emergency provisions of this permit (Section B.11 - Emergency Provisions).

(3) No later than eight (8) business hours of the determination of failure, response steps according to the timetable described in the Section C.15 – Response to Excursions or Exceedances shall be initiated.

For any failure with corresponding response steps and timetable not described in the Section C.15 – Response to Excursions or Exceedances, response steps shall

be devised no later than eight (8) business hours of discovery of the failure and shall include a timetable for completion.

(4) Failure to take reasonable response steps in accordance with Section C.15 – Response to Excursions or Exceedances, shall be considered a deviation from this permit.

(c) If operations continue after bag failure is observed and it will be 10 days or more after the failure is observed before the failed units will be repaired or replaced, the Permittee shall promptly notify the IDEM, OAQ of the expected date the failed units will be repaired or replaced.

The notification shall also include the status of the applicable compliance monitoring parameters with respect to normal, and the results of any response actions taken up to the time of notification.

D.1.25 Monitoring of Operations [40 CFR 60.274a]

Pursuant to 40 CFR 60.274a, the Permittee shall comply with the following monitoring requirements:

(a) Except as provided under item (e) of this condition, the Permittee shall check and record on a once per shift basis the furnace static pressure if the DEC system is in use, and a furnace static pressure gauge is installed according to Condition D.1.25(d) and either:

(1) check and record the control system fan motor amperes and damper positions on a once-per-shift basis; or

(2) calibrate, and maintain a monitoring device that continuously records the volumetric flow rate through each separately ducted hood; or

(3) calibrate, and maintain a monitoring device that continuously records the volumetric flow rate at the control device inlet and records 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 $\pm$ 10 percent over its normal operating range and shall be calibrated according to the manufacturer's instructions.

The IDEM, OAQ, or the U.S. EPA may require the Permittee to demonstrate the accuracy of the monitoring device(s) relative to Methods 1 and 2 of 40 CFR Part 60, Appendix A.

(b) When the Permittee is required to demonstrate compliance with the opacity standard in Condition D.1.15(b), and at any other time IDEM, OAQ may require (under Section 114 of the Act as amended), either:

(1) the control system fan motor amperes and all damper positions,
(2) the volumetric flow rate through each separately ducted hood or
(3) 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 EAFs.

(c) The Permittee 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.

(d) Except as provided under item (f) of this condition, if emissions during any phase of the heat time are controlled by the use of a DEC system, the Permittee shall 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 $\pm$ 5 millimeter of water gauge over its normal operating range and shall be calibrated according to the manufacturer's instructions.

(e) Except as provided under item (f) of this condition, when the Permittee is required to demonstrate compliance with the standard under Condition D.1.15(b) and at any other time the U.S. EPA may require under Section 114 of the CAA, the pressure in the free space inside the EAF shall be determined during the melting and refining period(s) using the monitoring device required under item (d) of this condition.

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.

(f) Pursuant to 40 CFR 60.273a(d), a furnace static pressure monitoring device is not required on any EAF equipped with a DEC system if observations of the shop opacity are performed by a certified visible emission observer as follows:

(1) Shop opacity observations shall be conducted at least once per day when the furnace is operating in the meltdown and refining period.

(2) 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.

(3) 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.

(4) 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.

D.1.26 Monitoring for Total Building Enclosure [326 IAC 2-2]

Pursuant to PSD Permits CP183-10097-00030, issued July 7, 1999, amended by PSD Significant Source Modification 183-12692-00030, issued January 10, 2001 and 326 IAC 2-2, the Permittee shall demonstrate compliance with the requirement to provide total enclosure of the meltshop using the procedures listed in either (1) or (2) below.

This compliance demonstration shall be repeated at the time of each Method 12 stack test for lead emissions from the meltshop baghouse stack.

The results of this compliance demonstration shall be submitted to IDEM, OAQ with the test results of each Method 12 stack test for lead emissions from the meltshop baghouse.

(1)(A) The Permittee shall use a propeller anemometer or equivalent device meeting the requirements specified in (i) through (iii) below:

(i) The propeller of the anemometer shall be made of a material of uniform density and shall be properly balanced to optimize performance.

(ii) The measurement range of the anemometer shall extend to at least 300 meters per minute (1,000 feet per minute).

(iii) A known relationship shall exist between the anemometer signal output and air velocity, and the anemometer must be equipped with a suitable readout system.

(B) Doorway in-draft shall be determined by placing the anemometer in the plane of the doorway opening near its center.

(C) Doorway in-draft shall be demonstrated for each doorway that is open during normal operation with all remaining doorways in the position that they are in during normal operation.

When the doorway in-draft is not demonstrated for any doorway that is open during normal operation, the Permittee shall take reasonable response steps in accordance with Section C.15 – Response to Excursions or Exceedances. Failure to take response steps in accordance with Section C.15 – Response to Excursions or Exceedances shall be considered a deviation from this permit.

(2)(A) The Permittee shall install a differential pressure gauge on the leeward wall of the building to measure the pressure difference between the inside and outside of the building.

(B) The pressure gauge shall be certified by the manufacturer to be capable of measuring pressure differential in the range of 0.02 to 0.2 mm Hg.

(C) Both the inside and outside taps shall be shielded to reduce the effects of wind.

(D) The Permittee shall demonstrate the inside of the building is maintained at a negative pressure as compared to the outside of the building of no less than 0.02 mm Hg when all doors are in the position they are in during normal operation.

When the pressure differential between the inside and outside of the building is less than 0.02 mm Hg the Permittee shall take reasonable response steps in accordance with Section C.15 – Response to Excursions or Exceedances. Failure to take response steps in accordance with Section C.15 – Response to Excursions or Exceedances shall be considered a deviation from this permit.

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

D.1.27 Record Keeping Requirements [326 IAC 2-1.1-11] [40 CFR 60.276a]

(a) Pursuant to PSD Permits CP183-10097-00030, issued July 7, 1999, amended by PSD Significant Source Modification SSM183-12692-00030, issued January 10, 2001,and 326 IAC 2-1.1, the Permittee shall maintain records required under 326 IAC 3-5-6 at the source in a manner so that they may be inspected by the IDEM, OAQ, or the U.S. EPA., if so requested or required.

(b) To document compliance with Condition D.1.1 - EAFs Operation Limitation, the Permittee shall maintain records of the amount of steel produced.

(c) To document compliance with Conditions D.1.7 - CO PSD BACT and D.1.9 - VOC PSD BACT, the Permittee shall maintain records of the readings of the CO and VOC CEMS.

(d) Pursuant to PSD Permits CP183-10097-00030, issued July 7, 1999, amended by PSD Significant Source Modification SSM183-12692-00030, issued January 10, 2001 and to document compliance with Conditions D.1.14 - Visible Emission Limitation PSD BACT, and D.1.15 - Visible Emission Limitations, the Permittee shall maintain records of visible emission readings at the EAFs Baghouse stack (Stack 1) and make the records available upon request to IDEM, OAQ, and the U.S. EPA.

(e) Pursuant to PSD Permits CP183-10097-00030, issued July 7, 1999, amended by PSD Significant Source Modification SSM183-12692-00030, issued January 10, 2001 and 40 CFR 60.276a, records of the measurements required in 40 CFR 60.274a must be retained for at least 5 years following the date of the measurement.

(f) Pursuant to PSD Permits CP183-10097-00030, issued July 7, 1999, amended by PSD Significant Source Modification 183-12692-00030, issued January 10, 2001 326 IAC 2-1.1-11, 326 IAC 2-2, and in order to demonstrate compliance with Condition D.1.6, the Permittee shall maintain records of the verification of sulfur content of DRI, charge carbon, and injection carbon added into the EAFs.

(g) Pursuant to PSD Permits CP183-10097-00030, issued July 7, 1999, amended by PSD Significant Source Modification SSM183-12692-00030, issued January 10, 2001, 326 IAC 2-1.1-11 and in order to demonstrate compliance with Condition D.1.24, the Permittee shall maintain records of the dates and times of all bag leak detection system alarms, the cause of each alarm, and an explanation of all corrective actions taken.

(h) In order to document compliance with Condition D.1.25, the Permittee shall also maintain records of the dates and results of the sensor inspections, response tests, electronic drift checks, and response steps taken.

(i) All records shall be maintained in accordance with Condition C.19 - General Record Keeping Requirements of this permit.

(j) Records necessary to demonstrate compliance shall be available not later than 30 days after the end of each compliance period.

D.1.28 Reporting Requirements [326 IAC 2-1.1-11] [40 CFR 60.276a]

(a) To document compliance with Condition D.1.1 - EAFs Operation Limitation, the Permittee shall submit a quarterly summary of the actual amount of steel produced, using the Steel Production Report or its equivalent, located at the end of this permit. These reports shall be submitted not later than thirty (30) calendar days following the end of each calendar quarter and in accordance with Condition C.20 - General Reporting Requirements of this permit.

(b) Pursuant to PSD Permits CP183-10097-00030, issued July 7, 1999, amended by PSD Significant Source Modification 183-12692-00030, issued January 10, 2001 and 326 IAC 2-1.1-11, the Permittee shall submit a quarterly excess emissions report, if applicable, based on the continuous emissions monitor (CEM) data for CO and VOC, and continuous opacity monitor (COM) data, pursuant to 326 IAC 3-5-7.

These reports shall be submitted not later than thirty (30) calendar days following the end of each calendar quarter and in accordance with Condition C.20- General Reporting Requirements of this permit.

(c) Pursuant to PSD Significant Source Modification SSM 183-18426-00030, issued November 18, 2005, the Permittee shall comply with the following reporting requirements:

(i) The Permittee shall submit a semi-annual written report of exceedances of the control device opacity to IDEM, OAQ, and upon request, the U.S. EPA.

(ii) The Permittee shall submit semi-annually any values that exceed the furnace static pressure value established under 40 CFR 60.274a(g) and either values of control system fan motor amperes that exceed 15 percent of the value established under 40 CFR 60.274a(c) or values of flow rates lower than those established under 40 CFR 60.274a(c) to IDEM, OAQ, and upon request, the U.S. EPA.

(iii) The Permittee shall furnish to IDEM, OAQ, and the U.S. EPA a written report of the results of the compliance emission tests. This report shall include the following information:

(A) Facility name and address;

(B) Plant representative;

(C) Make and model of process, control device, and continuous monitoring equipment;

(D) Flow diagram of process and emissions capture equipment including other equipment or process(es) ducted to the same control device;

(E) Rated (design) capacity of process equipment;

(F) The following operating conditions:

(1) List of charge and tap weights and materials;

(2) Heat times and process log;

(3) Control device operation log; and

(4) Continuous monitor or Reference Method 9 data.

(G) Test dates and test times;

(H) Test company;

(I) Test company representative;

(J) Test observers from outside agency;

(K) Description of test methodology used, including any deviation from standard reference methods;

(L) Schematic of sampling location;

(M) Number of sampling points;

(N) Description of sampling equipment;

(O) Listing of sampling equipment calibrations and procedures;

(P) Field and Laboratory data sheets;

(Q) Description of sample recovery procedures;

(R) Sampling equipment leak check results;

(S) Description of quality assurance procedures;

(T) Description of analytical procedures;

(U) Notation of sample blank corrections; and

(V) Sample emission calculations.

SECTION D.2 FACILITY OPERATION CONDITIONS

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

Preheaters - - Stack 1

(1) Four (4) natural gas-fired low NO_x ladle preheaters (IDs 3b through 3e), constructed in 2002, each with a nominal heat input rate of 10 million British Thermal Units per hour (MMBtu/hr).

(2) One (1) natural gas-fired low NO_x tundish nozzle preheater (ID# 3g), constructed in 2002, with a nominal heat input rate of 10 MMBtu/hr.

(3) Two (2) natural gas-fired low NO_x tundish preheaters (ID#s 3h and 3i), constructed in 2002, each with a nominal heat input rate of 5 MMBtu/hr.

(4) One (1) natural gas-fired Tundish Nozzle Preheater, identified as (ID# 3m), (to be constructed under SSM183-18426-00030), nominally rated at 10 MMBtu/hr.

(5) One (1) natural gas-fired Tundish Preheater, identified as (ID# 3n), constructed in 2002, nominally rated at 10 MMBtu/hr.

Combustion emissions from the preheaters exhaust inside the building, and are collected by the overhead roof exhaust system and ducted to the EAF Baghouse.

Dryers - - Stack 1

(1) Two (2) natural gas-fired low NO_x ladle dryers (ID# 3f and ID# 3l), constructed in 2002, each with a nominal heat input rate of 10 MMBtu/hr.

(2) One (1) natural gas-fired low NO_x tundish dryer (ID# 3j), constructed in 2002, with a nominal heat input rate of 5 MMBtu/hr.

(3) One (1) natural gas-fired Tundish Dryer, identified as ID# 3o, (to be constructed under SSM183-18426-00030) nominally rated at 5 MMBtu/hr.

Combustion emissions from the dryers exhaust inside the building, and are collected by the overhead roof exhaust system and ducted to the common EAF Baghouse.

(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 Nitrogen Oxides (NO_x) - PSD Best Available Control Technology [326 IAC 2-2]

Pursuant to PSD Permits CP183-10097-00030, issued July 7, 1999, amended by PSD Significant Source Modification SSM183-12692-00030, issued January 10, 2001 and 326 IAC 2-2 (PSD - Control Technology Review; Requirements), the following:

(a) Four (4) natural gas-fired low NO_x ladle preheaters (ID#s 3b through 3e),

(b) One (1) natural gas-fired low NO_x tundish nozzle preheater (ID# 3g),

(c) Two (2) natural gas-fired low NO_x tundish preheaters (ID#s 3h and 3i),

(d) One (1) natural gas-fired low NO_x ladle dryer (ID# 3f), and

(e) One (1) natural gas-fired low NO_x tundish dryer (ID# 3j)

shall be limited to the use of low NO_x natural gas-fired burners and NO_x emissions shall not exceed 0.10 pound per MMBtu.

D.2.2 Clean Unit [326 IAC 2-2.2]

(a) Pursuant to PSD Significant Source Modification SSM183-18426-00030 and 326 IAC 2-2.2, the following facilities:

(1) Four (4) natural gas-fired low NO_x ladle preheaters (ID#s 3b through 3e),

(2) One (1) natural gas-fired low NO_x tundish nozzle preheater (ID# 3g),

(3) Two (2) natural gas-fired low NO_x tundish preheaters (ID#s 3h and 3i),

(4) One (1) natural gas-fired low NO_x ladle dryer (ID# 3f), and

(5) One (1) natural gas-fired low NO_x tundish dryer (ID# 3j)

are classified as Clean Units for NO_x.

(b) The Clean Unit designations for the above mentioned facilities in Condition D.2.2(a) are in effect from September 9, 2004 to October 22, 2012.

The Clean Unit designations were based on the approval of the Affidavit of Construction for these units as permitted to be constructed under PSD Permits 193-10097-00030, issued on July 7, 1999 and PSD Permit 183-12692-00030, issued on January 10, 2001.

(c) In order to maintain the clean unit designations the above mentioned facilities in Condition D.2.2(a) , the Permittee shall comply with the following:

(1) The emissions units designated as clean unit s shall comply with the emissions limitations or work practice requirements in Condition D.2.1 (Nitrogen Oxides (NO_x) - PSD Best Available Control Technology) as part of the BACT.

In addition the emissions unit shall comply with all applicable requirements per 326 IAC 2-7 contained in this permit.

(2) No physical change or change in the method of operation shall be undertaken at these emissions units that would allow them to operate in a manner inconsistent with the physical or operational characteristics of the emission units.

(d) The above mentioned facilities in Condition D.2.2(a), designated as clean units, are subject to the following requirements:

(1) Any project at these emissions units for which actual construction begins after the effective date of the clean unit designations and before the expiration date shall be considered to have occurred while the emissions units were clean units.

(2) If a project at these emission units does not cause the need for a change in the emission limitations or work practice requirements in this permit for these units that were adopted in conjunction with BACT and the project would not alter any physical or operational characteristics that formed the basis for the BACT determination, the clean unit designations remain unchanged.

(3) If a project causes the need for a change in the emission limitations or work practice requirements in this permit for these units that were adopted in conjunction with BACT or the project would alter any physical or operational characteristics that formed the basis for the BACT determination, then the clean unit designations shall expire upon issuance of the necessary permit modifications,

unless the units requalify as clean units. If the Permittee begins actual construction on the project without first applying to modify the emissions unit's permit, the clean unit designations shall expire immediately prior to the time when actual construction of this project begins.

(4) A project that causes emissions units to lose their clean unit designations shall be subject to the applicability requirements of 326 IAC 2-2-2(d)(1) through 326 IAC 2-2-2(d)(4) and 326 IAC 2-2-2(d)(6).

D.2.3 Ladle Dryer - PSD Best Available Control Technology Limits [326 IAC 2-2]

Pursuant to PSD Significant Source Modification SSM183-18426-00030, issued November 18, 2005 and 326 IAC 2-2 Prevention of Significant Deterioration (PSD), the Permittee shall comply with the following Best Available Control Technology (BACT) requirements:

(a) The new second ladle dryer (ID# 3l) shall use natural gas as fuel.

(b) The nitrogen oxides (NO_x) emissions from the new second ladle dryer (ID# 3l) shall not exceed 0.050 pounds per MMBtu and 0.5 pounds of NO_x per hour, based on a three (3) hour block average.

(c) The carbon monoxide (CO) emissions from the new second ladle dryer (ID# 3l) shall not exceed 0.084 pounds per MMBtu and 0.84 pounds of CO per hour, based on a three (3) hour block average.

(d) The volatile organic compound (VOC) emissions from the new second ladle dryer (ID# 3l) shall not exceed 0.0055 pounds per MMBtu and 0.055 pounds of VOC per hour, based on a three (3) hour block average.

(e) The sulfur dioxide (SO_2) emissions from the new second ladle dryer (ID# 3l) shall not exceed 0.0006 pounds per MMBtu and 0.006 pounds of SO_2 per hour based on a three (3) hour block average.

(f) The PM (filterable) emissions from the new second ladle dryer (ID# 3l) shall not exceed 0.0019 pounds per MMBtu and 0.019 pounds of filterable PM per hour, based on a three (3) hour block average.

(g) The PM_{10} (filterable and condensable) emissions from the new second ladle dryer (ID# 3l) shall not exceed 0.0076 pounds per MMBtu and 0.076 pound of filterable and condensable PM_{10} per hour, based on a three (3) hour block average.

D.2.4 Clean Unit [326 IAC 2-2.2]

(a) Pursuant to PSD Significant Source Modification SSM183-18426-00030, issued November 18, 2005and 326 IAC 2-2.2, the new second ladle dryer (ID# 3l) is classified as Clean Unit for NO_x

(b) The Clean Unit designation for this new second ladle dryer (ID# 3l) is in effect for ten (10) years from the initial start up of this dryer.

(c) In order to maintain the clean unit designation for new second ladle dryer, the Permittee shall comply with the following:

(1) The new second ladle dryer, designated as clean unit, shall comply with the emissions limitations or work practice requirements in Conditions D.2.3(a) and D.2.3(b) as part of the BACT.

In addition, the new second ladle dryer shall comply with all applicable requirements per 326 IAC 2-7 contained in this permit.

(2) No physical change or change in the method of operation shall be undertaken at this emissions unit that would allow them to operate in a manner inconsistent with the physical or operational characteristics of the emission units.

(d) The new second ladle dryer (ID# 3l), designated as clean unit, is subject to the following requirements:

(1) Any project at this emissions unit for which actual construction begins after the effective date of the clean unit designation and before the expiration date shall be considered to have occurred while the emissions unit was clean unit.

(2) If a project at this emission unit does not cause the need for a change in the emission limitations or work practice requirements in this permit for this unit that were adopted in conjunction with BACT and the project would not alter any physical or operational characteristics that formed the basis for the BACT determination, the clean unit designation remains unchanged.

(3) If a project causes the need for a change in the emission limitations or work practice requirements in this permit for this unit that were adopted in conjunction with BACT or the project would alter any physical or operational characteristics that formed the basis for the BACT determination, then the clean unit designation shall expire upon issuance of the necessary permit modifications, unless the unit requalifies as clean unit. If the Permittee begins actual construction on the project without first applying to modify the emissions unit's permit, the clean unit designation shall expire immediately prior to the time when actual construction of this project begins.

(4) A project that causes emissions unit to lose its clean unit designation shall be subject to the applicability requirements of 326 IAC 2-2-2(d)(1) through 326 IAC 2-2-2(d)(4) and 326 IAC 2-2-2(d)(6).

D.2.5 Tundish Nozzle Preheater - PSD Best Available Control Technology Limits [326 IAC 2-2]

Pursuant to PSD Significant Source Modification SSM183-18426-00030, issued November 18, 2005 and 326 IAC 2-2 Prevention of Significant Deterioration (PSD), the Permittee shall comply with the following PSD Best Available Control Technology (BACT) standards:

(a) The Tundish Nozzle Preheater (ID# 3m) shall use natural gas as the primary fuel and propane as back up fuel.

(b) Low NO_x burners shall be installed and utilized to reduce the NO_x emissions from the Tundish Nozzle Preheater (ID# 3m).

(c) The NO_x emissions from the Tundish Nozzle Preheater (ID# 3m) shall not exceed 0.05 pounds per MMBtu and 0.5 pounds per hour, based on a 3-hour block average.

(d) The CO emissions from the Tundish Nozzle Preheater (ID# 3m) shall not exceed 0.084 pounds per MMBtu and 0.84 pounds per hour, based on a 3-hour block average.

(e) The VOC emissions from the Tundish Nozzle Preheater (ID# 3m) shall not exceed 0.0055 pounds per MMBtu and 0.055 pounds per hour, based on a 3-hour block average.

(f) The SO_2 emissions from the Tundish Nozzle Preheater (ID# 3m) shall not exceed 0.0006 pounds per MMBtu and 0.006 pounds per hour, based on a 3-hour block average.

(g) The filterable and condensable particulate matter (PM/PM_{10}) emissions from the Tundish Nozzle Preheater (ID# 3m) shall not exceed 0.0076 pounds per MMBtu and 0.076 pounds per hour, based on a 3-hour block average.

(h) Good combustion practices shall be observed.

D.2.6 Tundish Preheater - PSD Best Available Control Technology Limits [326 IAC 2-2]

Pursuant to PSD Significant Source Modification SSM183-18426-00030, issued November 18, 2005 and 326 IAC 2-2 Prevention of Significant Deterioration (PSD), the Permittee shall comply with the following PSD Best Available Control Technology (BACT) standards:

(a) The Tundish Preheater (ID# 3n) shall use natural gas as the primary fuel and propane as back up fuel.

(b) Low NO_x burners shall be installed and utilized to reduce the NO_x emissions from the Tundish Preheater (ID# 3n).

(c) The NO_x emissions from the Tundish Preheater (ID# 3n) shall not exceed 0.05 pounds per MMBtu and 0.5 pounds per hour, based on a 3-hour block average.

(d) The CO emissions from the Tundish Preheater (ID# 3n) shall not exceed 0.084 pounds per MMBtu and 0.84 pounds per hour, based on a 3-hour block average.

(e) The VOC emissions from the Tundish Preheater (ID# 3n) shall not exceed 0.0055 pounds per MMBtu and 0.055 pounds per hour, based on a 3-hour block average.

(f) The SO_2 emissions from the Tundish Preheater (ID# 3n) shall not exceed 0.0006 pounds per MMBtu and 0.006 pounds per hour, based on a 3-hour block average.

(g) The filterable and condensable particulate matter (PM/PM_{10}) emissions from the Tundish Preheater (ID# 3n) shall not exceed 0.0076 pounds per MMBtu and 0.076 pounds per hour, based on a 3-hour block average.

(h) Good combustion practices shall be observed.

D.2.7 Tundish Dryer - PSD Best Available Control Technology Limits [326 IAC 2-2]

Pursuant to PSD Significant Source Modification SSM183-18426-00030, issued November 18, 2005 and 326 IAC 2-2 Prevention of Significant Deterioration (PSD), the Permittee shall comply with the following PSD Best Available Control Technology (BACT) standards:

(a) The Tundish Dryer (ID# 3o) shall use natural gas as the primary fuel and propane as back up fuel.

(b) Low NO_x burners shall be installed and utilized to reduce the NO_x emissions from the Tundish Dryer (ID# 3o).

(c) The NO_x emissions from the Tundish Dryer (ID# 3o) shall not exceed 0.05 pounds per MMBtu and 0.25 pounds per hour, based on a 3-hour block average.

(d) The CO emissions from the Tundish Dryer (ID# 3o) shall not exceed 0.084 pounds per million Btu and 0.42 pounds per hour, based on a 3-hour block average.

(e) The VOC emissions from the Tundish Dryer (ID# 3o) shall not exceed 0.0055 pounds per MMBtu and 0.028 pounds per hour, based on a 3-hour block average.

(f) The SO_2 emissions from the Tundish Dryer (ID# 3o) shall not exceed 0.0006 pounds per MMBtu and 0.003 pounds per hour, based on a 3-hour block average.

(g) The filterable and condensable particulate matter (PM/PM_{10}) emissions from the Tundish Dryer (ID# 3o) shall not exceed 0.0076 pounds per MMBtu and 0.038 pounds per hour, based on a 3-hour block average.

(h) Good combustion practices shall be observed.

D.2.8 Clean Units [326 IAC 2-2.2]

(a) Pursuant to PSD Significant Source Modification SSM183-18426-00030, issued November 18, 2005 and 326 IAC 2-2.2 (Clean Unit):

(1) The Tundish Nozzle Preheater (ID# 3m) is classified as Clean Unit for NO_x.

(2) The Tundish Preheater (ID# 3n) is classified as Clean Unit for NO_x.

(3) The Tundish Dryer (ID# 3o) is classified as Clean Unit for NO_x.

(b) The Clean Unit designations for these preheaters and dryer are in effect for ten (10) years from their initial start ups.

(c) In order to maintain the clean unit designations for the:

(1) Tundish Nozzle Preheater (ID# 3m):
The Permittee shall comply with the Tundish Nozzle Preheater (ID# 3m) NO_x PSD BACT limit.

(2) Tundish Preheater (ID# 3n):
The Permittee shall comply with the Tundish Preheater (ID# 3n) NO_x PSD BACT limit.

(3) Tundish Dryer (ID# 3o):
The Permittee shall comply with the Tundish Dryer (ID# 3o) NO_x PSD BACT limit.

(4) In addition, the new second ladle dryer shall comply with all applicable requirements per 326 IAC 2-7 contained in this permit.

(5) No physical change or change in the method of operation shall be undertaken at this emissions unit that would allow them to operate in a manner inconsistent with the physical or operational characteristics of the emission units.

(b) The new second ladle dryer (ID# 3l), designated as clean unit, is subject to the following requirements:

(1) Any project at this emissions unit for which actual construction begins after the effective date of the clean unit designation and before the expiration date shall be considered to have occurred while the emissions unit was clean unit.

(2) If a project at this emission unit does not cause the need for a change in the emission limitations or work practice requirements in this permit for this unit that were adopted in conjunction with BACT and the project would not alter any physical or operational characteristics that formed the basis for the BACT determination, the clean unit designation remains unchanged.

(3) If a project causes the need for a change in the emission limitations or work practice requirements in this permit for this unit that were adopted in conjunction with BACT or the project would alter any physical or operational characteristics that formed the basis for the BACT determination, then the clean unit designation shall expire upon issuance of the necessary permit modifications, unless the unit requalifies as clean unit. If the Permittee begins actual construction on the project without first applying to modify the emissions unit's permit, the clean unit designation shall expire immediately prior to the time when actual construction of this project begins.

(4) A project that causes emissions unit to lose its clean unit designation shall be subject to the applicability requirements of 326 IAC 2-2-2(d)(1) through 326 IAC 2-2-2(d)(4) and 326 IAC 2-2-2(d)(6).

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

D.2.9 Low NO_x Burners [326 IAC 2-2] [326 IAC 2-7-6(6)]

Pursuant to PSD Significant Source Modification SSM183-18426-00030, issued November 18, 2005 and 326 IAC 2-2 Prevention of Significant Deterioration (PSD):

(a) The Tundish Nozzle Preheater (ID# 3m) shall utilize the low NO_x burners at all times when the Tundish Nozzle Preheater (ID# 3m) is in operation.

(b) The Tundish Preheater (ID# 3n) shall utilize the low NO_x burners at all times when the Tundish Preheater (ID# 3n) is in operation.

(c) The Tundish Dryer (ID# 3o) shall utilize the low NO_x burners at all times when the Tundish Dryer (ID# 3o) is in operation.

SECTION D.3 FACILITY OPERATION CONDITIONS

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

Reheat Furnaces - - Stack 2 and Stack 41

(1) One (1) natural gas-fired low NO_x reheat furnace (RH) (ID# 2), constructed in 2002 with a nominal heat input rate of 260 MMBtu/hr.

Combustion and process emissions from the RH (ID# 2) exhaust through a stack identified as Stack 2.

(2) One (1) natural gas-fired low NO_x reheat furnace, identified as (ID# 41), (to be constructed under SSM183-18426-00030), with a nominal heat input rate of 260 MMBtu/hr.

Combustion and process emissions from this reheat furnace (ID# 41) exhaust through a stack, identified as Stack 41.

(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 Nitrogen Oxides (NO_x) - PSD Best Available Control Technology [326 IAC 2-2]

(a) Pursuant to PSD Permits CP183-10097-00030, issued July 7, 1999, amended by PSD Significant Source Modification 183-12692-00030, issued January 10, 2001 and 326 IAC 2-2 (PSD - Control Technology Review; Requirements), the Reheat Furnace (RF) (ID# 2) shall be limited to the use of low NO_x natural gas-fired burners such that NO_x emissions shall not exceed 0.11 pound per MMBtu.

(b) Pursuant to PSD Significant Source Modification SSM183-18426-00030, issued November 18, 2005, the Permittee shall not allow more than 189.8 million cubic feet of natural gas to be combusted in the Reheat Furnace (RF) (ID# 2) on a monthly basis averaged over a twelve (12) month period, with compliance determined at the end of each month.

D.3.2 Carbon Monoxide (CO) - PSD Best Available Control Technology [326 IAC 2-2]

Pursuant to PSD Permits CP183-10097-00030, issued July 7, 1999, amended by PSD 183-12692-00030, issued January 10, 2001 and 326 IAC 2-2 (PSD - Control Technology Review; Requirements), the CO emissions from the Reheat Furnace (RF) (ID# 2) shall not exceed 0.03 pound per MMBtu.

D.3.3 Clean Unit [326 IAC 2-2.2]

(a) Pursuant to PSD Significant Source Modification SSM183-18426-00030 and 326 IAC 2-2.2, the Reheat Furnace (RF) (ID# 2) is classified as a Clean Unit for NO_x.

(b) The Clean Unit designation for this RF (ID# 2) is in effect from September 9, 2004 to October 22, 2012.

The Clean Unit designation was based on the approval of the Affidavit of Construction for this unit as permitted to be constructed under PSD Permits CP183-10097-00030, issued on July 7, 1999 and PSD Permit SSM183-12692-00030, issued on January 10, 2001.

(c) In order to maintain the clean unit designation for the RF(ID# 2), the Permittee shall comply with the following:

(1) The RF (ID# 2), designated as clean unit, shall comply with the emissions limitations or work practice requirements in Condition D.3.1 as part of the BACT:

In addition, the RF (ID# 2) shall comply with all applicable requirements per 326 IAC 2-7 contained in this permit.

(2) No physical change or change in the method of operation shall be undertaken at this emissions unit that would allow them to operate in a manner inconsistent with the physical or operational characteristics of the emission unit.

(d) The RF (ID# 2), designated as clean unit, is subject to the following requirements:

(1) Any project at this emissions unit for which actual construction begins after the effective date of the clean unit designation and before the expiration date shall be considered to have occurred while the emissions unit was clean unit.

(2) If a project at this emission unit does not cause the need for a change in the emission limitations or work practice requirements in this permit for this unit that were adopted in conjunction with BACT and the project would not alter any physical or operational characteristics that formed the basis for the BACT determination, the clean unit designation remains unchanged.

(3) If a project causes the need for a change in the emission limitations or work practice requirements in this permit for this unit that were adopted in conjunction with BACT or the project would alter any physical or operational characteristics that formed the basis for the BACT determination, then the clean unit designation shall expire upon issuance of the necessary permit modifications, unless the unit requalifies as clean unit. If the Permittee begins actual construction on the project without first applying to modify the emissions unit's permit, the clean unit designation shall expire immediately prior to the time when actual construction of this project begins.

(4) A project that causes emissions unit to lose its clean unit designation shall be subject to the applicability requirements of 326 IAC 2-2-2(d)(1) through 326 IAC 2-2-2(d)(4) and 326 IAC 2-2-2(d)(6).

D.3.4 Reheat Furnace - PSD Best Available Control Technology [326 IAC 2-2]

Pursuant to PSD Significant Source Modification SSM183-18426-00030, issued November 18, 2005and 326 IAC 2-2 Prevention of Significant Deterioration (PSD), the Permittee shall comply with the following PSD Best Available Control Technology (BACT) standards:

(a) The Reheat Furnace (ID# 41) shall use natural gas as the primary fuel and propane as back up fuel.

(b) Low NO_x burners shall be installed and utilized to reduce the NO_x emissions from the Reheat Furnace (ID# 41).

(c) The NO_x emissions from the Reheat Furnace (ID# 41) shall not exceed 0.08 pounds per MMBtu and 20.8 pounds per hour, based on a 3-hour block average.

(d) The CO emissions from the Reheat Furnace shall not exceed 0.03 pounds per MMBtu and 7.8 pounds per hour, based on a 3-hour block average.

(e) The VOC emissions from the Reheat Furnace (ID# 41) shall not exceed 0.005 pounds per MMBtu and 1.3 pounds per hour, based on a 3-hour block average.

(f) The SO_2 emissions from the Reheat Furnace (ID# 41) shall not exceed 0.0006 pounds per MMBtu and 0.156 pounds per hour, based on a 3-hour block average.

(g) The filterable particulate matter (PM) emissions from the Reheat Furnace (ID# 41) shall not exceed 0.0019 pounds per MMBtu and 0.49 pounds per hour, based on a 3-hour block average.

(h) The filterable and condensable particulate matter (PM/PM_{10}) emissions from the Reheat Furnace (ID# 41) shall not exceed 0.0076 pounds per MMBtu and 1.98 pounds per hour, based on a 3-hour block average.

(i) The visible emissions from the Reheat Furnace (ID# 41) Stack 41 shall not exceed 3% opacity.

(j) The lead emissions from the Reheat Furnace (ID# 41) shall not exceed 0.0005 pounds per MMBtu and 0.13 pounds per hour, based on a 3-hour block average.

(k) The mercury emissions from the Reheat Furnace (ID# 41) shall not exceed 0.00026 pounds per MMBtu and 0.068 pounds per hour, based on a 3-hour block average.

(l) Good combustion practices shall be observed.

D.3.5 Reheat Furnace Clean Unit [326 IAC 2-2.2]

(a) Pursuant to PSD Significant Source Modification SSM183-18426-00030, issued November 18, 2005 and 326 IAC 2-2.2 (Clean Unit), the Reheat Furnace (ID# 41) is classified as a Clean Unit for NO_x.

(b) The Clean Unit designation for this Reheat Furnace (ID# 41) is in effect for ten (10) years from its initial start up.

(c) In order to maintain the clean unit designations for the Reheat Furnace, the Permittee shall comply with the Reheat Furnace (ID# 41) NO_x PSD BACT limit.

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

D.3.6 Low NO_x Burners [326 IAC 2-2] [326 IAC 2-7-6(6)]

Pursuant to PSD Significant Source Modification SSM183-18426-00030, issued November 18, 2005 and 326 IAC 2-2 Prevention of Significant Deterioration (PSD), the Reheat Furnace (ID# 41) shall utilize the low NO_x burners at all times when the Reheat Furnace (ID# 41) is in operation.

D.3.7 Testing Requirements [326 IAC 2-1.1-11]

(a) Pursuant to PSD Permits CP183-10097-00030, issued July 7, 1999, amended by PSD Significant Source Modification SSM183-12692-00030, issued January 10, 2001 and 326 IAC 2-1.1-11, the Permittee shall perform NO_x and CO testing on the Reheat Furnace (RF) (ID# 2) at least once every five (5) years from the date of the last valid compliance demonstration.

(b) Pursuant to PSD Significant Source Modification SSM183-18426-00030, issued November 18, 2005 and 326 IAC 2-1.1-11, the Permittee shall test for NO_x on the Reheat Furnace stack (Stack 41) within 60 days after achieving maximum capacity, but no later than 180 days after the initial start up of the Reheat Furnace (ID# 42) utilizing methods as approved by the Commissioner.

This NO_x test shall be repeated thereafter at least once every five (5) years from the date of the last valid compliance demonstration.

(c) Testing shall be conducted in accordance with Section C.9 - Performance Testing.

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

D.3.8 Record Keeping Requirements [326 IAC 2-7-5] [326 IAC 2-7-19]

(a) Pursuant to PSD Permits CP183-10097-00030, issued July 7, 1999, amended by PSD Significant Source Modification SSM183-12692-00030, issued January 10, 2001, the Permittee shall maintain records of the natural gas and propane combusted in the Reheat Furnace (RF) (ID# 2) each month and make the records available upon request to IDEM, OAQ, and the US EPA.

(b) All records shall be maintained in accordance with Condition C.19 - General Record Keeping Requirements of this permit.

SECTION D.4 FACILITY OPERATION CONDITIONS

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

Ladle Vacuum Degasser (LVD) and LVD Boiler - - Stack 40

One (1) ladle vacuum degasser (LVD) (ID# 40), constructed in 2003, with a nominal capacity of 300 tons per hour of steel and one (1) boiler to power the LVD. The LVD Boiler (ID# 40) has a nominal heat input capacity of 41.8 MMBtu/hr, and uses natural gas as the primary fuel, with propane as an emergency back up fuel.

Gases from the LVD are directed to the boiler for combustion in the boiler. Emissions from the boiler exhausts through a stack identified as Stack 40.

(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 PM/PM_{10} Limitations - PSD Best Available Control Technology [326 IAC 2-2]

Pursuant to PSD Significant Source Modification SSM183-15170-00030, issued May 31, 2002 and 326 IAC 2-2 Prevention of Significant Deterioration (PSD), the total PM/PM_{10} (including both filterable and condensable) emissions from the LVD Boiler (ID# 40) shall not exceed 0.0076 pound per MMBtu of heat input and 0.318 pound per hour.

D.4.2 NO_x Limitations - PSD Best Available Control Technology [326 IAC 2-2]

Pursuant to PSD Significant Source Modification SSM183-15170-00030, issued May 31, 2002 and 326 IAC 2-2 Prevention of Significant Deterioration (PSD), the NO_x emissions from the LVD Boiler (ID# 40) shall not exceed 0.04 pound per million Btu of heat input and 1.67 pounds per hour.

D.4.3 CO Limitations - PSD Best Available Control Technology [326 IAC 2-2]

Pursuant to PSD Permit SSM183-15170-00030, issued May 31, 2002 and 326 IAC 2-2 Prevention of Significant Deterioration (PSD), the CO emissions from the LVD Boiler (ID# 40) shall not exceed 0.084 pound per MMBtu of heat input and 3.51 pounds per hour.

D.4.4 VOC Limitations - PSD Best Available Control Technology [326 IAC 2-2]

Pursuant to PSD Significant Source Modification SSM183-15170-00030, issued May 31, 2002 and 326 IAC 2-2 Prevention of Significant Deterioration (PSD), the VOC emissions from the LVD Boiler (ID# 40) shall not exceed 0.0026 pound per MMBtu of heat input and 0.11 pound per hour.

D.4.5 SO_2 Limitations - PSD Best Available Control Technology [326 IAC 2-2]

Pursuant to PSD Significant Source Modification SSM183-15170-00030, issued May 31, 2002 and 326 IAC 2-2 Prevention of Significant Deterioration (PSD), the SO_2 emissions from the LVD Boiler (ID# 40) shall not exceed 0.0006 pound per MMBtu of heat input and 0.025 pound per hour.

D.4.6 Operating Parameters - PSD Best Available Control Technology [326 IAC 2-2]

Pursuant to PSD Significant Source Modification SSM183-18426-00030, issued November 18, 2005 and 326 IAC 2-2 (PSD), the following conditions shall apply:

(a) Only natural gas or propane fuels shall be used in the LVD Boiler (ID# 40).

(b) The amount of natural gas used in the LVD Boiler (ID# 40) shall not exceed 209 million cubic feet per 12-consecutive month period, with compliance determined at the end of each month.

(c) The amount of propane used in the LVD Boiler (ID# 40) shall not exceed 222 kilogallons per 12 consecutive month period with compliance determined at the end of each month.

(d) Combustion emissions shall be controlled through the use of good combustion practices.

D.4.7 Clean Unit [326 IAC 2-2.2]

(a) Pursuant to PSD Significant Source Modification SSM183-18426-00030, issued November 18, 2005 and 326 IAC 2-2.2, the LVD Boiler (ID# 40) is classified as a Clean Unit for NO_x

(b) The Clean Unit designation for this LVD Boiler (ID# 40) is in effect from September 9, 2004 to June 5, 2013.

The Clean Unit designation was based on the approval of the Affidavit of Construction for this unit as permitted to be constructed under PSD Permit SSM183-15170-00030 was issued on May 31, 2002.

(c) In order to maintain the clean unit designation for the LVD Boiler (ID# 40), the Permittee shall comply with the following:

(1) The LVD Boiler (ID# 40), designated as a clean unit, shall comply with the emissions limitations or work practice requirements in the following conditions as part of the BACT:

(A) D.4.2 NO_x Limitations PSD BACT, and

(B) D.4.6 Operating Parameters.

In addition, the LVD Boiler (ID# 40) shall comply with all applicable requirements per 326 IAC 2-7 contained in this permit.

(2) No physical change or change in the method of operation shall be undertaken at this emissions unit that would allow them to operate in a manner inconsistent with the physical or operational characteristics of the emission unit.

(d) The LVD Boiler (ID# 40), designated as a clean unit, is subject to the following requirements:

(1) Any project at this emissions unit for which actual construction begins after the effective date of the clean unit designation and before the expiration date shall be considered to have occurred while the emissions unit was clean unit.

(2) If a project at this emission unit does not cause the need for a change in the emission limitations or work practice requirements in this permit for this unit that were adopted in conjunction with BACT and the project would not alter any physical or operational characteristics that formed the basis for the BACT determination, the clean unit designation remains unchanged.

(3) If a project causes the need for a change in the emission limitations or work practice requirements in this permit for this unit that were adopted in conjunction with BACT or the project would alter any physical or operational characteristics that formed the basis for the BACT determination, then the clean unit designation shall expire upon issuance of the necessary permit modifications, unless the unit requalifies as clean unit. If the Permittee begins actual construction on the project without first applying to modify the emissions unit's permit, the clean unit designation shall expire immediately prior to the time when actual construction of this project begins.

(4) A project that causes emissions unit to lose its clean unit designation shall be subject to the applicability requirements of 326 IAC 2-2-2(d)(1) through 326 IAC 2-2-2(d)(4) and 326 IAC 2-2-2(d)(6).

D.4.8 Preventive Maintenance Plan (PMP) [316 IAC 1-6-3] [326 IAC 2-7-5(13)]

Pursuant to PSD Significant Source Modification SSM183-15170-00030, issued May 31, 2002 and 326 IAC 1-6-3 a Preventive Maintenance Plan (PMP), in accordance with Section B.10 - Preventive Maintenance Plan (PMP), of this permit, is required for the LVD Boiler (ID# 40).

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

D.4.9 Testing Requirements [326 IAC 2-7-6(1),(6)] [326 IAC 2-1.1-11]

Pursuant to PSD Significant Source Modification SSM183-15170-00030, issued May 31, 2002 and 326 IAC 2-1.1-11, the Permittee shall perform NO_x and CO testing on the LVD Boiler (ID# 40), at least once every five (5) years from the date of the last valid compliance demonstration, using methods as approved by the Commissioner.

Testing shall be performed in compliance with Section C.9- Performance Testing.

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

D.4.10 Record Keeping Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19] [40 CFR 60, Subpart Dc]

(a) The Permittee shall maintain records required under 40 CFR 60, Subpart Dc, at the source in a manner that they may be inspected by the IDEM, OAQ, or the US EPA, if so requested or required.

(b) Pursuant to PSD Significant Source Modification SSM183-15170-00030, issued May 31, 2002 and 40 CFR 60, Subpart Dc, the Permittee shall maintain records of the amount of each type of fuel combusted in the LVD Boiler (ID# 40) each day.

(c) Pursuant to PSD Significant Source Modification SSM183-15170-00030 and to document compliance with Condition D.4.6 - Operating Parameters, the Permittee shall keep records of monthly fuel used by LVD Boiler (ID# 40), including the types of fuel and amount used.

(d) Records necessary to demonstrate compliance shall be available within 30 days of the end of each compliance period.

(e) All records shall be maintained in accordance with Section C.18 - General Record Keeping Requirements of this permit.

D.4.11 Reporting Requirements [326 IAC 2-1.1-11]

Pursuant to PSD Significant Source Modification SSM183-15170-00030, issued May 31, 2002 and 326 IAC 2-1.1-11 and to document compliance with Condition D.4.6 - Operating Parameters, a quarterly summary of the following:

(a) the amount of natural gas used in the LVD boiler, and

(b) the amount of propane used in the LVD boiler

shall be submitted to the address listed in Section C.19 - General Reporting Requirements, of this permit, using the reporting form (Natural Gas and Propane Usage Quarterly Report) located at the end of this permit, or its equivalent, within thirty (30) calendar days following the end of each calendar quarter.

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.5 **FACILITY OPERATION CONDITIONS**

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

(a) One (1) EAF dust storage silo (ID# 4), constructed in 2002, equipped with a bin vent filter for particulate control.

(b) Eight (8) raw material storage silos (ID#s 5 through 12) and the associated raw material receiving station, constructed in 2002.

Each silo is equipped with a bin vent filter for particulate control.

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

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

D.5.1 Particulate Matter (PM/PM_{10}) - PSD Best Available Control Technology [326 IAC 2-2]

Pursuant to PSD Permits CP183-10097-00030, issued July 7, 1999, amended by PSD Significant Source Modification SSM183-12692-00030, issued January 10, 2001 and 326 IAC 2-2 (PSD - Control Technology Review; Requirements), the filterable PM/PM_{10} emissions from each of the nine (9) storage silos shall not exceed 0.01 grains per dry standard cubic feet.

D.5.2 Visible Emission Limitation - PSD Best Available Control Technology [326 IAC 2-2]

(a) Pursuant to PSD Permits CP183-10097-00030, issued July 7, 1999, amended by PSD Significant Source Modification SSM183-12692-00030, issued January 10, 2001and 326 IAC 2-2 (PSD - Control Technology Review; Requirements), the visible emissions from each of the nine (9) storage silos shall not exceed three percent (3%) opacity.

(b) Pursuant to PSD Permits CP183-10097-00030, issued July 7, 1999, amended by PSD Significant Source Modification SSM183-12692-00030, issued January 10, 2001 and 326 IAC 2-2 (PSD - Control Technology Review; Requirements), the visible emissions from the EAFs dust handling system and the raw material receiving station shall not exceed three percent (3%) opacity or greater based on a six-minute average (24 readings taken in accordance with 40 CFR Part 60, Appendix A, Method 9).

D.5.3 Clean Unit [326 IAC 2-2.2]

(a) Pursuant to PSD Permit Significant Source Modification SSM183-18426-00030, issued November 18, 2005 and 326 IAC 2-2.2, the nine (9) storage silos are classified as Clean Units for PM/PM_{10}.

(b) The Clean Unit designations for these nine (9) storage silos are in effect from September 9, 2004 to October 22, 2012.

The Clean Unit designations were based on the approval of the Affidavit of Construction for these units as permitted to be constructed under PSD Permits 193-10097-00030, issued on July 7, 1999 and PSD Permit 183-12692-00030, issued on January 10, 2001.

(c) In order to maintain the clean unit designations for the nine (9) storage silos, the Permittee shall comply with the following:

(1) The nine (9) storage silos, designated as clean units, shall comply with the emissions limitations or work practice requirements in the following conditions as part of the BACT:

(A) D.5.1 Particulate Matter (PM/PM_{10}) - PSD Best Available Control Technology, and

(B) D.5.2 Visible Emission Limitation - PSD Best Available Control Technology.

In addition, the nine (9) storage silos shall comply with all applicable requirements per 326 IAC 2-7 contained in this permit.

(2) No physical change or change in the method of operation shall be undertaken at these emissions units that would allow them to operate in a manner inconsistent with the physical or operational characteristics of the emission units.

(d) The nine (9) storage silos, designated as clean units, are subject to the following requirements:

(1) Any project at these emissions units for which actual construction begins after the effective date of the clean unit designations and before the expiration date shall be considered to have occurred while the emissions units were clean units.

(2) If a project at these emission units does not cause the need for a change in the emission limitations or work practice requirements in this permit for these units that were adopted in conjunction with BACT and the project would not alter any physical or operational characteristics that formed the basis for the BACT determination, the clean unit designations remain unchanged.

(3) If a project causes the need for a change in the emission limitations or work practice requirements in this permit for these units that were adopted in conjunction with BACT or the project would alter any physical or operational characteristics that formed the basis for the BACT determination, then the clean unit designations shall expire upon issuance of the necessary permit modifications, unless the units requalify as clean units. If the Permittee begins actual construction on the project without first applying to modify the emissions unit's permit, the clean unit designations shall expire immediately prior to the time when actual construction of this project begins.

(4) A project that causes emissions units to lose their clean unit designations shall be subject to the applicability requirements of 326 IAC 2-2-2(d)(1) through 326 IAC 2-2-2(d)(4) and 326 IAC 2-2-2(d)(6).

D.5.4 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 EAF Dust Handling System except when otherwise specified in 40 CFR Part 60, Subpart AAa.

D.5.5 Visible Emission Limitations [40 CFR Part 60, Subpart AAa]

Pursuant to PSD Permits CP183-10097-00030, issued July 7, 1999, amended by PSD Significant Source Modification SSM183-12692-00030, issued January 10, 2001 and 40 CFR 60.272a(a), the Permittee shall not cause to discharge into the atmosphere from the EAF Dust Handling System any gases that exhibit ten percent (10%) opacity or greater.

D.5.6 Preventive Maintenance Plan (PMP) [326 IAC 1-6-3] [326 IAC 2-7-5(13)]

Pursuant to PSD Significant Source Modification SSM183-18426-00030, issued November 18, 2005 and 326 IAC 1-6-3, a Preventive Maintenance Plan (PMP), in accordance with Condition B.10 - Preventive Maintenance Plan (PMP), of this permit, is required for the bin vent filters.

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

D.5.7 Bin Vent Operation [326 IAC 2-2][326 IAC 2-7-6(6)]

Pursuant to PSD Significant Source Modification SSM183-18426-00030, issued November 18, 2005 and 326 IAC 2-2 Prevention of Significant Deterioration (PSD), the bin vent filters shall be in operation and control emissions at all times when the storage silos are in operation.

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

D.5.8 Visible Emissions Notations [326 IAC 2-1.1-11]

Pursuant to PSD Permits CP183-10097-00030, issued July 7, 1999, amended by PSD Significant Source Modification SSM183-12692-00030, issued January 10, 2001 and 326 IAC 2-1.1-11:

(a) Weekly visible emission notations of the nine (9) storage silos exhaust vents and the raw material receiving station shall be performed during normal daylight operations when loading or unloading material. 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, when 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.15 - Response to Excursions or Exceedances. Failure to take response steps in accordance with Section C.15 - Response to Excursions or Exceedances shall be considered a deviation from this permit.

D.5.9 Broken or Failed Bin Vent Filter Detection [326 IAC 2-1.1-11]

Pursuant to PSD Permits CP183-10097-00030, issued July 7, 1999, amended by PSD Significant Source Modification SSM183-12692-00030, issued January 10, 2001and 326 IAC 2-1.1-11:

In the event that filter failure has been observed, for single compartment filters, failed units and the associated process will be shut down as soon as possible until the failed units have been repaired or replaced.

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

D.5.10 Record Keeping Requirements [326 IAC 2-7-5] [326 IAC 2-7-19]

(a) Pursuant to PSD Permits CP183-10097-00030, issued July 7, 1999, amended by PSD Significant Source Modification SSM183-12692-00030, issued January 10, 2001 and to document compliance with Condition D.5.2 - Visible Emission Limitation PSD BACT, the Permittee shall maintain records of the following and make the records available upon request to IDEM, OAQ, and the US EPA:

(i) Weekly visible emission notations of the bin vent exhaust and raw material receiving station.

(ii) Documentation of all response steps implemented for every event that visible emissions were noted to be "abnormal".

(b) All records shall be maintained in accordance with Condition C.19 - General Record Keeping Requirements of this permit.

SECTION D.6 FACILITY OPERATION CONDITIONS

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

A slag handling and processing area (ID# 14), operated by an independent contractor, with a nominal rated capacity of 250 tons per hour.

This processing area consists of slag pot dumping, deskulling, slag cooling, digging of slag pits by a front-end loader, loading of grizzly feeder by a front-end loader, crushing, screening, conveyor transfer points, loading of materials into piles, storage piles, load out of materials from piles, and vehicle movement around piles.

This processing area utilizes the following equipment: one (1) grizzly/feeder, three (3) conveyors, one (1) single deck screen, one (1) primary crusher, one (1) by-pass conveyor, one (1) screen, and seven (7) stackers.

(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 Annual Slag Production Limitation - PSD Best Available Control Technology [326 IAC 2-1.1-5] [326 IAC 2-2]

Pursuant to PSD Significant Source Modification SSM183-18426-00030, issued November 18, 2005, 326 IAC 2-1.1-5 and 326 IAC 2-2 Prevention of Significant Deterioration (PSD), the Permittee shall not process more than 438,000 tons of slag per 12-consecutive month period, with compliance determined at the end of each month.

D.6.2 Particulate Matter (PM) [326 IAC 6-3]

Pursuant to PSD Permit SSM183-18426-00030, November 21, 2005 and 326 IAC 6-3 (Particulate Emission Limitations for Manufacturing Processes), the combined filterable particulate emissions from the crushing, screening, conveyor transfer points, continuous stacking operations shall not exceed 60.96 pounds per hour.

This limit is based on the nominal process weight rate of 250 tons per hour.

Particulate emissions will be considered in compliance with 326 IAC 6-3 in the absence of PM compliance tests provided that visible emissions do not exceed the visible emissions requirements specified for these operations in this permit.

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

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

The above equation shall be used for extrapolation of the data for process weight rates in excess of sixty thousand (60,000) pounds per hour.

Pursuant to 326 IAC 6-3-2(e)(3), when the process weith exceeds two hundred (200) tons/hour, the maximum allowable emission may exceed that calculated from the above equation, provided the concentration of particulate matter in the discharge gases to the atmosphere from the crushing, screening, conveyor transfer points, continuous stacking operations shall be less than one-tenth (0.01) pound per one thousand (1,000) pounds of gases.

D.6.3 Visible Emission Limitations - PSD Best Available Control Technology [326 IAC 2-2]

Pursuant to PSD Permits CP183-10097-00030, issued July 7, 1999, amended by PSD Significant Source Modification SSM183-12692-00030, issued January 10, 2001 326 IAC 2-2 (PSD - Control

Technology Review; Requirements), the fugitive dust emissions from the various slag handling and processing operations shall be controlled in accordance with the Fugitive Dust Control Plan (FDCP) (Section E.1) such that the following visible emission limitations are not exceeded:

Slag Handling/Processing Operation	Visible Emission Limitation (% opacity) (six (6) minute average)
Transferring of skull slag to slag pot	10 %
Pouring of liquid slag from EAF or LMS to slag pots	3% (on any building opening)
Dumping of liquid slag from slag pot to slag pit and cooling	3 %
Transferring of skull slag from slag pot to skull pit	5 %
Digging skull slag pits	5 %
Digging slag pits	3 %
Stockpiling of slag adjacent to the grizzly feeder	3 %
Wind erosion of stockpiles	3 %
Crushing	3 %
Screening	3 %
Conveyor transfer points	3 %
Continuous stacking of processed slag to stockpiles	3 %
Loadout of processed slag from stockpiles to haul trucks for shipment	3 %
Inplant hauling of slag pots (filled) and processed slag	3 %

D.6.4 Slag Dumping Fugitive Particulate Matter (PM/ PM_{10}) - PSD Best Available Control Technology [326 IAC 2-2]

Pursuant to PSD Permits CP183-10097-00030, issued July 7, 1999, amended by PSD Significant Source Modification SSM183-12692-00030, issued January 10, 2001 and 326 IAC 2-2 (PSD - Control Technology Review; Requirements), the slag dumping pits shall be covered by a partially enclosed, roofed structure to reduce particulate matter emissions during slag dumping. The roof shall extend over the entire slag pit area and past the dump stations. The sides of the structure shall extend sufficiently downward from the roof, taking into account:

(a) reduction of PM emissions during dumping and partial shielding of prevailing winds; and

(b) dissipation of heat and consideration of safety concerns within the structure.

D.6.5 Clean Unit [326 IAC 2-2.2]

(a) Pursuant to PSD Significant Source Modification SSM183-18426-00030, issued November 18, 2005 and 326 IAC 2-2.2, the slag handling and processing operations are classified as Clean Units for PM/PM_{10}.

(b) The Clean Unit designation for these slag handling and processing operations are in effect for ten (10) years from the issuance date of this permit.

(c) In order to maintain the clean unit designations for the slag handling and processing operations, the Permittee shall comply with the following:

(1) The slag handling and processing operations, designated as clean units, shall comply with the emissions limitations or work practice requirements in the following conditions as part of the BACT:

(A) D.6.1 Annual Slag Production Limitation,

(B) D.6.3 Visible Emission Limitations - BACT, and

(C) D.6.4 Slag Dumping Fugitive Particulate Matter.

In addition, the slag handling and processing operations shall comply with all applicable requirements per 326 IAC 2-7 contained in this permit.

(2) No physical change or change in the method of operation shall be undertaken at these operations that would allow them to operate in a manner inconsistent with the physical or operational characteristics of the operations.

(d) The slag handling and processing operations, designated as clean units, are subject to the following requirements:

(1) Any project at these emissions units for which actual construction begins after the effective date of the clean unit designations and before the expiration date shall be considered to have occurred while the emissions units were clean units.

(2) If a project at these emission units does not cause the need for a change in the emission limitations or work practice requirements in this permit for these units that were adopted in conjunction with BACT and the project would not alter any physical or operational characteristics that formed the basis for the BACT determination, the clean unit designations remain unchanged.

(3) If a project causes the need for a change in the emission limitations or work practice requirements in this permit for these units that were adopted in conjunction with BACT or the project would alter any physical or operational characteristics that formed the basis for the BACT determination, then the clean unit designations shall expire upon issuance of the necessary permit modifications, unless the units requalify as clean units. If the Permittee begins actual construction on the project without first applying to modify the emissions unit's permit, the clean unit designations shall expire immediately prior to the time when actual construction of this project begins.

(4) A project that causes emissions units to lose their clean unit designations shall be subject to the applicability requirements of 326 IAC 2-2-2(d)(1) through 326 IAC 2-2-2(d)(4) and 326 IAC 2-2-2(d)(6).

D.6.6 Preventive Maintenance Plan (PMP) [326 IAC 1-6-3] [326 IAC 2-7-5(13)]

Pursuant to PSD Permits CP183-10097-00030, issued July 7, 1999, amended by PSD Significant Source Modification SSM183-12692-00030, issued January 10, 2001 and 326 IAC 1-6-3, a Preventive Maintenance Plan (PMP), in accordance with Condition B.10 - Preventive Maintenance Plan (PMP), of this permit, is required for the slag handling and processing operations associated control devices.

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

D.6.7 Testing Requirements [326 IAC 2-2]

Pursuant to PSD Permits CP183-10097-00030, issued July 7, 1999, amended by PSD Significant Source Modification SSM183-12692-00030, issued January 10, 2001, the Permittee shall perform a compliance test for opacity on the above-mentioned slag handling and processing operations, utilizing 40 CFR Part 60, Appendix A, Method 9, or other methods as approved by the Commissioner at least once every five (5) years from the date of the last valid compliance demonstration.

Testing shall be conducted in accordance with Section C.9 - Performance Testing.

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

D.6.8 Record Keeping Requirements [326 IAC 2-7-19]

Pursuant to PSD Significant Source Modification SSM183-18426-00030, issued November 18, 2005, the Permittee shall maintain records of the following:

(a) To document compliance with Condition D.6.1 - Annual Slag Production Limitation, the Permittee shall maintain records of the amount of slag processed.

(b) All records shall be maintained in accordance with Condition C.20 - General Record Keeping Requirements of this permit.

D.6.9 Reporting Requirements [326 IAC 2-1.1-11]

Pursuant to SSM183-18426-00030, issued, November 21, 2005 and to document compliance with Condition D.6.1 - Annual Slag Production Limitation, the Permittee shall submit a quarterly summary of the amount of slag processed, using the reporting form (Slag Production Report) located at the end of this permit, or its equivalent, not later than thirty (30) days after the end of the quarter being reported and in accordance with Section C.19 - General Reporting Requirements of this permit.

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

SECTION D.7 **FACILITY OPERATION CONDITIONS**

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

Transporting on paved roadways and parking lots, unpaved roadways, and unpaved areas around slag storage piles and steel scrap piles.

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

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

D.7.1 Fugitive Dust Emission Limitations - PSD Best Available Control Technology [326 IAC 2-2]

Pursuant to PSD Significant Source Modification SSM183-18426-00030, issued November 18, 2005 and 326 IAC 2-2 (PSD - Control Technology Review; Requirements), the fugitive dust emissions from transporting on paved roadways and parking lots, unpaved roadways, and unpaved areas around slag storage piles and steel scrap piles shall be controlled in accordance with the Fugitive Dust Control Plan (FDCP) (Section E.1) such that the following limitations are not exceeded:

Instantaneous opacity from paved roadways and parking lots shall not exceed ten percent (10%). The average instantaneous opacity shall be the average of twelve (12) instantaneous opacity readings, taken for four (4) vehicle passes, consisting of three (3) opacity readings for each vehicle pass.

The three (3) opacity readings for each vehicle pass shall be taken as follows:

(a) The first will be taken at the time of emission generation.

(b) The second will be taken five (5) seconds later.

(c) The third will be taken five (5) seconds later or ten (10) seconds after the first.

The three (3) readings shall be taken at the point of maximum opacity.

The observer shall stand at least fifteen (15) feet, but no more than one-fourth (1/4) mile, from the plume and at approximately right angles to the plume.

Each reading shall be taken approximately four (4) feet above the surface of the paved roadway.

D.7.2 Visible Emission Limitations - PSD Best Available Control Technology [326 IAC 2-2]

Pursuant to PSD Permits CP183-10097-00030, issued July 7, 1999, amended by PSD Significant Source Modification SSM183-12692-00030, issued January 10, 2001 and 326 IAC 2-2 (PSD - Control Technology Review; Requirements), the visible emissions from unpaved roadways and unpaved areas around slag storage piles and steel scrap piles shall not exceed an average instantaneous opacity of ten percent (10%).

The average instantaneous opacity shall be the average of twelve (12) instantaneous opacity readings, taken for four (4) vehicle passes, consisting of three (3) opacity readings for each vehicle pass.

The three (3) opacity readings for each vehicle pass shall be taken as follows:

(a) The first will be taken at the time of emission generation.

(b) The second will be taken five (5) seconds later.

(c) The third will be taken five (5) seconds later or ten (10) seconds after the first.

The three (3) readings shall be taken at the point of maximum opacity.

The observer shall stand at least fifteen (15) feet, but no more than one-fourth (1/4) mile, from the plume and at approximately right angles to the plume.

Each reading shall be taken approximately four (4) feet above the surface of the unpaved roadway.

D.7.3 Clean Unit [326 IAC 2-2.2]

(a) Pursuant to PSD Significant Source Modification SSM183-18426-00030, issued November 18, 2005 and 326 IAC 2-2.2, the transporting on paved roadways and parking lots, unpaved roadways, and unpaved areas around slag storage piles and steel scrap piles are classified as Clean Units for PM/PM_{10}.

(b) The Clean Unit designations for these transporting on paved roadways and parking lots, unpaved roadways, and unpaved areas around slag storage piles and steel scrap piles are in effect from September 9, 2004 to October 22, 2012.

The Clean Unit designations were based on the approval of the Affidavit of Construction for these units as permitted to be constructed under PSD Permits CP13-10097-00030, issued on July 7, 1999 and PSD Permit SSM183-12692-00030, issued on January 10, 2001.

(c) In order to maintain the clean unit designations for the transporting on paved roadways and parking lots, unpaved roadways, and unpaved areas around slag storage piles and steel scrap piles, the Permittee shall comply with the following:

(1) The transporting on paved roadways and parking lots, unpaved roadways, and unpaved areas around slag storage piles and steel scrap piles (designated as clean units) shall comply with the emissions limitations or work practice requirements in the following conditions as part of the BACT:

(A) D.7.1 Fugitive Dust Emission Limitations - Best Available Control Technology, and

(B) D.7.2 Visible Emission Limitations - Best Available Control Technology.

In addition, the transporting on paved roadways and parking lots, unpaved roadways, and unpaved areas around slag storage piles and steel scrap piles shall comply with all applicable requirements per 326 IAC 2-7 contained in this permit.

(2) No physical change or change in the method of operation shall be undertaken at these emissions units that would allow them to operate in a manner inconsistent with the physical or operational characteristics of the emission units.

(d) The transporting on paved roadways and parking lots, unpaved roadways, and unpaved areas around slag storage piles and steel scrap piles (designated as clean units) are subject to the following requirements:

(1) Any project at these emissions units for which actual construction begins after the effective date of the clean unit designations and before the expiration date shall be considered to have occurred while the emissions units were clean units.

(2) If a project at these emission units does not cause the need for a change in the emission limitations or work practice requirements in this permit for these units that were adopted in conjunction with BACT and the project would not alter any physical or operational characteristics that formed the basis for the BACT determination, the clean unit designations remain unchanged.

(3) If a project causes the need for a change in the emission limitations or work practice requirements in this permit for these units that were adopted in

conjunction with BACT or the project would alter any physical or operational characteristics that formed the basis for the BACT determination, then the clean unit designations shall expire upon issuance of the necessary permit modifications, unless the units requalify as clean units. If the Permittee begins actual construction on the project without first applying to modify the emissions unit's permit, the clean unit designations shall expire immediately prior to the time when actual construction of this project begins.

(4) A project that causes emissions units to lose their clean unit designations shall be subject to the applicability requirements of 326 IAC 2-2-2(d)(1) through 326 IAC 2-2-2(d)(4) and 326 IAC 2-2-2(d)(6).

SECTION D.8 FACILITY OPERATION CONDITIONS

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

One (1) cooling tower (ID# 13), with a nominal water flow of 15,000 gallons per minute.

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

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

D.8.1 Particulate Matter (PM/PM_{10}) - PSD Best Available Control Technology [326 IAC 2-2]

Pursuant to PSD Permits CP183-10097-00030, issued July 7, 1999, amended by PSD Significant Source Modification SSM183-12692-00030, issued January 10, 2001 and 326 IAC 2-2 (PSD - Control Technology Review; Requirements) and the filterable PM/PM_{10} emissions from the cooling tower shall not exceed 0.008 pound per hour.

SECTION E.1 FUGITIVE DUST CONTROL PLAN (FDCP)

E.1.1 Implementation and Contact

(a) The following fugitive dust control plan (FDCP), when implemented, is designed to reduce uncontrolled fugitive dust, based on a PM_{10} mass emission basis, from:

(1) paved roadways and parking lots,

(2) unpaved areas within the slag processing area, and

(3) the slag processing operations,

such that the visible emissions limitations specified in the permit are met.

(b) This FDCP shall be implemented on a year-round basis until such time as another plan is approved or ordered by the Indiana Department of Environmental Management (IDEM).

(c) If there is a change in the name, title, and telephone number of the person who is responsible for implementing the fugitive dust control plan (FDCP), the information will be supplied to the Office of Air Quality (OAQ) Compliance Section within ninety (90) of such change.

E.1.2 Paved Roadways and Parking Lots

The following dust control measures shall be performed such that the visible emission limitations in the permit are met. Visible emissions shall be determined in accordance with the procedures specified in the permit.

(a) Paved roads and parking lots shall be controlled by the use of a vehicular vacuum sweeper, wet sweeping, or water flushing and shall be performed every 14 days.

(b) Since an Industrial Augmentation factor of I=1 was used for the emissions inventory, vehicles shall be limited to traveling on paved surfaces only and not allowed to enter any paved surface except from public paved roads and tarred and chipped roads.

Vehicles shall also not be allowed to travel on the shoulder of paved road ways.

(c) Upon request of the Indiana Department of Environmental Management (IDEM), Steel Dynamics, Inc. (SDI) shall sample and provide to IDEM surface material silt content and surface dust loadings in accordance with C. Cowherd, Jr., et al., Iron and Steel Plant Open Dust Source Fugitive Emission Evaluation, EPA-600/2-79-103, U.S. Environmental Protection Agency, Cincinnati, OH, May 1979.

IDEM will have the right to specify road segments to be sampled.

Steel Dynamics, Inc. (SDI) shall provide supplemental cleaning of paved road sections found to exceed the controlled silt surface loading of 9.7 grams per square meter.

(d) Cleaning of paved road segments and parking lots may be delayed by one day when:

(1) 0.1 or more inches of rain has accumulated during the 24-hour period prior to the scheduled cleaning.

(2) The road segment is closed or abandoned. Abandoned roads will be barricaded to prevent vehicle access.

(3) It is raining at the time of the scheduled cleaning.

(4) Ambient air temperature is below 32 °F.

E.1.3 Unpaved Areas within the Slag Processing Area and Scrap Yard

The following dust control measures shall be performed such that the visible emission limitations in the permit are met. Visible emissions shall be determined in accordance with the procedures specified in the permit.

(a) Unpaved areas traveled around slag storage piles and steel scrap piles shall be treated with an IDEM-approved dust suppressant in order to meet compliance with the associated visible emissions limitations.

(b) Fugitive dust emissions shall be reduced on a PM_{10} mass emission basis.

(c) Treating of unpaved areas may be delayed by one day when:

(1) 0.1 or more inches of rain has accumulated during the 24-hour period prior to the scheduled treatment.

(2) Unpaved areas are saturated with water such that chemical dust suppressants cannot be accepted by the surface.

(3) Unpaved areas are frozen or covered by ice, snow, or standing water.

(4) The area is closed or abandoned.

(5) It is raining at the time of the scheduled treatment.

(6) The ambient air temperature is below 32^0F.

E.1.4 Wind Erosion from Open Slag Piles

Open slag piles consist of slag in various stages of processing.

To maintain product quality and chemical stability, watering the stockpiles shall be the primary means of dust control.

Water must be limited so as to keep the moisture content of the product within standards.

Slag piles shall be sprayed with water, on an "as-needed" basis to control wind erosion and not exceed the visible emission limitations in the permit. Water added to the product during processing provides added control. Visible emissions shall be determined in accordance with the procedures specified in the permit.

E.1.5 Slag Handling and Processing

(a) During transferring of the skull slag to the slag pot, the drop height shall be minimized and the transferring shall be performed such that the visible emission limitations in the permit are not exceeded.

(b) Pouring of liquid slag from the EAFs or LMS to the slag pot shall be conducted inside the melt shop and emissions shall be captured by the melt shop roof canopy and ducted to the EAF baghouse such that the applicable visible emission limitations in the permit are not exceeded.

(c) Emissions during the dumping of liquid slag from the slag pot to the slag pit shall be controlled by the use of skull slag and by applying water, as needed, such that the visible emission limitations in the permit are not exceeded.

(d) Water suppression to control emissions during the transferring of the skull slag from the slag pot to the skull pit can be waived for safety reasons.

(e) Emissions during the digging of the slag and skull pit by front-end loaders shall be controlled by applying water, as needed, such that the visible emission limitations in the permit are not exceeded.

(f) Emissions from slag processing operations shall be controlled, as needed, through the application of water.

Spray bars shall be used as needed to apply water on crushing and screening operations, and conveyor transfer points.

(g) The stacker to pile drop height shall be limited to less than 48 inches, and front end loader batch drop height into trucks shall be limited to less than 48 inches.

E.1.6 Vehicle Speed Control

(a) Speed limits on paved roads shall be posted to be 20 mph.

(b) Speed limits on unpaved areas shall be 10 mph.

(c) All traffic on paved and unpaved roads shall obey the posted speed limits.

(d) Compliance with the above mentioned speed limits shall be monitored by plant security guards.

(e) Upon violation, employees shall receive a written warning, followed by a one day suspension if a second violation occurs.

(f) Visitors to the plant shall be denied access if repeated violations occur.

E.1.7 Material Spill Control

Incidents of material spillage on plant property that can contribute to fugitive dust emissions shall be investigated by the person responsible for implementing the plan.

That person shall arrange for prompt cleanup and shall contact the party responsible for the spill to insure that prompt corrective action is taken.

E.1.8 Monitoring and Recording Keeping

Daily records of the vacuum sweeping, wet sweeping, or water flushing and spill control activities, and dust suppressant application frequency and amount shall be kept.

The records shall also contain the amount of water sprayed:

(a) on the aggregate piles,

(b) at the slag quench station, and

(c) at the slag processing spray bars.

E.1.9 Compliance Schedule

This FDCP shall be fully implemented when construction and modification is completed.

Until that time, the plan shall be implemented within portions of the site where construction is considered complete.

Where construction is incomplete, appropriate control measures shall be implemented, but cannot be comprehensively addressed.

Records of these activities shall be kept.

SECTION E.2 SCRAP MANAGEMENT PLAN (SMP)

E.2.1 General Specifications

The following measures shall be performed such that the volatile organic compounds and hazardous air pollutants emission limitations in the permit are met.

(a) Unless specifically allowed, all grades of scrap shall not contain excessive amounts of regulated volatile organic compounds and hazardous materials.

Scrap materials with excessive amounts of regulated volatile organic compounds and hazardous materials are referred to as contaminated scrap.

(b) All scrap material shall meet the specifications in this Scrap Management Plan (SMP) and be acceptable to Steel Dynamics, Inc. (SDI) or its scrap-processing agent.

(c) Any material that deviates from the following specifications must be noted on the purchase order and agreed to prior to shipment.

(d) Rejection of scrap material because it does not conform to the following specifications is a judgment decision of the employees responsible for inspecting the scrap material.

(e) A portion or an entire scrap load shall be rejected depending on the contaminants, placement/location of the contaminated material or frequency of occurrence.

E.2.2 Scrap Specifications

The following measures shall be performed such that the regulated volatile organic compounds and hazardous air pollutants emission limitations in the permit are met.

(a) Hazardous Material
Scrap received with evidence of hazardous material or hazardous material containers,

(b) Lead
The presence of babbit, solder, balancing weights, or materials with excessive amounts of lead-based paint shall be removed, or the load shall be rejected.

(c) Non-Ferrous Material
Non-ferrous scrap may contain elevated levels of hazardous constituents such as chromium, nickel, and lead. Such scrap is generally nonmagnetic (e.g. electric motors, aluminum pots and pans, brass, and pewter) and shall be rejected. Only scrap that is picked up by the magnets from the scrap cranes is acceptable.

(d) Tanks And Cylinders

(1) Tanks, cylinders, or sealed units may be included in shipments if the ends are cut open and prepared in a manner to insure that they are not sealed and will not retain contaminating fluids.

(2) These shall include, but are not limited to, torque converters, transmissions, rear ends, hydraulic cylinders, gas tanks, closed pipe compressors, capacitors, shock absorbers, and gearboxes.

(3) Visual presence of any of these items shall be cause for the material to be removed from the scrap or the load shall be rejected. However, coated gas tanks shall be rejected regardless of its condition or even if cut open.

(e) Mercury Switches
All mercury switches that are susceptible to removal and that are found in scrap shall be removed and disposed of. SDI shall inform automotive scrap dealers that mercury switches shall be removed from scrap wherever possible.

(f) Top-Dressing
(1) Trucks and cars must not be top-dressed with clean scrap in order to hide contaminated scrap.

(2) If evidence of top-dressing is apparent during unloading process, the contaminated scrap shall be removed or the remaining partial shipments shall be rejected.

E.2.3 Scrap Inspection Procedure

At any point in the inspection process, SDI personnel or agents working on behalf of Steel Dynamics, Inc. (SDI) shall issue warnings and accept loads with minor deficiencies or shall reject loads, which contain contaminated scrap.

(a) Scrap Inspectors
The persons responsible for inspecting the loads for contaminated scrap are the SDI employees operating the railcar or truck scales, the scrap bay and unloading operators, and yard personnel (crane operators, sorters, supervisors, etc.), Environmental Department, the scrap broker, or other agents working on behalf of SDI.

(b) Entry
(1) The scale operator shall verify that the paperwork accompanying the load matches the load.

If not, then the correct paper work shall be obtained before acceptance of the load or the load shall be rejected.

(2) The scale operator shall verify that the paperwork does not indicate the load contains contaminated scrap.

(c) Scrap Inspection
(1) The scrap bay and unloading operators or yard personnel shall inspect the top of the load to insure it complies with the specifications.

(2) Yard personnel or scrap bay operators shall observe the load being dumped to make sure the load is consistent and contains contaminated scrap.

(3) If the scrap bay and unloading operator suspect top-dressing of the load, they shall direct the load to be magged-off to inspect for load consistency.

(4) Yard operators shall inspect the scrap during loading from stockpiles into railcars slated for delivery to the scrap bay.

(5) Scrap bay operators shall inspect the scrap during loading into the charge bucket.

(6) Contaminated scrap found in the stockpile or scrap bay shall be removed and discarded in accordance with applicable rules and regulations or returned to the scrap vendor.

(d) Load Acceptance
Loads that meet the scrap specifications in this Program may be directed for unloading and melting.

(e) Rejected Loads

(1) Loads that do not meet the specifications within this Program shall be returned to the vendor or the contaminated scrap removed from the load.

(2) Contaminated scrap that is removed from the load shall be returned to the vendor or disposed in accordance with applicable rules and regulations.

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
Compliance Branch
100 North Senate Avenue, MC 61-53 IGCN 1003, Indianapolis, Indiana 46204-2251

Part 70 Operating Permit
CERTIFICATION

Source Name:	Steel Dynamics, Inc. (SDI)- Structural and Rail Division
Source Address:	2601 County Road 700 East, Columbia City, Indiana 46725
Mailing Address:	2601 County Road 700 East, Columbia City, Indiana 46725
Part 70 Operating Permit No.	T183-17160-00030

This certification shall be included when submitting monitoring, testing reports/results or other documents as required by this approval.
Please check what document is being certified:
☐ 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:
Date:
Telephone:

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
Compliance Branch
100 North Senate Avenue, MC 61-53 IGCN 1003, Indianapolis, Indiana 46204-2251

Part 70 Operating Permit
CERTIFICATION

Source Name:	Slag Handling – On-site Contractor for Steel Dynamics, Inc. (SDI) - Structural and Rail Division
Source Address:	2601 County Road 700 East, Columbia City, Indiana 46725
Mailing Address:	2601 County Road 700 East, Columbia City, Indiana 46725
Part 70 Operating Permit No.	T183-17160-00030

This certification shall be included when submitting monitoring, testing reports/results or other documents as required by this approval.
Please check what document is being certified:
☐ 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:
Date:
Telephone:

Form Completed By:	
Title/Position:	
Date:	Telephone:

A certification by the responsible official as defined by 326 IAC 2-7-1(34) is required for this report.

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
Compliance Branch
100 North Senate Avenue, MC 61-53 IGCN 1003, Indianapolis, Indiana 46204-2251

Part 70 Operating Permit
EMERGENCY OCCURRENCE REPORT

Source Name: Steel Dynamics, Inc. (SDI) - Structural and Rail Division
Source Address: 2601 County Road 700 East, Columbia City, Indiana 46725
Mailing Address: 2601 County Road 700 East, Columbia City, Indiana 46725
Part 70 Operating Permit No. T183-17160-00030

This Report consists of 2 pages.

Page 1 of 2

This is an emergency as defined in 326 IAC 2-7-1(12)

The Permittee must notify the Office of Air Quality (OAQ), within four (4) daytime business hours (1-800-451-6027 or 317-233-0178, ask for Compliance Section); and

The Permittee must submit notice in writing or by facsimile within two (2) working days (Facsimile Number: 317-233-6865), and follow the other requirements of 326 IAC 2-7-16.

Address: 100 North Senate Avenue, MC 61-53 IGCN 1003,Indianapolis, Indiana 46204-2251

This Emergency Occurrence Report consists of 2 pages.

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:
Date/Time Emergency started
Date/Time Emergency was corrected:

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

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

Form Completed By:
Title/Position:
Date:
Telephone:

A certification by the responsible official as defined by 326 IAC 2-7-1(34) is NOT required for this report.

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
Compliance Branch
100 North Senate Avenue, MC 61-53 IGCN 1003, Indianapolis, Indiana 46204-2251

Part 70 Quarterly Report

Source Name:	Steel Dynamics, Inc. (SDI) - Structural and Rail Division
Source Address:	2601 County Road 700 East, Columbia City, Indiana 46725
Mailing Address:	2601 County Road 700 East, Columbia City, Indiana 46725
Part 70 Operating Permit No.	T183-17160-00030
Facility:	EAF
Parameter:	Steel Production per year
Limit:	2,628,000 tons per 12-consective month period with compliance demonstrated at the end of each month

YEAR:_____

Month	Steel Production		
	Column 1	Column 2	Column 1 + Column 2
	This month (tons/month)	Previous 11 Months	12-Month Total (tons/year)

Form Completed By:
Title/Position:
Date:
Telephone:

A certification by the responsible official as defined by 326 IAC 2-7-1(34) is required for this report.

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
Compliance Data Section
100 North Senate Avenue, MC 61-53 IGCN 1003, Indianapolis, Indiana 46204-2251

Part 70 Quarterly Report

Source Name:	Steel Dynamics, Inc. (SDI) - Structural and Rail Division
Source Address:	2601 County Road 700 East, Columbia City, Indiana 46725
Mailing Address:	2601 County Road 700 East, Columbia City, Indiana 46725
Facility:	LVD Boiler (ID# 41) (41.08 MMBtu/hr)
Parameters:	natural gas and propane usages
Limits:	209 MMCF of natural gas per twelve consecutive month period and 222 kilogallons of propane per twelve consecutive month period

YEAR: _____

Month	Fuel	Natural Gas and Propane Used		
		Column 1	Column 2	Column 1 + Column 2
		This Month	Previous 11 Months	12-Month Total
	Natural gas (MMCF)			
	Propane (kgal)			
	Natural gas (MMCF)			
	Propane (kgal)			
	Natural gas (MMCF)			
	Propane (kgal)			

Form Completed By:
Title/Position:
Date:
Telephone:

A certification by the responsible official as defined by 326 IAC 2-7-1(34) is required for this report.

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
Compliance Branch
100 North Senate Avenue, MC 61-53 IGCN 1003, Indianapolis, Indiana 46204-2251

Part 70 Quarterly Report

Source Name:	Slag Handling – On-site Contractor for Steel Dynamics, Inc. (SDI) - Structural and Rail Division
Source Address:	2601 County Road 700 East, Columbia City, Indiana 46725
Mailing Address:	2601 County Road 700 East, Columbia City, Indiana 46725
Part 70 Operating Permit No.	T183-17160-00030
Facility:	Slag Handling
Parameter:	slag per year
Limit:	438,000 per 12 consecutive month period with compliance demonstrated at the end of each month.

YEAR: _____

Month	Slag Production		
	Column 1	Column 2	Column 1 + Column 2
	This month (tons/month)	Previous 11 Months	12- Month Total (tons/year)

Form Completed By:
Title/Position:
Date:
Telephone:

A certification by the responsible official as defined by 326 IAC 2-7-1(34) is required for this report.

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE DATA SECTION
100 North Senate Avenue, MC 61-53 IGCN 1003, Indianapolis, IN 46204-2251

PART 70 OPERATING PERMIT
QUARTERLY DEVIATION AND COMPLIANCE MONITORING REPORT

Source Name: Steel Dynamics, Inc.(SDI) - Structural and Rail Division
Source Address: 2601 County Road 700 East, Columbia City, Indiana 46725
Mailing Address: 2601 County Road 700 East, Columbia City, Indiana 46725
Part 70 Permit No.: T183-17160-00030

Months: _____ **to** _____ **Year:** _____

This report shall be submitted quarterly based on a calendar year. Any deviation from the requirements, the date(s) of each deviation, the probable cause of the deviation, and the response steps taken must be reported. Deviations that are required to be reported by an applicable requirement shall be reported according to the schedule stated in the applicable requirement and do not need to be included in this report. 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.

Indiana Department of Environmental Management
Office of Air Quality

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

Source Name:	Steel Dynamics, Inc. Structural and Rail Division
Source Location:	2601County Road 700 East, Columbia City, Indiana 46725
County:	Whitley County
SIC Code:	3312
Operation Permit No.	T183-17160-00030
Permit Reviewer:	Gail McGarrity

On February 11, 2006, the Office of Air Quality (OAQ) had a notice published in the Columbia City Post-Mail, stating that Steel Dynamics, Inc. Structural and Rail Division had applied for a Part 70 Operating Permit to operate a steel beam minimill. The notice also stated that OAQ proposed to issue a permit for this operation and provided information on how the public could review the proposed permit and other documentation. Finally, the notice informed interested parties that there was a period of thirty (30) days to provide comments on whether or not this permit should be issued as proposed.

Written comments were received from Daniel and Sandra Trimmer and Charles D. Acheson on March 14, 2006. These comments are summarized and IDEM, OAQ responses, including changes to the permit (where language deleted is shown with ~~strikeout~~ and the added is shown in bold) are as follows:

Comment 1- Page 40 of the Technical Support Document (TSD) under Compliance Requirements

The following statement is made: "Permits issued under 326 IAC 2-7 are required to ensure that sources can demonstrate compliance with applicable state and federal rules on a more or less continuous basis". There is nothing in 326 IAC 2-7 that contains "more or less". Please remove the term "more or less" and include continuous compliance basis.

Response 1

IDEM agrees the source is required to demonstrate continuous compliance with the Part 70 permit. Therefore, the words "more or less" should not be stated in the Technical Support Document (TSD). No changes have been made to the TSD because the OAQ prefers that the Technical Support Document reflect the permit that was on public notice. Changes that occur after the public notice are documented in this Addendum to the Technical Support Document. This accomplishes the desired result, ensuring that these types of concerns are documented and part of the record regarding this permit decision.

Comment 2- Page 40 of the TSD under Compliance Requirements

The second paragraph contains the following statements: "Unlike Compliance Determination actions 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." First, continuous compliance is a requirement of the CAA. Except for specific provisions set forth for emergency and other special circumstances that are closely regulated and spelled out in the permit, continuous compliance is required. There is very specific guidance about 'excursions' and 'emergencies'. The first time it happens, it's an emergency or some sort of unforeseen condition that causes the exceedance of the limits. It gets reported as such and the source is required to correct their system so that the same condition does not recur. If it happens over and over again, it is no longer excusable as an emergency condition and the source has to repair the equipment. The circumstances that lead to the out of compliance condition must be corrected.

Response 2

IDEM agrees. If a source does not take appropriate measures to correct systems that fail and the system failures keep reoccurring, then it means the Preventive Maintenance Plan is inadequate. The Permittee will be required to revise the Preventive Maintenance Plan for the system because the lack of preventive maintenance caused or contributed to the system failure. The noncompliance with any permit condition would be a violation of the Part 70 permit and IDEM would take appropriate enforcement action against the Permittee.

Comment 3

Most of the HAPs that were being tested for in the original permit have been deleted from this permit. Although some of their emissions were below the detectable level during stack tests, the potential for these HAPs are possible and remains an issue for continuous compliance when considering the variability associated with the batch processing, quality and quantity of the scrap that is used in the process. It is appropriate for IDEM to include the testing for these HAPs in this permit.

Response 3

The original stack tests included testing to determine which HAPs are emitted during the scrap processing. Many of the tested HAPs were not found to be present in detectable levels. Therefore, the Permittee is only required to test for the HAPs that were present in detectable levels during the stack testing of the scrap processing. The permit is not revised as a result of this comment.

Comment 4- Page 20 of the TSD under State Rule Applicability, Electric Arc Furnaces - 326 IAC 2-1.1-4, 326 IAC 2-2 and 326 IAC 2-4.1-1 Hazardous Air Pollutants (HAP) Limitations

The following statements are made: "(a) Pursuant to SSM183-18426-00030 issued November 21, 2005 and 326 IAC 2-1.1-4, the beryllium to be emitted from the EAF stack in a quantity equal to or greater than 8.6×10^{-5} pounds per hour. (b) Pursuant to CP183-10097-00030 issued July 7, 2001 and 326 IAC 2-1.1-4 the manganese compounds to be emitted from the EAF stack in a quantity equal to or greater than 1.14 pounds per hour." In the fore mentioned permits, the sentence previous to these quotes was "Pursuant to 326 IAC 2-1.1-4" and "The Permittee shall not allow" was included in SSM183-17160-00030 Condition D.1.13. Therefore, IDEM must correct this error and include, 'the Permittee shall not allow' to the technical support document of this permit.

Response 4

IDEM agrees. The following is the correct statement:

326 IAC 2-1.1-4, 326 IAC 2-2, 326 IAC 2-4.1-1 Hazardous Air Pollutant (HAP) Limitations

Pursuant to PSD Permit SSM183-18426-00030 issued November 18, 2005 and 326 IAC 2-1.1-4, the Permittee shall not allow:...

Comment 5- Page 20 of the TSD under State Rule Applicability, Electric Arc Furnaces - 326 IAC 2-1.1-4, 326 IAC 2-2 and 326 IAC 2-4.1-1 Hazardous Air Pollutants (HAP) Limitations

The beryllium is limited to "8.6×10^{-5}pounds per hour". In PSD permit SSM 183-18426-00030, the limit is "5.75×10^{-5} pounds per hour". Which beryllium limit is correct?

Response 5

The beryllium emission limit of 8.6×10^{-5} pound per hour is the correct limit. This beryllium emission limit supersedes the beryllium emission limit of 5.75×10^{-5} pound per hour from the previously issued PSD permit SSM183-18426-00030 issued on November 18, 2006.

Comment 6

The TSD Addendum for SSM183-18426-00030, stated referrals had been sent to enforcement. Please comment on these violations and status of the enforcement actions or referrals.

Response 6

IDEM is taking enforcement action against the company for the following violations.

(a) Case No. 2003-12992-A
The lead emissions limit for the EAF baghouse dust was exceeded during an inspection conducted on April 15, 2003. A Notice of violation was sent to the source on March 24, 2006.

(b) Case No. 2003-15028-A
The visible emissions from the digging skull slag pits were exceeded during an opacity test conducted May 16, 2003. A Notice of violation was sent to the source on March 16, 2006.

(c) Case No. 2003-15029-A
The fluoride emissions limit for the EAF baghouse stack was exceeded during a stack test conducted on February 20, 2003. A Notice of violation was sent to the source on March 16, 2006.

(d) Case No. 2004-15032-A
(1) The lead emissions limit for the EAF baghouse dust was exceeded during an inspection conducted on May 12, 2005
(2) The source failed to maintain records of the dates and times of all baghouse leak detection system alarms, cause of each alarm and explanation of the corrective action taken.
(3) The sulfur limit of the charge carbon added to the EAF was exceeded during an inspection on Mat 12, 2005.
(4) The source failed to perform the recordkeeping requirement for the direct reduced iron and charge carbon added to the EAF.
(5) The source's semi-annual reports did not contain information about EAF furnace static pressure or fan amperes.
A Notice of violation was sent to the source on March 24, 2006.

(e) Case No. 2005-15033-A
The lead emissions limit for the EAF baghouse stack was exceeded during a stack test conducted on April 19-20, 2005. A notice of violation was sent to the source on March 24, 2006.

(f) Case No. 2005-15472-A
The lead emissions limit for the EAF baghouse stack was exceeded during a stack test conducted on June 15, 2005. A notice of violation was sent to the source on May 12, 2006.

All of these cases are pending and IDEM will take appropriate enforcement.

Comment 7

In Appendix A of the TSD Addendum of PSD/SSM 183-18426-00030, the frequency for testing for NOx in Condition D.1.21(a) was changed from "once every year" to "once every 2.5 years". This was changed without public comment on this subject. Does this new requirement prove that there is continuous compliance?

Response 7

326 IAC 2-7-6(1) and 326 IAC 2-1.1-11 provide IDEM the authority to require compliance testing conditions as necessary to assure that all reasonable information is provided to evaluate continuous compliance with the emission limits. These rule cites are included as part of the title of the performance testing section of the permit. The electric arc furnaces (EAFs) need to be tested periodically (every 2.5 years) to provide reasonable compliance information. The permit is not revised as a result of this comment.

Comment 8

In Appendix A of the TSD Addendum of PSD/SSM 183-18426-00030, the requirements in D.1.21 for when the initial tests must occur were changed from "...but no later than 180 days after start up..." to "...but no later than 365 days after start up...". CFR 40 60.8 (a) states, "...no later than 180 days." This must be changed back to 180 days to conform to Federal guidelines.

Response 8

The testing is conducted pursuant to Compliance Requirements 326 IAC 2-1.1-11. The state rule allows the testing more than 180 days after start up. The testing schedule was extended to 365 days after the modification to allow for normalization of the operation. The permit is not revised as a result of this comment.

Comment 9

In Appendix A of the TSD Addendum of PSD/SSM 183-18426-00030, Condition D.1.26 Baghouse Inspections was deleted. "Pursuant to 183-10097-00030 and 183-12692-00030, an inspection shall be performed annually of all bags controlling the EAFs. All defective bags shall be replaced. A record shall be kept of the results of the inspection and the number of bags replaced." What is the basis for removing this requirement? Inspection and replacement of bags is appropriate and must be included. The baghouse is the primary control from EAF emission and must be maintained in good working order. Please replace this provision.

Response 9

Condition D.1.26 Baghouse Inspections was removed from PSD/SSM183-18426-00030, to avoid unnecessary or duplicative compliance monitoring since the source already has a baghouse leak detection system and continuous opacity monitoring system (COM) to demonstrate compliance. In addition, IDEM has determined that it is the Permittee's responsibility to include routine control device inspection requirements in the applicable preventive maintenance plan. The EAF baghouse preventive maintenance plan also includes the name and number of replacement parts for the baghouse. Since the Permittee is in the best position to determine the appropriate frequency of control device inspections and the details regarding which components of the control device should be inspected, the conditions requiring control device inspections have been removed from the permit. The permit is not revised as a result of this comment.

Comment 10

In Appendix A of the TSD Addendum of PSD/SSM 183-18426-00030, D.1.24 SO_2 Continuous Emission Rate Monitoring Requirement and D.1.25 Baghouse Operating Condition were

eliminated. What is the reason for eliminating this requirement? What will ensure continuous compliance?

Response 10

The SO_2 CEMs monitoring requirement in PSD/SSM183-18426-00030 Condition D.1.24 was removed from the permit, because this mill does not make resulfurized steel and there is no SO_2 control device on the stack. However, the requirement to maintain the sulfur content of the DRI, charge carbon and injection carbon has been required as part of the PSD BACT limits. Requirements for SO_2 stack testing every 2.5 years were included in the PSD/SSM183-18426-00030 and the requirements were incorporated into the Part 70 permit T183-17160-00030 in Conditions D.1.6 and D.1.21.

The baghouse operating requirements in PSD/SSM183-18426-00030 Condition D.1.25 are the same as the requirements listed in EAF Baghouse Operation Condition D.1.20. Since Conditions D.1.20 and D.1.25 contained redundant requirements, only one condition was incorporated into the Part 70 permit T183-17160-00030. The permit is not revised as a result of these comments.

Comment 11- Condition D.1.22 CO and VOC Continuous Emission Rate Monitoring Requirement

Whenever the VOC or CO CEMS are down longer than 4 hours, there must be an appropriate alternate monitoring method or a spare or replacement monitor. There should be a report to IDEM when the 4 hours has been exceeded and there must be an acceptable plan for resuming monitoring. Calibration is and should be a very short turnaround time. If it's long, or the equipment can no longer be calibrated or refused to stay within acceptable tolerances, it should be declared faulty or malfunctioning expeditiously so that a replacement or spare can be obtained and installed. All down time must be logged and reported. It should not be an option at the discretion or whim of the source to repair, replace, or continue to operate faulty monitors and there must be enforceable conditions and consequences for failing to monitor or report.

Response 11

Inspections of the equipment that is important to the performance of the direct-shell evacuation control (DEC) system, canopy hood and total capture system, such as pressure sensors, dampers and damper switches are required by the permit. If the equipment can no longer be calibrated or maintained within the acceptable tolerance, the Permittee is required to replace the CEMs. Also Condition D.1.28(b) requires the VOC and CO monitor readings and downtime to be reported on a quarterly basis in accordance with 326 IAC 3-5-7. It is a violation for the CEMS to be down, even though the source performs other monitoring or operational parameter readings during the CEMS downtime. All these requirements are federally enforceable. The permit is not revised as a result of this comment.

Comment 12- Condition D.2.7(f) Tundish Dryer - PSD Best Available Control Technology Limits

The condition listed above states "The SO2 emissions from the Tundish Dryer (ID#3o) shall not exceed 0.0006 pounds per MMBtu and pounds per hour based on a 3-hour block average." The amount of pounds per hour is missing. Please include this in the final permit or explain the reason for this error.

Response 12

The Tundish Dryer (ID# 3o) SO_2 pound per hour limit based on a 3-hour block average is 0.003 pound per hour.

5 MMBtu per hr x 0.0006 lb SO_2 per MMBtu = 0.003 lb per hour SO2

The Part 70 permit T183-17160-00030 is revised as shown below.

D.2.7 Tundish Dryer PSD BACT Limits [326 IAC 2-2]

Pursuant to PSD Permit SSM183-18426-00030, issued November 21, 2005 and 326 IAC 2-2 Prevention of Significant Deterioration (PSD), the Permittee shall comply with the following PSD Best Available Control Technology (BACT) standards:

.....

(f) The SO_2 emissions from the Tundish Dryer (ID# 3o) shall not exceed 0.0006 pounds per MMBtu and **0.003** pounds per hour, based on a 3-hour block average.

Comment 13

In Appendix A of the TSD Addendum of PSD/SSM 183-18426-00030 Condition D.1.16 states, "Pursuant to 326 IAC 2-2 Prevention of Significant Deterioration (PSD) and PSD Permits 183-10097-00030 and 183-12692-00030, at least 99% of the filterable and condensible PM/PM10 emissions from the ladle metallurgy station (LMS) (ID# 3a) shall be captured by the meltshop roof canopy, then controlled by the existing common EAFs Baghouse." Not only is the 99% crossed out, also the "captured by the meltshop roof canopy". Capture by the meltshop canopy is exceedingly important. Because of future expansion of the facility, it is very likely that an LMS could be in more than one building, and the emissions must be contained. Please include this requirement in permit T183-17160-00030.

In Appendix A of the TSD Addendum of PSD/SSM 183-18426-00030 Condition D.1.17(a) states "Pursuant to 326 IAC 2-2 Prevention of Significant Deterioration (PSD) and PSD Permits 183-10097-00030 and 183-12692-00030, at least 99% of the filterable and condensible PM/PM10 emissions from the continuous caster (CC)(ID#3k) shall be captured by the meltshop roof canopy, then controlled by the common EAF's Baghouse." Again, because of future expansion of the facility, there is reasonable likelihood that there will be continuous casting in a separate building. The need to include 'captured by the meltshop canopy' in T183-17160-00030 is necessary.

Response 13

The requirements to achieve 99% capture efficiency for LMS and Casters have been eliminated because they are duplicative requirements. A stringent opacity limit has already been specified at 3% to ensure good capture efficiency. Also, compliance methods have been sufficiently specified such that the LMS and Casters are properly exhausting to the EAF's Baghouse. Any future expansion will have to go through the PSD BACT permit review process before being modified or built. The permit is not revised as a result of this comment.

Comment 14 - Condition D.1.6 Sulfur Dioxide (SO_2) - PSD Best Available Control Technology

In Appendix A of the TSD Addendum of PSD/SSM 183-18426-00030 Condition D.1.6(b) states, "Pursuant to 326 IAC 2-2-3 Prevention of Significant Deterioration (PSD), the SO_2 emissions from the EAF's Baghouse stack shall not exceed 0.25 pounds per ton of steel and 75 pounds of SO_2 per hour based on a three (3) hour block average." The following portion of the SO_2 limit was deleted from the permit: "not to exceed 0.25 pounds per ton of steel". This deletion was not part of the permit review, and IDEM has reacted to comments made by the source to relax the requirement. This was not part of 'public review', and should be restored into permit T183-17160-00030.

Response 14

IDEM evaluated the PSD BACT limits for the EAFs. The pound per ton limit for SO_2 was incorrectly deleted from condition D.1.6(b) of SSM183-18426-00030. A change in a PSD BACT

limit has to go through the public review process. The Part 70 permit T183-17160-00030 is revised as follows:

D.1.6 Sulfur Dioxide (SO_2) - PSD Best Available Control Technology [326 IAC 2-2]

(a) .....

(b) Pursuant to PSD Permit SSM183-18426-00030 issued November 18, 2005 and 326 IAC 2-2 Prevention of Significant Deterioration (PSD), the SO_2 emissions from the EAFs Baghouse stack shall not exceed **0.25 pounds per ton of steel and** 75 pounds of SO_2 per hour based on a three (3) hour block average.

Comment 15

In Appendix A of the TSD Addendum of PSD/SSM 183-18426-00030, the word "minimized" was replaced with "controlled" in Conditions D.1.9(a) Volatile Organic Compounds (VOC); D.1.10(a) Lead; D.1.11(a) Mercury; and D.1.12 Fluorides. Minimize means to reduce the pollutant to a minimum. Control means to direct the pollutant. "Minimized" is what IDEM must restore to the permit. The effectiveness of the requirement is reduced with "controlled".

Response 15

IDEM agrees. The word "controlled" has been replaced by the word "minimized" in Conditions D.1.9(a), D.1.10(a), D.1.11(a) and D.1.12. The permit is revised as follows:

D.1.9 Volatile Organic Compounds (VOC) - PSD Best Available Control Technology [326 IAC 2-2]

(a) Pursuant to CP183-10097-00030, issued July 7, 1999, amended by PSD Significant Source Modification SSM183-12692-00030, issued January 10, 2001 and 326 IAC 2-2 (PSD - Control Technology Review; Requirements), the VOC emissions from the EAFs shall be **minimized** ~~controlled~~ in accordance with the Scrap Management Program (SMP) (Section E.2) and shall be controlled by thermal oxidation and maintaining a negative pressure at the direct shell evacuation control (DEC) system air gap.

D.1.10 Lead - PSD Best Available Control Technology [326 IAC 2-2]

(a) Pursuant to PSD Permit SSM183-18426-00030 issued November 18, 2005 and 326 IAC 2-2 (PSD - Control Technology Review; Requirements), the lead emissions from the EAFs shall be:

(1) **minimized** ~~controlled~~ in accordance with the Scrap Management Program (SMP) (Section E.2), and

(2) controlled by a baghouse.

D.1.11 Mercury - PSD Best Available Control Technology [326 IAC 2-2]

(a) Pursuant to PSD Permit SSM183-18426-00030, issued November 18, 2005 and 326 IAC 2-2 (PSD - Control Technology Review; Requirements), the mercury emissions from the EAFs shall be:

(1) **minimized** ~~controlled~~ in accordance with the Scrap Management Program (SMP) (Section E.2), and .....

D.1.12 Fluorides- PSD Best Available Control Technology [326 IAC 2-2]

(a) Pursuant to PSD Permit SSM183-18426-00030 issued November 18, 2005 and 326 IAC 2-2 (PSD - Control Technology Review; Requirements), the fluoride emissions from the EAFs shall be:

(1) **minimized** ~~controlled~~ by using the granular type of Fluorspar, instead of the powdered type and .....

Comment 16 - Condition D.1.12 Fluorides- PSD Best Available Control Technology

In Appendix A of the TSD Addendum of PSD/SSM 183-18426-00030 Condition D.1.12(b) Fluorides states "Pursuant to 326 IAC 2-2 Prevention of Significant Deterioration (PSD), the Fluorides emissions from the EAFs Baghouse stack shall not exceed 0.01 pounds per ton of steel and 2.09 pounds of Fluorides per hour based on a three (3) hour block average." In the comments, TSD Addendum of PSD/SSM 183-18426-00030 page 25 of 66, IDEMs response does not lead us to believe that there will be a change in 'pounds per ton'. The Permittee had failed their stack test for Fluoride significantly. As a result, (last paragraph of response) IDEM required the use of a "granular type of Fluorspar to minimize fluoride emissions." "SDI made this change to their process in order to pass their most recent stack test for fluoride." If Fluorspar has corrected the problem, that lead to the failure, SDI should be meeting their requirement of 0.00697 pounds per ton on a continuous basis. The requirement should read 0.0697 pounds per ton, in T183-17160-00030.

Response 16

The fluoride pound per ton was established in the final permit as 0.01 lb/ton of steel and 2.09 pounds of fluorides per hour based on a three (3) hour block average. This limit is established as BACT limit in Condition D.11(b) of PSD/SSM 183-18426-00030. The PSD BACT limit cannot be changed in T183-17160-00030.

Comment 17

In Appendix A of the TSD Addendum of PSD/SSM 183-18426-00030 Condition D.1.23(d) "Whenever a continuous opacity monitor (COM) is malfunctioning or will be down for calibration, maintenance, or repairs for a period of one (1) hour or more, compliance with the applicable opacity limits shall be demonstrated by the following: (i) Visible emission (VE) notations shall be performed once per hour during daylight operations following the shutdown or malfunction of the primary COMS. A trained employee shall record whether emissions are normal or abnormal for the state of operation of the emission unit at the time of the reading. (A) 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. (B) If abnormal emissions are noted during two consecutive emission notations, the Permittee shall begin Method 9 opacity observations within four hours of the second abnormal notation. (C) VE notations may be discontinued once a COMs is online or formal Method 9 reading have been implemented." has been eliminated. This has been replaced by "Whenever a COMS is malfunctioning or is down for maintenance or repairs for a period of twenty-four (24) hours or more and a backup COMS is not online within twenty-four (24) hours of shutdown or malfunction of the primary COMS, the Permittee shall provide a certified opacity reader, who may be an employee of the Permittee or an independent contractor, to self-monitor the emissions from the emission unit stack." (1-4) are comparatively the same. There was nothing in the draft permit or comments that would suggest that the 'period of one (1) hour' be replaced with 24 hours. Please explain the basis for this change without public participation.

Response 17

Upon further review, IDEM determined that no additional monitoring will be required during COMS downtime, until the COMS has been down for twenty-four (24) hours. This allows the Permittee to focus on the task of repairing the COMS during the first twenty-four (24) hour period. After twenty-four (24) hours of COMS downtime, the Permittee will be required to conduct Method 9 readings for thirty (30) minutes. Once Method 9 readings are required to be performed, the

readings should be performed twice per day at least 4 or 6 hours apart, rather than once every four (4) hours, until a COMS is back in service.

Comment 18

In the TSD Addendum of PSD/SSM 183-18426-00030 page 12 of 66, Comment 10, IDEM response (b)D.1.25(a)(ii)and (iii) states that IDEM did not delete the word 'install'. However, T183-17160-00030 D.1.25 (2) and (3) has deleted the word 'install'. Federal Code states, 'Install, calibrate, and maintain...'

Response 18

The word "install" was deleted, because SDI has already installed the required monitoring device as required by the source modification. The permit is not revised as a result of this comment:

Comment 19

In Appendix A of the TSD Addendum of PSD/SSM 183-18426-00030 Condition D.2 "...NOx emissions from the locomotives shall not exceed 490 pounds per kilogallon of diesel fuel" This has been eliminated as a comment (page 43 and 44 of 66). However, IDEM has not inspected 'Old Smokey'. This On Site locomotive must be included in the overall emissions limitations.

Response 19

The emissions from locomotives fall under the Title 2 of the Clean Air Act. 326 IAC 13 Motor Vehicle Emissions Rules are not applicable to SDI and 326 IAC 19 Mobile Source Rules apply to employees in Lake and Porter Counties only. Since SDI is located in Whitley County the Mobile Source rules are not applicable. The permit is not revised as a result of this comment.

Comment 20- Condition E.2.1(e) General Specifications

The condition listed above states, "A portion or an entire scrap load shall be rejected depending on the contaminants, placement/location of the contaminated material or frequency of occurrence." Does this also apply to individuals who regularly bring scrap into the facility? Besides their normal vendors, there are several 'Martin' (demolition, salvage, and building) Corp. scrap trucks most days, and large farm trucks on occasion.

Response 20

The scrap management plan applies to all scrap delivered to SDI. SDI has the option to reject an entire load or partial load of scrap from all vendors. The scrap must meet the requirements in the scrap management plan.

Comment 21

Even though the baghouse is the primary control for EAF emissions at the facility, we find that the only time (with very few exceptions) that we see steam from the baghouse stack is in the month of December. The variability of temperature throughout the winter months should create, at the least, heat waves from this stack. However, this does not occur. Are there safeguards that ensure continuous use of the baghouse?

Response 21

If the baghouse was not operating or improperly operating during EAF operation, the particulate emissions and opacity would be clearly visible. Permit Condition D.1.20 requires the EAF baghouse to be in operation at all times the EAF is in operation. The EAF baghouse has a bag leak detection system and a COMS as monitoring devices to ensure the baghouse is operating

properly and continuous compliance is demonstrated with the particulate and opacity emission limits in the permit for the EAF.

Comment 22- Page 7 of the TSD

Condition C.10, Operation of Equipment, in PSD/SSM 183-18426-00030 was deleted. 326 IAC 2-7-6(6) must be included in this permit for guidance of Operation of Equipment. Provisions and enforcement discretion are already in place to prevent 'double jeopardy'. The reasoning for eliminating duplicates in this case, is unjustifiable.

Response 22

Pursuant to 326 IAC 2-7-5(6)(A), the Permittee must comply with all conditions of the Part 70 permit. Noncompliance with any Part 70 permit condition constitutes a violation of the Clean Air Act and is grounds for enforcement action. If the same requirement to operate one control device is in Section C and D section and if multiple control devices did not operate at any time, then the Permittee would violate two permit conditions for the same violation. Therefore, only one condition in D Section is retained so that the Permittee is not penalized twice for the same violation.

Comment 23- TSD, 326 IAC 2-2 Tundish Nozzle Preheater (3m) and Tundish Preheater (3n)

The Tundish Nozzle Preheater and Tundish Preheater use propane as a backup fuel. Where are the propane tanks located and how large are they?

Response 23

Propane tanks used for the purpose of backup fuel are not stored on site. The propane tanks would be brought on site if there was a natural gas flow curtailment and the plant needed an alternate source of fuel to run production. In the unlikely event that propane was necessary it is estimated 30,000 to 40,000 gallons of propane in three to four 10, 000 gallon tanks would be used.

Comment 24

In Appendix A of the TSD Addendum of PSD/SSM 183-18426-00030 Fugitive Dust Control Plan, Section E.1.1(a)(2) states "unpaved areas within the slag processing area by 90 percent, and E.1.1(a)(3) states "the slag processing operations by 95 percent (95%)". The percentages have been eliminated from this permit with no explanation of the basis for removal.

Response 24

The percentages have been removed from the Fugitive Dust Control Plan (FDCP), because specific limits for opacity for the slag handling and unpaved areas in Conditions D.6.3 and D.7.2 are 5% and 10% opacity, respectively. The permit is not revised as a result of this comment.

Comment 25

In Appendix A of the TSD Addendum of PSD/SSM 183-18426-00030, E.1.3(a) states "Unpaved areas traveled around slag storage piles and steel scrap piles shall be treated with an IDEM-approved dust suppressant at the rate of 0.16 gallons per square yard, or another rate approved by the IDEM, OAQ in order to meet compliance with the associated visible emissions limitations." This permit, T183-17160-00030, eliminates "at the rate of 0.16 gallons per square yard" from the requirement. There are no criteria for addressing dust control without it.

Response 25

The rate of dust suppressant has been deleted because it is restrictive and it does not provide flexibility for SDI to comply with the visible emissions limits. SDI shall comply with the visible emissions limits in Sections D.6 and D.7.

Comment 26 - Condition E.1.3 Unpaved Areas within the Slag Processing Area and Scrap Yard and Condition E.1.4 Wind Erosion from Open Slag Piles

Fugitive dust is a problem all year long, traveling outside of SDI's property line. Condition E.1.3(c)(1) states that treating the unpaved area may be delayed by one day if it has rained 0.1 inch or more during the 24 hour period prior to scheduled treatment. However, in the Spring/Summer/Fall, 0.1 inch of rain will not only evaporate within a 24 hour period, but with traffic, it will evaporate more quickly. IDEM should include, 'and as needed between scheduled applications'.

Condition E.1.3(c)(6) "The ambient air temperature is below 32 degrees F." This was added to this permit with no explanation. Fugitive dust is not controlled at this facility. There have been complaints filed, as dust has traveled almost ½ mile outside of the facility parameter.

In Condition E.1.4, the "Wind Erosion from Open Slag Piles" table was eliminated from the permit without an explanation.

Response 26

The source may delay treatment of unpaved areas if 0.1 inches of rain fall in 24 hours, but the opacity limits and fugitive dust requirements in the permit must be met all year.

This condition was in PSD SSM 183-18426-00030 permit as part of the fugitive dust control plan and is included in this permit as well. The provision to delay treatment when the temperature is below 32 degrees is included because dust suppressant can cause rain to form ice and accumulate on the roads and become a safety hazard.

The table that contained the moisture and silt content of the slag piles for wind erosion control is not necessary. Slag piles shall be sprayed with water on an "as needed" basis to eliminate wind erosion and not exceed the visible emissions limitations in this permit. Water added to the slag during processing provides added control.

The permit is not revised as result of this comment.

Comment 27 - Condition E.1.8 Monitoring and Recording Keeping

The word 'Daily' has been eliminated from this permit with no reason given. There is no guidance as to the frequency of the Monitoring and Record Keeping. Some periodic frequency must be included to show continuous compliance.

Response 27

The time period for keeping records is added to the permit.

E.1.8 Monitoring and Recording Keeping

Daily records of the vacuum sweeping, wet sweeping, or water flushing and spill control activities, and dust suppressant application frequency and amount shall be kept.

Comment 28 - Page 10 of TSD, Condition C.17 Response to Excursions or Exceedances

Condition C.17(a) states, "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." There is no timeline with which to 'detect' a violation from the operating permit, nor is there a timeline in which to bring the problem back into compliance, other than "as expeditiously as practicable". There must be guidelines for this.

In Appendix A of the TSD Addendum of PSD/SSM 183-18426-00030, the requirement in Condition C.17(iii)(e), "When abnormal emissions are observed, the Permittee shall take reasonable response steps in accordance with Section C.17 – Compliance Response Plan (CRP) – Preparation, Implementation, Records and Reports. Observation of abnormal emissions that do not violate an applicable opacity limit is not a deviation from this permit. Failure to take response steps in accordance with Section C.17 – Compliance Response Plan shall be a deviation from this permit." has been deleted from permit T183-17160-00030. It should not be an option at the discretion of the source to repair, replace, or continue to operate faulty monitors and there must be enforcement conditions and consequences for failing to monitor or report.

In Condition C.17(a), "...as practicable in accordance with good air pollution control practices" is unacceptable. It must state, "to be in continuous compliance with pollution control practices for *minimizing emissions*".

This permit has eliminated any reference to a Compliance Response Plan (CRP). In Appendix A of the TSD Addendum of PSD/SSM 183-18426-00030 the following reason was given why the CRP would not be removed from the permit: "Condition C.17 is not deleted because the central and main goal of the Part 70 program is each Permittee should be able to show their ability to verify compliance with applicable standards and requirements on a continuous basis. The CRP's reasonable response steps and schedule requirements are examples of documenting procedures developed from good business practices and the prevention of environmental problems. The Permittee already has maintenance schedules and trouble shooting guides that specify the steps to take when the equipment is not functioning correctly. The steps may involve some initial checking of the system to locate the exact cause, and other steps to place the system back into proper working order. Using the trouble shooting guide and the Permittee's own experience with the equipment, the steps are taken in order and as scheduled until the problem is fixed. The CRP has general means and guidance such that SDI knows that they have the obligation to show compliance continuously." The Title V permitting process is not intended to provide a mechanism for removing valid permit conditions from the permits that it aggregates into the Operating permit. Please include the condition or provide a proper forum for the review and consideration of the permit modification.

Response 28

Condition C.17 was renumbered C.15 as a result of the removal of Conditions C.10 and C.13 in T183-17160-00030. There are compliance determinations and monitoring requirements that determine the frequency of monitoring. The Permittee is required to take reasonable response steps when a compliance monitoring parameter is determined to be out of range or abnormal. The requirement to take reasonable response steps will ensure that the control equipment is returned to proper operation as soon as practicable, while still allowing the Permittee the flexibility to respond to situations that were not anticipated. In accordance with Condition C.15(d) Failure to take response steps shall be considered a deviation from the permit.

Condition C.15(a) does state "for minimizing emissions".

Condition C.17 Compliance Response Plan (CRP) - Preparation, Implementation, Records and Reports was revised and is now Condition C.15 Response to Excursions and Exceedances. SDI

will still be required to take response steps to repair or replace monitoring systems and keep records. If a source does not take appropriate measures to repair or replace monitoring systems that fail and the system failures keep reoccurring and are not recorded and reported, the noncompliance would be a violation of the Part 70 permit and this issue would be referred for enforcement action.

Comment 29- TSD under Existing Approvals

SSM 183-17426-00030 is referenced in the TSD, but I am unaware of this permit. If possible, please let me know how to obtain a copy of this permit.

Response 29

This is a typographical error. The permit referred to should have been SSM 183-18426-00030. The permit is available on IDEM's website at www.in.gov/idem/permits/air/pending.html.

Comment 30

In Appendix A of the TSD Addendum of PSD/SSM 183-18426-00030 Condition C.16, Pressure Gauge and Instrument Specifications states "(a) Whenever a condition in this permit requires the measurement of a temperature, the instrument employed shall have a scale such that the expected normal reading shall be no less than twenty percent (20%) of full scale and be accurate within plus or minus two percent (<2%) of full scale reading." T183-17160-00030 Section C.13, requires "(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." Any instrument that is used to control pollution must have accuracy specifications of plus or minus 2 %, plus a range that shall be no less than twenty percent (20%) of full scale. Furthermore, the instruments must be periodically tested for their accuracy. The accuracy and the periodic testing of these instruments must be included in this permit to ensure compliance.

In Appendix A of the TSD Addendum of PSD/SSM 183-18426-00030 C.16 states, "Whenever a condition in this permit requires the measurement of pressure drop across any part of the unit or its control device, the gauge employed shall have a scale such that the expected normal reading shall be no less than twenty percent (20%) of full scale and be accurate within plus or minus two percent (2%) of full scale reading." This requirement has been deleted from T183-17160-00030. Including this requirement in this permit is essential for accuracy of compliance.

Response 30

IDEM realizes that these specifications can only be practically applied to analog units. IDEM has also determined that the accuracy of the instruments is not nearly as important as whether the instrument has a range that is appropriate for the normal expected reading of the parameter. The general condition C.13 is deleted because specific monitoring instrument specifications and ranges are listed in the monitoring conditions in each specific Section D. The conditions are renumbered as necessary. The permit is revised as follows:

~~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.~~

Comment 31- Condition D.1.24 Bag Leak Detection System (BLDS)

In the PSD/SSM 183-18426-00030, the following requirements have not been included in this permit in Condition D.1.24 (a): "(vii) Each sensor should be inspected at least once per month to remove any build-up of material that may collect on the probe or insulator." and "(viii) Monthly QA check shall be performed to ensure the monitor is operating properly. If the results of the response test or electronics drift check are not favorable, the cause shall be investigated and any malfunctions corrected." These are critical to the accuracy of monitoring the control of air pollutants. Some positive indication of or reference to required maintenance that ensures proper operation of the sensor must be included in the permit.

In Appendix A of the TSD Addendum of PSD/SSM 183-18426-00030, D.1.24 (v), "The initial adjustment of the system shall, at a minimum, consist of establishing the baseline output by adjusting the sensitivity (range) and the averaging period of the device, and establishing the alarm set points and the alarm delay time", was deleted completely from this permit. Without the baseline and sensitivity range on the Bag Leak Detection System, it is impossible to demonstrate, monitor, or assume compliance with the permit. This must be included in this permit.

Response 31

IDEM agrees. Condition D.1.24 (v) in PSD/SSM 183-18426-00030 was incorrectly deleted. The items in D.1.24(a)(5) through (8) are renumbered as necessary. The PSD/SSM 183-18426-00030 Condition D.1.24 included these references for maintaining the BLDS. Therefore, the requirements are added back into this permit. The permit is revised as follows:

D.1.24 Bag Leak Detection System (BLDS) [326 IAC 2-2]

Pursuant to PSD Permit SSM183-12692-00030 issued January 10, 2001:

(a) The Permittee shall operate continuous bag leak detection systems (BLDS) for the EAFs Baghouse. The bag leak detection systems (BLDS) shall meet the following requirements:

(1) .....

(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.

~~(5)~~**(6)** In no event shall the sensitivity be increased by more than 100 percent or decreased by more than 50 percent over a 365 day period unless such adjustment follows a complete baghouse inspection which demonstrates the baghouse is in good operating condition.

~~(6)~~ **(7)** The bag detector must be installed downstream of the baghouses.

(8) Each sensor should be inspected at least once per month to remove any build-up of material that may collect on the probe or insulator.

(9) Monthly QA checks shall be performed to ensure the monitor is operating properly. If the results of the response test or electronics drift check are not favorable, the cause shall be investigated and any malfunctions corrected.

Comment 32

The vendor certification has been deleted from this permit. Why was this eliminated? Vendor certification needs to be included to ensure compliance for future expansion of the facility. All new equipment must meet minimal compliance monitoring and is required to verify compliance with the PSD BACT limitation and standards.

Response 32

The vendor certification report was required to be submitted only once with the Affidavit of Construction of the modification and not a reporting requirement of the Part 70 operating permit. Any future expansion of SDI will require a new permit application and permit review process for the added equipment.

Comment 33

There were no emissions calculation tables included in the final modification permit PSD/SSM 183-18426-00030, nor were they included in this draft permit T183-17160-00030. The calculation tables were included in the draft permit PSD/SSM 183-18426-00030. These tables are essential to a quick reference for comparison. These tables must be included in this permit T183-17160-00030 before it is final.

Response 33

The emissions calculations are part of the technical review for each specific source modification and included in the Technical Support Document for that modification. The SSM 183-18426-00030 Technical Support Document contains the calculations for determining the emission limits for that specific modification.

Comment 34

PSD/SSM 183-18426-00030, Condition C.4(b), "The Permittee shall implement the PMP's including any required record keeping, as necessary to ensure that failure to implement a PMP does not cause or contribute to an exceedance of any limitation on emissions or potential to emit.", has been eliminated from the T183-17160-00030. This is again, a necessary requirement to ensure continuous compliance.

In TSD Addendum of PSD/SSM 183-18426-00030, page 14 of 66 IDEM's response was, (a) "Condition C.4(b) is not deleted because this condition requires SDI to implement the PMPs to ensure that failure to implement the PMPs does not cause or contribute to an exceedance of any limitation specified in this permit. The following rules; 326 IAC 2-7-1(1).(3) and (13); 326 IAC 2-7-6(1) and (6); and 326 IAC 1-6-3 provides the authority for IDEM to require the implementation and maintenance of PMPs." There seem to be many mistakes in these permits, either by failing to include important requirements, or reacting to comments made by the Permittee to reduce requirements, without proper public review.

Response 34

The requirement for SDI to implement Preventive Maintenance Plans for equipment and control devices is not deleted from the Part 70 Operating Permit draft. IDEM determined that the Permittee is not required to keep records of all preventive maintenance. However, if the Permittee seeks to demonstrate that an emergency has occurred, the Permittee must provide, upon request, records of preventive maintenance in order to establish that the lack of proper maintenance did not cause or contribute to the deviation. The permit is not revised as a result of this comment.

Comment 35

In the Appendix A of the TSD Addendum of PSD/SSM 183-18426-00030, Condition D.5.10 Broken or Failed Bin Vent Filter Detection (a) "The affected compartments will be shut down immediately until the failed units have been repaired or replaced. Within eight (8) hours of the determination of failure, response steps according to the timetable described in the Preventive Maintenance Plan shall be initiated. For any failure with corresponding response steps and timetable not described in the Preventive Maintenance Plan, response steps shall be devised within eight (8) hours of discovery of the failure and shall include a timetable for completion." has been eliminated from this permit. Repairing or replacing filters in a timely manner is imperative to ensure compliance. IDEM must include this requirement into this permit.

Response 35

Condition D.5.10(a) was deleted, because it is a provision for multi-compartment baghouses. The bin vent filters are considered single compartment baghouses and the provision in Condition D.5.10(b) is for the single compartment baghouses. SDI is required to follow the Preventive Maintenance Plan for the Bin Vents, operate the bin vent filters at all times the storage silos are in operation and not exceed the opacity limits. The permit is not revised as a result of this comment.

Comment 36

In the Appendix A of the TSD Addendum of PSD/SSM 183-18426-00030 Condition D.5.10 states in (b), "for single compartment filters, failed units and the associated process will be shut down immediately as soon as possible until the failed units have been repaired or replaced." What does "as soon as possible" mean? Today, tomorrow, next week, or next month? What is required for continuous compliance?

Response 36

Paragraph (b) of Condition D.5.10 of SSM 183-18426-00030 has been revised for batch mode processes. The condition required an emission unit to be shut down "immediately" in case of baghouse failure. However IDEM is aware there can be safety issues with shutting down a process in the middle of a batch. IDEM also realizes that in some situations, shutting down an emissions unit mid-process can cause equipment damage. Since it is not always possible to shut down a process with material still remaining in the equipment, IDEM has revised the condition to state that in the case of filter failure, the feed to the process and the process shall be shut down as soon as possible. SDI is required to demonstrate continuous compliance with the three percent (3%) opacity limit at all times as set forth in this Section D for the storage bins. Since the storage silos have a batch loading and unloading process, VE readings are required on a weekly basis when loading and unloading material to show continuous compliance. When VE readings are abnormal, the response steps taken to correct the situation are to be recorded.

Comment 37 - Conditions C.3 Open burning and C.4 Incineration

The above conditions have been included in this permit. Indiana Codes' meaning is vague and extensive. More Data and Information is needed before moving forward with this Emission Source. What is the purpose of adding these conditions to the permit? What operations will apply to this? Where will this be located? How will it be used? Emissions of which criteria pollutants are we to expect from this process? Is there a possibility of expansion?

Response 37

Every Part 70 Operating Permit must contain all applicable rules. This permit requires SDI to comply with the Open Burning Rule. SDI also must comply with Indiana Code IC-13-17-9-3 which allows open burning except where prohibited by other state laws or local ordinances. Open

burning is prohibited except as allowed in 326 IAC 4-1. IDEM encourages alternatives to open burning, such as sales or reuse.

The requirements in 326 IAC 4-2 establish standards for the use of incinerators which emit regulated pollutants. This Permit requires SDI to comply with the Incinerator Rule. There are specific emission limitations for burning wastes in an incinerator equipped with a primary and secondary chamber. SDI also must comply with 326 IAC 9-1-2(a)(3) Carbon Monoxide Limitations, if refuse incineration and refuse burning are conducted in an incinerator equipped with a direct flame afterburner or secondary chamber.

The permit is not revised as result of this comment.

Written comments were received from Steel Dynamics, Inc. (SDI) Structural Steel and Rail Division on March 15, 2006 including various changes made throughout Sections A, B, C, D and E which are not specifically noted via a comment. These changes identify minor issues to satisfy regulatory wording, correct typographical errors, or clarify conditions; and which need no detailed comment. Comments interjected are encompassed by brackets "[ ]". SDI - Structural Steel and Rail Division requested IDEM to formally state why the change is not made. These comments and IDEM, OAQ responses, including changes to the permit (where language deleted is shown with ~~strikeout~~ and the added is shown in bold) are as follows:

The major issues are summarized below and comments on specific issues are made throughout the Part 70 permit draft.

Comment 1

This permit is a new permit and not a supplement to previous permits. As such, there are conditions that have already been satisfied.

Response 1

The Part 70 Permit T183-17160-00030 is a document that incorporates all previous source modification requirements that were not superseded by requirements in subsequently issued source modifications.

Comment 2

Some changes are made to mirror regulatory language. For example, "within four hours" changed to "not later than".

Response 2

Language that is taken verbatim from rules is not revised as requested. Any revisions are documented in the following response to specific comments.

Comment 3

The slag processor is an onsite contractor, which is responsible for its operations. SDI is not the "responsible official" for the slag processing operations and should not have to provide the annual certification. SDI requests "Certification by the slag processor may be submitted for the units listed in Section D.7 in lieu of the certification by the Permittee" be added to Condition B.9.

Response 3

The slag handling operation is considered a support facility for SDI - Structural Steel and Rail Division, because at least 50% of the output of the slag handling facility is dedicated to SDI-Structural Steel and Rail Division and the two entities are located on contiguous property. The

slag handling annual compliance certification can be signed by a "responsible official" of the slag handling operation as defined in 326 IAC 2-7-1(34). The annual compliance certification for the slag handling is to be submitted as part of the SDI – Structural Steel and Rail Division annual compliance certification. The permit is not revised as a result of this comment.

Comment 4

The condition to restrict steel production on an annual basis is a new condition, is unsupportable, and should be removed. This is also true of new limits that are in pounds per ton of steel, for manganese compliance testing, and total building enclosure monitoring, which were not in the most recent permit.

Response 4

IDEM disagrees. The steel production limit is not a new condition limit. This limit was required in SSM183-18426-00030, issued November 18, 2005 as part of BACT.

The most recent permit modification Condition D.1.13(b) of SSM183-18426-00030, issued November 18, 2005 contains a limit for manganese in pounds per hour, not pounds per ton of steel. This permit also requires manganese compliance testing and requires the Permittee to maintain total building enclosure to assure good capture necessary to satisfy BACT. The requirement to monitor for total building enclosure makes the capture efficiency requirements enforceable as a practical matter.

Comment 5

The provisions for backup COMS monitoring is overly onerous in light of the very restrictive 3% opacity limit.

Response 5

Pursuant to 326 IAC 2-7-5(3), the Part 70 permit shall include monitoring to evaluate continuous compliance with applicable requirements. Pursuant to 40 CFR 60.274(a) SDI is required to conduct visible emission readings using Method 9 if the COMS is down for 24 hours or more. The performance of Method 9 readings, also demonstrates continuous compliance with the 3% opacity limit.

Comment 6 - Annual Compliance Certification

Some provisions need removed because there is no clear guidance for annual certification.

Response 6

This is a general statement that does not discuss which specific provisions SDI requests to be removed. Nonrule Policy Document "Guidelines for Submittal and Review of Annual Compliance Certification under the Federally Enforceable Sate Operating Permit (FESOP) and Part 70 Permit Programs (AIR 007 NPD)" provides guidance.

Comment 7 - Reporting Forms

SDI requests the Steel Production Report, Natural Gas and Propane Usage Quarterly Report and Slag Production Report be deleted.

Response 7

All forms are necessary to show compliance with the requirements and conditions in this Part 70 permit. SDI is required to submit a Steel Production Quarterly Report, Natural Gas and Propane

Usage Quarterly Report, and Slag Production Quarterly Report to show compliance with Conditions D.1.1, D.2.1, D.2.3, D.2.5-D.2.7, D.3.1(b), D.3.4, D.4.6 and D.6.1. Therefore, the following reports are included:

Steel Production Quarterly Report
Natural Gas and Propane Usage Quarterly Report
Slag Production Quarterly Report

Comment 8 - Condition A.2 Emission Units and Pollution Control Equipment Summary and Section D.1, D.2 and D.3

The given month for the construction, September, is arbitrary given the length of time needed to actually construct emission units and in any event is not necessary to list in Condition A.2. The duplicative statement "consisting of a capture system" needs to be deleted.

Response 8

The construction month of September for the EAFs, LMS, and Continuous Castors, preheaters, dryers and Reheat Furnace ID #2 is removed from Condition A.2 and Description Boxes in Sections D.1, D.2 and D.3. The duplicate language for the EAFs description is removed. Therefore, the EAF, description is revised as follows and the Ladle metallurgical station, continuous caster, preheaters, dryer and reheat furnace constructed in 2002 descriptions are revised in a similar manner.

(a) Electric Arc Furnaces (EAFs) - - Stack 1
Two (2) single shell electric arc furnaces (EAFs), identified as EAF-1a and EAF-1b constructed in ~~September~~ 2002. These furnaces operate at a nominal combined rate of 300 tons of molten steel per hour and utilize a direct-shell evacuation control (DEC) system ("fourth hole" duct), an overhead roof exhaust system ~~consisting of a capture system~~ consisting of a segmented canopy hood, scavenger duct, and cross-draft partitions. .....

Comment 9 - Condition A.2 Emission Units and Pollution Control Equipment Summary and Section D.4

The LVD Boiler identification number is the same as the LVD (ID#40) and needs to be corrected in Condition A.2 and the Section D.4 description box.

Response 9

The entire process Ladle Vacuum Degasser (LVD) and LVD Boiler have one ID number 40. Therefore, the Ladle Vacuum Degasser (LVD) and LVD Boiler description in Condition A.2 and description box in Section D.4 are revised as follows:

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

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

(g) Ladle Vacuum Degasser (LVD) and LVD Boiler - - Stack 40
One (1) ladle vacuum degasser (LVD) (ID# 40), constructed in 2003 with a nominal capacity of 300 tons per hour of steel and one (1) boiler constructed in 2003 to power the LVD. The LVD Boiler ~~(ID# 41)~~ **(ID# 40)** ....

Comment 10 - Condition B.8 Certification

SDI requests the language "or required by an applicable requirement" in Condition B.8(a) be deleted. In Condition B.8(b), add "or another form meeting the requirements of 326 IAC 2-7-4(f)".

Response 10

Pursuant to 326 IAC 2-7-5(3), the Part 70 permit requirements, include reporting requirements which assure that all reasonable information is provided to evaluate continuous compliance with ***the applicable requirements*** (emphasis). Therefore, the Condition B.8(a) is not revised as a result of this comment.

IDEM has made the revision to Condition B.8(b) as follows:

(b) One (1) certification shall be included, using the attached Certification Form **or another form meeting the requirements of 326 IAC 2-7-4(f)**, with each submittal requiring certification.

Comment 11 - Condition B.10 Preventive Maintenance Plan

SDI requests the language "an exceedance" be replaced by "a violation" in Condition B.10(b).

Response 11

The requested language change in Condition B.10 from "an exceedance" to "a violation" is not consistent with the preventive maintenance plan rule. A Preventive Maintenance Plan is required even in the likelihood of exceedance, even if that exceedance does not occur as a violation. The permit is not revised as a result of this comment.

Comment 12 - Condition B.11 Emergency Provisions

SDI requests the language "except as otherwise provided in 326 IAC 2-7-16" be added to Condition B.11(a), the word "reduce" replace the word "minimize" in Conditions B.11(b)(3) and (g), and "no later than" replace "within" and "after" replace "of" in Conditions B.11(b)(4) and(5). Condition B.11(h) should be deleted, because the language is inconsistent with 326 IAC 2-7-5, B.15 and the report form.

Response 12

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

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

(a) An emergency, as defined in 326 IAC 2-7-1(12), is not an affirmative defense for an action brought for noncompliance with a federal or state health-based emission limitation, **except as otherwise provided in 326 IAC 2-7-16.**

Condition B.11(b)(3), (4) and (5) and Condition B.11(g) – "minimize", "within" and "of" are verbatim from the rule language, therefore the permit is not revised as a result of this comment.

Condition B.11(h) IDEM does not agree that emergencies previously reported in accordance with Condition B.11(b) do not need to be reported again in the Quarterly Deviation and Compliance Monitoring Report. Rule 326 IAC 2-7-6(1) requires that any document or report required by a Part 70 permit must include a certification by the responsible official. Many applicants have stated that obtaining a certification by the responsible official would cause difficulty in meeting the requirement to submit the Emergency Occurrence Report within 2 days; therefore, IDEM and

U.S. EPA have agreed that the report which is required to be submitted within 2 days of an emergency does not require a certification by the responsible official. Instead, the emergencies must be reported again in the Quarterly Deviation and Compliance Monitoring Report that is certified by the responsible official. Reporting the emergency again in the Quarterly Deviation and Compliance Monitoring Report fulfills the obligation to satisfy the requirements of 326 IAC 2-7-6(1) which requires reports to be certified.

Comment 13 - Condition B.13 Prior Permits Superseded

SDI requests the language "under 326 IAC 2-7-10.5," in Condition B.13 (a)(2) and (3) and the language "Provided that all terms and conditions are accurately reflected in this permit" in Condition B.13(b) be deleted, because this permit language is not supported by the cited regulation.

Response 13

The preamble to the Part 70 Operating Permit Program final rule makes clear that it is the responsibility of the source to turn in a complete application and that the application "must contain information which identifies a source, its applicable air pollution control requirements, the current compliance status of the source, the source's intended operating regime and emission levels, and must be certified as to their truth, accuracy and completeness by a responsible official after making reasonable inquiry." *Emphasis added,* 56FR 32250. The responsibility of a Part 70 permit applicant is also made clear by the language in 40 CFR 70.5(b) that states that , "[a]n applicant shall provide additional information as necessary to address any requirements that become applicable to the source after the date it filed a complete application, but prior to release of a draft permit". The responsibility of the applicant to provide IDEM with applicable requirements is borne out also by the language in 40 CFR 70.5(c)(8) which requires the applicant to provide the permitting agency with a "description of the compliance status of the source with respect to all applicable requirements. "

Further, IDEM added the language SDI wants to delete at the behest of U.S. EPA, Region V. For the above reasons the permit is not revised.

Comment 14 - Condition B.15 Deviations from Permit Requirements and Condition

Condition B.15 should be deleted as authority is lacking for this provision even for Part 70 permits. Nonetheless, should Section B.15 be retained, the following changes should be made to clarify compliance conditions. In Condition B.15(a) the word "quarterly" should be deleted, because there is no authority to require reporting more frequently than on a semiannual basis.

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,
Indianapolis, Indiana 46204-2251

using the attached ~~Quarterly~~ Deviation and Compliance Monitoring Report, or its equivalent. **Not withstanding this condition a 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) **Except as otherwise provided in this permit a** ~~A~~ deviation is an exceedance of a permit limitation or a failure to comply with a requirement of the permit.

Response 14

IDEM has the authority to require reports of deviations under 326 IAC 2-7-5(3) permit content and 326 IAC 2-7-5(3)(C) to require quarterly deviation reports as an applicable requirement in the Part 70 permit. 326 IAC 2-7-5(3)(C)(i) gives IDEM the authority to require submittal of reports at least every 6 months. IDEM has determined that deviations from the permit's applicable requirements are information that SDI should report more often than semi-annually. This provides the department and its staff (especially the inspector assigned to the source) updated information to verify as soon as possible the compliance status of the source. IDEM no longer requires deviations to be reported in 10 days. Deviations will be reported quarterly on the Quarterly Deviation and Compliance Monitoring Report.

IDEM agrees with the other requested change in Condition B.15(a) second paragraph. The permit is revised as follows:

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. **Not withstanding this condition a** ~~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.

Comment 15 - Condition B.17 Permit Renewal

SDI requests the language "and as required by 326 IAC 2-7-4(a)(2)" be added to Condition B.17(c), because this change is consistent with 326 IAC 2-7-3.

Response 15

IDEM agrees and the Condition B.17 has been changed accordingly.

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

(a) .....

(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 **as required by 326 IAC 2-7-4(a)(2),** 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.

Comment 16 - Condition B.19 Permit Revision Under Economic Incentives and Other Programs

SDI requests the language "or notice" be added to Condition B.19(a) as follows:

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

Response 16

The language "or notice" is not added to Condition B.19(a), because there might be specific notification requirements in Section D of the permit. The permit is not revised as a result of this comment.

Comment 17 - Condition B.20 Operational Flexibility

SDI requests the language in Condition B.20 "Any preconstruction approval required by 326 IAC 2-7-10.5 has been obtained" be deleted from Condition B.20(a)(2) to be consistent with 326 IAC 2-7-20(a) and the word "prior" deleted from Condition B.20(d) so it reads "No notification of IDEM, OAQ and U.S. EPA is required."

Response 17

Although it is not stated in 326 IAC 2-7-20(a), the Permittee must still obtain any preconstruction approval if required.

The last sentence of 326 IAC 2-7-20(d) states, "The provisions of 326 IAC 2-7-20(a) not withstanding, no advance notice to the department is required prior to making such a change." No prior notice is required. The permit is not revised as a result of this comment.

Comment 18 - Condition B.21 Source Modification Requirement

SDI requests the language in Condition B.21(b) "Any modification at an existing major source is governed by the requirements of 326 IAC 2-2-2 and/or 326 IAC 2-3-2." be deleted, because this language is not consistent with applicable law for NSR modifications.

Response 18

326 IAC 2-2-2 and/or 326 IAC 2-2-3 are applicable to modifications to existing major sources. The permit is not revised as a result of this comment.

Comment 19 - Condition B.22 Inspection and Entry

SDI requests the language "any legal privilege and" be added to the first paragraph of Condition B.22 and "regulated under this permit" be added to Condition B.22(d).

Response 19

IDEM has determined it is not necessary to modify this condition by adding the suggested language. The condition as currently written provides sufficient basis for IDEM, OAQ and the U.S. EPA to ensure the Permittee is in compliance with the Part 70 permit requirements and the Clean Air Act; therefore, the permit condition B.22 is not revised as a result of this comment.

Comment 20 - Condition C.2 Opacity

SDI requests the rule cite 326 IAC 5-1-1 be added to the first paragraph of Condition C.2, because 326 IAC 5-1-1 provides limits on the opacity rule such as the exclusion of condensed water vapor and needs to be cited along with 326 IAC 5-1-3.

Response 20

326 IAC 5-1-1(b) states the opacity limits for sources not specifically listed in 326 IAC 5-1-1 are listed in 326 IAC 5-1-2(2). The opacity limits in 326 IAC 5-1-2 do not include condensed water vapor emitted by a facility or source.

The opacity limitations in 326 IAC 5-1-2 are federally enforceable, because they are included in the State Implementation Plan. Also, this condition is SIP approved; therefore, it is federally enforceable. The permit is revised as follows:

C.2 Opacity [326 IAC 5-1]

Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in **326 IAC 5-1-1 and** 326 IAC 5-1-3 (Temporary Alternative Opacity Limitations), opacity shall meet the following, unless otherwise stated in this permit

(a) .....

~~326 IAC 5-1-2 (Opacity Limitations) is not federally enforceable.~~

Comment 21 - Condition C.8 Asbestos Abatement Projects

SDI requests the language "when conducting any asbestos abatement project covered by the rules" be added to Condition C.8.

Response 21

The Part 70 permit must include all applicable rules. The rules state requirements to be followed when conducting asbestos abatement projects. The permit is not revised as result of this comment.

Comment 22 - Condition C.9 Performance Testing

SDI requests the word "applicable" be added to Condition C.9(a) and the language " The notification submitted by the Permittee does not require certification by the "responsible official" as defined by 326 IAC 2-7-1(34) be added to Condition C.9(c).

Response 22

The addition of the word "applicable" has been added to Condition C.9(a), since this change was made in SSM183-18426-00030.

In Condition C.9(c) the requested language was not added, because any document including reports required by a Part 70 permit is to be certified by a responsible official that meets the requirements of 326 IAC 2-7-4(f).

The permit is revised as follows:

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

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

Comment 23 - Condition C.11 Compliance Monitoring

SDI requests that Condition C.11 be changed as follows:

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

Unless otherwise specified in this permit, all monitoring and record keeping requirements not already legally required shall be implemented no later than ninety (90) days after permit issuance. ~~If required by Section D~~, T the Permittee shall be responsible for installing any ~~necessary~~ equipment **required in Section D** and initiating any required monitoring related to that equipment. If due to circumstances beyond its **reasonable** control, that equipment cannot be installed and operated no later than ninety (90) days, after permit issuance, the Permittee may extend the compliance schedule related to the equipment for an additional ninety (90) days provided the Permittee notifies: ....

Response 23

Section D does not specify the equipment to be used; therefore, the permit is not revised as a result of this comment.

Comment 24 - Condition C.13 Instrument Specifications

SDI states Condition C.13 should be deleted because IDEM is without authority to require it. In any event, this permit contains numerous more specific compliance monitoring requirements spelled out in Section D that override the general condition that does not appear to apply to SDI's new equipment.

Response 24

The IDEM's authority to require instrument specifications can be found in 326 IAC 2-1.1-11; 326 IAC 2-7-5(3) and 326 IAC 2-7-6(1). Condition C.13 is deleted because instrument specifications are found in the monitoring conditions in Specific Section Ds. The permit is revised as follows:

~~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.~~

Comment 25 - Condition C.14 Emergency Reduction Plans

SDI requests the language "for a nearby sampling site," be added to Condition C.14, because the episode applies to the immediate area of the sampling site when a threshold level is reached.

Response 25

IDEM notification of specific air pollution episodes can be for an area larger than nearby a single sampling site. Meteorological conditions also affect the area affected by an air pollution episode. The emergency reduction plans 326 IAC 1-5-2 and 326 IAC 1-5-3 do not contain any references that an episode alert only applies to the immediate area of a sampling site. The permit is not revised a result of this comment.

Comment 26 - Condition C.16 Response to Excursions or Exceedances

SDI requests the following language be added to Condition C.16:

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, **or in the case of an excursion, determine that an exceedance is not occurring despite the excursion,** as expeditiously as practicable in accordance with good air pollution control practices for minimizing **excess** emissions.

(b) The response shall include minimizing the period of any startup, shutdown or malfunction 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 **are returning or have** returned to normal without operator action (such as through response by a computerized distribution control system); or

Response 26

Condition C.15 already covers what to do if exceedances or excursions occur. IDEM cannot anticipate and include every excursion or exceedance scenario. Good air pollution control practices are used to minimize all emissions not just excess emissions. The permit is not revised as a result of this comment.

Comment 27 - Condition C.17 Actions Related to Noncompliance Demonstrated by a Stack Test

SDI requests the language in Condition C.17 be changed as follows:

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

(a) When the results of a stack test performed in conformance with Section C.9 - Performance Testing, of this permit exceed the level specified in any condition of this permit, the Permittee shall take appropriate response actions. The Permittee shall submit a description of these response actions to IDEM, OAQ, no later than thirty (30) days after receipt of the test results. The Permittee shall take ~~appropriate action~~ **reasonable steps** to ~~minimize~~ **reduce** excess emissions from the affected facility while the response actions are being implemented.

(b) A retest to demonstrate compliance shall be performed no later than one hundred twenty (120) days after ~~receipt of~~ the original test results **are submitted to IDEM.** Should the Permittee demonstrate to IDEM, OAQ that retesting in one-

hundred and twenty (120) days is not practicable, IDEM, OAQ may extend the retesting deadline.

(c) The Permittee is not required to follow the specific procedures set out in (a) and (b) above if it and IDEM, OAQ agree to a different schedule of activities to address any noncompliant situation.

~~(c)~~ **(d)** 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).

Response 27

Condition C.16 covers all non compliant stack tests (not situations). Each instance of a non-compliance stack is different and this condition covers the steps the Permittee needs to follow if stack test results are found non compliant. The permit is not revised as a result of this comment.

Comment 28 - Condition C.18 Emission Statement

SDI requests the language in Condition C.18 be changed, because the cited regulation does not require reporting automatically; the HAPs that have permit limits will be reported pursuant to the language below thus making the provision unnecessary.

C.18 Emission Statement [326 IAC 2-7-5(3)(C)(iii)][326 IAC 2-7-5(7)][326 IAC 2-7-19(c)] [326 IAC 2-6]

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

~~(1)~~ Indicate estimated actual emissions of all pollutants **with emission limits identified in Section D.** ~~listed in 326 IAC 2-6-4(a);~~

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

Response 28

The reference to 326 IAC 2-6-4(a) is not deleted, because pursuant to 326 IAC 2-6-1, SDI is required to submit an emission statement that reports the actual estimated emissions generated on an annual basis in accordance with 326 IAC 2-6-4(a). Also, pursuant to 326 IAC 2-7-5(3)(C) submittal of an annual emission statement that meets the requirement of 326 IAC 2-6, or other equivalent information is required.

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

The permit is not revised as a result of this comment.

Comment 29

SDI requests the word "which" be replaced with the word "that" in Condition C.18(c).

Response 29 - Condition C.18 General Record Keeping Requirements

The courts have stayed the EPA clean unit designation requirements. The future of clean unit designations and requirements is unclear at this time.

To correct a grammatical error the permit is revised as follows:

C.~~19~~ **18**General Record Keeping Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-6] [326 IAC 2-2] [326 IAC 2-3]

.....

(c) If there is a ~~reasonable possibility that a~~ "project" (as defined in 326 IAC 2-2-1 (qq) and 326 IAC 2-3-1 (ll)) at an existing emissions unit, ~~other than projects at a Clean Unit~~ **or at a source with Plantwide Applicability limitation (PAL)** ~~which~~ **that** is not part of a "major modification" .....

Comment 30 - Condition D.19 General Reporting Requirements

SDI requests the language in Condition D.19 be revised as follows:

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

(a) The Permittee shall submit the attached Quarterly Deviation and Compliance Monitoring Report or its equivalent **for any deviations for which a report is specifically required under Section D.** Any deviation from permit requirements, the date(s) of each deviation, the cause of the deviation, and the response steps taken must be reported. This report shall be submitted ~~within~~ **no later than** thirty (30) days ~~of~~ after the end of the reporting period. **Not withstanding this condition, a deviation required to be reported pursuant to an applicable requirement shall be included in this report.** 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~~ **Applicable** reports required by conditions in Section D of this permit shall be submitted to: ....

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

(f) If the Permittee is required to comply with the recordkeeping provisions of (c) in Section C.19- General Record Keeping Requirements for any "project" (as defined in 326 IAC 2-2-1 (qq) and/or 326 IAC 2-3-1 (ll) at an existing emissions unit, and **if** the project meets the following criteria, then the Permittee shall submit a report to IDEM, OAQ: .....

(g) The report for **a** project at an existing emissions unit shall be submitted within sixty (60) days after the end of the year and contain the following:

These changes are needed, because this language comes from the cited rule.

Response 30

The deviations covered in condition C.19 include all deviations from conditions in the entire permit not just conditions in the D sections. IDEM agrees to changes, except "for any deviations for which a report is specifically required under Section D", "Not withstanding this condition, a deviation required to be reported pursuant to an applicable requirement shall be included in this report", "and" and "if."

C.~~20~~ **19** General Reporting Requirements [326 IAC 2-7-5(3)(C)] [326 IAC 2-1.1-11] [326 IAC 2-2] [326 IAC 2-3]

(a) The Permittee shall submit the attached Quarterly Deviation and Compliance Monitoring Report or its equivalent. Any deviation from permit requirements, the date(s) of each deviation, the cause of the deviation, and the response steps taken must be reported. This report shall be submitted ~~within~~ **no later than** thirty (30) days ~~of~~ **after** the end of the reporting period. .....

(g) The report for **a** project at an existing emissions unit shall be submitted within sixty (60) days after the end of the year and contain the following:

Comment 31 - Condition C.21 Compliance with 40 CFR 82 and 326 IAC 22-1

SDI requests that the language in Condition C.21 Compliance with 40 CFR 82 and 326 IAC 22-1 be changed as follows:

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 **applicable** 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.~~

Response 31

The language is not revised, because it clarifies what requirements are applicable to persons and equipment when performing maintenance, service, repair or disposal of appliances that contain stratospheric ozone depleting substances. The Part 70 permit must include all applicable requirements. The permit is not revised as a result of this comment.

Comment 32 - Condition C.21 Post Construction Ambient Monitoring

SDI requests the duration of the post construction ambient monitoring be changed from 36 months to 24 months in Condition C.22. Also, the language "(Annual Maximum Impact Area: UTM East 639300 and UTM North 4553700)" and "and that the plant has minimal impact on air quality" should be deleted from Condition C.22(a). The language "The petition is automatically granted if IDEM, OAQ does not respond to the petition by the end of the 45-day period." should be added to Condition C.22(a). These changes are requested because the original permit required only 24 months of ambient monitoring; therefore, there is no reason to require ambient monitoring for more than what was required in the original permit. This is supported by the fact that recorded ambient monitoring readings are well below the NAAQS and the 50% increase in production capacity is not expected to change ambient monitoring readings, as demonstrated by IDEM modeling.

Response 32

The duration of the post construction monitoring period was changed to 36 months because of the expected increase in emissions after the proposed expansion. A longer post construction monitoring period provides sufficient information to support the removal of the monitors in the future.

IDEM did not incorporate the recommended language because there are several factors that would be considered in any decision to reduce the level of monitoring. Among the factors that would be considered are:

(a) the production and emissions levels at the plant,

(b) the compliance history of the plant,

(c) the margin between the measured concentrations and the applicable National Ambient Air Quality Standards (these are the health-based air quality standards adopted by the U.S. EPA and applicable across the country),

(d) a comparison of upwind versus downwind concentrations, and

(e) a comparison of the ambient monitoring data with the predictions of the air quality modeling study.

The permit is not revised as a result of this comment.

Comment 33 - Condition C.22 Source Wide Hazardous Air Pollutant (HAP) Limitations

SDI requests the word "then" be replaced with the word "than" in Condition C.22(a).

Response 33

To correct a typographical error the permit is revised as follows:

C.~~23~~ **22** Source Wide Hazardous Air Pollutant (HAP) Limitations [326 IAC 2-4.1-1]

(a) Any single HAP emissions from the entire source shall be less ~~then~~ **than** ten (10) tons per year.

Comment 34

Throughout all the D Sections, SDI requests the following concerning prior permit requirements: (1) for prior permit requirements that have been modified, include a full recitation of the history of amendments for that term, identifying each permit sequence. In general, this has been done, but there are still permit terms for which it is missing. We can provide a list if needed. (2) For prior permit requirements that have been superseded, SDI requests that a condition be added to the relevant D section reflecting the determination of nonapplicability, including a recitation of each permit that included the prior term. Also, we anticipate numerous additional changes to this Title V permit if a stay agreement in the appeal of SSM 183-18426-00030 is reached.

The Condition D.1.28 Reporting Requirements provision needs to be drafted to match the new PSD provision - it would probably be desirable to refer only to the new PSD in the Title V, and then include supersession language for D.1.25 of the old PSD permits in the new PSD.

Response 34

Condition B.13 discusses the supersession of prior permit conditions. The TSD lists the prior permits. The Part 70 permit rules do not require that the history of all superseded limits, permit

terms or requirements need to be documented in each condition of the permit. The reference: "pursuant to" the last modification the limit, term or requirement was revised is already stated in the permit conditions.

To be consistent the permits referenced throughout this permit are as follows:

PSD CP183-10097-00030, issued July 7, 1999,
PSD Significant Source Modification SSM183-12692-00030, issued January 10, 2001
PSD Significant Source Modification SSM183-118426-00030, issued November 18, 2005

Also, the Table of Contents and Condition titles have been compared and revised for consistency.

When the appeal of SSM183-18426-00030 is resolved through a modification of the permit, all revisions addressed in the appeal resolution will be incorporated into the Part 70 permit T183-17160-00030. PSD provisions must go through the permit modification process and PSD review before the Part 70 Permit T183-17160-00030 can be revised.

The permit is not revised as a result of these comments.

Comment 35 - Condition D.1.1 EAFs Operation Limitation - PSD Best Available Control Technology

SDI requests the steel production limit language "2,628,000 tons of molten steel per 12-consecutive month period, with compliance determined at the end of each month." be deleted from Condition D.1.1(b), because there is no basis for this requirement.

Response 35

The steel production limit (Conditions D.1.1(b)), the steel production recordkeeping requirement (Condition D.1.27(b)), steel production reporting requirement (Condition D.1.28(a))and the Steel Production Reporting form are not deleted because an annual steel production limit has to be specified and the record keeping and reporting are required. The PSD provision 326 IAC 2-2 provides the authority for IDEM to specify production limitations as part of the PSD BACT. The permit is not revised as a result of this comment.

Comment 36

SDI requests the language "Filterable PM/PM_{10} emissions from the EAFs Baghouse shall not exceed 0.0018 grains per dry standard cubic feet and 14.4 pounds of filterable particulate per hour based on a 3-hour block average", be deleted form ConditionD.1.5(b), because they do not see the need to provide separate limits for filterable PM and filterable and condensable PM/PM_{10} and filterable and condensable PM_{10} are not separate criteria pollutants. There is no authority to break apart the regulated pollutant into separate fractions with independently enforceable limits.

In Condition D.1.5(c), the language "and 41.6 pounds of filterable and condensable particulate per hour" should be deleted, because the two cited permits (CP183-10097-00030 and SSM 183-12692-00030) do not contain PM/PM10 limits based on an hour rate. The language "constructed surrounding the EAFs in a manner that will" in Condition D.1.5(e) and "constructed above the EAFs. The canopy shall be" in Condition D.1.5(f) should be deleted, because construction was completed in 2002, thus making this language no longer an applicable requirement.

SDI requests that the permit references in Conditions D.1.16 and D.1.17 need to changed to clarify a mistake, this provision in its present form is actually found in the newest PSD permit issued November 18, 2005 rather than the two above-mentioned construction permits. The reference to the filterable and condensable particulate matter (PM/PM_{10}) should be changed to Particulate matter (PM and PM_{10}).

SDI states the language in Condition D.4.6(b) to determine compliance with the natural gas limit in LVD Boiler(ID#40) per 12-consecutive month period with compliance demonstrated at the end of each month is not consistent with the language in Condition D.1.6 of cited PSD Permit SSM183-15170-00030, issued May 31, 2002.

SDI states the language in Condition D.5.7, to operate the Bin Vents at all times the silos are in operation is not consistent with the language in Condition D.6 of the cited PSD Permit permits.

Response 36

According to 326 IAC 2-2-1(i), BACT means emissions limitation based on the maximum degree of reduction for *each regulated NSR pollutant* that would be emitted from the major stationary source. PM and PM10 are both regulated NSR pollutants. IDEM distinguishes between the filterable PM and Filterable/Condensible PM10; therefore, separate limits have to be specified.

The permit referenced In Condition D.1.5(a) should be SSM183-18426-00030. The PM/PM10 hourly emission rates in Conditions D.1.5(b) and (c) were added during the SSM183-18426-00030 review. The PM/PM10 limit calculations and BACT analysis for the EAF can be found in SSM183-18426-00030 Appendix A – PSD BACT Evaluations pages 31-33 of 48.
Since the canopy hood was constructed in 2002, reference to the construction will be deleted in Condition D.1.5 (e) and (f).

The permit referenced in Conditions D.1.16 and D.1.17 should be SSM183-18426-00030.

The SSM183-15170-00030 issued May 31, 2002 does not contain the language as shown. The permit reference in Condition D.4.6 is revised to reflect the language added in the PSD SSM183-18426-00030 to correct the over sight.

IDEM has determined the cited permits do not contain this requirement. PSD Significant Source Modification SSM 183-18426-00030, issued November 18, 2005 does contain this requirement.

The permit is revised as follows:

D.1.5 Particulate Matter (PM/PM_{10}) - PSD Best Available Control Technology [326 IAC 2-2]

Pursuant to ~~CP183-10097-00030, issued July 7, 1999, amended by PSD Significant Source Modification SSM183-12692-00030, issued January 10, 2001~~ **PSD Significant Source Modification SSM183-18426-00030, issued November 18, 2005** and 326 IAC 2-2 (PSD - Control Technology Review; Requirements):.....

(e) The cross-draft partitions ~~shall be constructed~~ surrounding the EAFs **shall** ~~in a manner that will~~ promote good capture efficiency for the meltshop EAFs Baghouse.

(f) A segmented canopy hood ~~shall be constructed above the EAFs. The canopy shall be~~ **constructed above the EAFs and** divided into separate sections ~~and the~~ **with** dampers **shall be** operated in a manner that will maximize the draft directly above the point of greatest emissions.

D.1.16 Ladle Metallurgy Station (LMS) PSD Best Available Control Technology (BACT) [326 IAC 2-2]

Pursuant to ~~CP183-10097-00030, issued July 7, 1999, amended by PSD Significant Source Modification SSM183-12692-00030, issued January 10, 2001~~ **PSD Significant Source Modification SSM183-18426-00030, issued November 18, 2005** .....

D.1.17 Continuous Casters (CCs) PSD Best Available Control Technology (BACT) [326 IAC 2-2]

(a) Pursuant to ~~CP183-10097-00030, issued July 7, 1999, amended by PSD Significant Source Modification SSM183-12692-00030, issued January 10, 2001~~

PSD Significant Source Modification SSM183-18426-00030, issued November 18, 2005 .....

D.4.6 Operating Parameters [326 IAC 2-2]

Pursuant to PSD Permit ~~SSM183-15170-00030, issued May 31, 2002~~ **PSD Significant Source Modification SSM183-18426-00030, issued November 18, 2005** and 326 IAC 2-2 (PSD), the following conditions shall apply:

D.5.7 Bin Vent Operation [326 IAC 2-2]

Pursuant to ~~CP183-10097-00030, issued July 7, 1999, amended by PSD Significant Source Modification SSM183-12692-00030, issued January 10, 2001~~ **PSD Significant Source Modification SSM183-18426-00030, issued November 18, 2005** and 326 IAC 2-2 Prevention of Significant Deterioration (PSD), the bin vent filters shall be in operation and control emissions at all times when the storage silos are in operation.

Comment 37 - Condition D.1.6 Sulfur Dioxide (SO_2) - PSD Best Available Control Technology

SDI requests the reference to the Scrap Management Plan (Section E) be deleted from Condition D.1.6(a) and the word "reduced" needs to be added to describe DRI as direct reduced iron in Condition D.1.6(c)(1). We do not agree with the monitoring provisions for SO_2 and have suggested appropriate alternatives.

Response 37

The issuance date of PSD Significant Source Modification SSM183-18426-00030 is November 18, 2005. This issuance date and reference to PSD Significant Source Modification is revised in Condition D.1.6(a) and throughout this permit.

The reference to the Scrap Management Plan in Section E.2 is not deleted, because the Scrap Management Plan is considered the Best Available Control Technology for SO_2 emissions from the EAF. The EAF SO_2 BACT analysis limits are stated in SSM 183-18426-00030 Appendix A – PSD BACT Evaluations Page 21 of 48.

DRI does refer to direct reduced iron, so "reduced" is added to the permit. As well as the date Permit Amendment 183-18658-00030 was issued.

There is no add-on control device for SO2, or a SO2 continuous emissions monitor required. The requirement to maintain the sulfur content of the DRI, charge carbon and injection carbon has been required as part of PSD BACT.

The permit is revised as follows:

D.1.6 Sulfur Dioxide (SO_2) - PSD Best Available Control Technology [326 IAC 2-2]

(a) Pursuant to PSD Permit SSM183-18426-00030 issued November ~~21~~,**18** 2005 and 326 IAC 2-2 Prevention of Significant Deterioration (PSD), SO_2 emissions from the EAFs shall be controlled in accordance with the Scrap Management Program (SMP) (Section E.2).

.....

(c) Pursuant to CP183-10097-00030, issued July 7, 1999, amended by PSD Significant Source Modification SSM183-12692-00030, issued January 10, 2001 and amended by Permit Amendment 183-18658-00030, **issued May 5, 2004** and 326 IAC 2-1.1-11:

(1) The sulfur content of the direct **reduced** iron (DRI), charge carbon, and injection carbon added into the EAFs shall not exceed the following:

Comment 38 - Condition D.1.8 Carbon Monoxide (CO)

SDI requests the following changes be made to Condition D.1.8:

D.1.8 Carbon Monoxide (CO) [326 IAC 9-1]

Pursuant to PSD Permits CP183-10097-00030, issued July 7, 1999, amended by PSD Significant Source Modification SSM183-12692-00030, issued January 10, 2001 and 326 IAC 9-1 (Carbon Monoxide Emission Limits), the Permittee shall not allow the discharge of CO from the EAF unless the waste gas stream is controlled by a direct-flame afterburner, boiler, or other approved method. ~~The~~ **IDEM approves the** Permittee's ~~has elected~~ thermal oxidation **method** at the direct-shell evacuation control (DEC) system air gap.

Response 38

The Permittee is approved in Condition D.1.7 to control CO emissions by thermal oxidation at the DEC air gap, so stating it again in D.1.8 is redundant. The permit is not revised as result of this comment.

Comment 39 - Condition D.1.9 Volatile Organic Compounds (VOC) - PSD Best Available Control Technology

Including the Scrap Management Plan as part of the permit, rather than as a separate document to be submitted to the agency upon request, unduly restricts SDI's ability to use varying scrap materials that have no impact on air emissions. It also will require a lengthy permit modification for changes to the plan that has little or no effect on regulated emissions. The SMP should not be an attachment.

The pounds per ton of steel produced emission limit was not in the original permit and is not appropriate for batch type production. In addition, the USEPA Whitley permit 2000 remand agreed with this decision. It should be deleted.

Conditions D.1.10, D.1.11 and D.1.12. The emission limits for the lead, mercury and fluorides are not federally enforceable.

In Condition D.1.12 (a)(1) and (2), the language "EAFs shall be controlled by using the granular type of Fluorspar, instead of the powdered type and controlled by a baghouse" should be deleted.

Response 39

The reference to Section E.2 is not deleted from Condition D.1.9(a), because the Scrap Management Plan (SMP) is considered BACT for VOC emissions from the EAF. The SMP is implemented and maintained as part of the BACT requirement under 326 IAC 2-2; therefore, the requirements of the plan must be included in the permit. To accommodate the dynamic nature of the SMP, it was incorporated into the permit as Section E.2.

According to 40 CFR 52.23 and 326 IAC 2-1.1-9.5, the EPA and IDEM consider the lead, mercury and fluoride limits to be federally enforceable because they were part of a federally approved program, Prevention of Significant Deterioration, which has been incorporated into our state implementation plan.

IDEM evaluated the PSD BACT limits in SSM183-18426-00030 for the EAFs and determined that the limits specified as pounds per ton for the EAFs are necessary for VOC, lead, mercury and fluoride.

Fluoride emissions were not reduced by the implementation of a Scrap Management Plan, so the requirement to use granular type fluorspar replaced the SMP in SSM SSM183-18426-00030 and that requirement is included in this permit. SDI changed the process to use granular type

fluorspar during the most recent EAF baghouse stack test to demonstrate compliance with the fluoride emissions limit.

The permit is not revised as a result of these comments.

Comment 40 - Condition D.1.13 Hazardous Air Pollutant (HAP) Limitations

SDI requests the manganese compound limit of 1.14 pounds per hour be changed to 2.28 pounds per hour in Condition D.1.13(b), because anything below 10 tpy avoids the rule, 1.16 lb/hr equals less than 5 tpy. Also, the word "Beryllium" and "and compliance with these limitations will assure" should be added to Condition D.1.13 second paragraph and the word "and" should be deleted.

Response 40

The Manganese compounds emission limit has been changed to 2.28 pounds per hour because it is still less than 10 tons per year. The beryllium limit is federally enforceable. The requested changes were made as follows:

D.1.13 Hazardous Air Pollutant (HAP) Limitations [326 IAC 2-1.1-4] [326 IAC 2-2] [326 IAC 2-4.1-1]

Pursuant to PSD Significant Source Modification SSM183-18426-00030 issued November 18, 2005 and 326 IAC 2-1.1-4, the Permittee shall not allow:

(a) Beryllium to be emitted from the EAFs Baghouse stack in a quantity equal to or greater than 8.6×10^{-5} pounds per hour. ~~This limitation is not federally enforceable.~~

(b) Manganese compounds to be emitted from the EAFs Baghouse stack in a quantity equal to or greater than ~~1.14~~ **2.28** pounds per hour.

Compliance with ~~these~~ **the Beryllium** limitations will assure that the requirements of 326 IAC 2-2 Prevention of Significant Deterioration (PSD) do not apply for beryllium, and **compliance with these limitations will assure** that the requirements of 326 IAC 2-4.1-1 (New Source Toxics Control) do not apply to the source.

Comment 41

SDI requests the word "fugitive" be deleted from Condition D.1.14(b), because by definition fugitive emissions are not captured by control devices.

Response 41 - D.1.14 Visible Emission Limitations - PSD Best Available Control Technology

The word "fugitive" has been deleted from Condition D.1.14(b).

Comment 42

SDI requests the Clean Unit Provisions be written to reflect that the "requirements" for maintaining the Clean Unit designations are not independent, enforceable requirements in Conditions D.1.19, D.2.2, D.2.4, D.2.8, D.3.3, D.3.5, D.4.7, D.5.3, D.6.4, and D.7.3. Failure to meet them might result in loss of the clean unit designation, but it is not a deviation from or violation of the Permit. The language "The Permittee must be in compliance with the following it wants to" should be added to Condition D.1.19(a)(3). The language "In order to" and "the Permittee shall comply with the following" should be deleted from Condition D.1.19(a)(3), as well. The language "The EAFs, LMS, and CC (designated as clean units) shall comply with the emissions limitations or work practice requirements in the following conditions as part of the

BACT" and the monitoring requirements (J) through (M) should be deleted from Condition D.1.19(a)(4).

SDI requests the language "The Permittee must be in compliance with the following if it wants to" be added to replace "in order to" and the language "the Permittee shall comply with the continuous caster (ID#42)" and "and Opacity" be deleted from Condition D.1.19(b)(3).

SDI requests the language "The Permittee must be in compliance with the following if it wants to maintain the clean unit designations listed in this condition." should be added to Condition D.1.19(c). The language "In addition, the EAFs, LMS, and CCs shall comply with all applicable requirements per 326 IAC 2-7" should be deleted and the language "Any terms and conditions" as well as "related unit's to the clean unit designations" should be added to Condition D.1.19(b)(3). See 326 IAC 2-2.2-1(g)(2).

SDI requests the word "modifications" be replaced with the word "revisions", modify be replaced with "revise" and the phrase "shall expire" be replaced with the word "end" in Condition D.1.19(c)(3)(C). See 326 IAC 2-2.2-1(b)(3).

The word "an" should be added, the word "their" be replaced with the word "its" and the language "is considered an existing emissions unit and " should be added in Condition D.1.19(c)(3)(D)

SDI requests the language "An emissions unit can requalify for clean unit status pursuant to the terms of 326 IAC 2-2.2-1(c)" and "Failure to meet any provision of this Condition shall not be considered a deviation or violation of this Permit." Be added to Condition D.1.19(c)(3)(E) and Condition D.1.19(e).

Also, Condition D.1.19 is written to describe all of the burdens of clean unit status, but there should also be a discussion of the benefits of clean unit status. See 326 IAC 2-2.21-1(h) and (i).

These requested changes are shown as follows:

D.1.19 Clean Unit [326 IAC 2-2.2]

(a) EAFs (EAF-1a and EAF-1b), LMS (ID# 3a), and CC (ID# 3k)

(1) Pursuant to PSD Permit SSM183-18426-00030 issued November 21, 2005 and 326 IAC 2-2.2, the:

EAFs (EAF-1a and EAF-1b),
LMS (ID# 3a), and
CC (ID# 3k)

are classified as Clean Units for:

(A) NO_x,
(B) PM/PM_{10},
(C) SO_2,
(D) CO,
(E) VOC,
(F) Lead,
(G) Mercury, and
(H) Fluorides.

(2) The Clean Unit designations for the EAFs, LMS, and CC are in effect for ten (10) years from the issuance date of this permit.

(3) **The Permittee must be in compliance with the following if it wants** ~~**In order**~~ to maintain the clean unit designations for the EAFs, LMS, and CC, ~~the Permittee shall comply with the following:~~

~~(4) The EAFs, LMS, and CC (designated as clean units) shall comply with the emissions limitations or work practice requirements in the following conditions as part of the BACT:~~

(A)	D.1.1	EAF Operation Limitation (all pollutants),
(B)	D.1.2	Nitrogen Oxides (NO_x) - PSD BACT,
(C)	D.1.5	Particulate Matter (PM/ PM_{10}) - PSD BACT,
(D)	D.1.6	Sulfur Dioxide (SO_2) - PSD BACT,
(E)	D.1.7	Carbon Monoxide (CO) - PSD BACT,
(F)	D.1.9	Volatile Organic Compounds (VOC) - PSD BACT,
(G)	D.1.10	Lead - PSD BACT,
(H)	D.1.11	Mercury - PSD BACT,
(I)	D.1.12	Fluorides- PSD BACT,
~~(J)~~	~~D.1.14~~	~~Visible Emission Limitations - PSD BACT,~~
~~(K)~~	~~D.1.16~~	~~Ladle Metallurgy Station (LMS) PSD BACT,~~
~~(L)~~	~~D.1.17(a)~~	~~Continuous Casters (CCs) PSD BACT, and~~
~~(M)~~	~~D.1.22~~	~~CO and VOC CEMS Requirement.~~

(b) Continuous Caster (ID# 42a)

(1) Pursuant to PSD Permit SSM183-18426-00030 issued November 21, 2005 and 326 IAC 2-2.2 (Clean Unit), the continuous caster (ID# 42a) is classified as Clean Unit for filterable and condensable particulate matter (PM/PM_{10}) ~~and opacity~~.

(2) The Clean Unit designation for this continuous caster (ID# 42a) is in effect for ten (10) years from its initial start up.

(3) ~~In order~~ **The Permittee** to maintain the clean unit designation for the continuous caster (ID# 42a), the Permittee shall comply with the continuous caster (ID# 42a) filterable and condensable particulate matter (PM/PM_{10}) and Opacity PSD BACT limits.

(c) EAFs (EAF-1a and EAF-1b), LMS (ID# 3a), and CCs (ID# 3k and ID# 42a)

(1) In addition, the EAFs, LMS, and CCs shall comply with all applicable requirements per 326 IAC 2-7 contained in this permit.

(2) No physical change or change in the method of operation shall be undertaken at these emissions units that would allow them to operate in a manner inconsistent with the physical or operational characteristics of the emission units.

(3) The EAFs, LMS, and CCs (designated as clean units) are subject to the following requirements:

(A) Any project at these emissions units for which actual construction begins after the effective date of the clean unit designations and before the expiration date shall be considered to have occurred while the emissions units were clean units.

(B) If a project at these emission units does not cause the need for a change in the emission limitations or work practice requirements in this permit for these units that were adopted in conjunction with BACT and the project would not alter any physical or operational characteristics that formed the basis for the BACT determination, the clean unit designations remain unchanged.

(C) If a project causes the need for a change in the emission limitations or work practice requirements in this permit for these units that were adopted in conjunction with BACT or the project would alter any physical or operational characteristics that formed the basis for the BACT determination, then the clean unit designations shall expire upon issuance of the necessary permit modifications, unless the units requalify as clean units. If the Permittee begins actual construction on the project without first applying to modify the emissions unit's permit, the clean unit designations shall expire immediately prior to the time when actual construction of this project begins.

(D) A project that causes emissions units to lose their clean unit designations shall be subject to the applicability requirements of 326 IAC 2-2-2(d)(1) through 326 IAC 2-2-2(d)(4) and 326 IAC 2-2-2(d)(6).

SDI requests changes to be made Conditions D.2.2, D.2.4, D.2.8, D.3.3, D.3.5, D.4.7, D.6.5, and D.7.3. The Condition D.3.5 format for clean unit is much better than the lengthy and difficult to understand D.1.19 format.

Condition D.2.4 be combined with D.2.8 to address all four units (3l, 3m, 3n, 3o) at once.

Response 42

The language in Conditions D.1.19, D.2.2, D.2.4, D.2.8, D.3.3, D.3.5, D.4.7, D.5.3, D.6.4 and D.7.3 contain all the Clean Unit requirements and includes the terms and conditions set forth in 326 IAC 2-2.2-1 and 326 IAC 2-2.2-2. The benefits of clean units are not requirements, nor are they specifically listed in the rules. The benefits of clean unit designation are source, process and/or even pollutant specific. The courts have stayed the EPA clean unit designation requirements. The permit is not revised as a result of these comments.

Comment 43 - Condition D.1.20 EAFs Baghouse Operation

SDI requests the language "filterable particulate" be added to Condition D.1.20.

Response 43

Since the EAF baghouse also controls lead, mercury, fluorides, beryllium and manganese compounds other than "filterable particulate" only, "filterable particulate" cannot be added.

Comment 44 - Condition D.1.21Testing Requirements

SDI states that in Condition D.1.21, the EAF emission testing frequency for NOx should be every five (5) years rather than every 2.5 years. The word "thereafter" should be added to the test requirement such as the test shall be repeated "thereafter" every five (5) years.

The manganese testing requirement was added without authority during the November 2005 permitting and should be removed.

Response 44

In condition D.1.21(a), the NOx testing frequency is pursuant to SSM183-18426-00030. SSM183-18426-00030 revised the testing frequency of NOx testing from annual testing to once every 2.5 years, since the modification required numerous monitoring of NOx to demonstrate compliance on a day to day basis.

326 IAC 2-7-6(1) gives the authority to include performance testing requirements for manganese in the Part 70 permit to demonstrate compliance.

Adding the word "thereafter" only reiterates what is already stated in this condition.

The permit is not revised as a result of these comments.

Comment 45 - Condition D.1.22 CO and VOC Continuous Emission Rate Monitoring Requirement and Condition D.1.24 Bag Leak Detection System (BLDS)

SDI does not agree with the monitoring provisions Condition D.1.22 for VOC and have suggested appropriate alternatives. The Total Hydrocarbon (THC) CEM should be removed given difficulties in certifying measurement on non-regulated hydrocarbons, and existing stack testing showing that VOC emissions are small. We have objected to the operation of a CEM that monitors unregulated hydrocarbons and thus request incorporation of VOC testing provisions.

In Conditions D.1.22(b), and D.1.24, the language "The Permittee shall submit to IDEM, OAQ, within ninety (90) days after installation of a new monitor, a complete written continuous monitoring standard operating procedure (SOP)" should be deleted. SDI does not want to submit a new SOP. They want to revise and submit an existing SOP biennially.

In Condition.1.22(e), six hours represents two full emission reporting periods. SDI requests the word "four" be replaced with "six" and "VOC" be deleted.

Response 45

The use of a VOC CEMS to monitor the VOC emissions from the meltshop stack is warranted because the amount of VOC emissions is highly variable based on the level of contaminants on the scrap and there is no other sufficient and reliable way to monitor the VOC emissions. Condition D.1.21 Testing is not revised as a result of this comment.

IDEM agrees that a revised SOP, not new SOP needs to be submitted whenever a new monitor is installed. The revised SOP for a new monitor shall be submitted within 90 days of installation. IDEM cannot wait two years to get a revised SOP if a new monitor is installed. Any other SOP revisions or updates shall be submitted biennially. Condition D.1.22(b) is revised as result of this comment.

D.1.22 CO and VOC Continuous Emission Rate Monitoring Requirement [326 IAC 2-1.1-11] [326 IAC 3-5]

(a) ...

(b) Pursuant to PSD Significant Source Modification Permit SSM183-18426-00030 issued November 18, 2005, 326 IAC 2-1.1-11 and 326 IAC 3-5-4(a), the Permittee shall submit to IDEM, OAQ, within ninety (90) days after installation of a new monitor, a complete written continuous monitoring standard operating procedure (SOP). If revisions are made to ~~the~~ **an existing** SOP, updates shall be submitted to IDEM, OAQ biennially.

Since the emissions are based on a 3 hour block average, and a change to six hours would represent two reporting periods Condition D.1.22(e) is revised as follows:

(e) Whenever the CO or VOC continuous emission monitor is malfunctioning or will be down for calibration, maintenance, or repairs for a period of ~~four~~ **six** ~~(4)~~ **(6)** hours or more, the Permittee shall perform once per day operational status inspections of the equipment that is important to the performance of the DEC,

canopy hood and total capture system (i.e., pressure sensors, dampers, and damper switches).

Comment 46 - Condition D.1.23 Visible Emission Observations and Continuous Opacity Monitoring (COM)

To remain consistent with new federal standards, the permit should include the option for a bag leak detector in lieu of an opacity monitor in accordance with the current applicable NSPS.

SDI requests the word "Observations" be replaced with "Notations" in Condition D.1.23 title and the word "All" be replaced with "The" as well as "are" be replaced with "is" in Condition D.1.23(b). SDI agrees that surrogate monitoring is needed for extended periods of COM down time. However with a 3% opacity limit, which is invisible to the naked eye, SDI does not believe that surrogate monitoring needs to be complicated with criteria that makes it appear we have an opacity limit greater than 3%. SDI requests instead that following a shutdown or malfunction of the COMS VE Notations be performed every hour.

In the event of an alarm, the language "filter bags in the" should be added to Condition D.1.24(b)(1), the language "Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the emergency provisions of this permit (Section B.11 - Emergency Provisions)" should be deleted from Condition D.1.24(b)(2).

SDI requests the language "If operations continue after bag failure is observed and it will be 10 days or more after the failure is observed before the failed units will be repaired or replaced, the Permittee shall promptly notify the IDEM, OAQ of the expected date the failed units will be repaired or replaced" and "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" be deleted from Condition D.1.24(c).
326 IAC 2-7-16 states that SDI must notify IDEM within 4 daytime business hours of baghouse malfunction.

Response 46

IDEM acknowledges that the NSPS 40 CFR 60 Subpart AAa provides an option for sources to either install and operate a COM or BLDS for compliance; however, IDEM retained the requirement for SDI to continue the use of a continuous opacity monitor to comply with the opacity PSD BACT limit for the meltshop stack in conjunction with the BLDS because a continuous opacity monitor is an excellent compliance tool to show compliance with the PM and PM10 limits on a continuous basis.

There is no provision for Visible Emission (VE) Notations in the NSPS 40 CFR 60 Subpart AAa. Method 9 opacity readings are required by this NSPS. After further review IDEM has determined the visible emissions observations shall be conducted in accordance with Method 9 as stated in 40 CFR 60.273a. This is necessary to monitor that the opacity limit is being met. The permit is not revised as a result of this comment.

According to 326 IAC 2-7-16 Emergency Provision, SDI is to notify IDEM within 4 daytime business hours if an emergency occurs that causes noncompliance of a technology based emissions limitation. The definition of "emergency" means any situation arising from sudden and reasonably unforeseeable events beyond the reasonable control of the source. An emergency shall not include noncompliance to the extent caused by improperly designed equipment, failure to implement an adequate preventive maintenance plan, careless or improper operation, or operator error. Emergencies lasting longer than one hour are to be reported within four (4) daytime business hours.

Baghouse malfunctions are not considered emergencies. The Permittee has eight (8) hours to respond to a baghouse failure and a record of the deviation is to be reported on the Quarterly

Deviation and Compliance Monitoring Report. The permit is not revised as result of this comment.

Comment 47 - Condition D.1.25 Monitoring of Operations

SDI states the monitoring of operations requirements are pursuant to the NSPS not PSD. The language "The Permittee shall determine" should be deleted and "When the Permittee is required to demonstrate compliance with the opacity standard in Condition D.1.15(b), and at any other time IDEM, OAQ may require (under Section 114 of the Act as amended)" should be added to Condition D.1.25(b). A new requirement "the volumetric flow rate at the control device inlet and all damper positions and shall be determined" should be added as Condition D.1.25(b)(3). The requested changes are needed to accurately reflect the NSPS 40 CFR 60.274a(c) as written. SDI also requests that IDEM include in the Permit Shield a provision finding that condition D.1.25 in the PSD permit misstated the NSPS and that the misstated term is therefore not applicable.

Response 47

IDEM agrees. These requirements are pursuant to the NSPS not PSD. The permit is revised as follows:

D.1.25 Monitoring of Operations [40 CFR 60.274a]

Pursuant to ~~CP183-10097-00030, issued July 7, 1999, amended by PSD Significant Source Modification SSM183-12692-00030, issued January 10, 2001 and~~ 40 CFR 60.274a, the Permittee shall comply with the following monitoring requirements:

(a) .....

The Annual Update of the Indiana Rules to include the amended 2005 Code of Federal Regulations was final on July 5, 2005. The permit is revised to reflect the amended 40 CFR 60.274a rule language adopted into the Indiana Rules as follows:

(b) ~~The Permittee shall determine~~ **When the Permittee is required to demonstrate compliance with the opacity standard in Condition D.1.15(b), and at any other time IDEM, OAQ may require (under Section 114 of the Act as amended),** either:

(1) the control system fan motor amperes and all damper positions, ~~or~~
(2) the volumetric flow rate through each separately ducted hood or
(3) 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 EAFs.

This Addendum to the Part 70 permit Technical Support Documents reflects the changes in the NSPS rule and the draft permit. The Permit Shield Condition B.12 is not revised as requested, since the permit shield will apply to the revised NSPS language when this permit review and decision is final.

Comment 48 - Condition D.1.26 Monitoring for Total Building Enclosure

We do not agree with the monitoring provisions for lead and have suggested appropriate alternatives. The purpose of the total building enclosure was to verify that lead BACT of 0.6 T/Y was not exceeded and BACT was not an issue. This now a moot point since potential lead emissions will be greater than 0.6 T/Y and BACT is required. Section D.1.26 should be deleted.

Two paragraphs contain language referring to Section C.16 - Response to Excursions or Exceedances which was not in the PSD permits.

Response 48

IDEM did not delete the requirement for monitoring the building's total enclosure because the requirement to maintain total building enclosure is necessary to assure good capture necessary to satisfy BACT. The requirement to monitor for total building enclosure makes the capture efficiency requirements enforceable as a practical matter. IDEM revised the preventive maintenance plan language in Condition B.10 and Response to Exceedances or Excursions language in Condition C.16 as stated in the Technical Support Document that accompanied the permit draft for public notice. Both require the Permittee to take reasonable response steps to minimize emissions. The permit is not revised as a result of these comments.

Comment 49 - Condition D.1.27 Record Keeping Requirements

SDI requests the word "after" replace the word "of" in Condition D.1.27.

Response 49

In Condition D.1.27(j), The word "of" is replaced with the word "after" as requested, since it does not change the intent of the condition.

(j) Records necessary to demonstrate compliance shall be available not later than 30 days ~~of~~ **after** the end of each compliance period.

Comment 50

SDI states there is no testing or independent verification for these natural gas emissions. The NOx limitation in Condition D.2.1 should be deleted or language incorporated that allows clear guidance for annual certification.

Also, in Conditions D.2.1, D.2.3, D.2.5, D.2.6, D.2.7, D.3.4 and D.4.1 through D.4.5 there is no reason to have dual limits of pounds of pollutant per MMBtu and pounds of pollutant per hour required for Ladle Preheaters (ID#s 3b through 3e), Tundish Nozzle Preheater (ID# 3g), Tundish Preheaters (ID#S 3h And 3i), Ladle Dryer (ID# 3f), Tundish Dryer (ID# 3j), New Second Ladle Dryer (ID# 3l), Tundish Nozzle Preheater (ID#3m), Tundish Preheater (ID# 3n), Tundish Dryer (ID# 3o), Reheat Furnace (ID#41) and LVD Boiler (ID#40), because they are small natural gas units.

Response 50

It is incorrect that there are no approved compliance test methods, if testing is required, to determine NOx emission rates from the new preheaters and dryers, new ladle dryer, Tundish Nozzle Preheater (ID #3m), Tundish Preheater (ID #3n), and Tundish Dryer (ID# 3o). However, IDEM did not require any compliance tests in this permit because the potential to emit is minimal and mainly due to fuel combustion. Compliance is sufficiently demonstrated by using pipeline natural gas as fuel because the NOx emissions are due to the combustion of this fuel.

In Conditions D.2.3, D.2.5, D.2.6, D.2.7, D.3.4 and D.4.1 the PSD BACT Analysis for the Ladle Dryer, Tundish Nozzle Preheater (ID #3m), Tundish Preheater (ID #3n), Tundish Dryer (ID# 3o) Reheat Furnace (ID#41) and LVD Boiler (ID#40) included both a lb per MMBtu limit and a pound per hour limit for NOx, CO, VOC, SO2, PM (filterable) and PM10 (filterable and condensable) emissions. These PSD BACT limits are included in this Part 70 permit pursuant to SSM183-18426-00030. We must include all applicable requirements in the Part 70 permit. The permit is not revised as a result of these comments.

After further review, IDEM revised Condition D.2.6(c) to correct the ID number of the Tundish Preheater. The permit is revised as follows:

(c) The NO_x emissions from the Tundish Preheater (ID# ~~3~~ **n**) shall not exceed 0.05 pounds per MMBtu and 0.5 pounds per hour, based on a 3-hour block average.

Comment 51 - Condition D.3.1 Nitrogen Oxides (NO_x) - PSD Best Available Control Technology

SDI states the Reheat Furnace (ID#2) requirement in Condition D.3.1 to use "ultra" low NOx natural gas fired burners has no objective meaning, as evidenced by the fact that the low NOx reheat furnace in D.3.4 has a lower NOx limit than the "ultra-low" NOx reheat furnace in D.3.1.

The addition of "with compliance determined at the end of each month" in Condition D.3.1(b) is not consistent with the cited PSD permit – see D.5.1(b) in that permit.

Response 51

After further review IDEM has determined the word "ultra" was not used in the BACT Analysis for Reheat Furnace (ID# 2). Also, the permit referenced in Condition D.3.1(b) should be SSM183-18426-00030.

The permit is revised as follows:

(a) Pursuant to CP183-10097-00030, issued July 7, 1999, amended by PSD Significant Source Modification 183-12692-00030, issued January 10, 2001 and 326 IAC 2-2 (PSD - Control Technology Review; Requirements), the Reheat Furnace (RF) (ID# 2) shall be limited to the use of ~~ultra~~ low- NO_x natural gas-fired burners such that NO_x emissions shall not exceed 0.11 pound per MMBtu.

(b) Pursuant to ~~CP183-10097-00030, issued July 7, 1999, amended by PSD Significant Source Modification 183-12692-00030, issued January 10, 2001,~~ **PSD Significant Source Modification SSM183-18426-00030, issued November 18, 2005**, the Permittee shall not allow more than 189.8 million cubic feet of natural gas to be combusted in the Reheat Furnace (RF) (ID# 2) on a monthly basis averaged over a twelve (12) month period, with compliance determined at the end of each month.

Comment 52 - Condition D.3.4 Reheat Furnace - PSD Best Available Control Technology

SDI states NOx and CO are same regulated criteria pollutants for Reheat Furnace (ID#41) as with the original Reheat Furnace (ID#2). VOC, SO_2, filterable PM, filterable and condensable (PM/PM_{10}), lead and mercury are governed by the use of natural gas and create difficulties of annual compliance certification. For this reason provisions in Condition D.3.4(e), (f), (g), (h), (j) and (k) should be deleted.

Response 52

The BACT Analysis for Reheat Furnace (ID#41) included both a lb per MMBtu limit and a pound per hour limit for NOx, CO, VOC, SO2, PM/PM10 (filterable and condensible), lead and mercury emissions. These PSD BACT limits are included in this Part 70 permit pursuant to SSM183-18426-00030. We must include all applicable requirements in the Part 70 permit. The permit is not revised as a result of this comment.

Comment 53 - Condition D.3.7 Testing Requirements [326 IAC 2-1.1-11]

SDI requests the NOx test required in Condition D.3.7(b) on Reheat Furnace (ID#41) be conducted with 60 days of achieving maximum capacity but no later than 365 days after the initial start up.

Response 53

IDEM will not extend the date in which the NOx test must occur at this time. If maximum capacity will not be achieved within 180 days after initial startup, the Permittee may request an extension. At that time, IDEM will review the request.

Comment 54 - Condition D.4.9 Testing Requirements

D.4.9 Testing Requirements [326 IAC 2-7-6(1),(6)] [326 IAC 2-1.1-11]

Pursuant to PSD Permit 183-15170-00030, issued May 31, 2002 and 326 IAC 2-1.1-11, the Permittee shall perform NO_x and CO testing on the LVD Boiler ~~(ID# 41)~~ **(ID#40)**, at least once every five (5) years ~~from the date of the last valid compliance demonstration~~, this permit issuance using methods as approved by the Commissioner.

Testing shall be performed in compliance with Section C.9- Performance Testing.

Response 54

The testing requirement language takes into account the past valid testing demonstration and is to be repeated five (5) years from the date of the last compliant test. The permit is not revised as result of this comment.

Comment 55 - Condition D.4.11Reporting Requirements

SDI requests the reporting requirement in Condition D.4.11 for the LVD Boiler (ID#40) be deleted, because 40 CFR 60 Subpart Dc does not require any reporting for natural gas fired boilers and Condition D.4.11 covers the duty to provide records to the agencies if they request them.

Response 55

Even though 40 CFR 60 Subpart Dc does not require reporting, pursuant to 326 IAC 2-1.1-11 compliance requirements, the commissioner may require stack testing, monitoring or reporting at any time to assure compliance with all applicable requirements. The Condition D.4.11 requirement to report natural gas and propane usage will ensure compliance with the limits in Condition D.4.6. The natural gas and propane usage report form at the end of the Part 70 permit is also not deleted.

The permit is not revised as result of these comments.

Comment 56 - Condition D.5.6 Preventive Maintenance Plan (PMP) and Condition D.6.5 Preventive Maintenance Plan (PMP)

SDI requests that the PMP requirements for the LVD Boiler (ID#40) and Slag Handling in Conditions D.5.6 and D.6.5 be removed, because these units are inconsequential and should not require a PMP.

Response 56

It is clear from the structure of the wording in 326 IAC 1-6-3 that the PMP requirement affects the entirety of the applicable facilities. Only 326 IAC 1-6-3(a)(1) is limited, in that it requires identification of the personnel in charge of only the emission control equipment, and not any other facility equipment. 326 IAC 1-6-3(b) provides that "...as deemed necessary by the commissioner, any person operating a facility shall comply with the requirements of subsection (a) of this section." Many types of facilities require maintenance in order to prevent excess emissions. These emission units may not be the main and significant operations of the plant, the preventive maintenance should be performed on the bin vents and slag handling, because lack of proper maintenance can result in increased particulate emissions.

Comment 57 - Condition D.5.8 Visible Emissions Notations

SDI requests Condition D.5.8 that requires VE notations of the Bin Vents be deleted from the permit. SDI noted the changes under Condition D.5.10 Record Keeping to remove conditions that were not part of the original permit. A new Condition D.5.8 requirement to inspect the bin vents should be added with the language "Pursuant to CP183-10097-00030, issued July 7, 1999, amended by PSD Significant Source Modification SSM183-12692-00030, issued January 10, 2001and 326 IAC 2-1.1-11, an inspection shall be performed each calendar quarter of all bin vent filters controlling the nine (9) storage silos. All defective filters shall be replaced. A record shall be kept of the results of the inspection and the number of bags replaced." Also, Condition D.5.9 second paragraph the language "that results in an exceedance of an emission limitation" should be added.

~~D.5.8 Visible Emissions Notations [326 IAC 2-1.1-11]~~

~~Pursuant to CP183-10097-00030, issued July 7, 1999, amended by PSD Significant Source Modification SSM183-12692-00030, issued January 10, 2001 and 326 IAC 2-1.1-11:~~

~~(a) Weekly visible emission notations of the nine (9) storage silos exhaust vents and the raw material receiving station shall be performed during normal daylight operations when loading or unloading material. 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, when the process is in operation, not counting startup or shut down time.~~

~~(c) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.~~

~~(d) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.~~

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

SDI requests a new Condition D.5.8 requirement to inspect the bin vents should be added to the permit with the following language:

D.5.8 Bin Vent Filter Inspections [326 IAC 2-1.1-11]

Pursuant to CP183-10097-00030, issued July 7, 1999, amended by PSD Significant Source Modification SSM183-12692-00030, issued January 10, 2001and 326 IAC 2-1.1-11, an inspection shall be performed each calendar quarter of all bin vent filters controlling the nine (9) storage silos. All defective filters shall be replaced. A record shall be kept of the results of the inspection and the number of bags replaced.

Response 57

The VE readings are not removed from the permit, because the permit must include some method for monitoring to assure continuous compliance. These emission units may not be the main and significant operations of the plant but they have applicable PSD BACT limits for

particulate emissions. These BACT limits must be enforceable as a practical matter. Since these units are not expected to emit large amounts of emissions, the frequency of the required visible emissions observations is only once weekly, as opposed to once per shift or continuous monitoring for units that emit much larger amounts of emissions. The VE notation record keeping requirement in Condition D.5.10 that was included in the SSM 183-18426-00030 and carried over in the Part 70 permit is not deleted.

IDEM has determined that it is the Permittee's responsibility to include routine control device inspection requirements in the applicable preventive maintenance plan. Since the Permittee is in the best position to determine the appropriate frequency of control device inspections and the details regarding which components of the control device should be inspected, the conditions requiring control device inspections and inspection records were not added to the permit.

To demonstrate continuous compliance with the Bin Vent emission limits in Conditions D.5.1 and D.5.2, bin vents that fail are to be repaired or replaced even if the failure does not result in an exceedance of an emission limitation.

The permit is not revised as a result of this comment.

Comment 58

SDI requests the slag processing limit should be stated per calendar year instead of per 12-consecutive month period with compliance demonstrated at the end of each month and the quantity of slag processed be reported on a calendar year basis to IDEM through the annual emissions reporting required by 326 IAC 2-6 and delete Condition D.6.10 Reporting Requirements.

Response 58

The Slag Handling Operation must demonstrate compliance on a continuing basis with slag throughput limit by submitting the quarterly report to the IDEM OAQ Compliance Branch. The quarterly report is needed so that any noncompliance with emission limit is determined. The annual emission statement submittal is not sufficient to show continuous compliance with the throughput limit. The permit is not revised as result of this comment.

Comment 59 - Condition D.6.2 Particulate Matter (PM)

SDI requests that Condition D.6.2 be deleted, because the process weight rate rule does not apply, since the slag processing went through PSD review – see 326 IAC 6-3-1(c)(1).

Response 59

IDEM disagrees. According to 326 IAC 6-3-1(c)(1), the rule does not apply if the particulate matter limitation established in a PSD BACT determination is more stringent than the particulate limitation established in this rule. In this case, there was no particulate limitation established. There was an opacity limit established, but an opacity limit is not considered more stringent than a mass emission limit. The permit is revised to include the requirement in 326 IAC 6-3-2(e)(3).

D.6.2 Particulate Matter (PM) [326 IAC 6-3]

Pursuant to PSD Permit SSM183-18426-00030, November 21, 2005 and 326 IAC 6-3 (Particulate Emission Limitations for Manufacturing Processes), the combined filterable particulate emissions from the crushing, screening, conveyor transfer points, continuous stacking operations shall not exceed 60.96 pounds per hour.

This limit is based on the nominal process weight rate of 250 tons per hour.

Particulate emissions will be considered in compliance with 326 IAC 6-3 in the absence of PM compliance tests provided that visible emissions do not exceed the visible emissions requirements specified for these operations in this permit.

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

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

The above equation shall be used for extrapolation of the data for process weight rates in excess of sixty thousand (60,000) pounds per hour.

Pursuant to 326 IAC 6-3-2(e)(3), when the process weith exceeds two hundred (200) tons/hour, the maximum allowable emission may exceed that calculated from the above equation, provided the concentration of particulate matter in the discharge gases to the atmosphere from the crushing, screening, conveyor transfer points, continuous stacking operations shall be less than one-tenth (0.01) pound per one thousand (1,000) pounds of gases.

Comment 60 - Condition D.6.8 Visible Emissions Notations

SDI requests that Condition D.6.8 be removed, because VE notations were not required in any prior permit and the suggested frequency is completely unreasonable.

Response 60

After further review, IDEM has determined the fugitive dust control plan requirements contain the necessary steps to ensure continuous compliance from the slag handling operations. Condition D.6.8 and the record keeping requirement in Condition D.6.9(b) now Condition D.6.7 are deleted and the subsequent conditions are renumbered as necessary. The permit is revised as follows:

~~D.6.8 Visible Emissions Notations~~

~~(a) Visible emission notations of the slag handling processes shall be performed once per day during normal daylight operations when exhausting to the atmosphere. A trained employee shall record whether emissions are normal or abnormal.~~

~~(b) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.~~

~~(c) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.~~

~~(d) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.~~

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

D.6.~~9~~ 7 Record Keeping Requirements [326 IAC 2-7-19]

Pursuant to PSD SSM183-18426-00030, issued November 21, 2005, the Permittee shall maintain records of the following:

(a) .....

~~(b) To document compliance with condition D.6.8, the Permittee shall maintain records of the once per day visible emission notations.~~

~~(c)~~ **(b)** All records shall be maintained in accordance with Condition C.20 - General Record Keeping Requirements of this permit.

Comment 61 - Section E.1 Fugitive Dust Control Plan (FDCP)

SDI states the Fugitive Dust Control Plan (FDCP) is a living document that needs to be changed without a permit modification. The permit referenced in Condition D.7.1 should be SSM183-18426-00030, issued November 18, 2005.

SDI requests the language in the FDCP Section E.1 be changed as follows:
Condition E.1.1,"down to 9.7 grams per square meter" and "silt loading limitation" be removed, because the language was removed from the roadways section of the permit (see D.7.1) and should not appear in Condition E.1.1 either.

The language in Condition E.1.2(b) "Since an Industrial Augmentation factor of I=1 was used for the emissions inventory, vehicles shall be limited to traveling on paved surfaces only and not allowed to enter any paved surface except from public paved roads and tarred and chipped roads. Vehicles shall also not be allowed to travel on the shoulder of paved road ways" be removed from the permit because the provision implies that vehicles cannot travel on paved roads and contradicts E.1.3, which acknowledges that some roads are unpaved and may be traveled if treated.

SDI requests a language change in Conditions E.1.2(d)(3) and E.1.3(c)(5) concerning the requirement to delay cleaning roads if it is raining. The phrase "at the time of" should be replaced with the phrase "on the day of", the scheduled cleaning.

There is no way to certify the 90% reduction percentage instantaneous control for fugitive dust emissions in Condition E.1.3(b).

In Condition E.1.4, the water sprayed on the slag piles should state "control" emissions rather than "eliminate", because the water sprays are used as a control for fugitive dust from the slag piles.

In Condition E.1.5(a), the transferring of skull slag should state "performed" rather than "done slowly", because performed clarifies what the source needs to do. SDI requests the language "such that the applicable visible emissions limitations in the permit are not exceeded" be added to the end of Condition E.1.5(b). In Condition E.1.5(d), SDI requests the phrase "can be waived" be deleted and "is waived" be added. Finally, the phrase "as needed" should be added to Condition E.1.5(f) second paragraph to clarify when water needs to be used to control fugitive emissions.

SDI requests the deletion of Condition E.1.6 Vehicle Speed Control, because AP-42 does not consider speed in emission calculations. Therefore, there is no supporting evidence to restrict speed as a means of controlling emissions and this is overly prescriptive and unnecessary given the very small roadway emissions and the requirements in Condition D.7.1.

In Condition E.1.7, Material Spill Control, SDI requests the addition of "that can contribute to fugitive dust emissions", because the Title V permit cannot regulate matters outside the CAA and state regulatory authority.

Response 61

The fugitive dust limitation requirements for paved and unpaved areas were revised in SMM 183-18426-00030. The reference to the Fugitive Dust Control Plan in Section E.1 is not deleted, because the FDCP is implemented to meet the limitations in Condition D.7.1. Implementing and maintaining the FDCP is part of the BACT requirement under 326 IAC 2-2 for this source; therefore, the requirements of the plan must be included in the permit. This is in addition to the 326 IAC 6-4 requirements.

The permit is revised as follows:

D.7.1 Fugitive Dust Emission Limitations - Best Available Control Technology [326 IAC 2-2]

Pursuant to ~~CP183-10097-00030, issued July 7, 1999, amended by PSD Significant Source Modification SSM183-12692-00030, issued January 10, 2001~~ **SSM183-18426-00030, issued November 18, 2005** and 326 IAC 2-2 (PSD - Control Technology Review; Requirements), the fugitive dust emissions from transporting on paved roadways and parking lots, unpaved roadways, and unpaved areas around slag storage piles and steel scrap piles shall be controlled in accordance with the Fugitive Dust Control Plan (FDCP) (Section E.1) such that the following limitations are not exceeded:

The silt loading was deleted from SSM183-18426-0030 Section D.7, because a BACT 10% opacity limit was specified in Section D.7.1 for paved and unpaved roads. The language is deleted in the FDCP as requested for clarity. The permit is revised as follows:

E.1.1 Implementation and Contact

(a) The following fugitive dust control plan (FDCP), when implemented, is designed to reduce uncontrolled fugitive dust, based on a PM_{10} mass emission basis, from:

(1) paved roadways and parking lots, ~~down to 9.7 grams per square meter.~~

(2) .....

such that the ~~silt loading limitation and~~ visible emissions limitations specified in the permit are met.

E.1.3 Unpaved Areas within the Slag Processing Area and Scrap Yard

The following dust control measures shall be performed such that the visible emission limitations in the permit are met. Visible emissions shall be determined in accordance with the procedures specified in the permit.

(a) .....

(b) Fugitive dust emissions shall be reduced ~~by at least 90 percent (90%) instantaneous control~~ on a PM_{10} mass emission basis.

Condition E.1.4 is revised as follows:

E.1.4 Wind Erosion from Open Slag Piles

Open slag piles consist of slag in various stages of processing.

.....

Slag piles shall be sprayed with water, on an "as-needed" basis to ~~eliminate~~ **control** wind erosion and not exceed the visible emission limitations in the permit. Water added to the product during processing provides added control. Visible emissions shall be determined in accordance with the procedures specified in the permit.

IDEM agrees in part. The language "can be waived" is not replaced with "is waived" in Condition E.1.5(d), because the language as stated gives SDI the option to require the use of water suppression to control emissions during skull transferring when safety is not a factor.

The permit is revised as follows:

E.1.5 Slag Handling and Processing

(a) During transferring of the skull slag to the slag pot, the drop height shall be minimized and the transferring shall be ~~done slowly~~ **performed** such that the visible emission limitations in the permit are not exceeded.

(b) Pouring of liquid slag from the EAFs or LMS to the slag pot shall be conducted inside the melt shop and emissions shall be captured by the melt shop roof canopy and ducted to the EAF baghouse **such that the applicable visible emissions limitations in the permit are not exceeded.**

(f) .....

Spray bars shall be used **as needed** to apply water on crushing and screening operations, and conveyor transfer points.

IDEM disagrees. Condition E.1.6 is not deleted, because the AP-42 November 2006 update for Paved Roads Chapter 13.2.1 and Unpaved Roads Chapter 13.2.2 lists equations developed for calculating emissions factors from paved and unpaved roads based on numerous emissions tests. One of the variables used in these equations is mean vehicle speed. These equations retain the quality rating of A for calculating emission factors from the roads. Also, the fugitive dust BACT Analysis included speed limits as a control for fugitive particulate emissions from paved and unpaved roads at SDI.

After further review, IDEM has determined the Permittee is required to control fugitive dust emissions from material spills that contribute to fugitive dust emissions at the plant. The Condition E.1.7 is revised as follows:

E.1.7 Material Spill Control

Incidents of material spillage on plant property **that can contribute to fugitive dust emissions** shall be investigated by the person responsible for implementing the plan.

Comment 62

SDI requests testing conditions be added in Conditions D.7.4 and D.8.2 that state "Testing of the above mentioned operations is not required", because this language was in PSD permit SSM-12693-00030, issued on January 10, 2001 and is needed to clarify the permit.

Response 62

IDEM disagrees. There is no need to state "testing is not required". IDEM may require testing if necessary to determine compliance with a limit. The permit is not revised as result of this comment.

Comment 63

SDI requests that duplicative Conditions D.9.1 and D.9.2 be removed from the permit, because the process weight rate rule is already cited in Condition C.1 and the natural gas units requirements are in Section D.2.

Response 63

IDEM agrees. The requirements are duplicates of conditions cited elsewhere in the permit. 326 IAC 6-3-2 Particulate Emissions Limitations in Condition C.1 apply to the brazing equipment, cutting torches soldering equipment and welding equipment when process weight rates are less than 100 pounds per hour and particulate emissions potential to emit 0.551 pounds per hour.

The BACT NOx limits for the natural gas combustion sources considered insignificant are found in Section D.2, along with the significant combustion sources, so condition D.9.2 is deleted.

~~**Section D.9**~~

~~**Facility Description** [326 IAC 2-7-5(15)] Insignificant activities, as defined in 326 IAC 2-7-1(21):~~

~~(a) Grinding and machining operations controlled with fabric filters, scrubbers, mist collectors, wet collectors and electrostatic precipitators with a design grain loading of less than or equal to three one-hundredths (0.03) grains per dry standard cubic foot and a gas flow rate less than or equal to four thousand (4,000) actual cubic feet per minute, including the following: deburring, buffing, polishing, abrasive blasting, pneumatic conveying and woodworking operations.~~

~~(b) Degreasing operations that do not exceed one hundred forty-five (145) gallons per twelve (12) months, except if subject to 326 IAC 20-6.~~

~~(c) Cleaners and solvents characterized as:~~

~~(1) having a vapor pressure equal to or less than two (2.0) kilo Pascals fifteen (15) millimeters of mercury or three-tenths (0.3) pound per square inch) measured at thirty-eight (38) degrees Centigrade (one hundred (100) degrees Fahrenheit); or~~

~~(2) having a vapor pressure equal to or less than seven-tenths (0.7) kilo Pascal (five (5) millimeters of mercury or one-tenth (0.1) pound per square inch) measured at twenty (20) degrees Centigrade (sixty-eight (68) degrees Fahrenheit); the use of which, for all cleaners and solvents combined, does not exceed one hundred forty-five (145) gallons per twelve (12) months.~~

~~(d) Natural gas-fired combustion sources with heat input equal to or less than ten million (10,000,000) British thermal units per hour. (Listed and regulated in Section D.2).~~

~~(e) A gasoline fuel transfer dispensing operation handling less than or equal to one thousand three hundred (1,300) gallons per day and filling storage tanks having a capacity equal to or less than ten thousand five hundred (10,500) gallons. Such storage tanks may be in a fixed location or on mobile equipment.~~

~~(f) Refractory storage not requiring air pollution control equipment.~~

~~(g) Equipment used exclusively for the following:~~

~~(1) Packaging lubricants and greases.~~

~~(2) Filling drums, pails, or other packaging containers with lubricating oils, waxes and greases.~~

~~(h) Production related activities, including the application of: oils; greases, lubricants; and nonvolatile material; as temporary protective coatings.~~

~~(i) The following equipment related to manufacturing activities not resulting in the emission of HAPs: brazing, cutting torches, soldering, welding.[326 IAC 6-3-2]~~

~~(j) Closed loop heating and cooling systems.~~

~~(k) Solvent recycling systems with batch capacity less than or equal to one hundred (100) gallons.~~

~~(l) Water based activities, including activities associated with the treatment of wastewater streams with an oil and grease content less than or equal to one percent (1%) by volume.~~

~~(m) Quenching operations used with heat treating processes.~~

~~(n) Repair activities, including the replacement or repair of electrostatic precipitators, bags in baghouses, and filters in other air filtration equipment.~~

~~(o) Paved and unpaved roads and parking lots with public access.~~

~~(p) Conveyors as follows:~~

~~(1) Covered conveyors for coal or coke conveying of less than or equal to three~~

~~hundred sixty (360) tons per day.~~

~~(2) Covered conveyors for solid raw material, including limestone conveying of less than or equal to seven thousand two hundred (7,200) tons per day for sources other than mineral processing plants constructed after August 31, 1983.~~

~~(g) Blowdown for the following: Sight glass; Boiler; Cooling tower; Compressors; and Pumps.~~

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

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

~~D.9.1 Particulate Emissions [326 IAC 6-3-2]~~

~~Pursuant to 326 IAC 6-3-2 (Particulate Emission Limitations), the particulate emissions from the brazing equipment, cutting torches, soldering equipment and welding equipment shall not exceed the particulate limitation in Section C.1 - Particulate Emission Limitations for Processes with Process Weight Rates Less Than One Hundred (100) pounds per hour.~~

~~D.9.2 Nitrogen Oxides (NOx) - Emissions - Best Available Control technology [26 IAC 2-2]~~

~~Refer to Section D.2 of this permit for the NOx emission limits for the natural gas-fired combustion sources~~

Comment 64

SDI cannot guarantee that 100% of the following material will be caught and rejected, especially when there is no impact on air quality. Therefore, a provision should be included that allows de minimis material such that the allowed emission limit is not exceeded.

In Condition E.2.1(a), the language "be essentially free of materials containing" should be replaced with "not contain", "regulated" should be added before volatile organic compounds and "and hazardous materials" should be deleted, because "hazardous material" is a DOT regulatory term that has no place in a Title V permit.

In Condition E.2.1(c), the language "must be noted on the purchase order and" should be deleted.

In Condition E.2.2(a) and (b), Scrap Specifications, the language "Air Pollutant Containing" and Scrap received "which during melting will produce a hazardous pollutant in excess of regulated or permitted limits, shall be removed or the load" to describe hazardous material and Scrap received should be added and the language "with evidence of hazardous material, or hazardous material containers" should be deleted.

SDI requests Condition E.2.2(c) be deleted, because non-ferrous materials are not related to air emissions.

In Condition E.2.2(e), SDI requests the language " All mercury switches that are susceptible to removal and that are found in scrap shall be removed and disposed of" be deleted and the word "practical" replace "possible". Scrap delivered to a steel mill has been processed before delivery, and any switches are no longer accessible because of bundling, crushing, or shredding. Thus, this "susceptible to removal" standard is meaningless. Further this topic is currently being considered by the General Assembly, and the Permit language should not impose terms that may end up being inconsistent with any legislation.
In Condition E.2.3(a), SDI requests the word "or" should replace "and" between scrap broker and other agents.

In Conditions E.2.3(b)(2), E.2.3(c)(2) and , "excessive amounts of" should be added to describe the amount of contaminated scrap allowed. To clarify in Condition E.2.3(c)(4) that the scrap goes from the stockpiles into railcars for delivery "to" the scrap bay the word "to" should be added between delivery and scrap bay.

SDI requests language be added to Condition E.2.3(c)(6) to allow SDI to return the contaminated scrap to the vendor as well as discarding the scrap.

Response 64

The scrap management plan is part of the BACT requirements under 326 IAC 2-2 Prevention of Significant Deterioration. The Permittee must implement and maintain a SMP to prevent as many contaminates as practical that emit regulated air pollutants (VOC and hazardous air pollutants such as lead, mercury, chromium and nickel compounds) from being in the scrap before processing. The permit is revised as follows:

E.2.1 General Specifications

The following measures shall be performed such that the volatile organic compounds and hazardous air pollutants emission limitations in the permit are met:

(a) Unless specifically allowed, all grades of scrap shall ~~be essentially free of materials containing~~ **not contain** excessive amounts of **regulated** volatile organic compounds and hazardous materials.

Scrap materials with excessive amounts of **regulated** volatile organic compounds and hazardous materials are referred to as contaminated scrap.

E.2.2 Scrap Specifications

The following measures shall be performed such that the regulated volatile organic compounds and hazardous air pollutants emission limitations in the permit are met:

(a) Hazardous Material
Scrap received with evidence of hazardous material or hazardous material containers,

(b) .....

(e) Mercury Switches
All mercury switches that are susceptible to removal and that are found in scrap shall be removed and disposed of.- SDI shall inform automotive scrap dealers that mercury switches shall be removed from scrap wherever possible.

E.2.3 Scrap Inspection Procedure

At any point in the inspection process, SDI personnel or agents working on behalf of Steel Dynamics, Inc. (SDI) shall issue warnings and accept loads with minor deficiencies or shall reject loads, which contain contaminated scrap:

(a) Scrap Inspectors
The persons responsible for inspecting the loads for contaminated scrap are the SDI employees operating the railcar or truck scales, the scrap bay and unloading operators, and yard personnel (crane operators, sorters, supervisors, etc.), Environmental Department, the scrap broker, ~~and~~ **or** other agents working on behalf of SDI.

(b) .....

(c) Scrap Inspection

(1) .....

(2) Yard personnel or scrap bay operators shall observe the load being dumped to make sure the load is consistent and contains no contaminated scrap.

(3) .....

(4) Yard operators shall inspect the scrap during loading from stockpiles into railcars slated for delivery **to** the scrap bay.

(5) .....

(6) Contaminated scrap found in the stockpile or scrap bay shall be removed and discarded in accordance with applicable rules and regulations **or returned to the scrap vendor.**

Comment 68

SDI requests the Emergency Occurrence Report form language be changed from "within" to "no later than".

Response 68

The language in the report form is not revised, because the language is taken verbatim from the rule.

Upon further review, the OAQ has decided to make the following revisions to the permit (bolded language has been added, the language with a line through it has been deleted). The Miscellaneous grammar and spelling corrections have been made throughout the permit also.

Change 1

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

(a) .....

(e) Backup fuel switches specifically addressed in, and limited under, Section D of this permit shall not be considered alternative operating scenarios. Therefore, the notification requirements of part (a) of this condition do not apply.

Change 2

The signature block on the permit cover page is revised as follows:

~~Paul Dubenetzky, Assistant Commissioner~~
Nisha Sizemore, Chief
Permits Branch

Change 3

After further review, IDEM has determined the Permittee does not have to submit the Annual Compliance Certification in letter form. Therefore the permit is revised as follows:

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

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

Change 4

IDEM has clarified the Section B - Permit Shield Requirements condition as follows:

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

(a) Pursuant to 326 IAC 2-7-15, the Permittee has been granted a permit shield. The permit shield provides that compliance with the conditions of this permit shall be deemed ~~in~~ compliance with any applicable requirements as of the date of permit issuance, provided that either the applicable requirements are included and specifically identified in this permit or the permit contains an explicit determination or concise summary of a determination that other specifically identified requirements are not applicable. The Indiana statutes from IC 13 and rules from 326 IAC, referenced in conditions in this permit, are those applicable at the time the permit was issued. The issuance or possession of this permit shall not alone constitute a defense against an alleged violation of any law, regulation or standard, except for the requirement to obtain a Part 70 permit under 326 IAC 2-7 or for applicable requirements for which a permit shield has been granted.

Change 5

All references to IDEM, OAQ, Compliance Section telephone and facsimile numbers have been revised as follows:

~~317-233-5674~~ **317-233-0178**
~~317-233-5967~~ **317-233-6865**

Change 6

IDEM has clarified the Section C General Record Keeping Requirements condition as follows:

C.~~19~~ **18** General Record Keeping Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-6] [326 IAC 2-2][326 IAC 2-3]

(a) ....

(c) If there is a reasonable possibility that a "project" (as defined in 326 IAC 2-2-1 (qq) and/or 326 IAC 2-3-1 (ll) at an existing emissions unit, **or at a source with Plantwide Applicability Limitation (PAL)**, ~~other than projects at a Clean Unit~~, which is not part of a "major modification" (as defined in 326 IAC 2-2-1 (ee) and/or 326 IAC 2-3-1 (z) may result in significant emissions increase and the Permittee elects to utilize the "projected actual emissions" (as defined in 326 IAC 2-2-1 (rr) and/or 326 IAC 2-3-1 (mm)), the Permittee shall comply with following:

(1) Prior to commencing the construction of the "project" (as defined in 326 IAC 2-2-1 (qq) and/or 326 IAC 2-3-1 (ll)) at an existing emissions unit, document and maintain the following records:
(A) .....

(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)~~(3)~~ **(iii)** and
(iv) An explanation for why the amount was excluded, and any netting calculations, if applicable.

Change 7

IDEM has clarified which insignificant activities are specifically regulated as follows:

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

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

1. Specifically regulated insignificant activities, as defined in 326 IAC 2-7-1(21):

(a) Grinding and machining operations controlled with fabric filters, scrubbers, mist collectors, wet collectors and electrostatic precipitators with a design grain loading of less than or equal to three one-hundredths (0.03) grains per dry standard cubic foot and a gas flow rate less than or equal to four thousand (4,000) actual cubic feet per minute, including the following: deburring, buffing, polishing, abrasive blasting, pneumatic conveying and woodworking operations. [326 IAC 6-3-2]

~~(d)~~**(b)** Natural gas-fired combustion sources with heat input equal to or less than ten million (10,000,000) British thermal units per hour. [326 IAC 2-2]

~~(i)~~**(c)** The following equipment related to manufacturing activities not resulting in the emission of HAPs: brazing, cutting torches, soldering, welding. [326 IAC 6-3-2]

~~(e)~~**(d)** Paved and unpaved roads and parking lots with public access. [326 IAC 2-2]

2. Other Insignificant activities:

~~(b)~~**(a)** Degreasing operations that do not exceed one hundred forty-five (145) gallons per twelve (12) months, except if subject to 326 IAC 20-6.

~~(c)~~**(b)** Cleaners and solvents characterized as:
(1) having a vapor pressure equal to or less than two (2.0) kilo Pascals fifteen (15) millimeters of mercury or three-tenths (0.3) pound per square inch measured at thirty-eight (38) degrees Centigrade (one hundred (100) degrees Fahrenheit); or
(2) having a vapor pressure equal to or less than seven-tenths (0.7) kilo Pascal (five (5) millimeters of mercury or one-tenth (0.1) pound per square inch) measured at twenty (20) degrees Centigrade (sixty-eight (68) degrees Fahrenheit); the use of which, for all cleaners and solvents combined, does not exceed one hundred forty-five (145) gallons per twelve (12) months.

~~(e)~~**(c)** A gasoline fuel transfer dispensing operation handling less than or equal to one thousand three hundred (1,300) gallons per day and filling storage tanks having a capacity equal to or less than ten thousand five hundred (10,500) gallons. Such storage tanks may be in a fixed location or on mobile equipment.

~~(f)~~**(d)** Refractory storage not requiring air pollution control equipment.

~~(g)~~**(e)** Equipment used exclusively for the following:
(1) Packaging lubricants and greases.
(2) Filling drums, pails, or other packaging containers with lubricating oils, waxes and greases.

~~(h)~~**(f)** Production related activities, including the application of: oils; greases, lubricants; and nonvolatile material; as temporary protective coatings.

~~(i)~~**(g)** Closed loop heating and cooling systems.

~~(k)~~**(h)** Solvent recycling systems with batch capacity less than or equal to one hundred (100) gallons.

~~(l)~~**(i)** Water based activities, including activities associated with the treatment of wastewater streams with an oil and grease content less than or equal to one percent (1%) by volume.

~~(m)~~**(j)** Quenching operations used with heat treating processes.

~~(n)~~**(k)** Repair activities, including the replacement or repair of electrostatic precipitators, bags in baghouses, and filters in other air filtration equipment.

~~(p)~~**(l)** Conveyors as follows:
(1) Covered conveyors for coal or coke conveying of less than or equal to three hundred sixty (360) tons per day.
(2) Covered conveyors for solid raw material, including limestone conveying of less than or equal to seven thousand two hundred (7,200) tons per day for sources other than mineral processing plants constructed after August 31, 1983.

~~(q)~~**(m)** Blowdown for the following: Sight glass; Boiler; Cooling tower; Compressors; and Pumps.

Change 8

Upon further review, IDEM has decided to remove (d) concerning nonroad engines from B.18 Permit Amendment or Modification. 40 CFR 89, Appendix A specifically indicates that states are not precluded from regulating the use and operation of nonroad engines, such as regulations on hours of usage, daily mass emission limits, or sulfur limits on fuel; nor are permits regulating such operations precluded, once the engine is no longer new.

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

(a) ....

~~(d) No permit amendment or modification is required for the addition, operation or removal of a nonroad engine, as defined in 40 CFR 89.2.~~

Change 9

IDEM is making a change to our procedures related to the Responsible Official (R.O.) and Authorized Individual (A.I.). The names or titles of the R.O. and A.I. will no longer be listed in Section A of the permit. This information will be kept up to date in the permit tracking database. The permit is revised as follows:

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 steel beam mini mill.

~~Responsible Official: General Manager or designee (pursuant to 326 IAC 2-7-1(34))~~

Change 10

IDEM's address has been updated to include mail codes. The Technical Support and Modeling Section's mail code is "MC 61-50 IGCN 1003"; therefore, the address in Condition C.17 Emission Statement has been revised as shown below. Please note that even though the Asbestos Section's address is not included in this permit the Asbestos Section's mail code is "MC 61-52 IGCN 1003". All other addresses referenced in this permit use the mail code "MC 61-53 IGCN 1003".

C.17 Emission Statement [326 IAC 2-7-5(3)(C)(iii)][326 IAC 2-7-5(7)][326 IAC 2-7-19(c)] [326 IAC 2-6]

(a) ...

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

Indiana Department of Environmental Management
Office of Air Quality

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

Source Background and Description

Source Name:	Steel Dynamics, Inc. - Structural and Rail Division
Source Location:	2601 County Road 700 East, Columbia City, IN 46725
County:	Whitley
SIC Code:	3312
Operation Permit No.:	T183-17160-00030
Permit Reviewer:	Gail McGarrity

The Office of Air Quality (OAQ) has reviewed a Part 70 Operating Permit application from Steel Dynamics, Inc. relating to the operation of a mini-mill that produces structural steel products.

Permitted Emission Units and Pollution Control Equipment

The source consists of the following permitted emission units and pollution control devices:

(a) Electric Arc Furnaces (EAFs) - - Stack 1
Two (2) single shell electric arc furnaces (EAFs), identified as EAF-1a and EAF-1b, constructed in September 2002. These furnaces operate at a nominal combined rate of 300 tons of molten steel per hour and utilize a direct-shell evacuation control (DEC) system ("fourth hole" duct), an overhead roof exhaust system consisting of a capture system consisting of a segmented canopy hood, scavenger duct, and cross-draft partitions.

These furnaces utilize the following emission control technologies:

(1) A DEC for carbon monoxide (CO) and volatile organic compounds (VOC) emissions;

(2) Low NO_x/oxyfuel burners (combustion control) for nitrogen oxide (NO_x) emissions; and

(3) A baghouse (identified as EAF Baghouse, ID# 1) for particulate (PM and PM_{10}) emissions.

The particulate and lead emissions escaping the DEC system are collected by the overhead roof exhaust system and exhaust through a stack identified as EAF Baghouse stack (Stack 1).

There are no roof monitors in the meltshop.

(b) Ladle Metallurgy Station (LMS) - - Stack 1
One (1) ladle metallurgy refining station (LMS) (ID# 3a) constructed in September 2002 with a nominal rate of 300 tons of steel per hour.

The LMS particulate emissions are collected by the overhead roof exhaust system and exhaust through the common EAF Baghouse stack (Stack 1).

(c) Continuous Casters (CCs) - - Stack 1
The two (2) continuous casters are limited to a nominal combined casting capacity of 300 tons of steel per hour.

(1) One (1) continuous caster (CC) (ID# 3k), constructed in September 2002, with a nominal casting rate of 200 tons of steel per hour.

(2) One (1) continuous caster, identified as ID# 42a, (to be constructed under SSM183-18426-00030), with a nominal casting rate of 200 tons of steel per hour.

The particulate emissions from the continuous casters are collected by the overhead roof exhaust system and exhaust through the common EAF baghouse stack (Stack 1).

(d) Preheaters - - Stack 1

(1) Four (4) natural gas-fired low NO_x ladle preheaters (ID#s 3b through 3e), constructed in September 2002, each with a nominal heat input rate of 10 million British Thermal Units per hour (MMBtu/hour).

(2) One (1) natural gas-fired low NO_x tundish nozzle preheater (ID# 3g), constructed in September 2002, with a nominal heat input rate of 10 MMBtu/hour.

(3) Two (2) natural gas-fired low NO_x tundish preheaters (ID#s 3h and 3i), constructed in September 2002, each with a nominal heat input rate of 5 MMBtu/hour.

(4) One (1) natural gas-fired Tundish Nozzle Preheater, identified as (ID# 3m) (to be constructed under SSM183-18426-00030), nominally rated at 10 MMBtu/hour.

(5) One (1) natural gas-fired Tundish Preheater, identified as (ID# 3n), constructed in September 2002, nominally rated at 10 MMBtu/hour.

Combustion emissions from the preheaters exhaust inside the building, and are collected by the overhead roof exhaust system and ducted to the EAFs Baghouse.

(e) Dryers - - Stack 1

(1) Two (2) natural gas-fired low NO_x ladle dryers (ID# 3f) constructed in September 2002 and (ID# 3l), (to be constructed under SSM183-18426-00030) each with a nominal heat input rate of 10 MMBtu/hour.

(2) One (1) natural gas-fired low NO_x tundish dryer (ID# 3j), constructed in September 2002, with a nominal heat input rate of 5 MMBtu/hour.

(3) One (1) natural gas-fired Tundish Dryer, identified as (ID# 3o) (to be constructed under SSM183-18426-00030), nominally rated at 5 MMBtu/hour.

Combustion emissions from the dryers exhaust inside the building, and are collected by the overhead roof exhaust system and ducted to the common EAFs Baghouse.

(f) Reheat Furnaces - - Stack 2 and Stack 41

(1) One (1) natural gas-fired low NO_x reheat furnace (RH) (ID# 2), constructed in September 2002, with a nominal heat input rate of 260 MMBtu per hour.

Combustion and process emissions from the RH (ID# 2) exhaust through a stack identified as Stack 2.

(2) One (1) natural gas-fired low NO_x burners reheat furnace, identified as ID# 41 (to be constructed under SSM183-18426-00030), with a nominal heat input rate of 260 MMBtu per hour.

Combustion and process emissions from this reheat furnace (ID# 41) exhaust through a stack, identified as Stack 41.

(g) Ladle Vacuum Degasser (LVD) and LVD Boiler - - Stack 40
One (1) ladle vacuum degasser (LVD) (ID# 40), constructed in 2003 with a nominal capacity of 300 tons per hour of steel and one (1) boiler constructed in 2003 to power the LVD. The LVD Boiler (ID# 41) has a nominal heat input capacity of 41.8 MMBtu/hour, and uses natural gas as the primary fuel, with propane as an emergency back up fuel.

Gases from the LVD are directed to the boiler for combustion in the boiler. Emissions from the boiler exhausts through a stack identified as Stack 40.

(h) One (1) EAF dust storage silo (ID# 4), constructed in 2002, equipped with a bin vent filter for particulate control.

(i) Eight (8) raw material storage silos (ID#s 5 through 12), and the associated raw material receiving station, constructed in 2002.

Each silo is equipped with a bin vent filter for particulate control.

(j) A slag handling and processing area (ID# 14) constructed in 2002, operated by an independent contractor, with a nominal rated capacity of 250 tons per hour.

This processing area consists of slag pot dumping, deskulling, slag cooling, digging of slag pits by a front-end loader, loading of grizzly feeder by a front-end loader, crushing, screening, conveyor transfer points, loading of materials into piles, storage piles, load out of materials from piles, and vehicle movement around piles.

This processing area utilizes the following equipment: one (1) grizzly/feeder, three (3) conveyors, one (1) single deck screen, one (1) primary crusher, one (1) by-pass conveyor, one (1) screen, and seven (7) stackers.

(k) Transporting on paved roadways and parking lots, unpaved roadways, and unpaved areas around slag storage piles and steel scrap piles constructed in 2002.

(l) One (1) cooling tower (ID# 13), constructed in 2002, with a nominal water flow of 15,000 gallons per minute.

Unpermitted Emission Units and Pollution Control Equipment

There are no unpermitted emission units operating at this source during this review process.

Insignificant Activities

The source also consists of the following insignificant activities, as defined in 326 IAC 2-7-1(21):

(a) Grinding and machining operations controlled with fabric filters, scrubbers, mist collectors, wet collectors and electrostatic precipitators with a design grain loading of less than or equal to three one-hundredths (0.03) grains per dry standard cubic foot and a gas flow rate less than or equal to four thousand (4,000) actual cubic feet per minute, including the following: deburring, buffing, polishing, abrasive blasting, pneumatic conveying and woodworking operations.

(b) Degreasing operations that do not exceed one hundred forty-five (145) gallons per twelve (12) months, except if subject to 326 IAC 20-6.

(c) Cleaners and solvents characterized as:
(1) having a vapor pressure equal to or less than two (2.0) kilo Pascals fifteen (15) millimeters of mercury or three-tenths (0.3) pound per square inch) measured at thirty-eight (38) degrees Centigrade (one hundred (100) degrees Fahrenheit); or

(2) having a vapor pressure equal to or less than seven-tenths (0.7) kilo Pascal (five (5) millimeters of mercury or one-tenth (0.1) pound per square inch) measured at twenty (20) degrees Centigrade (sixty-eight (68) degrees Fahrenheit); the use of which, for all cleaners and solvents combined, does not exceed one hundred forty-five (145) gallons per twelve (12) months.

(d) Natural gas-fired combustion sources with heat input equal to or less than ten million (10,000,000) British thermal units per hour. (Listed and regulated in Section D.2).

(e) A gasoline fuel transfer dispensing operation handling less than or equal to one thousand three hundred (1,300) gallons per day and filling storage tanks having a capacity equal to or less than ten thousand five hundred (10,500) gallons. Such storage tanks may be in a fixed location or on mobile equipment.

(f) Refractory storage not requiring air pollution control equipment.

(g) Equipment used exclusively for the following:
(1) Packaging lubricants and greases.
(2) Filling drums, pails, or other packaging containers with lubricating oils, waxes and greases.

(h) Production related activities, including the application of: oils; greases; lubricants; and nonvolatile material; as temporary protective coatings.

(i) The following equipment related to manufacturing activities not resulting in the emission of HAPs: brazing, cutting torches, soldering, welding.

(j) Closed loop heating and cooling systems.

(k) Solvent recycling systems with batch capacity less than or equal to one hundred (100) gallons.

(l) Water based activities, including activities associated with the treatment of wastewater streams with an oil and grease content less than or equal to one percent (1%) by volume.

(m) Quenching operations used with heat treating processes.

(n) Repair activities, including the replacement or repair of electrostatic precipitators, bags in baghouses, and filters in other air filtration equipment.

(o) Paved and unpaved roads and parking lots with public access.

(p) Conveyors as follows:
(1) Covered conveyors for coal or coke conveying of less than or equal to three hundred sixty (360) tons per day.

(2) Covered conveyors for solid raw material, including limestone conveying of less than or equal to seven thousand two hundred (7,200) tons per day for sources other than mineral processing plants constructed after August 31,1983.

(q) Blowdown for the following: Sight glass; Boiler; Cooling tower; Compressors; and Pumps.

Existing Approvals

The source has constructed and has been operating under the following previous approvals:

(a) CP 183-10097-00030, issued on July 7, 1999,

(b) PSD Modification 183-12692-00030, issued on January 10, 2001;

(c) SSM183-15170-00030, issued on May 31, 2002; and

(d) Amendment 183-18658-00030, issued May 5, 2004.

(e) SSM183-18426-00030, issued November 21, 2005.

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.

The following terms and conditions from previous approvals have been revised in this Part 70 permit:

1. IDEM has determined the Permittee is not required to keep records of all preventive maintenance. However, where the Permittee seeks to demonstrate that an emergency has occurred, the Permittee must provide, upon request, records of preventive maintenance in order to establish that the lack of proper maintenance did not cause or contribute to the deviation. Therefore, IDEM has deleted paragraph (b) of Condition C.4 in SSM 183-17426-00030 (now B.10) – Preventive Maintenance, and has amended the Condition C.19 in SSM 183-17426-00030 (now B.11) – Emergency Provisions condition as follows:.

~~C.4~~ **B.10** Preventive Maintenance Plan (PMP) [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, maintain and implement Preventive Maintenance Plans (PMPs) upon start up of the new emission units, including the following information on each facility:

(1) Identification by jobs or titles 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.

~~(b) The Permittee shall implement the PMPs, including any required record keeping, as necessary to ensure that failure to implement a PMP does not cause or contribute to an exceedance of any limitation on emissions or potential to emit.~~

~~(c)~~ **(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 PMP**s** does not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

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

~~C.19~~ **B.11** Emergency Provisions [326 IAC 2-7-16]

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

(b) An emergency, as defined in 326 IAC 2-7-1(12), constitutes an affirmative defense to an action brought for noncompliance with a technology-based emission limitation if the affirmative defense of an emergency is demonstrated through properly signed, contemporaneous operating logs or other relevant evidence that describe the following:

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

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

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

(4) For each emergency lasting one (1) hour or more, the Permittee notified IDEM, OAQ, within four (4) daytime business hours after the beginning of the emergency, or after the emergency was discovered or reasonably should have been discovered;

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

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

Indiana Department of Environmental Management
Compliance Branch, Office of Air Quality
100 North Senate Avenue
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) for the emission unit that experienced an emergency 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.

2. Condition C.10 - Operation of Equipment in SSM 183-18426-00030 is the same requirement (to operate the control equipment at all times) that is under compliance determination in the specific D conditions. It has been decided that it is best to have this requirement in the specific D conditions and delete Condition C.10.. Many companies are concerned about double jeopardy, and do not want the same requirement listed in two locations of the permit. Therefore, this Condition C.10 is not carried through in this permit.

~~C.10 Operation of Equipment [326 IAC 2-7-6(6)]~~

~~Except as otherwise provided by statute or rule, or in this permit, all air pollution control equipment listed in this permit and used to comply with an applicable requirement shall be operated at all times that the emission units vented to the control equipment are in operation.~~

3. Condition C.16 - Pressure Gauge and Other Instrument Specifications in SSM 183-18426-00030 now Condition C.13 in this permit is revised since, IDEM realizes that these specifications can only be practically applied to analog units, and has therefore clarified the condition to state that the condition only applies to analog units. Upon further review, IDEM has also determined that the accuracy of the instruments is not nearly as important as whether the instrument has a range that is appropriate for the normal expected reading of the parameter. Therefore, the accuracy requirements have been removed from the condition.

C.~~16~~ **13** ~~Pressure Gauge and Other~~ Instrument Specifications [326 IAC 2-1.1-11] [326 IAC 2-7-5(3)][326 IAC 2-7-6(1)]

(a) ~~Whenever a condition in this permit requires the measurement of pressure drop across any part of the unit or its control device, the gauge employed~~ **When required by any condition of this permit, an analog instrument used to measure a parameter related to the operation of an air pollution control device** shall have a scale such that the expected ~~normal~~ **maximum** reading **for the normal range** shall be no less than twenty percent (20%) of full scale ~~and be accurate within plus or minus two percent (2%) of full scale reading~~.

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

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

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

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

4. Condition C.17 - Compliance Response Plan (CRP) - Preparation, Implementation, Records, and Reports now C.16 - Response to Excursions or Exceedances in this permit is revised since IDEM has reconsidered the requirement to develop and follow a Compliance Response Plan. The Permittee will still be required to take reasonable response steps when a compliance monitoring parameter is determined to be out of range or abnormal. Replacing the requirement to develop and follow a Compliance Response Plan with a requirement to take reasonable response steps will ensure that the control equipment is returned to proper operation as soon as practicable, while still allowing the Permittee the flexibility to respond to situations that were not anticipated. The Section D conditions that refer to this condition have been revised to reflect the new condition title, and the following changes have been made to the Section C condition:

C.17 ~~Compliance Response Plan (CRP) - Preparation, Implementation, Records, and Reports~~ **Response to Excursions or Exceedances**[326 IAC 2-7-5] [326 IAC 2-7-6]

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

~~(1) Reasonable response steps that may be implemented in the event that a response step is needed pursuant to the requirements of Section D of this permit; and an expected timeframe for taking reasonable response steps.~~

~~(2) If, at any time, the Permittee takes reasonable response steps that are not set forth in the Permittee's current Compliance Response Plan and the Permittee~~

~~documents such response in accordance with subsection (c) below, the Permittee shall amend its Compliance Response Plan to include such response steps taken.~~

~~(b) For each compliance monitoring condition of this permit, reasonable response steps shall be taken when indicated by the provisions of that compliance monitoring condition as follows:~~

~~(1) Reasonable response steps shall be taken as set forth in the Permittee's current Compliance Response Plan; or~~

~~(2) If none of the reasonable response steps listed in the Compliance Response Plan is applicable or responsive to the excursion, the Permittee shall devise and implement additional response steps as expeditiously as practical. Taking such additional response steps shall not be considered a deviation from this permit so long as the Permittee documents such response steps in accordance with this condition.~~

~~(3) If the Permittee determines that additional response steps would necessitate that the emissions unit or control device be shut down, and it will be ten (10) days or more until the unit or device will be shut down, then the Permittee shall promptly notify the IDEM, OAQ of the expected date of the shut down. The notification shall also include the status of the applicable compliance monitoring parameter with respect to normal, and the results of the response actions taken up to the time of notification.~~

~~(4) Failure to take reasonable response steps shall be considered a deviation from the permit.~~

~~(c) The Permittee is not required to take any further response steps for any of the following reasons:~~

~~(1) A false reading occurs due to the malfunction of the monitoring equipment and prompt action was taken to correct the monitoring equipment.~~

~~(2) The Permittee has determined that the compliance monitoring parameters established in the permit conditions are technically inappropriate, has previously submitted a request for a minor permit modification to the permit, and such request has not been denied.~~

~~(3) An automatic measurement was taken when the process was not operating.~~

~~(4) The process has already returned or is returning to operating within "normal" parameters and no response steps are required.~~

~~(d) When implementing reasonable steps in response to a compliance monitoring condition, if the Permittee determines that an exceedance of an emission limitation has occurred, the Permittee shall report such deviations pursuant to Section B-Deviations from Permit Requirements and Conditions.~~

~~(f) Except as otherwise provided by a rule or provided specifically in Section D, all monitoring as required in Section D shall be performed when the emission unit is operating, except for time necessary to perform quality assurance and maintenance activities.~~

(a) Upon detecting an excursion or exceedance, the Permittee shall restore operation of the emissions unit (including any control device and associated capture system) to its normal or usual manner of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions.

(b) The response shall include minimizing the period of any startup, shutdown or malfunction and taking any necessary corrective actions to restore normal operation and prevent the likely recurrence of the cause of an excursion or exceedance (other than those caused by excused startup or shutdown conditions). Corrective actions may include, but are not limited to, the following:

(1) initial inspection and evaluation;

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

(3) any necessary follow-up actions to return operation to within the indicator range, designated condition, or below the applicable emission limitation or standard, as applicable.

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

(1) monitoring results;

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

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

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

(e) The Permittee shall maintain the following records:

(1) monitoring data;

(2) monitor performance data, if applicable; and

(3) corrective actions taken.

5. Condition D.1.23 - Visible Emission Observations and Continuous Opacity Monitoring (COM) in SSM 183-18426-00030 and this permit is revised, since IDEM has determined that no additional monitoring will be required during COM downtime, until the COM has been down for twenty-four (24) hours. This allows the Permittee to focus on the task of repairing the COM during the first twenty-four (24) hour period. After twenty-four (24) hours of COM downtime, the Permittee will be required to conduct Method 9 readings for thirty (30) minutes. Once Method 9 readings are required to be performed, the readings should be performed twice per day at least 4 or 6 hours apart, rather than once every four (4) hours, until a COMS is back in service.

D.1.23 Visible Emission Observations and Continuous Opacity Monitoring (COM) [326 IAC 2-1.1-11] [326 IAC 3-5] [40 CFR 60.273a]

(a) Pursuant to 326 IAC 2-1.1-11, 326 IAC 3-5, and 40 CFR 60.273a and PSD Permits CP183-10097-00030, issued July 7, 1999, amended by PSD SSM183-12692-00030, issued January 10, 2001:

(1) The Permittee shall calibrate, certify, operate, and maintain a continuous monitoring system (COMS) to measure opacity from the EAFs Baghouse stack (Stack 1) in accordance with 326 IAC 3-5-2 and 3-5-3.

(2) The Permittee shall submit to IDEM, OAQ, within (90) days after installation of a new monitor, a complete written continuous monitoring standard operating procedure (SOP), in accordance with the requirements of 326 IAC 3-5-4. The Permittee shall also submit a revised SOP whenever changes were made to the existing SOP.

(b) All ~~continuous opacity monitoring systems~~ **COMs** shall meet the performance specifications of 40 CFR 60, Appendix B, Performance Specification No. 1, and are subject to monitor system certification requirements pursuant to 326 IAC 3-5.

(c) In the event that a breakdown of a ~~continuous opacity monitoring system~~ **COMs** occurs, a record shall be made of the times and reasons of the breakdown and efforts made to correct the problem.

(d) Whenever a COMS is malfunctioning or is down for maintenance or repairs for a period of twenty-four (24) hours or more and a backup COMS is not online within twenty-four (24) hours of shutdown or malfunction of the primary COMS, ~~If a COM is not online within twenty-four (24) hours of shutdown or malfunction of the primary COM,~~ the Permittee shall provide **a** certified opacity reader~~(s)~~, who may be **an** employees of the Permittee or **an** independent contractors, to self-monitor the emissions from the emission unit stack.

(1) Visible emission readings shall be performed in accordance with 40 CFR 60, Appendix A, Method 9, for a minimum of five (5) consecutive six (6) minute averaging periods beginning not more than twenty-four (24) hours after the start of the malfunction or down time.

(2) Method 9 opacity readings shall be repeated for a minimum of five (5) consecutive six (6) minute averaging periods at least twice per day during daylight operations, with at least four (4) between each set of readings until a COM is online.

(3) Method 9 readings may be discontinued once a COM is online.

(4) Any opacity exceedances determined by Method 9 readings shall be reported with the Quarterly Opacity Exceedances Reports.

~~(e) If abnormal emissions are observed, the Permittee shall take reasonable response steps in accordance with Section C.17 - Compliance Response Plan (CRP) - Preparation, Implementation, Records, and Reports.~~

~~Observation of abnormal emissions that do not violate an applicable opacity limit is not a deviation from this permit.~~

~~Failure to take response steps in accordance with Section C.17- Compliance Response Plan (CRP) - Preparation, Implementation, Records, and Reports, shall be considered a deviation from this permit.~~

~~(f)~~ **(e)** Nothing in this permit shall excuse the Permittee from complying with the requirements to operate a continuous opacity monitoring system pursuant to 326 IAC 3-5 and 40 CFR 60.

6. SSM 063-18426-00030 Paragraph (c) of condition D.1.24, Bag Leak Detection System (BLDS) condition which is condiiton D.1.24 Bag Leak Detection System (BLDS) in Part 70 permit T063-17160-00030 is revised since the permit will not specify for multi-compartment baghouses, what actions the Permittee needs to take in response to a broken bag.

D.1.24 Bag Leak Detection System (BLDS) [326 IAC 2-2]

Pursuant to PSD Permit SSM 183-12692-00030 issued January 10, 2001

(a) The Permittee shall operate continuous bag leak detection systems (BLDS) for the EAFs Baghouse. The bag leak detection systems (BLDS) shall meet the following requirements:

(1) The bag leak detection systems (BLDS) must be certified by the manufacturer to be capable of detecting particulate matter emissions at concentrations of 0.0018 grains per actual cubic foot or less.

(2) The bag leak detection system (BLDS) sensor must provide output of relative particulate matter loading.

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

(4) The bag leak detection system (BLDS) shall be installed and operated in a manner consistent with available written guidance from the U.S. Environmental Protection Agency or, in the absence of such written guidance, the manufacturer's written specifications and recommendations for installation, operation, and adjustment of the system.

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

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

(b) In the event of a bag leak detection system alarm:

(1) The affected compartments will be shut down as soon as possible until the failed units have been repaired or replaced.

(2) Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the emergency provisions of this permit (Section B.11 - Emergency Provisions).

(3) No later than eight (8) business hours of the determination of failure, response steps according to the timetable described in the ~~Compliance Response Plan~~ **Section C.16 – Response to Excursions or Exceedances** shall be initiated.

For any failure with corresponding response steps and timetable not described in the ~~Compliance Response Plan~~ **Section C.16 – Response to Excursions or Exceedances**, response steps shall be devised no later than eight (8) business hours of discovery of the failure and shall include a timetable for completion.

(3) Failure to take reasonable response steps in accordance with ~~Section C - Compliance Response Plan - Preparation, Implementation, Records and Reports~~ **Section C.16 – Response to Excursions or Exceedances**, shall be considered a deviation from this permit.

(c) If operations continue after bag failure is observed and it will be 10 days or more after the failure is observed before the failed units will be repaired or replaced, the Permittee shall promptly notify the IDEM, OAQ of the expected date the failed units will be repaired or replaced.

The notification shall also include the status of the applicable compliance monitoring parameters with respect to normal, and the results of any response actions taken up to the time of notification.

7. Record keeping of additional inspections required by the PMP in Conditions D.1.27(i), D.4.11(d), and D.5.11(b) are removed from this permit, because IDEM has determined that the Permittee is not required to keep records of all preventive maintenance. However, where the Permittee seeks to demonstrate that an emergency has occurred, the Permittee must provide, upon request, records of preventive maintenance in order to establish that the lack of proper maintenance did not cause or contribute to the deviation.

8. SSM 183-18426-00030 condition D.4.7 is not included in this permit, since the LVD Boiler has a PM/PM_{10} limit established under 326 IAC 2-2 Prevention of Significant Deterioration (PSD), so the PSD PM/PM_{10} limit prevails. Therefore the permit condition is deleted and subsequent conditions are renumbered. :

Enforcement Issue

There are no enforcement actions pending.

Recommendation

The staff recommends to the Commissioner that the Part 70 permit be approved. This recommendation is based on the following facts and conditions:

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

An administratively complete Part 70 permit renewal application for the purposes of this review was received on April 11, 2003.

There was no notice of completeness letter mailed to the Permittee.

Potential to Emit of the Source

Pursuant to 326 IAC 2-1.1-1(16), Potential to Emit is defined as "the maximum capacity of a stationary source or emissions unit to emit any air pollutant under its physical and operational design. Any physical or operational limitation on the capacity of a source to emit an air pollutant, includling air pollution control equipment and restrictions on hours of operation or type or amount of material combusted, stored, or processed shall be treated as part of its design if the limitation is enforceable by the U.S. EPA, the department, or the appropriate local air pollution control agency."

Pollutant	Potential to Emit (tons/yr)
PM	greater than 100
PM_{10}	greater than 100
SO_2	greater than 100
VOC	greater than 100
CO	greater than 100
NO_x	greater than 100
Pb	greater than 0.6*

(a) The potential to emit (as defined in 326 IAC 2-7-1(29)) of PM/PM_{10}, SO_2, VOC, CO and NOx are equal to or greater than 100 tons per year. Therefore, the source is subject to the provisions of 326 IAC 2-7. Therefore, the source is subject to the provisions of 326 IAC 2-7.

(b) Fugitive Emissions
Since this type of operation is one of the twenty-eight (28) listed source categories under 326 IAC 2-2, the fugitive emissions are counted toward determination of PSD and Emission Offset applicability.

Actual Emissions

The following table shows the actual emissions from the source. This information reflects the 2002, OAQ emission data.

Pollutant	Actual Emissions (tons/year)
PM	-
PM_{10}	7
SO_2	19
VOC	11
CO	157
NO_x	44
HAP (specify) Lead	0.57

County Attainment Status

The source is located in Whitley County.

Pollutant	Status
PM_{10}	attainment
PM 2.5	attainment or unclassifiable
SO_2	attainment
NOx	attainment
1-hour Ozone	attainment
8-hour Ozone	attainment
CO	attainment
Lead	attainment

(a) Volatile organic compounds (VOC) and Nitrogen Oxides (NOx) are regulated under the Clean Air Act (CAA) for the purposes of attaining and maintaining the National Ambient Air Quality Standards (NAAQS) for ozone. Therefore, VOC emissions and NOx are

considered when evaluating the rule applicability relating to ozone. Whitley County has been designated as attainment or unclassifiable for ozone. Therefore, VOC emissions and NOx were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2. See the State Rule Applicability for the source section.

(b) Whitley County has been classified as unclassifiable or attainment for PM 2.5. U.S. EPA has not yet established the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2 for PM 2.5 emissions. Therefore, until the U.S.EPA adopts specific provisions for PSD review for PM 2.5 emissions, it has directed states to regulate PM_{10} emissions as surrogate for PM 2.5 emissions. See the State Rule Applicability – Entire Source section.

(c) Whitley County has been classified as attainment or unclassifiable for all other pollutants. Therefore, these emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2. See the State Rule Applicability for the source section.

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 assure that all reasonable information is provided to evaluate continuous compliance with the applicable requirements.

Federal Rule Applicability

(a) The provisions of 40 CFR 60 Subpart A – General Provisions, which are incorporated by reference as 326 IAC 12-1-1, apply to the EAF and EAF dust handling system described in this section except when otherwise specified in 40 CFR 60 Subpart AAa.

(b) The New Source Performance Standard, 326 IAC 12, (40 CFR 60, Subpart AAa (Standards of Performance for Steel Plants: Electric Arc Furnaces and Argon-Oxygen Decarburization Vessels Constructed After August 7,1983) is included in this permit for EAF and EAF dust handling system. The EAF and EAF dust handling system have the following applicable requirements:

The particulate matter emissions from the EAF:

(1) The PM emissions from the EAF baghouse shall not exceed 0.0052 grains per dry standard cubic feet;

(2) The Permittee shall not cause to discharge into the atmosphere from the EAF any gases that:

(A) Exit from a control device and exhibit three percent (3%) opacity or greater; and

(B) Exit from the melt shop, and due solely to the operations of the EAF, exhibit six percent (6%) opacity or greater.

(c) The New Source Performance Standard for Small Industrial-Commercial-Institutional Steam Generating Units, 326 IAC 12, (40 CFR 60, Subpart Dc (steam generating for units contructed, modified or reconstructed after June 9,1989, and with a maximumn design heat capacity 100 MMBtu/hr or less bur greater than or equal to 10 MMBtu/hr is included in this permit for the Steel Dynamics, Inc –Structural and Rail Division for the LVD boiler. 40 CFR 60 Subpart Dc does not include any emission limitations for natural gas or propane-fired boilers. The Permittee shall maintain records of the amounts of each fuel combusted each day in the LVD Boiler.

(d) The New Source Performance Standard, 326 IAC 12, (40 CFR 60, Subpart AAa (Standards of Performance for Steel Plants: Electric Arc Furnaces and Argon-Oxygen Decarburization Vessels Constructed After August 7,1983) is included in this permit for the EAF dust handling system. The EAF dust handling system has the following applicable requirement:

The Permittee shall not cause to discharge into the atmosphere from the EAF dust handling system any gases that exhibit ten percent (10%) opacity or greater.

(e) There are no National Emission Standards for Hazardous Air Pollutants (NESHAP)(326 IAC 14, 20 and 40 CFR Part 61, 63), included in this permit for Steel Dynamics, Inc – Structural and Rail Division.

(f) There are no other New Source Performance Standards, 326 IAC 12, (NSPS)(326 IAC 12 and 40 CFR 60), included in this permit for Steel Dynamics, Inc –Structural and Rail Division.

State Rule Applicability – Entire Source

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

The source has submitted an Emergency Reduction Plan (ERP) on May 11, 2003. The ERP has been verified to fulfill the requirements of 326 IAC 1-5-2 (Emergency Reduction Plans).

326 IAC 2-2 (Prevention of Significant Deterioration)

This source is subject to the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration), because the potential to emit of PM, PM-10, SO2, CO, VOC and NOx exceeds the major thresholds of 100 tons per year, it was built after August 1977, and it belongs to one of the 28 source categories listed in this rule.

326 IAC 2-6 (Emissions Reporting)

Since this source is required to have an operating permit under 326 IAC 2-7, Part 70 Permit Program this source is subject to 326 IAC 2-6 (Emission Reporting). This source also has the potential to emit greater than or equal to 2500 tons of Carbon Monoxide per year, 250 tons of PM-10 per year and 250 tons of Volatile Organic Compounds per year, therefore an amission statement covering the previous calendar year must be submitted by July 1 annually. This 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.

State Rule Applicability – Individual Facilities

Electric Arc Furnace

326 IAC 2-1.1-5 and 326 IAC 2-2 EAFs Operation Limitation

Pursuant to SSM183-18426-00030, issued November 21, 2005 and 326 IAC 2-1.1-5 (Air Quality Requirements) and 326 IAC 2-2 Prevention of Significant Deterioration (PSD), the Permittee shall operate the electric arc furnaces (EAFs) at a maximum combined arte of 300 tons of molten steel per hour and 2,628.000 tons of molten steel per 12-consecutive month period, with compliance determined at the end of each month.

326 IAC 2-2 Nitrogen Oxides - Best Available Control Technology

(a) Pursuant to CP183-10097-00030, issued July 7,1999, amended by PSD Significant Modification SSM183-12692-00030, issued January 10, 2001 and 326 IAC 2-2 (PSD - Control Technology Review; Requirements) and the EAF auxiliary burners shall be equipped with Low NO_x/oxyfuel burners.

(b) Pursuant to SSM183-18426-00030, issued November 21, 2005 and 326 IAC 2-2 (PSD - Control Technology Review; Requirements), the EAF auxiliary burners shall be limited to low-NOx/oxyfuel burners and NOx emissions from the EAF shall not exceed 0.35 pounds per ton of steel produced and 105 pounds of NOx per hour, based on a three (3) hour block average.

326 IAC 2-2 Particulate Matter (PM/PM_{10}) - Best Available Control Technology

(a) Pursuant to CP183-10097-00030, issued July 7, 1999, amended by PSD Significant Modification SSM183-12692-00030, issued January 10, 2001 and 326 IAC 2-2 (PSD - Control Technology Review; Requirements), filterable PM/PM_{10} emissions from the EAF shall be controlled by a baghouse. Filterable PM/PM_{10} emissions from the EAF baghouse shall not exceed 0.0018 grains per dry standard cubic feet and 14.4 pounds per hour based on a 3-hour block average.

(b) Pursuant to CP183-10097-00030, issued July 7, 1999, and 326 IAC 2-2 (PSD – Control Technology Review; Requirements) total PM/PM_{10} (including condensable PM_{10}) emissions from the EAF shall not exceed 0.0052 grains per dry standard cubic fee and 41.6 pounds of filterable and condensable particulate per hour based on a 3-hour block average.

(c) There shall be no roof monitors in the melt shop. The meltshop shall be located in a total enclosure subject to general ventilation that maintains the meltshop at a lower than ambient pressure to ensure in-draft through any doorway opening. Ventilation air from the total enclosure shall be conveyed to the meltshop baghouse.

(d) Cross-draft partitions shall be constructed surrounding the EAF in a manner that will promote good capture efficiency for the meltshop baghouse.

(e) A segmented canopy hood shall be constructed above the EAF. The canopy shall be divided into separate sections and the dampers operated in a manner that will maximize the draft directly above the point of greatest emissions.

326 IAC 2-2 Sulfur Dioxide (SO_2) - Best Available Control Technology

(a) Pursuant to PSD Permit SSM183-18426-00030 issued November 21, 2005 and 326 IAC 2-2 Prevention of Significant Deterioration (PSD), SO_2 emissions from the EAFs shall be controlled in accordance with the Scrap Management Program (SMP) (Section E.2)

(b) Pursuant to PSD Permit SSM183-18426-00030 issued November 21, 2005 and 326 IAC 2-2 Prevention of Significant Deterioration (PSD), the SO_2 emissions from the EAFs Baghouse stack shall not exceed 75 pounds of SO_2 per hour based on a three (3) hour block average.

(c) Pursuant to CP183-10097-00030, issued July 7, 1999, amended by PSD Significant Modification SSM183-12692-00030, issued January 10, 2001 and amended by Permit Amendment 183-18658-00030 and 326 IAC 2-1.1-11:

(1) The sulfur content of the direct iron (DRI), charge carbon, and injection carbon added into the EAFs shall not exceed the following:

Raw Material	Sulfur Content (%)
direct reduced iron (DRI)	0.20
charge carbon	0.6
injection carbon	2.5

(2) The Permittee may utilize the following alternative mixture of sulfur content of the charge carbon and injection carbon added into the EAFs:

Raw Material	Sulfur Content (%)
charge carbon	2.0
injection carbon	4.0

The Permittee shall not use DRI when charging this alternative mixture to the EAFs.

(3) The Permittee shall obtain vendor certifications and/or analyses to verify that shipments of DRI, charge carbon and injection carbon do not exceed the thresholds stated in Conditions D.1.6(c)(1) and D.1.6(c)(2).

326 IAC 2-2 Carbon Monoxide (CO) - Best Available Control Technology

(a) Pursuant to SSM183-18426-00030, issued November 21, 2005 and 326 IAC 2-2 (PSD - Control Technology Review; Requirements), CO emissions from the EAF baghouse stack shall not exceed 2.0 pounds per ton of steel produced and 600 pounds of CO per hour, based on a three (3) hour block average.

(b) Pursuant to CP183-10097-00030, issued July 7, 1999, amended by PSD Significant Modification SSM183-12692-00030, issued January 10, 2001 and 326 IAC 2-2 (PSD - Control Technology Review; Requirements) CO emissions from the EAF shall be controlled by thermal oxidation and maintaining a negative pressure at the Direct Shell Evacuation (DEC) system air gap.

326 IAC 9-1 Carbon Monoxide (CO)

Pursuant to CP183-10097-00030, issued July 7, 1999, amended by PSD Significant Modification SSM183-12692-00030, issued January 10, 2001 and 326 IAC 9-1 (Carbon Monoxide Emission Limits], the Permittee shall not allow the discharge of CO from the EAF unless the waste gas stream is controlled by thermal oxidation at the Direct shell Evacuation Control System.

326 IAC 2-2 Volatile Organic Compounds (VOC) - Best Available Control Technology

(a) Pursuant to CP183-10097-00030, issued July 7,1999, amended by PSD Significant Modification SSM183-12692-00030, issued January 10, 2001 and 326 IAC 2-2 (PSD - Control Technology Review; Requirements), VOC emissions from the EAF shall be minimized in accordance with the Scrap Management Program (SMP) (Section E.2) and shall be controlled by thermal oxidation and maintaining a negative pressure at the DEC air gap.

(b) Pursuant to SSM183-18426-00030, issued November 21, 2005 and 326 IAC 2-2 (PSD - Control Technology Review; Requirements), VOC emissions from the EAFs baghouse stack shall not exceed 0.09 pounds per ton of steel and 27 pounds per pounds of VOC per hour, based on a three (3) hour block average.

326 IAC 2-2 Lead - Best Available Control Technology

(a) Pursuant to SSM183-18426-00030, issued November 21, 2005 and 326 IAC 2-2 (PSD - Control Technology Review; Requirements), the lead from the EAFs baghouse stack shall not exceed 0.00048 pounds per ton of steel and 0.144 pounds of lead per hour, based on a three (3) hour block average.

(b) Pursuant to SSM183-18426-00030, issued November 21, 2005 and 326 IAC 2-2 (PSD - Control Technology Review; Requirements), the lead emissions from the EAFs shall be controlled in accordance with the scrap management program (Section E.2) and controlled by a baghouse.

326 IAC 2-2 Mercury- Best Available Control Technology

(a) Pursuant to SSM183-18426-00030, issued November 21, 2005 and 326 IAC 2-2 (PSD - Control Technology Review; Requirements), the mercury emissions from the EAFs baghouse stack shall not exceed 5.21×10^{-4} pounds per ton of steel and 0.1563 pounds of mercury per hour, based on a three (3) hour block average.

(b) Pursuant to SSM183-18426-00030, issued November 21, 2005 and 326 IAC 2-2 (PSD - Control Technology Review; Requirements), the mercury emissions from the EAFs shall be controlled in accordance with the scrap management program (Section E.2) and controlled by a baghouse.

326 IAC 2-2 Fluorides- Best Available Control Technology

(a) Pursuant to SSM183-18426-00030, issued November 21, 2005 and 326 IAC 2-2 (PSD - Control Technology Review; Requirements), the fluorides emissions from the EAFs baghouse stack shall not exceed 0.01 pounds per ton of steel and 2.09 pounds of fluorides per hour, based on a three (3) hour block average.

(b) Pursuant to SSM183-18426-00030, issued November 21, 2005 and 326 IAC 2-2 (PSD - Control Technology Review; Requirements), the fluorides-emissions from the EAFs shall

be controlled in accordance with the scrap management program (Section E.2) and controlled by a baghouse.

326 IAC 2-1.1-4, 326 IAC 2-2 and 326 IAC 2-4.1- 1 Hazardous Air Pollutants (HAP) Limitations

(a) Pursuant to SSM183-18426-00030, issued November 21, 2005 and 326 IAC 2-1.1-4, the beryllium to be emitted from the EAF stack in a quantity equal to or greater than 8.6×10^{-5} pounds per hour. This limitation is not federally enforceable.

(b) Pursuant to CP183-10097-00030, issued July 7, 1999, amended by PSD Significant Modification 183-12692-00030, issued January 10, 2001 and 326 IAC 2-1.1-4 the manganese compounds to be emitted from the EAF stack in a quantity equal to or greater than 1.14 pounds per hour.

Compliance with these limitations will assure that the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration) do not apply for beryllium and that the requirements of 326 IAC 2-4.1-1 (New Source Toxics Control) do not apply to the source.

326 IAC 2-2 Visible Emission Limitations - Best Available Control Technology

Pursuant to CP183-10097-00030, issued July 7,1999, amended by PSD Significant Modification SSM183-12692-00030, issued January 10, 2001 and 326 IAC 2-2 (PSD - Control Technology Review; Requirements):

(a) Visible emissions from the EAF baghouse stack 1 shall not exceed three percent (3%) opacity based on a six-minute average (24 readings taken in accordance with 40 CFR Part 60, Appendix A, Method 9).

(b) All fugitive particulate matter (PM and PM_{10}) emissions generated during furnace operations shall be captured by the melt shop roof canopy and ducted to the EAF baghouse 1 such that visible emissions generated at the EAF shall not exceed three percent (3%) opacity based on a six-minute average (24 readings taken in accordance with 40 CFR Part 60, Appendix A, Method 9) when emitted from any building opening.

(c) Inspections and preventive measures shall be performed as prescribed in the Preventive Maintenance Plan.

Compliance with the above opacity limitations shall also satisfy the requirements of 326 IAC 5-1-2 (Visible Emissions Limitations) under Section C - Opacity Limitations.

Ladle Metallurgy Station (LMS)

326 IAC 2-2 Particulate Matter (PM/PM_{10}) - Best Available Control Technology

Pursuant to CP183-10097-00030, issued July 7,1999, amended by PSD Significant Modification SSM183-12692-00030, issued January 10, 2001 and 326 IAC 2-2 (PSD - Control Technology Review; Requirements), the filterable and condensible PM/PM_{10} emissions from the LMS shall be captured by the melt shop roof canopy then controlled by the common meltshop baghouse.

Continuous Caster

326 IAC 2-2 Particulate Matter (PM/PM_{10}) - Best Available Control Technology

(a) Pursuant to CP183-10097-00030, issued July 7, 1999, amended by PSD Significant Modification SSM183-12692-00030, issued January 10, 2001 and 326 IAC 2-2 (PSD - Control Technology Review; Requirements), the filterable and condensible PM/PM_{10}

emissions from the continuous caster (ID# 3k) shall be captured by the overhead roof exhaust system, then controlled by the common EAF baghouse.

(b) Pursuant to SSM183-18426-00030, issued November 21, 2005 and 326 IAC 2-2 (PSD - Control Technology Review; Requirements), the filterable and condensible PM/PM_{10} emissions from the second continuous caster (ID# 42a) shall be controlled by the existing common EAF baghouse.

326 IAC 2-2.2 Clean Unit Designation – EAFs (EAF-1a and EAF-1b), LMS (ID# 3a) and CC (ID# 3k)

(a) Pursuant to SSM183-18426-00030, issued November 21, 2005 and 326 IAC 2-2.2, the EAFs (EAF-1a and EAF-1b), LMS (ID# 3a) and CC (ID# 3k) are classified as clean units for NOx, PM/PM_{10}, SO_2, CO, VOC, Lead, Mercury and Fluorides emissions.

(b) The Clean Unit designation is in effect for ten (10) years from November 21, 2005.

(c) In order to maintain the clean unit designation for EAFs (EAF-1a and EAF-1b), and LMS (# 3a), the Permittee shall comply with BACT emissions limitations or work practice requirements in Section D.1 of this permit.

(d) EAFs (EAF-1a and EAF-1b) and LMS (ID# 3a)

(1) In addition, the EAFs and LMS shall comply with all applicable requirements per 326 IAC 2-7 contained in this permit.

(2) No physical change or change in the method of operation shall be undertaken at these emissions units that would allow them to operate in a manner inconsistent with the physical or operational characteristics of the emission units.

(3) The EAFs and LMS (designated as clean units) are subject to the following requirements:

(A) Any project at these emissions units for which actual construction begins after the effective date of the clean unit designations and before the expiration date shall be considered to have occurred while the emissions units were clean units.

(B) If a project at these emission units does not cause the need for a change in the emission limitations or work practice requirements in this permit for these units that were adopted in conjunction with BACT and the project would not alter any physical or operational characteristics that formed the basis for the BACT determination, the clean unit designations remain unchanged.

(C) If a project causes the need for a change in the emission limitations or work practice requirements in this permit for these units that were adopted in conjunction with BACT or the project would alter any physical or operational characteristics that formed the basis for the BACT determination, then the clean unit designations shall expire upon issuance of the necessary permit modifications, unless the units requalify as clean units. If the Permittee begins actual construction on the project without first applying to modify the emissions unit's permit, the clean unit designations shall expire immediately prior to the time when actual construction of this project begins.

(D) A project that causes emissions units to lose their clean unit designations shall be subject to the applicability requirements of 326 IAC 2-2-2(d)(1) through 326 IAC 2-2-2(d)(4) and 326 IAC 2-2-2(d)(6).

326 IAC 2-2.2 Clean Unit Designation – Continuous Caster (CC) (42a)

(a) Pursuant to SSM183-18426-00030, issued November 21, 2005 and 326 IAC 2-2.2, the CC (ID# 42a) is classified as clean units for filterable and condensible particulate matter (PM/PM_{10}) and opacity.

(b) The clean unit designation for this continuous caster (42a) is in effect for ten (10) years from the initial startup.

(c) In order to maintain the clean unit designation for (CC) (ID# 42a) the Permittee shall comply with PM/PM_{10} and opacity BACT PSD limits CC (ID# 3k) or work practice requirements in Section D.1 of this permit.

(d) CCs (ID# 3k and ID# 42a)

(1) In addition, the CCs shall comply with all applicable requirements per 326 IAC 2-7 contained in this permit.

(2) No physical change or change in the method of operation shall be undertaken at these emissions units that would allow them to operate in a manner inconsistent with the physical or operational characteristics of the emission units.

(3) The CCs (designated as clean units) are subject to the following requirements:

(A) Any project at these emissions units for which actual construction begins after the effective date of the clean unit designations and before the expiration date shall be considered to have occurred while the emissions units were clean units.

(B) If a project at these emission units does not cause the need for a change in the emission limitations or work practice requirements in this permit for these units that were adopted in conjunction with BACT and the project would not alter any physical or operational characteristics that formed the basis for the BACT determination, the clean unit designations remain unchanged.

(C) If a project causes the need for a change in the emission limitations or work practice requirements in this permit for these units that were adopted in conjunction with BACT or the project would alter any physical or operational characteristics that formed the basis for the BACT determination, then the clean unit designations shall expire upon issuance of the necessary permit modifications, unless the units requalify as clean units. If the Permittee begins actual construction on the project without first applying to modify the emissions unit's permit, the clean unit designations shall expire immediately prior to the time when actual construction of this project begins.

(D) A project that causes emissions units to lose their clean unit designations shall be subject to the applicability requirements of 326 IAC 2-2-2(d)(1) through 326 IAC 2-2-2(d)(4) and 326 IAC 2-2-2(d)(6).

Natural Gas-Fired Units

Ladle preheaters (ID#s 3b-3e), ladle dryer (ID# 3f), nozzle preheater (ID# 3g), tundish preheaters (ID#s 3h and 3i) and tundish dryer (ID# 3j)

326 IAC 2-2 Nitrogen Oxides (NO_x) - Best Available Control Technology

Pursuant to CP183-10097-00030, issued July 7,1999, amended by PSD Significant Modification SSM183-12692-00030, issued January 10, 2001 and 326 IAC 2-2 (PSD - Control Technology Review; Requirements), the ladle preheaters (ID#s 3b-3e), ladle dryer (ID# 3f), nozzle preheater (3g), tundish preheaters (ID#s 3h and 3i) and tundish dryer (ID# 3j) shall be limited to the use of low-NOx natural gas-fired burners such that NO_x emissions shall not exceed 0.10 pound per MMBtu.

326 IAC 2-2 PSD Best Available Control Technology – Ladle Dryer (3l)

Pursuant to SSM 183-18426-00030 issued November 21, 2005 and 326 IAC 2-2 PSD Best Available Control Technology (BACT) Review, the Permittee shall comply with the PSD BACT standards for the second ladle dryer (ID# 3l) as follows:

(a) The second ladle dryer (3l) shall use natural gas as fuel.

(b) The NOx emissions from the second ladle dryer (3l) shall not exceed shall not exceed 0.050 pounds per MMBtu and 0.5 pounds of NO_x per hour, based on a three (3) hour block average.

(c) The carbon monoxide (CO) emissions from the new second ladle dryer (ID# 3l) shall not exceed 0.084 pounds per MMBtu and 0.84 pounds of CO per hour, based on a three (3) hour block average.

(d) The volatile organic compound (VOC) emissions from the new second ladle dryer (ID# 3l) shall not exceed 0.0055 pounds per MMBtu and 0.055 pounds of VOC per hour, based on a three (3) hour block average.

(e) The sulfur dioxide (SO_2) emissions from the new second ladle dryer (ID# 3l) shall not exceed 0.0006 pounds per MMBtu and 0.006 pounds of SO_2 per hour based on a three (3) hour block average.

(f) The PM (filterable) emissions from the new second ladle dryer (ID# 3l) shall not exceed 0.0019 pounds per MMBtu and 0.019 pounds of filterable PM per hour, based on a three (3) hour block average.

(g) The PM_{10} (filterable and condensible) emissions from the new second ladle dryer (ID# 3l) shall not exceed 0.0076 pounds per MMBtu and 0.076 pound of filterable and condensible PM_{10} per hour, based on a three (3) hour block average.

326 IAC 2-2 PSD Best Available Control Technology – Tundish Nozzle Preheater (3m)

Pursuant to SSM183-18426-00030 issued November 21, 2005 and 326 IAC 2-2 PSD Best Available Control Technology (BACT) Review, the Permittee shall comply with the PSD BACT standards for the Tundish Nozzle Preheater (ID# 3m) are as follows:

(a) The Tundish Nozzle Preheater (ID# 3m) shall use natural gas as the primary fuel and propane as back up fuel.

(b) Low NO_x burners shall be installed and utilized to reduce the NO_x emissions from the Tundish Nozzle Preheater (ID# 3m).

(c) The NO_x emissions from the Tundish Nozzle Preheater (ID# 3m) shall not exceed 0.05 pounds per MMBtu and 0.5 pounds per hour, based on a 3-hour block average.

(d) The CO emissions from the Tundish Nozzle Preheater (ID# 3m) shall not exceed 0.084 pounds per MMBtu and 0.84 pounds per hour, based on a 3-hour block average.

(e) The VOC emissions from the Tundish Nozzle Preheater (ID# 3m) shall not exceed 0.0055 pounds per MMBtu and 0.055 pounds per hour, based on a 3-hour block average.

(f) The SO_2 emissions from the Tundish Nozzle Preheater (ID# 3m) shall not exceed 0.0006 pounds per MMBtu and 0.006 pounds per hour, based on a 3-hour block average.

(g) The filterable and condensible particulate matter (PM/PM_{10}) emissions from the Tundish Nozzle Preheater (ID# 3m) shall not exceed 0.0076 pounds per MMBtu and 0.076 pounds per hour, based on a 3-hour block average.

(h) Good combustion practices shall be observed.

326 IAC 2- PSD Best Available Control Technology -- Tundish Preheater (3n)

Pursuant to SSM183-18426-00030, issued November 21, 2005 and 326 IAC 2-2 Prevention of Significant Deterioration (PSD) and PSD, the Permittee shall comply with the PSD BACT standards for the Tundish Preheater (ID# 3n) as follows::

(a) The Tundish Preheater (ID# 3n) shall use natural gas as the primary fuel and propane as back up fuel.

(b) Low NO_x burners shall be installed and utilized to reduce the NO_x emissions from the Tundish Preheater (ID# 3n).

(c) The NO_x emissions from the Tundish Preheater (ID# 3m) shall not exceed 0.05 pounds per MMBtu and 0.5 pounds per hour, based on a 3-hour block average.

(d) The CO emissions from the Tundish Preheater (ID# 3n) shall not exceed 0.084 pounds per MMBtu and 0.84 pounds per hour, based on a 3-hour block average.

(e) The VOC emissions from the Tundish Preheater (ID# 3n) shall not exceed 0.0055 pounds per MMBtu and 0.055 pounds per hour, based on a 3-hour block average.

(f) The SO_2 emissions from the Tundish Preheater (ID# 3n) shall not exceed 0.0006 pounds per MMBtu and 0.006 pounds per hour, based on a 3-hour block average.

(g) The filterable and condensible particulate matter (PM/PM_{10}) emissions from the Tundish Preheater (ID# 3n) shall not exceed 0.0076 pounds per MMBtu and 0.076 pounds per hour, based on a 3-hour block average.

(h) Good combustion practices shall be observed.

326 IAC 2-2 PSD Best Available Control Technology – Tundish Preheater (ID# 3o)

Pursuant to SSM183-18426-00030, issued November 21, 2005 and 326 IAC 2-2 Prevention of Significant Deterioration (PSD) and the Permittee shall comply with the PSD BACT standards for the Tundish Preheater (ID# 3o) as follows:

(a) The Tundish Dryer (ID# 3o) shall use natural gas as the primary fuel and propane as back up fuel.

(b) Low NO_x burners shall be installed and utilized to reduce the NO_x emissions from the Tundish Dryer (ID# 3o).

(c) The NO_x emissions from the Tundish Dryer (ID# 3o) shall not exceed 0.05 pounds per MMBtu and 0.25 pounds per hour, based on a 3-hour block average.

(d) The CO emissions from the Tundish Dryer (ID# 3o) shall not exceed 0.084 pounds per MMBtu and 0.42 pounds per hour, based on a 3-hour block average.

(e) The VOC emissions from the Tundish Dryer (ID# 3o) shall not exceed 0.0055 pounds per MMBtu and 0.028 pounds per hour, based on a 3-hour block average.

(f) The SO_2 emissions from the Tundish Dryer (ID# 3o) shall not exceed 0.0006 pounds per MMBtu and pounds per hour, based on a 3-hour block average.

(g) The filterable and condensible particulate matter (PM/PM_{10}) emissions from the Tundish Dryer (ID# 3o) shall not exceed 0.0076 pounds per MMBtu and 0.038 pounds per hour, based on a 3-hour block average.

(h) Good combustion practices shall be observed.

326 IAC 2-2.2 Clean Unit Designation – Ladle preheaters (ID#s 3b-3e), ladle dryer (ID# 3f), nozzle preheater (ID# 3g), tundish preheaters (ID#s 3h and 3i) and tundish dryer (ID# 3j)

(a) Pursuant to SSM183-18426-00030, issued November 21, 2005 and 326 IAC 2-2.2, the ladle preheaters (ID#s 3b-3e), ladle dryer (ID# 3f), nozzle preheater (ID# 3g), tundish preheaters (ID#s 3h and 3i) and tundish dryer (ID# 3j) are classified as clean units for NOx.

(1) The Clean Unit designations for the ladle preheaters (ID# s 3b-3e), ladle dryer (ID# 3f), nozzle preheater (ID# 3g), tundish preheaters (ID# s 3h and 3i) and tundish dryer (ID# 3j) are in effect from September 9, 2004 to October 22, 2012.

(2) The Clean Unit designations were based on the approval of the Affidavit of Construction for these units as permitted to be constructed under PSD Permits CP183-10097-00030, issued on July 7, 1999 and PSD Permit SSM183-12692-00030, issued on January 10, 2001.

(b) In order to maintain the clean unit designations the above mentioned facilities in Condition D.2.2(a) , the Permittee shall comply with the following:

(1) The emissions units designated as clean unit s shall comply with the emissions limitations or work practice requirements in Condition D.2.1 (Nitrogen Oxides (NO_x) - PSD Best Available Control Technology) as part of the BACT.

In addition the emissions unit shall comply with all applicable requirements per 326 IAC 2-7 contained in this permit.

(2) No physical change or change in the method of operation shall be undertaken at these emissions units that would allow them to operate in a manner inconsistent with the physical or operational characteristics of the emission units.

(c) The above mentioned facilities in Condition D.2.2(a), designated as clean units, are subject to the following requirements:

(1) Any project at these emissions units for which actual construction begins after the effective date of the clean unit designations and before the expiration date shall be considered to have occurred while the emissions units were clean units.

(2) If a project at these emission units does not cause the need for a change in the emission limitations or work practice requirements in this permit for these units that were adopted in conjunction with BACT and the project would not alter any physical or operational characteristics that formed the basis for the BACT determination, the clean unit designations remain unchanged.

(3) If a project causes the need for a change in the emission limitations or work practice requirements in this permit for these units that were adopted in conjunction with BACT or the project would alter any physical or operational characteristics that formed the basis for the BACT determination, then the clean unit designations shall expire upon issuance of the necessary permit modifications, unless the units requalify as clean units. If the Permittee begins actual construction on the project without first applying to modify the emissions unit's permit, the clean unit designations shall expire immediately prior to the time when actual construction of this project begins.

(4) A project that causes emissions units to lose their clean unit designations shall be subject to the applicability requirements of 326 IAC 2-2-2(d)(1) through 326 IAC 2-2-2(d)(4) and 326 IAC 2-2-2(d)(6).

326 IAC 2-2.2 Clean Unit Designation – Ladle dryer (3I)

(a) Pursuant to SSM183-18426-00030, issued November 21, 2005 and 326 IAC 2-2.2, the new second ladle dryer (3I) is classified as Clean Unit for NO_x.

(1) The Clean Unit designation for this new second ladle dryer (ID# 3I) is in effect for ten (10) years from the initial start up of this dryer.

(2) In order to maintain the clean unit designation for new second ladle dryer, the Permittee shall comply with the following:

(A) The new second ladle dryer, designated as clean unit, shall comply with the emissions limitations or work practice requirements in Conditions D.2.3(a) and D.2.3(b) as part of the BACT.

In addition, the new second ladle dryer shall comply with all applicable requirements per 326 IAC 2-7 contained in this permit.

(B) No physical change or change in the method of operation shall be undertaken at this emissions unit that would allow them to operate in a manner inconsistent with the physical or operational characteristics of the emission units.

(b) The new second ladle dryer (ID# 3I), designated as clean unit, is subject to the following requirements:

(1) Any project at this emissions unit for which actual construction begins after the effective date of the clean unit designation and before the expiration date shall be considered to have occurred while the emissions unit was clean unit.

(2) If a project at this emission unit does not cause the need for a change in the emission limitations or work practice requirements in this permit for this unit that were adopted in conjunction with BACT and the project would not alter any physical or operational characteristics that formed the basis for the BACT determination, the clean unit designation remains unchanged.

(3) If a project causes the need for a change in the emission limitations or work practice requirements in this permit for this unit that were adopted in conjunction with BACT or the project would alter any physical or operational characteristics that formed the basis for the BACT determination, then the clean unit designation shall expire upon issuance of the necessary permit modifications, unless the unit requalifies as clean unit. If the Permittee begins actual construction on the project without first applying to modify the emissions unit's permit, the clean unit designation shall expire immediately prior to the time when actual construction of this project begins.

(4) A project that causes emissions unit to lose its clean unit designation shall be subject to the applicability requirements of 326 IAC 2-2-2(d)(1) through 326 IAC 2-2-2(d)(4) and 326 IAC 2-2-2(d)(6).

326 IAC 2-2.2 Clean Unit Designation – Tundish Nozzle Preheater (ID# 3m), Tundish Preheater (ID# 3n) and Tundish dryer (ID# 3o)

(a) Pursuant to SSM183-18426-00030, issued November 21, 2005 and 326 IAC 2-2.2, the Tundish Nozzle Preheater (ID# 3m), Tundish Preheater (ID# 3n) and Tundish dryer (ID# 3o) are classified as Clean Units for NO_x.

(1) The Clean Unit designations for these preheaters and dryer are in effect for ten (10) years from the initial start up of this dryer.

(2) In order to maintain the clean unit designations for these preheaters and dryer the Permittee shall comply with the PSD BACT NOx emissions limitations for each.

Reheat Furnaces

326 IAC 2-2 Nitrogen Oxides (NOx) - Best Available Control Technology – Reheat Furnace (ID# 2)

(a) Pursuant to CP183-10097-00030, issued July 7,1999, amended by PSD Significant Modification SSM183-12692-00030, issued January 10, 2001 and 326 IAC 2-2 (PSD - Control Technology Review; Requirements), the reheat furnace (ID# 2) shall be limited to the use of ultra low-NOx natural gas-fired burners such that NOx emissions shall not exceed 0.11 pound per MMBtu.

(b) The Permittee shall not allow more than 189.8 million cubic feet of natural gas to be combusted in the reheat furnace (ID# 2) on a monthly basis averaged over a twelve (12) month period.

326 IAC 2-2 Carbon Monoxide (CO) - Best Available Control Technology - Reheat Furnace (ID# 2)

Pursuant to CP183-10097-00030, issued July 7,1999, amended by PSD Significant Modification SSM183-12692-00030, issued January 10, 2001 and 326 IAC 2-2 (PSD - Control Technology Review; Requirements), CO emissions from the reheat furnace shall not exceed 0.03 pound MMBtu.

326 IAC 2-2 PSD Best Available Control Technology – Reheat Furnace (ID# 41)

Pursuant to SSM183-18426-00030, issued November 21, 2005 and 326 IAC 2-2 Prevention of Significant Deterioration (PSD), the Permittee shall comply with the PSD BACT standards for the Reheat Furnace (ID# 41) as follows:

(a) The Reheat Furnace (ID# 41) shall use natural gas as the primary fuel and propane as back up fuel.

(b) Low NO_x burners shall be installed and utilized to reduce the NO_x emissions from the Reheat Furnace (ID# 41).

(c) The NO_x emissions from the Reheat Furnace (ID# 41) shall not exceed 0.08 pounds per MMBtu and 20.8 pounds per hour, based on a 3-hour block average.

(d) The CO emissions from the Reheat Furnace (ID# 41) shall not exceed 0.03 pounds per MMBtu and 7.8 pounds per hour, based on a 3-hour block average.

(e) The VOC emissions from the Reheat Furnace (ID# 41) shall not exceed 0.005 pounds per MMBtu and 1.3 pounds per hour, based on a 3-hour block average.

(f) The SO_2 emissions from the Reheat Furnace (ID# 41) shall not exceed 0.0006 pounds per MMBtu and 0.156 pounds per hour, based on a 3-hour block average.

(g) The filterable particulate matter (PM) emissions from the Reheat Furnace (ID# 41) shall not exceed 0.0019 pounds per MMBtu and 0.49 pounds per hour, based on a 3-hour block average.

(h) The filterable and condensible particulate matter (PM/PM_{10}) emissions from the Reheat Furnace (ID# 41) shall not exceed 0.0076 pounds per MMBtu and 1.98 pounds per hour, based on a 3-hour block average.

(i) The visible emissions from the Reheat Furnace (ID# 41) Stack 41 shall not exceed 3% opacity.

(j) The lead emissions from the Reheat Furnace (ID# 41) shall not exceed 0.0005 pounds per MMBtu and 0.13 pounds per hour, based on a 3-hour block average.

(k) The mercury emissions from the Reheat Furnace (ID# 41) shall not exceed 0.00026 pounds per MMBtu and 0.068 pounds per hour, based on a 3-hour block average.

(l) Good combustion practices shall be observed.

326 IAC 2-2.2 Clean Unit Designation – Reheat Furnace (ID# 2)

(a) Pursuant to SSM183-18426-00030, issued November 21, 2005 and 326 IAC 2-2.2, the Reheat Furnace (ID# 2) is classified as a Clean Unit for NO_x.

(1) The Clean Unit designation for the Reheat Furnace (ID# 2) is in effect from September 9, 2004 to October 22, 2012.

The Clean Unit designation was based on the approval of the Affidavit of Construction for this unit as permitted to be constructed under PSD Permits CP183-10097-00030, issued on July 7,1999 and PSD Permit SSM183-12692-00030, issued on January 10, 2001.

(2) In order to maintain the clean unit designation for the Reheat Furnace (ID# 2) the Permittee shall comply with the emissions limitations or work practice requirements in Conditions D.3.1 as part of the BACT.

In addition, the RF (ID# 2) shall comply with all applicable requirements per 326 IAC 2-7 contained in this permit.

(3) No physical change or change in the method of operation shall be undertaken at this emissions unit that would allow them to operate in a manner inconsistent with the physical or operational characteristics of the emission unit.

(b) The RF (ID# 2), designated as clean unit, is subject to the following requirements:

(1) Any project at this emissions unit for which actual construction begins after the effective date of the clean unit designation and before the expiration date shall be considered to have occurred while the emissions unit was clean unit.

(2) If a project at this emission unit does not cause the need for a change in the emission limitations or work practice requirements in this permit for this unit that were adopted in conjunction with BACT and the project would not alter any physical or operational characteristics that formed the basis for the BACT determination, the clean unit designation remains unchanged.

(3) If a project causes the need for a change in the emission limitations or work practice requirements in this permit for this unit that were adopted in conjunction with BACT or the project would alter any physical or operational characteristics that formed the basis for the BACT determination, then the clean unit designation shall expire upon issuance of the necessary permit modifications, unless the unit requalifies as clean unit. If the Permittee begins actual construction on the project without first applying to modify the emissions unit's permit, the clean unit designation shall expire immediately prior to the time when actual construction of this project begins.

(4) A project that causes emissions unit to lose its clean unit designation shall be subject to the applicability requirements of 326 IAC 2-2-2(d)(1) through 326 IAC 2-2-2(d)(4) and 326 IAC 2-2-2(d)(6).

326 IAC 2-2.2 Clean Unit Designation – Reheat Furnace (ID# 41)

(a) Pursuant to SSM183-18426-00030, issued November 21, 2005 and 326 IAC 2-2.2, the Reheat Furnace (ID# 41) is classified as a Clean Unit for NO_x.

(b) The Clean Unit designation for this Reheat Furnace (ID# 41) is in effect for ten (10) years from its initial start up.

(c) In order to maintain the clean unit designations for the Reheat Furnace, the Permittee shall comply with the Reheat Furnace (ID# 41) NO_x PSD BACT limit.

Ladle Vacuum Degasser (LVD) Boiler

326 IAC 2-2 PM/PM_{10} Emission Limitations Prevention of Significant Deterioration (PSD)

Pursuant Significant Source Modification SSM183-15170-00030, issued May 31, 2002 and 326 IAC 2-2 (PSD), the total PM/PM_{10} (including both filterable and condensible) emissions from the LVD boiler shall not exceed 0.0076 pound per MMBtu of heat input and 0.318 pound per hour.

326 IAC 2-2 Nitrogen Dioxides (NOx) Limitations PSD

Pursuant to Significant Source Modification SSM183-15170-00030, issued May 31, 2002 and 326 IAC 2-2 (PSD), the NOx emissions from the LVD boiler shall not exceed 0.04 pound per MMBtu of heat input and 1.67 pounds per hour.

326 IAC 2-2 Carbon Monoxide (CO) Limitations PSD BACT

Pursuant to Significant Source Modification SSM183-15170-00030, issued May 31, 2002 and 326 IAC 2-2 (PSD), the CO emissions from the LVD boiler (ID# 41) shall not exceed 0.084 pound per MMBtu of heat input and 3.51 pounds per hour.

326 IAC 2-2 Volatile Organic Compounds (VOC) Limitations PSD BACT

Pursuant to Significant Source Modification SSM183-15173-00030, issued May 31, 2002 and 326 IAC 2-2 (PSD), the VOC emissions from the LVD boiler (ID# 41) shall not exceed 0.0026 pound per MMBtu of heat input and 0.11 pound per hour.

326 IAC 2-2 Sulfur Dioxide (SO_2) Limitations PSD BACT

Pursuant to Significant Source Modification SSM183-15170-00030, issued May 31, 2002 and 326 IAC 2-2 (PSD), the SO_2 emissions from the LVD boiler (ID# 41) shall not exceed 0.0006 pound per MMBtu of heat input and 0.025 pound per hour.

326 IAC 2-2 Operating Parameters

Pursuant to Significant Source Modification SSM183-15170-00030, issued May 31, 2002 and 326 IAC 2-2 (PSD), the following conditions shall apply:

(a) Only natural gas or propane fuels shall be used in the LVD boiler (ID# 41).

(b) The amount of natural gas used in the LVD boiler (ID# 41) shall not exceed 209 million cubic feet per 12 consecutive month period.

(c) The amount of propane used in the LVD boiler shall not exceed 222 kilogallons per 12 consecutive month period.

(d) Combustion emissions shall be reduced through the use of good combustion practices.

326 IAC 6-2-4 Particulate Emission Limitations for Sources of Indirect Heating

Pursuant Significant Source Modification SSM183-15170-00030, issued May 31, 2002 and 326 IAC 6-2-4 Particulate Emission Limitations for Sources of Indirect Heating: emission limitations for facilities specified in 326 IAC 6-2-1(d), particulate emissions from the LVD boiler (ID# 41) shall not exceed 0.1 pound per MMBtu of heat input.

326 IAC 2-2.2 Clean Unit Designation – (ID# 41)

(a) Pursuant to SSM183-18426-00030, issued November 21. 2005 and 326 IAC 2-2.2, the LVD boiler (ID# 41) is classified as a Clean Unit for NO_x.

(1) The Clean Unit designation for the LVD boiler (ID# 41) is in effect from September 9, 2004 to June 5, 2013.

The Clean Unit designation was based on the approval of the Affidavit of Construction for this unit as permitted to be constructed under PSD Permit SSM183-15170-00030, issued on May 31, 2002.

(b) In order to maintain the clean unit designation for the LVD Boiler (ID# 41), the Permittee shall comply with the following:

(1) The LVD Boiler (ID# 41), designated as clean unit, shall comply with the emissions limitations or work practice requirements in the following conditions as part of the BACT:

(A) D.4.2 NO_x Limitations PSD BACT, and

(B) D.4.6 Operating Parameters.

In addition, the LVD Boiler (ID# 41) shall comply with all applicable requirements per 326 IAC 2-7 contained in this permit.

(2) No physical change or change in the method of operation shall be undertaken at this emissions unit that would allow them to operate in a manner inconsistent with the physical or operational characteristics of the emission unit.

(c) The LVD Boiler (ID# 41), designated as clean unit, is subject to the following requirements:

(1) Any project at this emissions unit for which actual construction begins after the effective date of the clean unit designation and before the expiration date shall be considered to have occurred while the emissions unit was clean unit.

(2) If a project at this emission unit does not cause the need for a change in the emission limitations or work practice requirements in this permit for this unit that were adopted in conjunction with BACT and the project would not alter any physical or operational characteristics that formed the basis for the BACT determination, the clean unit designation remains unchanged.

(3) If a project causes the need for a change in the emission limitations or work practice requirements in this permit for this unit that were adopted in conjunction with BACT or the project would alter any physical or operational characteristics that formed the basis for the BACT determination, then the clean unit designation shall expire upon issuance of the necessary permit modifications, unless the unit requalifies as clean unit. If the Permittee begins actual construction on the project without first applying to modify the emissions unit's permit, the clean unit designation shall expire immediately prior to the time when actual construction of this project begins.

(4) A project that causes emissions unit to lose its clean unit designation shall be subject to the applicability requirements of 326 IAC 2-2-2(d)(1) through 326 IAC 2-2-2(d)(4) and 326 IAC 2-2-2(d)(6).

EAF Dust Storage Silo and Raw Material Storage Silos

326 IAC 2-2 Particulate Matter (PM/PM_{10}) - Best Available Control Technology

Pursuant to CP183-10097-00030, issued July 7,1999, amended by PSD Significant Modification SSM183-12692-00030, issued January 10, 2001 and 326 IAC 2-2 (PSD - Control Technology

Review; Requirements), filterable PM/PM_{10} emissions from each of the nine (9) storage silos shall not exceed 0.01 grains per dry standard cubic feet.

326 IAC 2-2 Visible Emission Limitation - Best Available Control Technology

(a) Pursuant to CP183-10097-00030, issued July 7,1999, amended by PSD Significant Modification 183-12692-00030, issued January 10, 2001 and 326 IAC 2-2 (PSD - Control Technology Review; Requirements), visible emissions from each of the nine (9) storage silos shall not exceed three percent (3%) opacity.

(b) Pursuant to CP183-10097-00030, issued July 7,1999, amended by PSD Significant Modification 183-12692-00030, issued January 10, 2001 and 326 IAC 2-2 (PSD - Control Technology Review; Requirements), visible emissions from the EAF dust handling system and the raw material receiving station shall not exceed three percent (3%) opacity or greater based on a six-minute average (24 readings taken in accordance with 40 CFR Part 60, Appendix A, Method 9).

326 IAC 2-2.2 Clean Unit Designation – (ID# 41)

(a) Pursuant to PSD Permit SSM 183-18426-00030 and 326 IAC 2-2.2, the nine (9) storage silos are classified as Clean Units for PM/PM_{10}.

(b) The Clean Unit designations for these nine (9) storage silos are in effect from September 9, 2004 to October 22, 2012.

The Clean Unit designations were based on the approval of the Affidavit of Construction for these units as permitted to be constructed under PSD Permits 193-10097-00030, issued on July 7, 1999 and PSD Permit 183-12692-00030, issued on January 10, 2001.

(c) In order to maintain the clean unit designations for the nine (9) storage silos, the Permittee shall comply with the following:

(1) The nine (9) storage silos, designated as clean units, shall comply with the emissions limitations or work practice requirements in the following conditions as part of the BACT:

(A) D.5.1 Particulate Matter (PM/PM_{10}) - PSD Best Available Control Technology, and

(B) D.5.2 Visible Emission Limitation - PSD Best Available Control Technology.

In addition, the nine (9) storage silos shall comply with all applicable requirements per 326 IAC 2-7 contained in this permit.

(2) No physical change or change in the method of operation shall be undertaken at these emissions units that would allow them to operate in a manner inconsistent with the physical or operational characteristics of the emission units.

(d) The nine (9) storage silos, designated as clean units, are subject to the following requirements:

(1) Any project at these emissions units for which actual construction begins after the effective date of the clean unit designations and before the expiration date shall be considered to have occurred while the emissions units were clean units.

(2) If a project at these emission units does not cause the need for a change in the emission limitations or work practice requirements in this permit for these units that were adopted in conjunction with BACT and the project would not alter any physical or operational characteristics that formed the basis for the BACT determination, the clean unit designations remain unchanged.

(3) If a project causes the need for a change in the emission limitations or work practice requirements in this permit for these units that were adopted in conjunction with BACT or the project would alter any physical or operational characteristics that formed the basis for the BACT determination, then the clean unit designations shall expire upon issuance of the necessary permit modifications, unless the units requalify as clean units. If the Permittee begins actual construction on the project without first applying to modify the emissions unit's permit, the clean unit designations shall expire immediately prior to the time when actual construction of this project begins.

(4) A project that causes emissions units to lose their clean unit designations shall be subject to the applicability requirements of 326 IAC 2-2-2(d)(1) through 326 IAC 2-2-2(d)(4) and 326 IAC 2-2-2(d)(6).

Slag Handling and Processing Area

326 IAC 2-1.1-5 Annual Slag Production Limitation

Pursuant to SSM 183-18426-00030 issued November 21, 2005 and 326 IAC 2-1.1-5, the Permittee shall not process more than 428,000 tons of slag per 12 consecutive month period with compliance demonstrated at the end of each month.

326 IAC 6-3 Particulate Emission Limitations for Manufacturing Processes

Pursuant to SSM183-18426-00030 issued November 21, 2005 and 326 IAC 6-3 (Particulate Emission Limitations for Manufacturing Processes), combined filterable PM emissions from the crushing, screening, conveyor transfer points, continuous stacking operations shall not exceed 60.96 pounds per hour. This limit is based on the nominal process weight rate of 250 tons per hour. PM emissions will be considered in compliance with 326 IAC 6-3 in the absence of PM compliance tests provided that visible emissions do not exceed the limitations for these operations.

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

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

326 IAC 2-2 Visible Emission Limitations - Best Available Control Technology

Pursuant to CP183-10097-00030, issued July 7, 1999, amended by PSD Significant Modification SSM183-12692-00030, issued January 10, 2001 and 326 IAC 2-2 (PSD - Control Technology Review; Requirements), fugitive dust emissions from the various slag handling and processing operations shall be controlled in accordance with the Fugitive Dust Control Plan (Section E.1) such that the following visible emission limitations are not exceeded:

Slag Handling/Processing Operation	Visible Emission Limitation (% opacity)
Transferring of skull slag to slag pot	10 % opacity, six (6) minute average
Pouring of liquid slag from EAF or LMF to slag pots	3% opacity, six (6) minute average on any building opening
Dumping of liquid slag from slag pot to slag pit and cooling	3 % opacity, six (6) minute average
Transferring of skull slag from slag pot to skull pit	5 % opacity, six (6) minute average
Digging skull slag pits	5 % opacity, six (6) minute average
Digging slag pits	3 % opacity, six (6) minute average
Stockpiling of slag adjacent to the grizzly feeder	3 % opacity, six (6) minute average
Wind erosion of stockpiles	3 % opacity, six (6) minute average
Crushing	3 % opacity, six (6) minute average
Screening	3 % opacity, six (6) minute average
Conveyor transfer points	3 % opacity, six (6) minute average
Continuous stacking of processed slag to stockpiles	3 % opacity, six (6) minute average
Loadout of processed slag from stockpiles to haul trucks for shipment	3 % opacity, six (6) minute average
Inplant hauling of slag pots (filled) and processed slag (this does not include activities covered under section D.7 Transporting on paved roadways and parking lots, unpaved roadways and unpaved areas.)	3 % opacity, six (6) minute average

326 IAC 2-2 Slag Dumping Fugitive Particulate Matter (PM/PM_{10})

Pursuant to CP183-10097-00030, issued July 7, 1999, amended by PSD Significant Modification SSM183-12692-00030, issued January 10, 2001 and 326 IAC 2-2 (PSD - Control Technology Review; Requirements), the slag dumping pits shall be covered by a partially enclosed, roofed structure to reduce PM emissions during slag dumping. The roof shall extend over the entire slag pit area and past the dump stations. The sides of the structure shall extend sufficiently downward from the roof, taking into account:

(1) Reduction of PM emissions during dumping and partial shielding of prevailing winds; and

(2) Dissipation of heat and consideration of safety concerns within the structure.

326 IAC 2-2.2 Clean Unit Designation – The Slag Handling and processing operations

(a) Pursuant to PSD Permit SSM 183-18426-00030 and 326 IAC 2-2.2, the slag handling and processing operations are classified as Clean Units for PM/PM_{10}.

(b) The Clean Unit designation for these slag handling and processing operations are in effect for ten (10) years from the issuance date of this permit.

(c) In order to maintain the clean unit designations for the slag handling and processing operations, the Permittee shall comply with the following:

(1) The slag handling and processing operations, designated as clean units, shall comply with the emissions limitations or work practice requirements in the following conditions as part of the BACT:

(A) D.6.1 Annual Slag Production Limitation,

(B) D.6.3 Visible Emission Limitations - BACT, and

(C) D.6.4 Slag Dumping Fugitive Particulate Matter.

In addition, the slag handling and processing operations shall comply with all applicable requirements per 326 IAC 2-7 contained in this permit.

(2) No physical change or change in the method of operation shall be undertaken at these operations that would allow them to operate in a manner inconsistent with the physical or operational characteristics of the operations.

(d) The slag handling and processing operations, designated as clean units, are subject to the following requirements:

(1) Any project at these emissions units for which actual construction begins after the effective date of the clean unit designations and before the expiration date shall be considered to have occurred while the emissions units were clean units.

(2) If a project at these emission units does not cause the need for a change in the emission limitations or work practice requirements in this permit for these units that were adopted in conjunction with BACT and the project would not alter any physical or operational characteristics that formed the basis for the BACT determination, the clean unit designations remain unchanged.

(3) If a project causes the need for a change in the emission limitations or work practice requirements in this permit for these units that were adopted in conjunction with BACT or the project would alter any physical or operational characteristics that formed the basis for the BACT determination, then the clean unit designations shall expire upon issuance of the necessary permit modifications, unless the units requalify as clean units. If the Permittee begins actual construction on the project without first applying to modify the emissions unit's permit, the clean unit designations shall expire immediately prior to the time when actual construction of this project begins.

(4) A project that causes emissions units to lose their clean unit designations shall be subject to the applicability requirements of 326 IAC 2-2-2(d)(1) through 326 IAC 2-2-2(d)(4) and 326 IAC 2-2-2(d)(6).

Transporting on paved roadways and parking lots, unpaved roadways and unpaved areas

326 IAC 2-2 Fugitive Dust Emission Limitations - Best Available Control Technology

Pursuant to CP183-10097-00030, issued July 7, 1999, amended by PSD Significant Modification SSM183-12692-00030, issued January 10, 2001 and 326 IAC 2-2 (PSD - Control Technology Review; Requirements), fugitive dust emissions from transporting on paved roadways and parking lots, unpaved roadways, and unpaved areas around slag storage piles and steel scrap piles shall be controlled in accordance with the Fugitive Dust Control Plan (FDCP) (Section E.1) such that the following limitations are not exceeded:

(a) Instantaneous opacity from paved roadways and parking lots shall not exceed ten percent (10%). The average instantaneous opacity shall be the average of twelve (12) instantaneous opacity readings, taken for four (4) vehicle passes, consisting of three (3) opacity readings for each vehicle pass. The three (3) opacity readings for each vehicle pass shall be taken as follows:

(1) The first will be taken at the time of emission generation.
(2) The second will be taken five (5) seconds later.
(3) The third will be taken five (5) seconds later or ten (10) seconds after the first.

(b) The three (3) readings shall be taken at the point of maximum opacity. The observer shall stand at least fifteen (15) feet, but no more than one-fourth (1/4) mile, from the plume and at approximately right angles to the plume. Each reading shall be taken approximately four (4) feet above the surface of the paved roadway.

326 IAC 2-2 Visible Emission Limitations - Best Available Control Technology

(a) Visible emissions from unpaved roadways and unpaved areas around slag storage piles and steel scrap piles shall not exceed an average instantaneous opacity of ten percent (10%). The average instantaneous opacity shall be the average of twelve (12) instantaneous opacity readings, taken for four (4) vehicle passes, consisting of three (3) opacity readings for each vehicle pass. The three (3) opacity readings for each vehicle pass shall be taken as follows:

(1) The first will be taken at the time of emission generation.
(2) The second will be taken five (5) seconds later.
(3) The third will be taken five (5) seconds later or ten (10) seconds after the first.

(b) The three (3) readings shall be taken at the point of maximum opacity. The observer shall stand at least fifteen (15) feet, but no more than one-fourth (1/4) mile, from the plume and at approximately right angles to the plume. Each reading shall be taken approximately four (4) feet above the surface of the unpaved roadway.

326 IAC 2-2.2 Clean Unit Designation – Transporting on paved roadways and parking lots, unpaved roadways and unpaved areas

(a) Pursuant to PSD Permit 183-18426-00030 and 326 IAC 2-2.2, the transporting on paved roadways and parking lots, unpaved roadways, and unpaved areas around slag storage piles and steel scrap piles are classified as Clean Units for PM/PM_{10}.

(b) The Clean Unit designations for these transporting on paved roadways and parking lots, unpaved roadways, and unpaved areas around slag storage piles and steel scrap piles are in effect from September 9, 2004 to October 22, 2012.

The Clean Unit designations were based on the approval of the Affidavit of Construction for these units as permitted to be constructed under PSD Permits 193-10097-00030, issued on July 7, 1999 and PSD Permit 183-12692-00030, issued on January 10, 2001.

(c) In order to maintain the clean unit designations for the transporting on paved roadways and parking lots, unpaved roadways, and unpaved areas around slag storage piles and steel scrap piles, the Permittee shall comply with the following:

(1) The transporting on paved roadways and parking lots, unpaved roadways, and unpaved areas around slag storage piles and steel scrap piles (designated as clean units) shall comply with the emissions limitations or work practice requirements in the following conditions as part of the BACT:

(A) D.7.1 Fugitive Dust Emission Limitations - Best Available Control Technology,
and

(B) D.7.2 Visible Emission Limitations - Best Available Control Technology.

In addition, the transporting on paved roadways and parking lots, unpaved roadways, and unpaved areas around slag storage piles and steel scrap piles shall comply with all applicable requirements per 326 IAC 2-7 contained in this permit.

(2) No physical change or change in the method of operation shall be undertaken at these emissions units that would allow them to operate in a manner inconsistent with the physical or operational characteristics of the emission units.

(d) The transporting on paved roadways and parking lots, unpaved roadways, and unpaved areas around slag storage piles and steel scrap piles (designated as clean units) are subject to the following requirements:

(1) Any project at these emissions units for which actual construction begins after the effective date of the clean unit designations and before the expiration date shall be considered to have occurred while the emissions units were clean units.

(2) If a project at these emission units does not cause the need for a change in the emission limitations or work practice requirements in this permit for these units that were adopted in conjunction with BACT and the project would not alter any physical or operational characteristics that formed the basis for the BACT determination, the clean unit designations remain unchanged.

(3) If a project causes the need for a change in the emission limitations or work practice requirements in this permit for these units that were adopted in conjunction with BACT or the project would alter any physical or operational characteristics that formed the basis for the BACT determination, then the clean unit designations shall expire upon issuance of the necessary permit modifications, unless the units requalify as clean units. If the Permittee begins actual construction on the project without first applying to modify the emissions unit's permit, the clean unit designations shall expire immediately prior to the time when actual construction of this project begins.

(4) A project that causes emissions units to lose their clean unit designations shall be subject to the applicability requirements of 326 IAC 2-2-2(d)(1) through 326 IAC 2-2-2(d)(4) and 326 IAC 2-2-2(d)(6).

Cooling Tower

326 IAC 2-2 Particulate Matter (PM/PM_{10}) - Best Available Control Technology

Pursuant to CP183-10097-00030, issued July 7,1999, amended by PSD Significant Modification SSM 183-12692-00030, issued January 10, 2001 and 326 IAC 2-2 (PSD - Control Technology Review; Requirements), filterable PM/PM_{10} emissions from the cooling tower shall not exceed 0.008 pound per hour.

Insignificant Activities

326 IAC 6-3-2 Particulate Emissions

Pursuant to 326 IAC 6-3-2 (Particulate Emission Limitations), the particulate emissions from the brazing equipment, cutting torches, soldering equipment and welding equipment shall not exceed the particulate limitation in Section C.1 - Particulate Emission Limitations for Processes with Process Weight Rates Less Than One Hundred (100) pounds per hour.

326 IAC 2-2 Nitrogen Oxides (NOx) –Emissions – Best Available Control Technology

Refer to Section D.2 of this permit for the NOx emission limits for the natural gas-fired combustion sources

Fugitive Dust Control Plan (FDCP)

(a) This plan is to be implemented to reduce fugitive emissions from the following:

(1) paved roadways and parking lots

(2) unpaved areas within the slag processing area and scrap yard

(3) wind erosion from open slag piles

(4) the slag handling and processing operations.

(b) Dust controls measures

(1) vacuum sweeping roads

(2) chemical dust suppressant

(3) water sprays

(4) drop height of materials shall be minimized to 48 inches

(5) posted vehicle speed

(6) material spill control

(c) Daily record keeping of the sweeping, amount of suppressant and water usage and spill control activities.

(d) Monitor vehicle speed

Scrap Management Plan

(a) General Specifications

(b) Scrap Specifications

(c) Scrap Inspection Procedures

Testing Requirements

Equipment	Pollutant	Time Frame
Electric Arc Furnaces (EAF) Stack 1	NOx, SO_2 and Opacity	SSM183-18426-00030 issued November 21, 2005 60 days after achieving maximum capacity, but no later than 365 days after start up, then once every 2 ½ years from the date of latest valid compliance demonstration
Electric Arc Furnaces (EAFs) Stack 1*	PM/PM_{10} (filterable and condensable), Fluorides, manganese	SSM183-18426-00030 issued November 21, 2005 60 days after achieving maximum capacity, but no later than 365 days after start up, then once every 5 years from the date of latest valid compliance demonstration
Electric Arc Furnaces (EAFs) Stack 1*	Lead , Mercury	SSM183-18426-00030 issued November 21, 2005 60 days after achieving maximum capacity, but no later than 365 days after start up then once every year from the date of latest valid compliance demonstration
Reheat Furnace (ID# 2)	NOx and CO	Once every 5 years from the date of latest valid compliance demonstration
Reheat Furnace (ID# 41)*	NOx	SSM 183-18426-00030 issued November 21, 2005 60 days after achieving maximum capacity but no later than 180 days after initial startup then once every 5 years from the date of latest valid compliance demonstration
Ladle Vacuum Degasser Boiler (ID# 41)	NOx and CO	Once every 5 years from the date of latest valid compliance demonstration
Slag Handling and Processing Area	Opacity	Once every 5 years from the date of latest valid compliance demonstration

*At the time of this Part 70 permit review, the initial stack testing required in SSM183-18426-00030, issued November 21, 2005, for the EAFs (1a and 1b), and Reheat Furnace (ID# 41) has not yet been conducted. Therefore, the initial stack testing requirement in SSM 183-18426-00030 has been included in Condition D.1.21 and D.3.7(b) of this permit.

Compliance Requirements

Permits issued under 326 IAC 2-7 are required to ensure that sources can demonstrate compliance with applicable state and federal rules on a more or less continuous basis. All state and federal rules contain compliance provisions, however, these provisions do not always fulfill the requirement for a more or less continuous demonstration. When this occurs IDEM, OAQ in conjunction with the source, must develop specific conditions to satisfy 326 IAC 2-7-5. As a result, compliance requirements are divided into two sections: Compliance Determination Requirements and Compliance Monitoring Requirements.

Compliance Determination Requirements in Section D of the permit are those conditions that are found more or less directly within state and federal rules and the violation of which serves as grounds for enforcement action. If these conditions are not sufficient to demonstrate continuous compliance, they will be supplemented with Compliance Monitoring Requirements, also 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 approporiate corrective actions within a specific time period.

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

1. The Electric Arc Furnace has applicable compliance monitoring conditions as specified below:

   (a) Bag Leak Detection System (BLDS) (Condition D.1.24)

   Pursuant to PSD Permit SSM183-12692-00030 issued January 10, 2001::

   (1) The Permittee shall operate continuous bag leak detection systems (BLDS) for the EAFs Baghouse. The bag leak detection systems (BLDS) shall meet the following requirements:

   (A) The bag leak detection systems (BLDS) must be certified by the manufacturer to be capable of detecting particulate matter emissions at concentrations of 0.0018 grains per actual cubic foot or less.

   (B) The bag leak detection system (BLDS) sensor must provide output of relative particulate matter loading.

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

   (D) The bag leak detection system (BLDS) shall be operated in a manner consistent with available written guidance from the U.S. Environmental Protection Agency or, in the absence of such written guidance, the manufacturer's written specifications and recommendations for operation, and adjustment of the system.

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

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

(2) In the event of a bag leak detection system alarm:

(A) The affected compartments will be shut down as soon as possible until the failed units have been repaired or replaced.

(B) Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the emergency provisions of this permit (Section B.11 - Emergency Provisions).

(C) No later than eight (8) business hours of the determination of failure, response steps according to the timetable described in the Section C.16 – Response to Excursions or Exceedances shall be initiated.

For any failure with corresponding response steps and timetable not described in the Section C.16 – Response to Excursions or Exceedances, response steps shall be devised no later than eight (8) business hours of discovery of the failure and shall include a timetable for completion.

(D) Failure to take reasonable response steps in accordance with Section C.16 – Response to Excursions or Exceedances, shall be considered a deviation from this permit.

(3) If operations continue after bag failure is observed and it will be 10 days or more after the failure is observed before the failed units will be repaired or replaced, the Permittee shall promptly notify the IDEM, OAQ of the expected date the failed units will be repaired or replaced.

The notification shall also include the status of the applicable compliance monitoring parameters with respect to normal, and the results of any response actions taken up to the time of notification.

(b) Monitoring of Operations (Condition D.1.25)

Pursuant to CP183-10097-00030, issued July 7, 1999, amended by PSD Significant Modification SSM183-12692-00030, issued January 10, 2001 and 40 CFR 60.274a, the Permittee shall comply with the following monitoring requirements:

(1) Except as provided in (3), the Permittee shall check and record on a once-per-shift basis the furnace (EAF) static pressure and either:

(A) Check and record the control system fan motor amperes and damper positions on a once-per-shift basis; or

(B) Calibrate and maintain a monitoring device that continuously records the volumetric flow rate through each separately ducted hood; or

(C) Calibrate and maintain a monitoring device that continuously records the volumetric flow rate at the control device inlet and records damper positions on a once-per-shift basis.

(D) 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 IDEM, OAQ, or the U.S. EPA may require the Permittee to demonstrate the accuracy of the monitoring device(s) relative to Methods 1 and 2 of 40 CFR Part 60, Appendix A.

(2) When the Permittee is required to demonstrate compliance with the visible emission standard in condition D.1.13 (b) and at any other time IDEM, OAQ, or the U.S. EPA may require, that either the control system fan motor amperes and all damper positions or the volumetric flow rate through each separately ducted hood shall be determined during all periods in which a hood is operated for the purpose of capturing emissions from the EAF.

(3) The Permittee 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.

(4) The Permittee shall calibrate and maintain a monitoring device that allows the pressure inside the free space inside the EAF to be monitored. 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 be calibrated according to the manufacturer's instructions.

(5) The pressure in the free space inside the EAF shall be determined during the melting and refining period(s) using the monitoring device required under item (4) of this condition. 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.

(6) Pursuant to 40 CFR 60.274a, amended by EPA March 2, 1999 and adopted by IDEM, OAQ by reference into 326 IAC 12-1 on July 1, 2000, and except as provided in item (3) above, a furnace static pressure monitoring device is not required on any EAF equipped with a DEC system if observations of the shop opacity are performed by a certified visible emission observer as follows:

(A) Shop opacity observations shall be conducted at least once per day when the furnace is operating in the meltdown and refining period.

(B) 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.

(C) 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, only one observation of shop opacity will be required.

(D) 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

(c) Monitoring for Total Building Enclosure (Condition D.1.26)

The Permittee shall demonstrate compliance with the requirement to provide total enclosure of the meltshop, using either procedure (1) or (2) below. This compliance demonstration shall be repeated at the time of each Method 12 stack test for lead emissions from the meltshop baghouse stack. The results of this compliance demonstration shall be submitted to IDEM with the test results of each Method 12 stack test for lead emissions from the meltshop baghouse.

(1) Procedure Option one is as follows:

(A) The Permittee shall use a propeller anemometer or equivalent device meeting the requirements specified in (i) through (iii) below:

(i) The propeller of the anemometer shall be made of a material of uniform density and shall be properly balanced to optimize performance.

(ii) The measurement range of the anemometer shall extend to at least 300 meters per minute (1,000 feet per minute).

(iii) A known relationship shall exist between the anemometer signal output and air velocity, and the anemometer must be equipped with a suitable readout system.

(B) Doorway in-draft shall be determined by placing the anemometer in the plane of the doorway opening near its center.

(C) Doorway in-draft shall be demonstrated for each doorway that is open during normal operation with all remaining doorways in the position that they are in during normal operation.

When the doorway in-draft is not demonstrated for any doorway that is open during normal operation, the Permittee shall take reasonable response steps in accordance with Section C.16 – Response to Excursions or Exceedances. Failure to take response steps in accordance with Section C.16 – Response to Excursions or Exceedances shall be considered a deviation from this permit.

(2) Option two is as follows:

(A) The Permittee shall install a differential pressure gauge on the leeward wall of the building to measure the pressure difference between the inside and outside of the building.

(B) The pressure gauge shall be certified by the manufacturer to be capable of measuring pressure differential in the range of 0.02 to 0.2 mm Hg.

(C) Both the inside and outside taps shall be shielded to reduce the effects of wind.

(D) The Permittee shall demonstrate the inside of the building is maintained at a negative pressure as compared to the outside of the building of no less than 0.02 mm Hg when all doors are in the position they are in during normal operation.

When the pressure differential between the inside and outside of the building is less than 0.02 mm Hg the Permittee shall take reasonable response steps in accordance with Section C.16 – Response to Excursions or Exceedances. Failure to take response steps in accordance with Section C.16 – Response to Excursions or Exceedances shall be considered a deviation from this permit.

These monitoring conditions are necessary because the baghouse for the electric arc furnace and melt shop operations must operate properly to ensure compliance with PM/PM_{10}, and Visible Emission BACT Emission Limits, 40 CFR 60.274(a) (EAF NSPS) and 326 IAC 2-7 (Part 70).

2. The EAF dust handling system including the EAF Dust storage silo and raw material silos have applicable compliance monitoring conditions as specified below:

Visible Emission Notations (Condition D.5.8)

(a) Weekly visible emission notations of the nine (9) storage silos exhaust vents and the raw material receiving station shall be performed during normal daylight operations when loading or unloading material. 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 (80%) of the time when 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 an abnormal emissions are observed. Failure to take response steps in accordance with Section C.16 – Response to Excursions and Exceedances, shall be considered a deviation from this permit.

(f) For single compartment filters controlling emissions from a batch process the feed shall be shut down as soon as possible until the failed units have been repaired or replaced. The emissions unit shall be shut down no later than the completion of the processing of the EAF dust and raw materials. Operations may continue only in the event of the emergency provisions of this permit. (Section B.11 Emergency Provisions).

These monitoring conditions are necessary because the bin vent filters for the silos must operate properly to ensure compliance with PM/PM_{10}, and Visible Emission BACT Emission Limits and 326 IAC 2-7 (Part 70).

3. The slag handling and processing area have applicable compliance monitoring conditions as specified below:

Visible Emission Notations (Condition D.6.8)

(a) Once per day visible emission notations of the slag handling processes shall be performed during normal daylight operations when exhausting to the atmosphere. A trained employee shall record whether emissions are normal or abnormal.

(b) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.

(c) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.

(d) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.

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

These monitoring conditions are necessary because the dust suppression and water sprays for the slag handling must operate properly to ensure compliance with PM/PM_{10}, and Visible Emission BACT Emission Limits and 326 IAC 2-7 (Part 70).

Conclusion

The operation of this steel beam mill shall be subject to the conditions of this Part 70 permit 183-17160-00030.