



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 19, 2005
RE: ISG Indiana Harbor, Inc. / 089-21088-00318
FROM: Paul Dubenetzky
Chief, Permits Branch
Office of Air Quality

Notice of Decision: Approval – Effective Immediately

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

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

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

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

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

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

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

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

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

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

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

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



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

Mitchell 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

Mr. Michael Heaney
ISG Harbor Inc.
3001 Dickey Road
East Chicago, IN 46312

July 19, 2005

Re: 089-21088
Second Administrative Amendment to
Part 70 Operating Permit No. 089-7099-00318

Dear Mr. Heaney:

ISG Indiana Harbor Inc., was issued a permit on December 7, 2004 for stationary integrated steel mill and finishing facility. A letter requesting the following changes was received on April 13, 2005:

- Remove reference and all requirements relating to the following facility which is no longer operational: Two (2) natural gas fired boilers in the No. 2 Sheet Mill designated as Boiler No. 7 and Boiler No. 8 (installed in 1955), having a combined heat input of 98 MMBtu per hour, with uncontrolled emissions exhausting to (S5C).
- Remove reference and all requirements relating to the following facility which is no longer operational: Three (3) Open Coil (Hydrogen) Annealing Furnaces (1-3) in the No. 3 Sheet Mill, having a combined heat input capacity of 10.5 MMBtu per hour, with uncontrolled emissions exhausting inside the building to vent (V6A).
- Revise the compliance monitoring parameter of No. 4 Blast Furnace Casthouse Baghouse pressure drop range across the baghouse.
- Revise the compliance monitoring parameter of Sinter Plant Discharge (Breaker) Scrubber pressure drop range across the scrubber.
- Revise the compliance monitoring parameter of BOF Reladle/Desulfurization Baghouse pressure drop range across the baghouse.

Pursuant to the provisions of 2-7-11, the permit is hereby administratively amended as follows:

1. Condition A.3(e) has been revised to reflect Boiler No. 7 and Boiler No. 8 have been removed from operation at ISG Indiana Harbor Inc.

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

ISG-Indiana Harbor Inc. consists of the following permitted emission units and pollution control devices:

(e) One (1) Sheet Mill Finishing operation, designated as No. 2 Sheet Mill, having a maximum capacity of 1,404,929 tons per year, comprised of the following facilities, fugitive sources, process equipment, and operational practices:

~~(3) Two (2) natural gas fired boilers designated as Boiler No. 7 and Boiler No. 8 (installed in 1955), having a combined heat input of 98 MMBtu per hour, with uncontrolled emissions exhausting to (S5C)~~

(4 3) Seven (7) space heaters (installed in 1968) having a combined heat input of 17.5 MMBtu

per hour, with uncontrolled emissions exhausting to vent (V5B) to No. 2 Sheet Mill shop.

2. Condition A.3(f) has been revised to reflect that three (3) open coil (hydrogen) annealing furnaces have been removed from operation at ISG Indiana Harbor Inc.

(f) One (1) Sheet Mill Finishing operation, designated as No. 3 Sheet Mill, having a maximum capacity of 2,156,537 tons per year, comprised of the following facilities, fugitive sources, process equipment, and operational practices:

- ~~(4) Three (3) Open Coil (Hydrogen) Annealing Furnaces (1-3), having a combined heat input of 10.5 MMBtu per hour, with uncontrolled emissions exhausting inside the building to vent (V6A)~~
- ~~(5 4) One (1) Pickle Line consisting of four (4) HCl process tanks and one (1) water rinse tank (installed in 1964), with acid fumes controlled by a scrubber system (14,000 acfm) comprised of tank hoods and ductwork connected to two (2) scrubbers (in series) exhausting through scrubber stack (S6A)~~
- ~~(6 5) One (1) Shot Blaster, used to put a matte finish on the surface of reconditioned rolls. Emissions are controlled by a small baghouse exhausting through vent (V6B) outside the building.~~
- ~~(7 6) One (1) tempering operation consisting of a 2-Stand Temper Mill with fugitive emissions exhausting inside the building.~~
- ~~(8 7) One (1) steel coil cold reduction operation consisting of one (1) 5- Stand Tandem Mill where steel coil thickness is reduced to final specification, with emissions exhausting through stack (S6B)~~
- ~~(9 8) Miscellaneous activities include two (2) steel sheet edge slitters, electrostatic oiling space heating and portable heating (to prevent equipment freezing).~~

3. Condition D.1.11 has been revised to incorporate parametric monitoring requirements consistent with updated pressure drop ranges across the No. 4 Blast Furnace Casthouse Baghouse (S1B).

D.1.11 Parametric Monitoring [326 IAC 2-7-6(1)][326 IAC 2-7-5(1)]

The Permittee shall record the pressure drop across the baghouse used in conjunction with the No. 4 Blast Furnace Casthouse Baghouse (S1B), at least once per shift when the above processes are in operation when venting to the atmosphere. When for any one reading, the pressure drop across the baghouse is outside the normal ranges of ~~3.0 – 18.0 inches of water~~ **as specified in the table below** or a range established during the latest stack test, the Permittee shall take reasonable response steps in accordance with Section C- Compliance Response Plan - Preparation, Implementation, Records, and Reports. A reading that is outside the ranges is not a deviation from this permit. Failure to take response steps in accordance with Section C- Compliance Response Plan - Preparation, Implementation, Records, and Reports, shall be considered a violation of this permit.

No. 4 Blast Furnace Casthouse Baghouse (S1B)	
Number of Fans Operational	Pressure Drop Range (inches of water)
One (1)	1.0 – 6.0
Two (2)	6.0 – 14.0

4. Condition D.1.16 has been revised to correct previously permitted citations.

D.1.16 Record Keeping Requirements

- (b) To document compliance with Condition ~~D.1.14~~ **D.1.10**, the Permittee shall maintain records of once per shift visible emission notations of the No. 4 Blast Furnace Casthouse Baghouse (S1B).
 - (c) To document compliance with Condition ~~D.1.12~~ **D.1.11**, the Permittee shall maintain records, once per shift of the pressure drop across the No.4 Blast Furnace Casthouse Baghouse **and the number of fans in operation** when venting to the atmosphere.
 - (d) In order to document compliance with Condition ~~D.1.13~~ **D.1.12**, the Permittee shall maintain records of the results of the inspections.
5. Condition D.2.14 has been revised to incorporate parametric monitoring requirements consistent with an updated pressure drop range across the sinter plant discharge (breaker) scrubber (S2B).

D.2.14 Parametric Monitoring [326 IAC 2-7-6(1)][326 IAC 2-7-5(1)]

- (b) The Permittee shall record the total static pressure drop across the sinter plant discharge (breaker) scrubber (S2B) used in conjunction with the sinter plant operations, at least once per shift when the breaker is in operation when venting to the atmosphere. When for any one reading, the pressure drop across the discharge (breaker) scrubber is outside the normal range of ~~8.0 and 12.0~~ **6.0 – 13.0** inches of water or a range established during the latest stack test, the Permittee shall take reasonable response steps in accordance with Section C-Compliance Response Plan-Preparation, Implementation, Records and Reports. The Permittee shall record the water flow rate to the sinter plant discharge (breaker) scrubber used in conjunction with the sinter plant operations, at least once per shift when the breaker is in operation when venting to the atmosphere. When for any one reading, the flow rate of the scrubber is below the minimum rate of 200 gpm or a range established during the latest stack test, the Permittee shall take reasonable response steps in accordance with Section C-Compliance Response Plan-Preparation, Implementation, Records and Reports. A reading that is outside the ranges is not a deviation from this permit. Failure to take response steps in accordance with Section C-Compliance Response Plan-Preparation, Implementation, Records and Reports, shall be considered a violation of this permit.
6. Condition D.3.13 has been revised to incorporate parametric monitoring requirements consistent with an updated pressure drop range across the BOF reladle/desulfurization baghouse (S3B).

D.3.13 Baghouse Parametric Monitoring [326 IAC 2-7-6(1)][326 IAC 2-7-5(1)]

The Permittee shall record the total static pressure drop across the baghouse used in conjunction with the reladle/desulfurization operations (S3B), and the ladle metallurgical facility (LMF) operations (S3C) at least once per shift when the associated processes are in operation when venting to the atmosphere. When for any one reading, the pressure drop across the baghouse is outside the normal range of ~~4.0 to 12.0~~ **6.0 – 14.0** inches of water or a range established during the latest stack test, for the reladle/desulfurization operations (S3B) and 4.0 to 9.0 inches of water or a range established during the latest stack test for the ladle metallurgical facility (LMF) operations (S3C), the Permittee shall take reasonable response steps in accordance with Section C-Compliance Response Plan-Preparation, Implementation, Records and Reports. A reading that is outside the ranges is not a deviation from this permit. Failure to take response steps in accordance with Section C-Compliance Response Plan-Preparation, Implementation, Records and Reports, shall be considered a violation of this permit.

7. Section D.5 has been revised to reflect Boiler No. 7 and Boiler No. 8 have been removed from operation at ISG Indiana Harbor Inc.

SECTION D.5 FACILITY OPERATION CONDITION

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

(e) One (1) Sheet Mill Finishing operation, designated as No. 2 Sheet Mill, having a maximum capacity of 1,404,929 tons per year, comprised of the following facilities, fugitive sources, process equipment, and operational practices:

~~(3) Two (2) natural gas fired boilers designated as Boiler No. 7 and Boiler No. 8 (installed in 1955), having a combined heat input of 98 MMBtu per hour, with uncontrolled emissions exhausting to (S5C)~~

(4 3) Seven (7) space heaters (installed in 1968) having a combined heat input of 17.5 MMBtu per hour, with uncontrolled emissions exhausting to vent (V5B) to No. 2 Sheet Mill shop.

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

D.5.1 Particulate Matter [326 IAC 6-1-10.1(h)]

Pursuant to 326 IAC 6-1-10.1(h) (Lake County PM10 Emission Requirements) combustion from the No. 1 and No. 2 Galvanizing Line Flame Furnaces and the No. 1 and No. 2 Galvanizing Line Galvanizer Furnaces, ~~Boiler No. 7 and Boiler No. 8~~ at the No. 2 Sheet Mill and the seven (7) space heaters shall be restricted to the use of natural gas as only fuel and the total suspended particulate (TSP) and particulate matter (PM₁₀) emissions shall not exceed the following:

~~(c) The total suspended particulate emissions from Boiler No. 7 and Boiler No. 8 (S5C) shall not exceed 0.003 pounds per MMBtu and 0.290 pounds per one (1) hour period combined.~~

~~(d c) The total suspended particulate emissions from the seven (7) space heaters (V5B) shall not exceed 0.003 pounds per MMBtu and 0.050 pounds per one (1) hour period combined.~~

~~D.5.2 Sulfur Dioxide (SO₂) [326 IAC 7-4-1.1]~~

~~Pursuant to 326 IAC 7-4-1.1(c)(14)(B), the Boiler No. 7 and Boiler No. 8 (S5C) shall use natural gas only.~~

D.5.3 2 Opacity

D.5.4 3 Emission Offset [326 IAC 2-3]

D.5.5 4 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

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

D.5.6 5 Sulfur Dioxide (SO₂) Sampling and Analysis [326 IAC 7-4-1.1(d)]

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

D.5.7 6 Reporting Requirements

8. Section D.6 has been revised to reflect Three (3) Open Coil (Hydrogen) Annealing Furnaces have been removed from operation at ISG Indiana Harbor Inc.

SECTION D.6 FACILITY OPERATION CONDITIONS

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

(f) One (1) Sheet Mill Finishing operation, designated as No. 3 Sheet Mill, having a maximum capacity of 2,156,537 tons per year, comprised of the following facilities, fugitive sources, process equipment, and operational practices:

- ~~(4)~~ Three (3) Open Coil (Hydrogen) Annealing Furnaces (1-3), having a combined heat input of 10.5 MMBtu per hour, with uncontrolled emissions exhausting inside the building to vent (V6A)
- ~~(5)~~ 4 One (1) Pickle Line consisting of four (4) HCl process tanks and one (1) water rinse tank (installed in 1964), with acid fumes controlled by a scrubber system (14,000 acfm) comprised of tank hoods and ductwork connected to two (2) scrubbers (in series) exhausting through scrubber stack (S6A)
- ~~(6)~~ 5 One (1) Shot Blaster, used to put a matte finish on the surface of reconditioned rolls. Emissions are controlled by a small baghouse exhausting through vent (V6B) outside the building.
- ~~(7)~~ 6 One (1) tempering operation consisting of a 2-Stand Temper Mill with fugitive emissions exhausting inside the building.
- ~~(8)~~ 7 One (1) steel coil cold reduction operation consisting of one (1) 5- Stand Tandem Mill where steel coil thickness is reduced to final specification, with emissions exhausting through stack (S6B)
- ~~(9)~~ 8 Miscellaneous activities include two (2) steel sheet edge slitters, electrostatic oiling space heating and portable heating (to prevent equipment freezing).

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

D.6.4 Particulate Matter [326 IAC 6-1-10.1(h)]

Pursuant to 326 IAC 6-1-10.1(h) (Lake County PM10 Emission Requirements) the seven (7) single stack batch annealing furnaces **and** the eleven (11) multi-stack batch annealing furnaces, ~~and the three (3) open coil (hydrogen) annealing furnaces~~ shall fire natural gas only, and the total suspended particulate (TSP) emissions shall be limited as follows:

- ~~(c)~~ The total suspended particulate emissions from the three (3) open coil (hydrogen) annealing furnaces (V6A) shall not exceed 0.003 pounds per MMBtu and 0.031 pounds of TSP emissions emitted per one (1) hour period combined.

All other conditions of the permit shall remain unchanged and in effect. For your convenience, the entire revised Title V Operating Permit, with all modifications and amendments made to it, is being provided.

This decision is subject to the Indiana Administrative Orders and Procedures Act - IC 4-21.5-3-5. If you have any questions on this matter, please contact Jenny Acker, at (800) 451-6027, and ask for Jenny Acker or extension (2-8253), or dial (317) 232-8253.

Sincerely,

Original Signed By:
Kathy Moore, Section Chief
Permits Branch
Office of Air Quality

Attachments

JLA

cc: File - Lake County
Lake County Health Department
Northwest Regional Office
Air Compliance Section Inspector – Michael Hall
Compliance Data Section
Administrative and Development



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

PART 70 OPERATING PERMIT OFFICE OF AIR QUALITY

**ISG-Indiana Harbor, Inc.
3001 Dickey Road
East Chicago, Indiana 46312**

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

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

This permit is issued in accordance with 326 IAC 2 and 40 CFR 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 70.6, IC 13-15 and IC 13-17.

Operation Permit No.: T089-7099-00318	
Issued by: Original signed by Janet G. McCabe, Assistant Commissioner Office of Air Quality	Issuance Date: December 7, 2004 Expiration Date: December 7, 2009

First Administrative Amendment No.:089-15865-00318, issued May 2, 2002

Second Administrative Amendment No.: T089-21088-00318	Conditions Affected: A.3(e) and (f), D.1.11, D.1.16, D.2.12, D.3.13, Section D.5
Issued by: Original Signed By: Kathy Moore, Section Chief Office of Air Quality	Issuance Date: July 19, 2005

TABLE OF CONTENTS

A SOURCE SUMMARY

- A.1 General Information [326 IAC 2-7-4(c)][326 IAC 2-7-5(15)][326 IAC 2-7-1(22)]
- A.2 Part 70 Source Definition [326 IAC 2-7-1(22)]
- A.3 Emission Units and Pollution Control Equipment Summary [326 IAC 2-7-4(c)(3)]
[326 IAC 2-7-5(15)]
- A.4 Specifically Regulated Insignificant Activities [326 IAC 2-7-1(21)][326 IAC 2-7-4(c)] [326
IAC 2-7-5(15)]
- A.5 Part 70 Permit Applicability [326 IAC 2-7-2]

B GENERAL CONDITIONS

- B.1 Definitions [326 IAC 2-7-1]
- B.2 Permit Term [326 IAC 2-7-5(2)] [326 IAC 2-1.1-9.5]
- B.3 Enforceability [326 IAC 2-7-7]
- B.4 Termination of Right to Operate [326 IAC 2-7-10] [326 IAC 2-7-4(a)]
- B.5 Severability [326 IAC 2-7-5(5)]
- B.6 Property Rights or Exclusive Privilege [326 IAC 2-7-5(6)(D)]
- B.7 Duty to Provide Information [326 IAC 2-7-5(6)(E)]
- B.8 Certification [326 IAC 2-7-4(f)] [326 IAC 2-7-6(1)] [326 IAC 2-7-5(3)(C)]
- B.9 Annual Compliance Certification [326 IAC 2-7-6(5)]
- B.10 Preventive Maintenance Plan [326 IAC 2-7-5(1),(3)and (13)][326 IAC 2-7-6(1), (6)] [326
IAC 1-6-3]
- B.11 Emergency Provisions [326 IAC 2-7-16]
- B.12 Permit Shield [326 IAC 2-7-15] [326 IAC 2-7-20] [326 IAC 2-7-12]
- B.13 Prior Permits Superseded [326 IAC 2-1.1-9.5]
- B.14 Deviations from Permit Requirements and Conditions [326 IAC 2-7-5(3)(C)(ii)]
- B.15 Permit Modification, Reopening, Revocation and Reissuance, or Termination
[326 IAC 2-7-5(6)(C)] [326 IAC 2-7-8(a)] [326 IAC 2-7-9]
- B.16 Permit Renewal [326 IAC 2-7-4]
- B.17 Permit Amendment or Modification [326 IAC 2-7-11][326 IAC 2-7-12]
- B.18 Permit Revision Under Economic Incentives and Other Programs [326 IAC 2-7-5(8)]
[326 IAC 2-7-12 (b)(2)]
- B.19 Operational Flexibility [326 IAC 2-7-20] [326 IAC 2-7-10.5]
- B.20 Source Modification Requirement [326 IAC 2-7-10.5]
- B.21 Inspection and Entry [326 IAC 2-7-6] [IC 13-14-2-2][IC 13-30-3-1][13-17-3-2]
- B.22 Transfer of Ownership or Operational Control [326 IAC 2-7-11]
- B.23 Annual Fee Payment [326 IAC 2-7-19] [326 IAC 2-7-5(7)][326 IAC 2-1.1-7]
- B.24 Credible Evidence [326 IAC 2-7-5(3)][326 IAC 2-7-6][62 FR 8314]

C SOURCE OPERATION CONDITIONS

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

- C.1 Opacity [326 IAC 5-1]
- C.2 Open Burning [326 IAC 4-1] [IC 13-17-9]
- C.3 Incineration [326 IAC 4-2] [326 IAC 9-1-2]
- C.4 Fugitive Dust Emissions [326 IAC 6-4]
- C.5 Fugitive Dust Emissions [326 IAC 6-1-11.1]
- C.6 Operation of Equipment [326 IAC 2-7-6(6)]
- C.7 Stack Height [326 IAC 1-7]
- C.8 Asbestos Abatement Projects [326 IAC 14-10] [326 IAC 18] [40 CFR 61, Subpart M]

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

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

Compliance Requirements [326 IAC 2-1.1-11]

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

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 Continuous Compliance Plan [326 IAC 6-1-10.1(l)] [326 IAC 6-1-10.1(u)]
- C.13 Maintenance of Continuous Opacity Monitoring Equipment [326 IAC 2-7-5(3)(A)(iii)]
- C.14 Monitoring Methods [326 IAC 3][40 CFR 60][40 CFR 63]
- C.15 Pressure Gauge and Other Instrument Specifications [326 IAC 2-1.1-11]
[326 IAC 2-7-5(3)][326 IAC 2-7-6(1)]

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

- C.16 Emergency Reduction Plans [326 IAC 1-5-2] [326 IAC 1-5-3]
- C.17 Risk Management Plan [326 IAC 2-7-5(12)] [40 CFR 68]
- C.18 Compliance Response Plan - Preparation, Implementation, Records, and Reports
[326 IAC 2-7-5] [326 IAC 2-7-6]
- C.19 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.20 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.21 General Record Keeping Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-6]
- C.22 General Reporting Requirements [326 IAC 2-7-5(3)(C)] [326 IAC 2-1.1-11]

Stratospheric Ozone Protection

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

D.1 FACILITY OPERATION CONDITIONS – Blast Furnaces

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

- D.1.3 Lake County PM10 Emission Requirements [326 IAC 6-1-10.1(d)]
- D.1.4 Particulate Matter (PM) [326 IAC 6-1-2]
- D.1.5 Sulfur Dioxide (SO₂) [326 IAC 7-4-1.1(c)(14)(D) and 326 IAC 7-4-1.1(c)(14)(G)]
- D.1.6 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

Compliance Determination Requirements

- D.1.7 National Emission Standards for Hazardous Air Pollutants from Integrated Iron and Steel Manufacturing - Compliance Requirements for Blast Furnaces [40 CFR 63.7810(a)][40 CFR 63.7825][40 CFR 63.7826][40 CFR 63.7832] The Permittee must comply with these requirements on and after May 22, 2006.
- D.1.8 National Emission Standards for Hazardous Air Pollutants from Integrated Iron and Steel Manufacturing - Testing Requirements for Blast Furnaces [40 CFR 63.7820 through 63.7824] The Permittee must comply with these requirements on and after May 22, 2006.
- D.1.9 Control Device Operation

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

- D.1.10 Visible Emissions Notations [326 IAC 2-7-6(1)][326 IAC 2-7-5(1)]
- D.1.11 Parametric Monitoring [326 IAC 2-7-6(1)][326 IAC 2-7-5(1)]
- D.1.12 Baghouse Inspection [326 IAC 2-7-6(1)][326 IAC 2-7-5(1)]
- D.1.13 Broken or Failed Bag Detection [326 IAC 2-7-6(1)][326 IAC 2-7-5(1)]
- D.1.14 Sulfur Dioxide (SO₂) Sampling and Analysis [326 IAC 7-4-1.1(d)]

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

- D.1.15 National Emission Standards for Hazardous Air Pollutants from Integrated Iron and Steel Manufacturing - Record Keeping Requirements for Blast Furnaces [40 CFR 63.7810(b)] [40 CFR 63.7] The Permittee shall comply with these requirements on or after May 22, 2006.
- D.1.16 Record Keeping Requirements
- ~~D.1.17 National Emission Standards for Hazardous Air Pollutants from Integrated Iron and Steel Manufacturing - Reporting Requirements for Blast Furnaces [40 CFR 63.7835] [40 CFR 63.7840]~~
- D.1.18 Requirement to Submit a Significant Permit Modification Application [326 IAC 2-7-12] [326 IAC 2-7-5]
- D.1.19 Reporting Requirements

D.2 FACILITY OPERATION CONDITIONS – Sinter Plant

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

- D.2.1 General Provisions Relating to HAPs [326 IAC 20-1] [40 CFR 63, Subpart A] [able 4 to 40 CFR 63, Subpart FFFFF]
- D.2.2 National Emissions Standards for Hazardous Air pollutants from Integrated Iron and Steel Manufacturing - Emission Limitations for Sinter Plants [40 CFR 63, Subpart FFFFF]
- D.2.3 Particulate Matter [326 IAC 6-1-10.1(d)]
- D.2.4 Lake County Sulfur Dioxide (SO₂) Emission Limitations [326 IAC 7-4-1]
- D.2.5 Sinter Plant Volatile Organic Compounds (VOCs) [326 IAC 8-13-3]
- D.2.6 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

Compliance Determination Requirements

- D.2.7 National Emission Standards for Hazardous Air Pollutants from Integrated Iron and Steel Manufacturing - Compliance Requirements for Sinter Plants [40 CFR 63.7810(a)] [40 CFR 63.7825] [40 CFR 63.7826] [40 CFR 63.7832] The Permittee shall comply with these requirements on or after May 22, 2006.
- D.2.8 National Emission Standards for Hazardous Air Pollutants from Integrated Iron and Steel Manufacturing - Testing Requirements [40 CFR 63.7820 through 63.7824] The Permittee shall comply with these requirements on or after May 22, 2006.
- D.2.9 Testing Requirements [326 IAC 2-7-6(1), (6)]
- D.2.10 Particulate Matter (PM)
- D.2.11 Windbox Gas VOC [326 IAC 8-13-4]

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

- D.2.12 Windbox Gas VOC Emissions Monitoring [326 IAC 8-13-6]
- D.2.13 Visible Emissions Notations [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]
- D.2.14 Parametric Monitoring [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]
- D.2.15 Scrubber Inspection [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]
- D.2.16 Scrubber Failure Detection [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]
- D.2.17 Cyclone Inspection [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]
- D.2.18 Cyclone Failure Detection [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]
- D.2.19 Sulfur Dioxide (SO₂) Sampling and Analysis [326 IAC 7-4-1.1(d)]

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

- D.2.20 National Emission Standards for Hazardous Air Pollutants from Integrated Iron and Steel Manufacturing- Record Keeping Requirements for Sinter Plants [40 CFR 63.7810(b)] [40 CFR 3 Sinter Plant process and control equipment in accordance with 40 CFR 63.7810(b)] [40 CFR 63.7] The Permittee shall comply with these requirements on or after May 22, 2006.
- D.2.21 Record Keeping Requirements [326 IAC 8-13-3]
- D.2.22 Record Keeping Requirements
- D.2.23 National Emission Standards for Hazardous Air Pollutants from Integrated Iron and Steel Manufacturing- Reporting Requirements for Sinter Plants [40 CFR 63.7835] [40 CFR 63.7640]
- D.2.24 Requirements to Submit a Significant Permit Application [326 IAC 2-7-12] [326 IAC 2-7-5]

D.2.25 Reporting Requirements

D.3 FACILITY OPERATION CONDITIONS – Basic Oxygen Furnace Shop

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

- D.3.1 General Provisions Relating to HAPs [326 IAC 20-1][40 CFR 63, Subpart A] [Table 4 to 40 CFR 63, Subpart FFFFF]
- D.3.2 National Emissions Standards for Hazardous Air pollutants from Integrated Iron and Steel Manufacturing - Emission Limitations for Basic Oxygen Process Furnace (BOPF) [40 CFR 63, Subpart FFFFF]
- D.3.3 Lake County PM emission requirements [326 IAC 6-1-10.1(d)]
- D.3.4 Particulate Matter (PM) [326 IAC 6-1-2]
- D.3.5 Opacity [326 IAC 6-1-10.1(e)]
- D.3.6 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

Compliance Determination Requirements

- D.3.7 National Emission Standards for Hazardous Air Pollutants from Integrated Iron and Steel Manufacturing - Compliance Requirements for Basic Oxygen Process Furnace (BOPF) [40 CFR 63.7810(a)][40 CFR 63.7825] [40 CFR 63.7826][40 CFR 63.7832] The Permittee shall comply with these requirements on or after May 22, 2006
- D.3.8 National Emission Standards for Hazardous Air Pollutants from Integrated Iron and Steel Manufacturing -Testing Requirements [40 CFR 63.7820 through 63.7824] The Permittee shall comply with these requirements on or after May 22, 2006
- D.3.9 Testing Requirements [326 IAC 2-7-6(1), (6)][326 IAC 2-1.1-11]
- D.3.10 Particulate Matter (PM) & Carbon Monoxide (CO)

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

- D.3.11 Opacity Continuous Emission Monitoring [326 IAC 6-1-10.1(g)(2)]
- D.3.12 Visible Emissions Notations [326 IAC 2-7-6(1)][326 IAC 2-7-5(1)]
- D.3.13 Baghouse Parametric Monitoring [326 IAC 2-7-6(1)][326 IAC 2-7-5(1)]
- D.3.14 Baghouse Inspections [326 IAC 2-7-6(1)][326 IAC 2-7-5(1)]
- D.3.15 Broken or Failed Bag Detection [326 IAC 2-7-6(1)][326 IAC 2-7-5(1)]

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

- D.3.16 National Emission Standards for Hazardous Air Pollutants from Integrated Iron and Steel Manufacturing- Record Keeping Requirements for Basic Oxygen Process Furnace (BOPF) [40 CFR 63.7810(b)][40 CFR 3 Basic Oxygen Process Furnace (BOPF) process and control equipment in accordance with 40 CFR 63.7810(b)] [40 CFR 63.7] The Permittee shall comply with these requirements on or after May 22, 2006
- D.3.17 Record Keeping Requirements
- D.3.18 Reporting Requirements
- D.3.19 National Emission Standards for Hazardous Air Pollutants from Integrated Iron and Steel Manufacturing- Reporting Requirements for Basic Oxygen Process Furnace (BOPF) [40 CFR 63.7835][40 CFR 63.7640]
- D.3.20 Requirements to Submit a Significant Permit Application [326 IAC 2-7-12] [326 IAC 2-7-5]

D.4 FACILITY OPERATION CONDITIONS – 84” Hot Strip Mill

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

- D.4.1 Particulate Matter [326 IAC 6-1-10.1]
- D.4.2 Sulfur Dioxide (SO₂) [326 IAC 7-4-1.1(c)(14)(D)]
- D.4.3 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

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

- D.4.4 Visible Emissions Notations [326 IAC 2-7-6(1)][326 IAC 2-7-5(1)]
- D.4.5 Sulfur Dioxide (SO₂) Sampling and Analysis [326 IAC 7-4-1.1(d)]

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

D.4.6 Record Keeping Requirements

D.4.7 Reporting Requirements

D.5 FACILITY OPERATION CONDITIONS – No.2 Sheet Mill

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

D.5.1 Particulate Matter [326 IAC 6-1-10.1(h)]

D.5.2 Opacity

D.5.3 Emission Offset [326 IAC 2-3]

D.5.4 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

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

D.5.5 Sulfur Dioxide (SO₂) Sampling and Analysis [326 IAC 7-4-1.1(d)]

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

D.5.6 Reporting Requirements

D.6 FACILITY OPERATION CONDITIONS – No.3 Sheet Mill

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

D.6.1 General Provisions Relating to HAPs [326 IAC 20-1-1][40 CFR 63, Subpart A]

D.6.2 National Emission Standards for Hazardous Air Pollutants for Steel Pickling - HCl Process Facilities and Hydrochloric Acid Regeneration Plants [40 CFR 63, Subpart CCC]

D.6.3 NESHAP Maintenance Requirements [40 CFR 63.1160, Subpart CCC]

D.6.4 Particulate Matter [326 IAC 6-1-10.1(h)]

D.6.5 Particulate Matter (PM) [326 IAC 6-1-2]

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

Compliance Determination Requirements

D.6.7 Testing Requirements [40 CFR 63.1161]

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

D.6.8 Monitoring Requirements [40 CFR 63.1162]

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

D.6.9 Record Keeping Requirements

D.6.10 Reporting Requirements [40 CFR 63.1164]

D.7 FACILITY OPERATION CONDITIONS – Utilities

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

D.7.1 Particulate Matter [326 IAC 6-1-10.1(d)]

D.7.2 Sulfur Dioxide (SO₂) [326 IAC 7-4-1.1]

D.7.3 PSD and Emissions Offset Credit Limits [326 IAC 2-2 and 326 IAC 2-3]

D.7.4 Nitrogen Oxide Reduction program for Specific Source Categories [326 IAC 10-3]

D.7.5 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

Compliance Determination Requirements

D.7.6 Nitrogen Oxide Reduction program for Specific Source Categories [326 IAC 10-3]

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

D.7.7 Sulfur Dioxide (SO₂) Sampling and Analysis [326 IAC 7-4-1.1(d)]

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

D.7.8 Record Keeping Requirements

D.7.9 Reporting Requirements

D.8 FACILITY OPERATION CONDITIONS – Shops

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

- D.8.1 Gasoline Storage Tank Requirements [326 IAC 8-4-6]
- D.8.2 Gasoline Dispensing Facility Requirements [326 IAC 8-4-6]
- D.8.3 Volatile Organic Liquid Storage Vessels [326 IAC 8-9]

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

- D.8.4 Gasoline Dispensing Facility Monitoring Requirements [326 IAC 8-4-6]

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

- D.8.5 Record Keeping Requirements

D.9 FACILITY OPERATION CONDITIONS – Storage Vessels

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

- D.9.1 Volatile Organic Liquid Storage Vessels [326 IAC 8-9]
- D.9.2 NESHAP Operational and equipment standards [40 CFR 63.63.1159, Subpart CCC]

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

- D.9.3 Monitoring Requirements [40 CFR 63.1162]

Record Keeping and Reporting Requirements [326 IAC 2-8-4(3)] [326 IAC 2-8-16]

- D.9.4 Record Keeping Requirements

D.10 FACILITY OPERATION CONDITIONS – Insignificant Activities

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

- D.10.1 Nonattainment Area Particulate Limitations [326 IAC 6-1-2]
- D.10.2 Volatile Organic Liquid Storage Vessels [326 IAC 8-9-1]
- D.10.3 Volatile Organic Compounds (VOC) [326 IAC 8-3-2]
- D.10.4 Volatile Organic Compounds (VOC) [326 IAC 8-3-5]

Compliance Determination Requirement

- D.10.5 Particulate Control

Record Keeping and Reporting Requirements [326 IAC 2-8-4(3)] [326 IAC 2-8-16]

- D.10.6 Record Keeping Requirements
- D.10.7 Volatile Organic Compounds (VOC) [326 IAC 8-3-8] (Material requirements for cold cleaning degreasers)

D.11 FACILITY OPERATION CONDITIONS – Fugitives

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

- D.11.1 Particulate Matter (PM)[326 IAC 6-1-11.1]

Compliance Determination Requirements

- D.11.2 Particulate Matter (PM)

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

- D.11.3 Record Keeping Requirements
- D.11.4 Reporting Requirements

Certification
Emergency Occurrence Report
Semi-Annual Natural Gas Fired Boiler Certification
Quarterly Deviation and Compliance Monitoring Report

SECTION A

SOURCE SUMMARY

This permit is based on information requested by the Indiana Department of Environmental Management (IDEM), Office of Air Quality (OAQ). The information describing the source contained in conditions A.1, A.3, and A.4 is descriptive information and does not constitute enforceable conditions. However, the Permittee should be aware that a physical change or a change in the method of operation that may render this descriptive information obsolete or inaccurate may trigger requirements for the Permittee to obtain additional permits or seek modification of this permit pursuant to 326 IAC 2, or change other applicable requirements presented in the permit application.

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

The Permittee owns and operates a stationary integrated steel mill and finishing facility

Responsible Official:	General Manager, ISG Indiana Harbor Inc.
Source Address:	3001 Dickey Road, East Chicago 46312
Mailing Address:	3250 Interstate Drive, 2 nd Floor, Richfield, OH 44286-9000
General Source Phone Number:	(219) 391-2571
SIC Code:	3312
County Location:	Lake County
Source Location Status:	Nonattainment for SO ₂ , 1-hour and 8-hour ozone standard, Attainment for all other criteria pollutants
Source Status:	Part 70 Permit Program Major Source, under PSD and Emission Offset Rules; Major Source, Section 112 of the Clean Air Act 1 of 28 Source Categories under PSD and Emission Offset Rules

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

ISG-Indiana Harbor Inc. is an integrated steel mill consisting of a source with on-site contractors:

- (a) ISG-Indiana Harbor Inc. (Plant ID 089-00318), the primary operation, is located at, 3001 Dickey Road, East Chicago, Indiana and
- (b) Oil Tech, Inc (Plant ID 089-00375), the on-site contractor (a used oil recycling facility), is located at 3001 Dickey Road, East Chicago, Indiana;
- (c) International Mill Service (Plant ID 089-00353), the on-site contractor (a steel slab scarfer) is located 3001 Dickey Road, East Chicago, Indiana;
- (d) Edward Levy (Plant ID 089-00339), the on-site contractor (a slag processing facility), is located at 3001 Dickey Road, East Chicago, Indiana;
- (e) Ironside Energy, LLC (Plant ID 089-00448), the on-site contractor (an industrial steam and electric power cogeneration plant), is located at 3001 Dickey Road, East Chicago, Indiana
- (f) Heckett Multiserv (Plant ID 089-00341), the on-site contractor (a slag and kish processing plant), is located at East Chicago, Indiana;

IDEM has determined that ISG-Indiana Harbor Inc. and each of the on-site contractors are under the common control of ISG-Indiana Harbor Inc. These plants are considered one source due to contractual control. Therefore, the term "source" in the Part 70 documents refers to both ISG-Indiana Harbor Inc. and the on-site contractors as one source.

Separate Part 70 permits will be issued to ISG-Indiana Harbor Inc. and each on-site contractor, solely for administrative purposes.

Company Name	TV Permit Number
ISG-Indiana Harbor, Inc.	089-7099-00318
Oil Technology	089-7517-00375
International Mill Service	089-7562-00353
Edward Levy	089-6260-00339
Ironside Energy	089-11557-00448
Heckett Multiserv	089-7066-00341

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

ISG-Indiana Harbor Inc. consists of the following permitted emission units and pollution control devices:

- (a) Two (2) Blast Furnaces, designated as Blast Furnace No. 3 and Blast Furnace No. 4, comprised of the following facilities, process equipment, and operational practices:**
- (1) No. 3 Blast Furnace, with a maximum capacity of 4,555,200 tons raw material per year, including an integral gas cleaning system consisting of a dust catcher, separator, two scrubbers (primary and secondary) and one cooling tower, with excess gas exhausting through a flare at stack (S1E); installed in 1953.
 - (2) No. 3 Blast Furnace Stoves, designated as stoves 31, 32, and 33, exhausting to the combustion stack (S1A) with a heat input rate of 441 MMBtu/hr and installed in 1953
 - (3) No. 3 Blast Furnace Casthouse with Passive Emission Control (PEC) to suppress fumes in the casthouse, consisting of slag and iron runner covers along with natural gas flame suppression exhausting to the No. 3 Blast Furnace Casthouse Roof Monitor (V1A);
 - (4) No. 4 Blast Furnace, with a maximum capacity of 5,490,836 tons raw material per year, including an integral gas cleaning system consisting of a dust catcher, separator, two scrubbers (primary and secondary) and one cooling tower with excess gas exhausting through a flare at stack-(S1D); installed in 1967
 - (5) No. 4 Blast Furnace Stoves, designated as stoves 41, 42, and 43, exhausting to the combustion stack (S1C) with a heat input rate of 486 MMBtu/hr and installed in 1967
 - (6) No. 4 Blast Furnace Casthouse with Passive Emission Control (PEC) to suppress fumes in the casthouse, consisting of slag and iron runner covers along with natural gas flame suppression exhausting to the No. 4 Blast Furnace Casthouse Roof Monitor (V1B)
 - (7) No. 4 Blast Furnace Casthouse Baghouse used to control emissions from the casthouse with an airflow rate of 147,000 acfm exhausting at stack (S1B) when operating one (1) fan. No. 4 Blast Furnace Casthouse Baghouse has an air flow rate of 240,000 acfm when operating two (2) fans.
 - (8) Miscellaneous equipment for handling of raw materials, including but not limited to, coke, iron ore pellets, limestone, slag and sinter.
- (b) One (1) Sinter Plant with a maximum raw material usage rate of 2,592,782 tons per year and a maximum annual production capacity of 2,119,920 tons of sinter per year,**

comprised of the following facilities, fugitive sources, process equipment, and operational practices: (Installed in 1958)

- (1) Raw material handling area consisting of material feeders (storage bins), conveyors, a pug mill and hearth layer returns from screening that combines these raw materials to create a uniform mixed burden that is deposited on the sinter strand.
- (2) One (1) natural gas fired ignition furnace used to ignite the surface of the mixed burden deposited on the sinter strand.
- (3) One (1) sinter plant main windbox, with twenty-one (21) vacuum chambers and emissions controlled by drop- out boxes, multi-cyclones (6 units), settling chamber and a wet venturi scrubber (containing chevrons) having a flow rate of 335,000 acfm, exhausting to stack-(S2A)
- (4) One (1) sinter plant discharge end (breaker), with a hood to capture light dust and controlled by a wet Venturi scrubber having a flow rate of 100,400 acfm, exhausting to stack (S2B)
- (5) One (1) Sinter Cooler and sinter product screening station

(c) Basic Oxygen Furnace (BOF) Shop, comprised of the following facilities, process equipment, and operational practices:

- (1) One (1) Hot Metal Reladle/Desulf Complex consisting of two (2) reladle stations, two (2) desulfurization stations and two (2) slag skimming stations, installed in 1982, having a maximum capacity of 5,630,208 tons per year of hot metal and sulfur scavenger. Emissions from all stations are controlled by a baghouse, designated as Baghouse No. 1 with captured emissions exhausting to stack (S3B) and uncaptured/fugitive emissions exhausting through a roof monitor (V3B)
- (2) One (1) Basic Oxygen Furnace (BOF) Complex, consisting of two (2) basic oxygen furnaces, designated as No. 1 and No. 2 Furnace, installed in 1968, having a combined maximum capacity of 7,456,512 tons of hot metal, flux, alloys, and scrap per year. Emissions from furnace operations such as charging, oxygen blowing and tapping are controlled by an electrostatic precipitator, with captured emissions exhausting to stack S3A and uncaptured/fugitive emissions exhausting through a roof monitor at vent V3A;
- (3) One (1) Ladle Metallurgical Facility (LMF), installed in 1988, consisting of (2) heating stations, having a combined maximum capacity of 5,606,400 tons of hot metal, flux and alloys per year. Emissions from LMF operations such as argon stirring, heating, and alloy addition, are controlled by a baghouse, designated as Baghouse No. 5 (LMF), with captured emissions exhausting to stack (S3C) and uncaptured/fugitive emissions exhausting through a roof monitor at vent (V3C)
- (4) One (1) Vacuum Degassing Facility (decarbonization), installed in 1988, with carbon monoxide (CO) emissions controlled by an integral CO scrubber and exhausting to the flare at stack (S3D)
- (5) One (1) Continuous Casting Complex consisting of two (2) single-strand slab casting machines, each with its own ladle turrent, tundish and mold. Molten steel from the LMF is directed into the turrent than cooled in the mold to begin the solidification process. The steel continues to solidify as it passes through the water spray cooling system to produce slabs that are finally cut to length using an acetylene torch-cutting machine. Emissions from water-cooling are directed to stacks (S3E/F).

- (6) Lime handling operations including trailer unloading and lime handling from silos with emissions captured by single compartment, 16 bag filter vents;
 - (7) Miscellaneous dust removal process consisting of recovered BOF ESP dust, baghouse dust, handling and conditioning equipment, silos and pug mill; (fugitives)
 - (8) Miscellaneous natural gas combustion consisting of ladle preheat, ladle drying, space heaters, tundish preheat and drying, tundish nozzle preheat, ladle shroud preheat, and slab torch cutting; and
 - (9) Miscellaneous material handling.
- (d) 84 Inch Hot Strip Mill, comprising the following facilities, process equipment, and operational practices:**
- (1) Three (3) Reheat Furnaces identified as Nos. 1, 2 and 3, installed in 1968, having a heat input rate of 427 MMBtus per hour each.
 - (A) No. 1 Reheat Furnace, having the ability to burn natural gas and fuel oil with emissions exhausting through stack S4A.
 - (B) No. 2 Reheat Furnace, having the ability to burn natural gas and fuel oil with emissions exhausting through stack S4B.
 - (C) No. 3 Reheat Furnace, having the ability to burn natural gas and fuel oil with emissions exhausting through stack S4C.
 - (2) One (1) Hot Rolling Mill, where steel slabs from the reheat furnaces are converted to hot bands (steel coils). The mill consists of scale breakers, six (6) roughing stands, a crop shear, seven (7) finishing stands, a cooling table and three (3) downcoilers. The mill fugitive emissions from these processes vent inside the building (V4A).
 - (3) One (1), two (2) stand temper mill.
 - (4) Twenty-eight (28) natural gas space heaters having a combined heat input rate of 84 MMBtu/hr.
- (e) One (1) Sheet Mill Finishing operation, designated as No. 2 Sheet Mill, having a maximum capacity of 1,404,929 tons per year, comprised of the following facilities, fugitive sources, process equipment, and operational practices:**
- (1) No. 1 Galvanizing Line (installed in 1959) consisting of:
 - (A) Flame Furnace having heat input rate of 18 MMBtu/hr with uncontrolled emissions exhausting through vent (V5A) to No. 2 Sheet Mill shop
 - (B) Galvanize furnace having a heat input rate of 37 MMBtu/hr with uncontrolled emissions exhausting through vent (V5A) to No. 2 Sheet Mill shop
 - (C) Zinc coating pot with uncontrolled fugitive emissions exhausting into the No. 2 Sheet Mill shop
 - (D) Chromic Acid Bath with water vapor exhausting into the No. 2 Sheet Mill shop

- (E) Hot air dryer exhausting to No. 2 Sheet Mill shop
- (2) No. 2 Galvanizing Line (installed in 1988) consisting of:
 - (A) Flame Furnace having heat input rate of 150 MMBtu/hr with uncontrolled emissions exhausting through stack S5B.
 - (B) Galvanize furnace having a heat input rate of 54 MMBtu/hr with uncontrolled emissions exhausting through vent (V5A) to No. 2 Sheet Mill shop
 - (C) One (1) natural gas fired Edge Flame Burner on line No. 2, with uncontrolled emissions venting into the No. 2 Sheet Mill shop
 - (D) Zinc coating pot with uncontrolled fugitive emissions exhausting into the No. 2 Sheet Mill shop
 - (E) One (1) natural gas fired Selas Furnace, with uncontrolled emissions venting through vent (V5A) to No. 2 Sheet Mill shop
 - (F) Hot air dryers exhausting to No. 2 Sheet Mill shop
 - (G) Chromic Acid Bath with water vapor exhausting into the No. 2 Sheet Mill shop
 - (H) Temper Mill
- (3) Seven (7) space heaters (installed in 1968) having a combined heat input of 17.5 MMBtu per hour, with uncontrolled emissions exhausting to vent (V5B) to No. 2 Sheet Mill shop.
- (f) One (1) Sheet Mill Finishing operation, designated as No. 3 Sheet Mill, having a maximum capacity of 2,156,537 tons per year, comprised of the following facilities, fugitive sources, process equipment, and operational practices:**
 - (1) Seven (7) Single Stack Batch Annealing Furnaces (1-7) (installed in 1965), having a combined heat input of 24.5 MMBtu per hour, with uncontrolled emissions exhausting inside the building to vent (V6A)
 - (2) Eleven (11) Four-Stack Batch Annealing Furnaces (1-11)(installed in 1966), having a combined heat input of 176 MMBtu per hour, with uncontrolled emissions exhausting inside the building to vent (V6A)
 - (3) One (1) Four-Stack Batch Annealing Furnace (13) (installed in 1998) with a heat input capacity of 10 MMBtu per hour, with uncontrolled emissions exhausting inside the building to vent (V6A)
 - (4) One (1) Pickle Line consisting of four (4) HCl process tanks and one (1) water rinse tank (installed in 1964), with acid fumes controlled by a scrubber system (14,000 acfm) comprised of tank hoods and ductwork connected to two (2) scrubbers (in series) exhausting through scrubber stack (S6A)
 - (5) One (1) Shot Blaster, used to put a matte finish on the surface of reconditioned rolls. Emissions are controlled by a small baghouse exhausting through vent (V6B) outside the building.
 - (6) One (1) tempering operation consisting of a 2-Stand Temper Mill with fugitive emissions exhausting inside the building.

- (7) One (1) steel coil cold reduction operation consisting of one (1) 5- Stand Tandem Mill where steel coil thickness is reduced to final specification, with emissions exhausting through stack (S6B)
- (8) Miscellaneous activities include two (2) steel sheet edge slitters, electrostatic oiling space heating and portable heating (to prevent equipment freezing).

(g) Utilities comprised of the following facilities, process equipment, and operational practices:

- (1) No. 5 Boiler, with a heat input rate of 454 MMBtu/hr fired by blast furnace gas, natural gas and No. 6 fuel oil exhausting through stacks S8C/D, installed in 1952.
- (2) No. 6 Boiler, with a heat input rate of 454 MMBtu/hr fired by blast furnace gas, natural gas and No. 6 fuel oil exhausting through stack S8E, installed in 1956.
- (3) No. 7 Boiler, with a heat input rate of 454 MMBtu/hr fired by blast furnace gas, natural gas and No. 6 fuel oil exhausting through stack S8F, installed in 1956
- (4) No. 8 Boiler, with a heat input rate of 1090 MMBtu/hr fired by blast furnace gas, natural gas and No. 6 fuel oil exhausting through stack S8G, installed in 1967

(h) Shops*

- (1) Machine Shop
- (2) Refrigeration Shop
- (3) Electrical Shop
- (4) Bridge Shop
- (5) Pipe Shop
- (6) Line Shop
- (7) Fabrication Shop
- (8) Carpenter shop
- (9) Paint Shop and Paint Building
- (10) Mason Shop
- (11) Transportation Shop
 - (A) Gasoline Dispensing Facility with 10,000 gallon capacity Storage Tank (T4A22) (162, 504 gal/yr throughput), installed in 1988
 - (B) Two (2) Diesel Fuel Storage Tanks (T-4A7 & T- 4A8) with a 10,000 gallon storage capacity.
- (12) Locomotive Shop including Railcar and Yard Storage

*the activities performed in the shops are listed in the insignificant activities

(i) Storage Vessels: (all tanks installed before 1975)

- (1) One (1) 400,000 gallon storage tank containing #6 fuel oil (T4F24)
- (2) One (1) 70,000 gallon storage tank containing #6 fuel oil (T4A1)
- (3) One (1) 25,000 gallon diesel fuel storage tank (T4A13)
- (4) One (1) 2,000,000 gallon storage tank containing #6 fuel oil (T4A4)
- (5) One (1) 200,000 gallon storage tank containing #6 fuel oil (T4A5)
- (6) One (1) 3,400,000 gallon storage tank containing #6 fuel oil (T4C9)
- (7) One (1) 3,400,000 gallon storage tank containing #6 fuel oil (T4A C10)
- (8) Three (3) 5,000 gallon bleach storage tanks (TR-05, TR-06, TR-07)
- (9) Two (2) 5,000 gallon storage tanks containing hydrochloric acid (HCl) (TR-22, TR-23)
- (10) One (1) 5,000 gallon storage tanks containing ethylene glycol (T4E15)
- (11) Two (2) 30,000 gallon storage tank containing hydrochloric acid (HCl) (T-238, T-239)
- (12) One (1) 8,000 gallon diesel fuel tank (T-4F95)

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

The source also consists of the following insignificant activities, as defined in 326 IAC 2-7-1(21):

- (a) A petroleum fuel, other than gasoline, dispensing facility having a storage capacity less than or equal to 10,500 gallons, and dispensing less than or equal to 230,000 gallons per month. [326 IAC 8-9-1]
- (b) The following VOC and HAP storage containers:
 - (1) Storage tanks with capacity less than or equal to 1,000 gallons and annual throughput less than 12,000 gallons. [326 IAC 8-9-1]
- (c) Degreasing operations that do not exceed 145 gallons per 12 months, except if subject to 326 IAC 20-6. [326 IAC 8-3-2] [326 IAC 8-3-5]
- (d) The following equipment related to manufacturing activities not resulting in the emission of HAPs: brazing equipment, cutting torches, soldering equipment, welding equipment. [326 IAC 6-1-2]
- (e) Grinding and machining operations controlled with fabric filters, scrubbers, mist collectors, wet collectors and electrostatic precipitators with a design grain loading of less than or equal to 0.03 grains per actual cubic foot and a gas flow rate less than or equal to 4000 actual cubic feet per minute, including the following: deburring; buffing; polishing; abrasive blasting; pneumatic conveying; and woodworking operations. [326 IAC 6-1-2]

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

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

- (a) It is a major source, as defined in 326 IAC 2-7-1(22);
- (b) It is a source in a source category designated by the United States Environmental

Protection Agency (U.S. EPA) under 40 CFR 70.3 (Part 70 - Applicability).

SECTION B

GENERAL CONDITIONS

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

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

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

This permit is issued for a fixed term of five (5) years from the issuance date of this permit, as determined in accordance with IC 4-21.5-3-5(f) and IC 13-15-5-3. Subsequent revisions, modifications, or amendments of this permit do not affect the expiration date.

B.3 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.4 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.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, with each submittal requiring certification.
- (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. The initial certification shall cover the time period from the date of final permit issuance through December 31 of the same year. All subsequent certifications shall cover the time period from January 1 to December 31 of the previous year, and shall be submitted in letter form no later than April 15 of each year to:

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

and

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

- (b) The annual compliance certification report required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ, on or before the date it is due.
- (c) The annual compliance certification report shall include the following:
- (1) The appropriate identification of each term or condition of this permit that is the basis of the certification;
 - (2) The compliance status;
 - (3) Whether compliance was continuous or intermittent;
 - (4) The methods used for determining the compliance status of the source, currently and over the reporting period consistent with 326 IAC 2-7-5(3); and
 - (5) Such other facts, as specified in Sections D of this permit, as IDEM, OAQ, may require to determine the compliance status of the source.

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

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

- (a) If required by specific condition(s) in Section D of this permit, the Permittee shall prepare and maintain Preventive Maintenance Plans (PMPs) within ninety (90) days after issuance of this permit, including the following information on each facility:
- (1) Identification of the individual(s) responsible for inspecting, maintaining, and repairing emission control devices;
 - (2) A description of the items or conditions that will be inspected and the inspection schedule for said items or conditions; and
 - (3) Identification and quantification of the replacement parts that will be maintained in inventory for quick replacement.

If, due to circumstances beyond the Permittee's control, the PMPs cannot be prepared and

maintained within the above time frame, the Permittee may extend the date an additional ninety (90) days provided the Permittee notifies:

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

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

- (b) The Permittee shall implement the PMPs, including any required record keeping as necessary to ensure that failure to implement a PMP does not cause or contribute to an exceedance of any limitation on emissions or potential to emit.
- (c) A copy of the PMPs shall be submitted to IDEM, OAQ, upon request and within a reasonable time, and shall be subject to review and approval by IDEM, OAQ. IDEM, OAQ, may require the Permittee to revise its PMPs whenever lack of proper maintenance causes or is the primary contributor to an exceedance of any limitation on emissions or potential to emit. The PMP does not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).
- (d) To the extent the Permittee is required by 40 CFR 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.
- (b) An emergency, as defined in 326 IAC 2-7-1(12), constitutes an affirmative defense to an action brought for noncompliance with a technology-based emission limitation if the affirmative defense of an emergency is demonstrated through properly signed, contemporaneous operating logs or other relevant evidence that describe the following:
 - (1) An emergency occurred and the Permittee can, to the extent possible, identify the causes of the emergency;
 - (2) The permitted facility was at the time being properly operated;
 - (3) During the period of an emergency, the Permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards or other requirements in this permit;
 - (4) For each emergency lasting one (1) hour or more, the Permittee notified IDEM, OAQ, and Northwest Regional Office, within four (4) daytime business hours after the beginning of the emergency, or after the emergency was discovered or reasonably should have been discovered;

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

Telephone Number: 317-233-5674 (ask for Compliance Section)

Facsimile Number: 317-233-5967

Northwest Regional Office telephone number: 219-757-0265

Northwest Regional Office Facsimile Number: 219-757-0267

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

facsimile to:

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

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

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

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

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

- (6) The Permittee immediately took all reasonable steps to correct the emergency.
- (c) In any enforcement proceeding, the Permittee seeking to establish the occurrence of an emergency has the burden of proof.
- (d) This emergency provision supersedes 326 IAC 1-6 (Malfunctions). This permit condition is in addition to any emergency or upset provision contained in any applicable requirement.
- (e) IDEM, OAQ, may require that the Preventive Maintenance Plans required under 326 IAC 2-7-4(c)(9) be revised in response to an emergency.
- (f) Failure to notify IDEM, OAQ, by telephone or facsimile of an emergency lasting more than one (1) hour in accordance with (b)(4) and (5) of this condition shall constitute a violation of 326 IAC 2-7 and any other applicable rules.
- (g) If the emergency situation causes a deviation from a technology-based limit, the Permittee may continue to operate the affected emitting facilities during the emergency provided the Permittee immediately takes all reasonable steps to correct the emergency and minimize emissions.
- (h) The Permittee shall include all emergencies in the Quarterly Deviation and Compliance Monitoring Report.

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

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

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

- (b) If, after issuance of this permit, it is determined that the permit is in nonconformance with an applicable requirement that applied to the source on the date of permit issuance, IDEM, OAQ, shall immediately take steps to reopen and revise this permit and issue a compliance order to the Permittee to ensure expeditious compliance with the applicable requirement until the permit is reissued. The permit shield shall continue in effect so long as the Permittee is in compliance with the compliance order.
- (c) No permit shield shall apply to any permit term or condition that is determined after issuance of this permit to have been based on erroneous information supplied in the permit application. Erroneous information means information that the Permittee knew to be false, or in the exercise of reasonable care should have been known to be false, at the time the information was submitted.
- (d) Nothing in 326 IAC 2-7-15 or in this permit shall alter or affect the following:
 - (1) The provisions of Section 303 of the Clean Air Act (emergency orders), including the authority of the U.S. EPA under Section 303 of the Clean Air Act;
 - (2) The liability of the Permittee for any violation of applicable requirements prior to or at the time of this permit's issuance;
 - (3) The applicable requirements of the acid rain program, consistent with Section 408(a) of the Clean Air Act; and
 - (4) The ability of U.S. EPA to obtain information from the Permittee under Section 114 of the Clean Air Act.
- (e) This permit shield is not applicable to any change made under 326 IAC 2-7-20(b)(2) (Sections 502(b)(10) of the Clean Air Act changes) and 326 IAC 2-7-20(c)(2) (trading based on State Implementation Plan (SIP) provisions).
- (f) This permit shield is not applicable to modifications eligible for group processing until after IDEM, OAQ, has issued the modifications. [326 IAC 2-7-12(c)(7)]
- (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]

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

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

- (a) Deviations from any permit requirements (for emergencies see Section B - Emergency

Provisions), the probable cause of such deviations, and any response steps or preventive measures taken shall be reported to:

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

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

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

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

B.15 Permit Modification, Reopening, Revocation and Reissuance, or Termination [326 IAC 2-7-5(6)(C)] [326 IAC 2-7-8(a)] [326 IAC 2-7-9]

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

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

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

Request for renewal shall be submitted to:

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

- (b) Timely Submittal of Permit Renewal [326 IAC 2-7-4(a)(1)(D)]
- (1) A timely renewal application is one that is:
- (A) Submitted at least nine (9) months prior to the date of the expiration of this permit; and
- (B) If the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ, on or before the date it is due.
- (2) If IDEM, OAQ, upon receiving a timely and complete permit application, fails to issue or deny the permit renewal prior to the expiration date of this permit, this existing permit shall not expire and all terms and conditions shall continue in effect, including any permit shield provided in 326 IAC 2-7-15, until the renewal permit has been issued or denied.
- (c) Right to Operate After Application for Renewal [326 IAC 2-7-3]
If the Permittee submits a timely and complete application for renewal of this permit, the source's failure to have a permit is not a violation of 326 IAC 2-7 until IDEM, OAQ, takes final action on the renewal application, except that this protection shall cease to apply if, subsequent to the completeness determination, the Permittee fails to submit by the deadline specified in writing by IDEM, OAQ, any additional information identified as being needed to process the application.
- (d) United States Environmental Protection Agency Authority [326 IAC 2-7-8(e)]
If IDEM, OAQ, fails to act in a timely way on a Part 70 permit renewal, the U.S. EPA may invoke its authority under Section 505(e) of the Clean Air Act to terminate or revoke and reissue a Part 70 permit.

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

- (a) Permit amendments and modifications are governed by the requirements of 326 IAC 2-7-11 or 326 IAC 2-7-12 whenever the Permittee seeks to amend or modify this permit.
- (b) Any application requesting an amendment or modification of this permit shall be submitted to:
- Indiana Department of Environmental Management
Permits Branch, Office of Air Quality
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015
- Any such application shall be certified by the "responsible official" as defined by 326 IAC 2-7-1(34).
- (c) The Permittee may implement administrative amendment changes addressed in the request for an administrative amendment immediately upon submittal of the request. [326 IAC 2-7-11(c)(3)]
- (d) No permit amendment or modification is required for the addition, operation or removal of a

nonroad engine, as defined in 40 CFR 89.2.

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

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

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

- (a) The Permittee may make any change or changes at the source that are described in 326 IAC 2-7-20(b), (c), or (e), without a prior permit revision, if each of the following conditions is met:
 - (1) The changes are not modifications under any provision of Title I of the Clean Air Act;
 - (2) Any preconstruction approval required by 326 IAC 2-7-10.5 has been obtained;
 - (3) The changes do not result in emissions which exceed the emissions allowable under this permit (whether expressed herein as a rate of emissions or in terms of total emissions);
 - (4) The Permittee notifies the:

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

and

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

in advance of the change by written notification at least ten (10) days in advance of the proposed change. The Permittee shall attach every such notice to the Permittee's copy of this permit; and
 - (5) The Permittee maintains records on-site which document, on a rolling five (5) year basis, all such changes and emissions trading that are subject to 326 IAC 2-7-20(b), (c), or (e) and makes such records available, upon reasonable request, for public review.

Such records shall consist of all information required to be submitted to IDEM, OAQ, in the notices specified in 326 IAC 2-7-20(b)(1), (c)(1), and (e)(2).
- (b) The Permittee may make Section 502(b)(10) of the Clean Air Act changes (this term is defined at 326 IAC 2-7-1(36)) without a permit revision, subject to the constraint of 326 IAC 2-7-20(a). For each such Section 502(b)(10) of the Clean Air Act change, the required written notification shall include the following:

- (1) A brief description of the change within the source;
 - (2) The date on which the change will occur;
 - (3) Any change in emissions; and
 - (4) Any permit term or condition that is no longer applicable as a result of the change. The notification, which shall be submitted, is not considered an application form, report or compliance certification. Therefore, the notification by the Permittee does not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).
- (c) Emission Trades [326 IAC 2-7-20(c)]
The Permittee may trade increases and decreases in emissions in the source, where the applicable SIP provides for such emission trades without requiring a permit revision, subject to the constraints of Section (a) of this condition and those in 326 IAC 2-7-20(c).
- (d) Alternative Operating Scenarios [326 IAC 2-7-20(d)]
The Permittee may make changes at the source within the range of alternative operating scenarios that are described in the terms and conditions of this permit in accordance with 326 IAC 2-7-5(9). No prior notification of IDEM, OAQ, or U.S. EPA is required.

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

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

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

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

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

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

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

shall contain a written agreement containing a specific date for transfer of permit responsibility, coverage and liability between the current and new Permittee. The application shall be submitted to:

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

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

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

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

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

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

Notwithstanding the conditions of this permit that state specific methods that may be used to demonstrate compliance with, or a violation of, applicable requirements, any person (including the Permittee) may also use other credible evidence to demonstrate compliance with, or a violation of, any term or condition of this permit.

SECTION C SOURCE OPERATION CONDITIONS

Entire Source

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

C.1 Opacity [326 IAC 5-1]

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

- (a) Opacity shall not exceed an average of twenty percent (20%) 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.2 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.3 Incineration [326 IAC 4-2] [326 IAC 9-1-2]

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

C.4 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).

C.5 Fugitive Dust Emissions [326 IAC 6-1-11.1]

- (a) Pursuant to 326 IAC 6-1-11.1 (Lake County Fugitive Particulate Matter Control Requirements), the particulate matter emissions from source wide activities shall meet the following requirements:
 - (1) The average instantaneous opacity of fugitive particulate emissions from a paved road shall not exceed ten percent (10%).
 - (2) The average instantaneous opacity of fugitive particulate emissions from an unpaved road shall not exceed ten percent (10%).
 - (3) The average instantaneous opacity of fugitive particulate emissions from batch transfer shall not exceed ten percent (10%). Where adequate wetting of the material for fugitive particulate emissions control is prohibitive to further processing or reuse of the material, the opacity shall not exceed ten percent (10%) three (3) minute average. This includes material transfer to the initial hopper of a material processing facility as defined in 326 IAC 6-1-11.1(c) or material transfer for transportation within or outside the source property including, but not limited to, the following:
 - (i) Transfer of slag product for use by asphalt plants:
 - (A) From a storage pile to a front end loader; and

- (B) From a front end loader to a truck.
- (ii) Transfer of sinter blend for use at the sinter plant:
 - (A) From a storage pile to a front end loader;
 - (B) From a front end loader to a truck; and
 - (C) From a truck to the initial processing point
- (iii) Transfer of coal for use at a coal processing line:
 - (A) From a storage pile to a front end loader; and
 - (B) From a front end loader to the initial hopper of a coal processing line.

Compliance with any operation lasting less than three minutes shall be determined as an average of consecutive operations recorded at fifteen second intervals for the duration of the operation.

- (4) The opacity of fugitive particulate emissions from continuous transfer of material onto and out of storage piles shall not exceed ten percent (10%) on a three (3) minute average.
- (5) Wind erosion from storage piles and exposed areas.
The opacity of fugitive particulate emissions from storage piles shall not exceed ten percent (10%) on a six (6) minute average. These limitations may not apply during periods when application of fugitive particulate control measures are either ineffective or unreasonable due to sustained very high wind speeds. During such periods, the Permittee must continue to implement all reasonable fugitive particulate control measures and maintain records documenting the application of measures and the basis for a claim that meeting the opacity limitation was not reasonable given prevailing wind conditions.
- (6) There shall be a zero (0) percent frequency of visible emission observations of a material during the in-plant transportation of material by truck or rail at any time. Material transported by truck or rail that is enclosed and covered shall be considered in compliance with the in-plant transportation requirement.
- (7) The opacity of fugitive particulate emissions from the inplant transportation of material by front end loaders and skip hoists shall not exceed ten percent (10%).
- (8) There shall be a zero (0) percent frequency of visible emission observations from a building enclosing all or part of the material processing equipment, except from a vent in the building.
- (9) The PM10 emissions from building vents shall not exceed twenty-two-thousandths (0.022) grains per dry standard cubic foot and ten percent (10%) opacity.
- (10) The opacity of particulate emissions from dust handling equipment shall not exceed ten percent (10%).
- (11) Any facility or operation not specified in 326 IAC 6-1-11.1(d) shall meet a twenty percent (20%), three (3) minute average opacity standard.
- (12) PM10 emissions from each material processing stack shall not exceed 0.022 grains per dry standard cubic foot and ten percent (10%) opacity

- (13) Fugitive particulate matter from the material processing facilities except at a crusher in which a capture system is not used shall not exceed ten percent (10%) opacity.
- (14) Fugitive particulate matter from a crusher in which a capture system is not used shall not exceed fifteen percent (15%) opacity.
- (15) Slag and kish handling activities at integrated iron and steel plants shall comply with the following particulate emissions limits:
 - (A) The opacity of fugitive particulate emissions from transfer from pots and trucks into pits shall not exceed twenty percent (20%) on a six (6) minute average.
 - (B) The opacity of fugitive particulate emissions from transfer from pits into front end loaders and from transfer from front end loaders into trucks shall comply with the fugitive particulate emission limits in 326 IAC 6-1-11.1(d)(9).

Material processing facilities include crushers, screens, grinders, mixers, dryers, belt conveyors, bucket elevators, bagging operations, storage bins, and truck or railroad car loading stations.

Opacity shall be determined by the procedures identified in 326 IAC 6-1-11.1(d) (1) through (9). The Permittee shall achieve these limits by controlling fugitive particulate matter emissions according to the Fugitive Dust Control Plan, submitted on December 15, 1993 and revised on August 15, 2002.

- (b) The source is subject to 326 IAC 6-1-11.2 (Lake County Particulate Matter Contingency Measures) because it is subject to the requirements of 326 IAC 6-1-11.1 and 326 IAC 6-1-10.1(d). Pursuant to this rule, the source shall comply with parts (h), (i), (k), (l), (m), (o), (p) and (q) of this rule.

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

Except as otherwise provided by statute or rule, or in this permit, all air pollution control equipment listed in this permit and used to comply with an applicable requirement shall be operated at all times that the emission units vented to the control equipment are in operation.

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

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

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

- (a) Notification requirements apply to each owner or operator. If the combined amount of regulated asbestos containing material (RACM) to be stripped, removed or disturbed is at least 260 linear feet on pipes or 160 square feet on other facility components, or at least thirty-five (35) cubic feet on all facility components, then the notification requirements of 326 IAC 14-10-3 are mandatory. All demolition projects require notification whether or not asbestos is present.
- (b) The Permittee shall ensure that a written notification is sent on a form provided by the Commissioner at least ten (10) working days before asbestos stripping or removal work or before demolition begins, per 326 IAC 14-10-3, and shall update such notice as necessary, including, but not limited to the following:

- (1) When the amount of affected asbestos containing material increases or decreases by at least twenty percent (20%); or
- (2) If there is a change in the following:
 - (A) Asbestos removal or demolition start date;
 - (B) Removal or demolition contractor; or
 - (C) Waste disposal site.
- (c) The Permittee shall ensure that the notice is postmarked or delivered according to the guidelines set forth in 326 IAC 14-10-3(2).
- (d) The notice to be submitted shall include the information enumerated in 326 IAC 14-10-3(3).

All required notifications shall be submitted to:

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

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

- (e) **Procedures for Asbestos Emission Control**
The Permittee shall comply with the applicable emission control procedures in 326 IAC 14-10-4 and 40 CFR 61.145(c). Per 326 IAC 14-10-1, emission control requirements are applicable for any removal or disturbance of RACM greater than three (3) linear feet on pipes or three (3) square feet on any other facility components or a total of at least 0.75 cubic feet on all facility components.
- (f) **Demolition and renovation**
The Permittee shall thoroughly inspect the affected facility or part of the facility where the demolition or renovation will occur for the presence of asbestos pursuant to 40 CFR 61.145(a).
- (g) **Indiana Accredited Asbestos Inspector**
The Permittee shall comply with 326 IAC 14-10-1(a) that requires the owner or operator, prior to a renovation/demolition, to use an Indiana Accredited Asbestos Inspector to thoroughly inspect the affected portion of the facility for the presence of asbestos. The requirement to use an Indiana Accredited Asbestos inspector is not federally enforceable.

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

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

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

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

Indiana Department of Environmental Management

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

no later than thirty-five (35) days prior to the intended test date. The protocol submitted by the Permittee does not require certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

- (b) The Permittee shall notify IDEM, OAQ of the actual test date at least fourteen (14) days prior to the actual test date. The notification submitted by the Permittee does not require certification by the "responsible official" as defined by 326 IAC 2-7-1(34).
- (c) Pursuant to 326 IAC 3-6-4(b), all test reports must be received by IDEM, OAQ, not later than forty-five (45) days after the completion of the testing. An extension may be granted by IDEM, OAQ, if the Permittee submits to IDEM, OAQ, a reasonable written explanation not later than five (5) days prior to the end of the initial forty-five (45) day period.

Compliance Requirements [326 IAC 2-1.1-11]

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

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

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

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

Unless otherwise specified in this permit, all monitoring and record keeping requirements not already legally required shall be implemented within ninety (90) days of permit issuance. If required by Section D, the Permittee shall be responsible for installing any necessary equipment and initiating any required monitoring related to that equipment. If due to circumstances beyond its control, that equipment cannot be installed and operated within ninety (90) days, the Permittee may extend the compliance schedule related to the equipment for an additional ninety (90) days provided the Permittee notifies:

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

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

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

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

C.12 Continuous Compliance Plan [326 IAC 6-1-10.1(l)] [326 IAC 6-1-10.1(u)]

- (a) Pursuant to 326 IAC 6-1-10.1(l), the Permittee shall submit to IDEM and maintain at source a copy of the Continuous Compliance Plan (CCP). The Permittee shall perform the inspections, monitoring and record keeping in accordance with the information in 326 IAC 6-1-10.1 (p) through (r) or applicable procedures in the CCP.
- (b) Pursuant to 326 IAC 6-1-10.1(u), the Permittee shall update the CCP, as needed, retain a

copy any changes and updates to the CCP at the source and make the updated CCP available for inspection by the department. The Permittee shall submit the updated CCP to IDEM, OAQ within thirty (30) days of the update.

- (c) Pursuant to 326 IAC 6-1-10.1, failure to submit a CCP, maintain all information required by the CCP at the source, or submit update to a CCP is a violation of 326 IAC 6-1-10.1.

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

- (a) The Permittee shall calibrate, maintain, and operate all necessary continuous opacity monitoring systems (COMS) and related equipment.
- (b) All continuous opacity monitoring systems 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 occurs, a record shall be made of the time and reason of the breakdown and efforts made to correct the problem.
- (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:
- (1) Visible emission (VE) notations shall be performed once per hour during daylight operations following the shutdown or malfunction of the primary COM. 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 COM is online or formal Method 9 readings have been implemented.
- (2) If a COM is not online within twenty-four (24) hours of shutdown or malfunction of the primary COM, the Permittee shall provide certified opacity reader(s), who may be employees of the Permittee or independent contractors, to self-monitor the emissions from the emission unit stack.
- (A) Visible emission readings shall be performed in accordance with 40 CFR 60, Appendix A, Method 9, for a minimum of five (5) consecutive six (6) minute averaging periods beginning not more than twenty-four (24) hours after the start of the malfunction or down time.
- (B) Method 9 opacity readings shall be repeated for a minimum of five (5) consecutive six (6) minute averaging periods at least once every four (4) hours during daylight operations, until such time that a COM is in operation.
- (C) Method 9 readings may be discontinued once a COM is online.
- (D) Any opacity exceedances determined by Method 9 readings shall be reported with the Quarterly Opacity Exceedances Reports.

- (3) If abnormal emissions are observed, the Permittee shall take reasonable response steps in accordance with Section C - Compliance Response Plan - 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 - Compliance Response Plan - Preparation, Implementation, Records, and Reports, shall be considered a deviation from this permit.
- (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, 326 IAC 6-1-10.1(g)(2), 40 CFR 60 and/or 40 CFR 63, Subpart FFFFF.

C.14 Monitoring Methods [326 IAC 3] [40 CFR 60] [40 CFR 63]

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

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

- (a) Whenever a condition in this permit requires the measurement of pressure drop across any part of the unit or its control device, the gauge employed shall have a scale such that the expected normal reading shall be no less than twenty percent (20%) of full scale and be accurate within plus or minus two percent (2%) of full scale reading.
- (b) Whenever a condition in this permit requires the measurement of a 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, unless State or Federal regulations provide for a different level of accuracy.
- (c) The Permittee may request the IDEM, OAQ approve the use of a pressure gauge or other instrument that does not meet the above specifications provided the Permittee can demonstrate an alternative pressure gauge or other instrument specification will adequately ensure compliance with permit conditions requiring the measurement of pressure drop or other parameters.

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

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

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

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

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

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

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

- (c) If the ERP is disapproved by IDEM, OAQ, the Permittee shall have an additional thirty (30) days to resolve the differences and submit an approvable ERP.

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

C.17 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.18 Compliance Response Plan - Preparation, Implementation, Records, and Reports [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. If a Permittee is required to have an Operation, Maintenance and Monitoring (OMM) Plan (or Parametric Monitoring Plan and Start-up, Shutdown, and Malfunction (SSM) Plan) under 40 CFR 60/63, such plans shall be deemed to satisfy the requirements for a CRP for those compliance monitoring conditions. A CRP shall be submitted to IDEM, 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 or Operation, Maintenance and Monitoring (OMM) Plan (or Parametric Monitoring Plan and Start-up, Shutdown, and Malfunction (SSM) Plan) and the Permittee documents such response in accordance with subsection (e) below, the Permittee shall amend its Compliance Response Plan or Operation, Maintenance and Monitoring (OMM) Plan (or Parametric Monitoring Plan and Start-up, Shutdown, and Malfunction (SSM) Plan) to include such response steps taken.

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

(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 actions taken up to the time of notification.

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

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

- (a) When the results of a stack test performed in conformance with Section C - Performance Testing, of this permit exceed the level specified in any condition of this permit, the Permittee shall take appropriate response actions. The Permittee shall submit a description of these response actions to IDEM, OAQ, within thirty (30) days of receipt of the test results. The Permittee shall take appropriate action to minimize excess emissions from the affected facility while the response actions are being implemented.
- (b) A retest to demonstrate compliance shall be performed within one hundred twenty (120) days of receipt of the original test results. Should the Permittee demonstrate to IDEM, OAQ that retesting in one hundred and twenty (120) days is not practicable, IDEM, OAQ may extend the retesting deadline.
- (c) IDEM, OAQ reserves the authority to take any actions allowed under law in response to noncompliant stack tests.

The response action documents submitted pursuant to this condition do require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

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

C.20 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, P. O. Box 6015
Indianapolis, Indiana 46206-6015

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

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

C.21 General Record Keeping Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-6]

- (a) Records of all required monitoring data, reports and support information required by this permit shall be retained for a period of at least five (5) years from the date of monitoring sample, measurement, report, or application. These records shall be physically present or electronically accessible at the source location for a minimum of three (3) years. The records may be stored elsewhere for the remaining two (2) years as long as they are available upon request. If the Commissioner makes a request for records to the Permittee, the Permittee shall furnish the records to the Commissioner within a reasonable time.
- (b) Unless otherwise specified in this permit, all record keeping requirements not already legally required shall be implemented within ninety (90) days of permit issuance.

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

- (a) The Permittee shall submit the attached Quarterly Deviation and Compliance Monitoring Report or its equivalent. Any deviation from permit requirements, the date(s) of each deviation, the cause of the deviation, and the response steps taken must be reported. This report shall be submitted within thirty (30) days of the end of the reporting period. The Quarterly Deviation and Compliance Monitoring Report shall include the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).
- (b) The report required in (a) of this condition and reports required by conditions in Section D of this permit shall be submitted to:

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

- (c) Unless otherwise specified in this permit, any notice, report, or other submission required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ, on or before the date it is due.
- (d) Unless otherwise specified in this permit, all reports required in Section D of this permit shall be submitted within thirty (30) days of the end of the reporting period. All reports do require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).
- (e) The first report shall cover the period commencing on the date of issuance of this permit and ending on the last day of the reporting period. Reporting periods are based on calendar years.

Stratospheric Ozone Protection

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

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

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

SECTION D.1 FACILITY OPERATION CONDITIONS

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

(a) Two (2) Blast Furnaces, designated as Blast Furnace No. 3 and Blast Furnace No. 4, comprised of the following facilities, process equipment, and operational practices:

- (1) No. 3 Blast Furnace, with a maximum capacity of 4,555,200 tons raw material per year, including an integral gas cleaning system consisting of a dust catcher, separator, two scrubbers (primary and secondary) and one cooling tower, with excess gas exhausting through a flare at stack (S1E); installed in 1953.
- (2) No. 3 Blast Furnace Stoves, designated as stoves 31, 32, and 33, exhausting to the combustion stack (S1A) with a heat input rate of 441 MMBtu/hr and installed in 1953
- (3) No. 3 Blast Furnace Casthouse with Passive Emission Control (PEC) to suppress fumes in the casthouse, consisting of slag and iron runner covers along with natural gas flame suppression exhausting to the No. 3 Blast Furnace Casthouse Roof Monitor (V1A);
- (4) No. 4 Blast Furnace, with a maximum capacity of 5,490,836 tons raw material per year, including an integral gas cleaning system consisting of a dust catcher, separator, two scrubbers (primary and secondary) and one cooling tower with excess gas exhausting through a flare at stack-(S1D); installed in 1967
- (5) No. 4 Blast Furnace Stoves, designated as stoves 41, 42, and 43, exhausting to the combustion stack (S1C) with a heat input rate of 486 MMBtu/hr and installed in 1967
- (6) No. 4 Blast Furnace Casthouse with Passive Emission Control (PEC) to suppress fumes in the casthouse, consisting of slag and iron runner covers along with natural gas flame suppression exhausting to the No. 4 Blast Furnace Casthouse Roof Monitor (V1B)
- (7) No. 4 Blast Furnace Casthouse Baghouse used to control emissions from the casthouse with an airflow rate of 147,000 acfm exhausting at stack (S1B) when operating one (1) fan. No. 4 Blast Furnace Casthouse Baghouse has an air flow rate of 240,000 acfm when operating two (2) fans.
- (8) Miscellaneous equipment for handling of raw materials, including but not limited to, coke, iron ore pellets, limestone, slag and sinter.

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

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

D.1.1 General Provisions Relating to HAPs [326 IAC 20-1][40 CFR 63, Subpart A] [Table 4 to 40 CFR 63, Subpart FFFFF]

- (a) The provisions of 40 CFR 63, Subpart A- General Provisions, which are incorporated by reference as 326 IAC 20-1-1, apply to the affected sources, No. 3 Blast Furnace and No. 4 Blast Furnace, except when otherwise specified by Table 4 to 40 CFR 63, Subpart FFFFF. The Permittee must comply with these requirements on and after May 20, 2003.
- (b) Since the applicable requirements associated with the compliance options are not included and specifically identified in this permit, the permit shield authorized by the B section of this permit in the condition titled Permit Shield, and set out in 326 IAC 2-7-15 does not apply to paragraph (a) of this condition, except as otherwise provided in this condition. The permit shield applies to Condition D.1.17 National Emission Standards for Hazardous Air Pollutants from Integrated Iron and Steel Manufacturing - Reporting Requirements for Blast Furnaces [40 CFR 63.7835][40 CFR 63.7840]

D.1.2 National Emission Standards for Hazardous Air Pollutants from Integrated Iron and Steel Manufacturing - Emission Limitations for Blast Furnaces [40 CFR 63, Subpart FFFFF] The Permittee must comply with these requirements on and after May 22, 2006.

- (a) The provisions of 40 CFR 63, Subpart FFFFF (National Emission Standards for Hazardous Air Pollutants: Integrated Iron and Steel Manufacturing) apply to the affected sources, No. 3 Blast Furnace and No. 4 Blast Furnace. The Permittee shall comply with the applicable requirements on and after May 22, 2006.
- (b) The following Blast Furnace emissions points are subject to 40 CFR 63, Subpart FFFFF:
 - (1) No. 3 Blast Furnace Casthouse Roof Monitor (V1A);
 - (2) No. 4 Blast Furnace Casthouse Roof Monitor (V1B); and
 - (3) No. 4 Blast Furnace Casthouse Baghouse (S1B)
- (c) The definitions of 40 CFR 63, Subpart FFFFF are applicable to these processes in 40 CFR 63.7852.
- (d) The Permittee shall meet each emission limitation in 40 CFR 63.7790 that applies to the No. 3 Blast Furnace Casthouse Roof Monitor (V1A), No. 4 Blast Furnace Casthouse Roof Monitor (V1B) and No. 4 Blast Furnace Casthouse Baghouse (S1B).
- (e) The Permittee shall meet each operation and maintenance requirement in 40 CFR 63.7800 that applies to the No. 3 Blast Furnace Casthouse and No. 4 Blast Furnace Casthouse and required capture and control equipment.
- (f) The Permittee shall develop and implement a written startup, shutdown, and malfunction plan in accordance with 40 CFR 63.7810(c). During periods of startup, shutdown, or malfunction, the Permittee shall operate in accordance with the plan and 40 CFR 63.7835(b).
- (g) The Permittee shall meet each monitoring requirement in 40 CFR 63.7830 that applies to the No. 3 Blast Furnace Casthouse and No. 4 Blast Furnace Casthouse and required capture and control equipment.
- (h) The Permittee shall meet each requirement in 40 CFR 63.7831 regarding installation, operation, and maintenance of monitors for each monitor required by 40 CFR 63, Subpart FFFFF, that applies to the No. 3 Blast Furnace Casthouse and No. 4 Blast Furnace Casthouse and required capture and control equipment.

D.1.3 Lake County PM10 Emission Requirements [326 IAC 6-1-10.1(d)]

Pursuant to 326 IAC 6-1-10.1(d)(22), the PM10 emissions from No.3 and No. 4 Blast Furnaces shall not exceed the following:

- (a) PM10 emissions from the stack serving No. 3 Blast Furnace Stoves (S1A) shall not exceed 0.027 lbs/MMBtu and 11.73 pounds per hour.
- (b) PM10 emissions from the stack serving No. 4 Blast Furnace Stoves (S1C) shall not exceed 0.027 lbs/MMBtu and 12.93 pounds per hour.

Each emission limit applies to one (1) stack serving one (1) facility unless otherwise noted. The emission limitations apply to one (1) stack serving the multiple units specified when the facility descriptions notes "stack serving", and to each stack of multiple stacks serving multiple facilities when the facility description notes "each stack serving".

D.1.4 Particulate Matter (PM) [326 IAC 6-1-2]

Pursuant 326 IAC 6-1-2, No. 3 Blast Furnace Casthouse Roof Monitor (V1A), No. 4 Blast Furnace Casthouse Roof Monitor (V1B) and No. 4 Blast Furnace Casthouse Baghouse (S1B) shall not discharge to the atmosphere any gases which contain particulate matter in excess of 0.03 grains per dry standard cubic foot of exhaust air.

D.1.5 Sulfur Dioxide (SO₂) [326 IAC 7-4-1.1(c)(14)(D) and 326 IAC 7-4-1.1(c)(14)(G)]

Pursuant to 326 IAC 7-4-1.1(c)(14)(D), the SO₂ emissions from the Blast Furnace operations shall be limited as follows:

- (a) SO₂ emissions from the stack serving No. 3 Blast Furnace Stoves (S1A) shall not exceed 0.024 lbs/MMBtu.
- (b) SO₂ emissions from the stack serving No. 4 Blast Furnace Stoves (S1C) shall not exceed 0.024 lbs/MMBtu.

D.1.6 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for this facility and any control devices.

Compliance Determination Requirements

D.1.7 National Emission Standards for Hazardous Air Pollutants from Integrated Iron and Steel Manufacturing - Compliance Requirements for Blast Furnaces [40 CFR 63.7810(a)][40 CFR 63.7825][40 CFR 63.7826][40 CFR 63.7832] The Permittee must comply with these requirements on and after May 22, 2006.

- (a) Pursuant to 40 CFR 63.7810(a), the Permittee shall be in compliance with the emission limitations and operation and maintenance requirements in Condition D.1.2 at all times, except during periods of startup, shutdown, and malfunction as defined in 40 CFR 63.2, which is incorporated by reference in 326 IAC 20-1-3.
- (b) The Permittee shall demonstrate initial compliance with the emission limitations that apply to the No. 3 Blast Furnace Casthouse and No. 4 Blast Furnace Casthouse in accordance with 40 CFR 63.7825.
- (c) The Permittee shall demonstrate initial compliance with the operation and maintenance requirements that apply to the No. 3 Blast Furnace Casthouse and No. 4 Blast Furnace Casthouse in accordance with 40 CFR 63.7826.
- (d) The Permittee shall monitor and collect data to demonstrate continuous compliance with 40 CFR 63, Subpart FFFFF in accordance with 40 CFR 63.7832.
- (e) The Permittee shall demonstrate continuous compliance with the emission limitations of 40 CFR 63, Subpart FFFFF that apply to the No. 3 Blast Furnace Casthouse and No. 4 Blast Furnace Casthouse and required capture and control equipment in accordance with 40 CFR 63.7833.
- (f) The Permittee shall demonstrate continuous compliance with the operation and maintenance requirements of 40 CFR 63, Subpart FFFFF that apply to the No. 3 Blast Furnace Casthouse and No. 4 Blast Furnace Casthouse and required capture and control equipment in accordance with 40 CFR 63.7834.

D.1.8 National Emission Standards for Hazardous Air Pollutants from Integrated Iron and Steel Manufacturing - Testing Requirements for Blast Furnaces [40 CFR 63.7820 through 63.7824] The Permittee must comply with these requirements on and after May 22, 2006.

- (a) The Permittee shall conduct performance tests and other initial compliance demonstrations that apply to the No. 3 Blast Furnace Casthouse and No. 4 Blast Furnace Casthouse in accordance with 40 CFR 63.7820.
- (b) The Permittee shall conduct subsequent performance tests that apply to the No. 3 Blast Furnace Casthouse and No. 4 Blast Furnace Casthouse in accordance with 40 CFR 63.7821.
- (c) The Permittee shall use the test methods and other procedures in 40 CFR 63.7822 when demonstrating compliance with the emission limits for particulate matter for the No. 3 Blast Furnace Casthouse Roof Monitor (V1A), No. 4 Blast Furnace Casthouse Roof Monitor (V1B) and No. 4 Blast Furnace Casthouse Baghouse (S1B).
- (d) The Permittee shall use the test methods and other procedures in 40 CFR 63.7823 when demonstrating compliance with the opacity limits for the No. 3 Blast Furnace Casthouse Roof Monitor (V1A), No. 4 Blast Furnace Casthouse Roof Monitor (V1B) and No. 4 Blast Furnace Casthouse Baghouse (S1B).
- (e) The Permittee shall use the test methods and other procedures in 40 CFR 63.7824 to establish and demonstrate initial compliance with operating limits for the No. 3 Blast Furnace Casthouse and No. 4 Blast Furnace Casthouse and required capture and control equipment.

D.1.9 Control Device Operation

- (a) The No. 3 Blast Furnace shall be equipped with excess gas bleeder flare. The pilot flame for the flare shall be present at all times the Blast Furnace is in operation in order to minimize CO emissions.
- (b) The No. 4 Blast Furnace shall be equipped with excess gas bleeder flare. The pilot flame for the flare shall be present at all times the Blast Furnace is in operation in order to minimize CO emissions.
- (c) The No. 4 Blast Furnace Casthouse Baghouse shall be in operation at all times when the No. 4 Blast Furnace is casting.
- (d) In order to minimize PM emissions to comply with D.1.4:
 - (1) The iron and slag runners shall be equipped with covers and natural gas fired lances placed in appropriate areas at the No. 3 Blast Furnace for fume suppression during the cast.
 - (2) The iron and slag runners shall be equipped with covers and natural gas fired lances placed in appropriate areas at the No. 4 Blast Furnace for fume suppression during the cast.
 - (3) The iron and slag runner covers can be removed during a cast for required maintenance/malfunction and shall be promptly returned in position.
 - (4) At No. 3 and No. 4 Furnace, the trough hood (cover) shall be placed over the iron trough as soon as practical after drilling the taphole and remain in place during the cast until just prior to taphole closing. The hood may be removed during the cast only for required maintenance/malfunction and be promptly returned to position.

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

D.1.10 Visible Emissions Notations [326 IAC 2-7-6(1)][326 IAC 2-7-5(1)]

- (a) Visible emission notations of the No. 4 Blast Furnace Casthouse Baghouse (S1B) shall be performed once per shift during normal daylight operations when exhausting to the atmosphere. A trained employee shall record whether emissions are normal or abnormal.
- (b) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.
- (c) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.
- (d) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.
- (e) The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when an abnormal emission is observed. Failure to take response steps in accordance with Section C- Compliance Response Plan - Preparation, Implementation, Records, and Reports, shall be considered a violation of this permit.

D.1.11 Parametric Monitoring [326 IAC 2-7-6(1)][326 IAC 2-7-5(1)]

The Permittee shall record the pressure drop across the baghouse used in conjunction with the No. 4 Blast Furnace Casthouse Baghouse (S1B), at least once per shift when the above processes are in operation when venting to the atmosphere. When for any one reading, the pressure drop across the baghouse is outside the normal ranges as specified in the table below or a range established during the latest stack test, the Permittee shall take reasonable response steps in accordance with Section C- Compliance Response Plan - Preparation, Implementation, Records, and Reports. A reading that is outside the ranges is not a deviation from this permit. Failure to take response steps in accordance with Section C- Compliance Response Plan - Preparation, Implementation, Records, and Reports, shall be considered a violation of this permit.

No. 4 Blast Furnace Casthouse Baghouse (S1B)	
Number of Fans Operational	Pressure Drop Range (inches of water)
One (1)	1.0 – 6.0
Two (2)	6.0 – 14.0

D.1.12 Baghouse Inspection [326 IAC 2-7-6(1)][326 IAC 2-7-5(1)]

An inspection shall be performed each calendar quarter of all bags controlling the No. 4 Blast Furnace Casthouse Baghouse (S1B) when venting to the atmosphere. A baghouse inspection shall be performed within three months of redirecting vents to the atmosphere and every three months thereafter. Inspections are optional when venting to the indoors. Inspections required by this condition shall not be performed in consecutive months. All defective bags shall be replaced.

D.1.13 Broken or Failed Bag Detection [326 IAC 2-7-6(1)][326 IAC 2-7-5(1)]

In the event that bag failure has been observed:

- (a) For multi-compartment units, the affected compartments will be shut down immediately until the failed units have been repaired, replaced, blanked or isolated. Within eight (8) business hours of the determination of failure, response steps according to the timetable described in

the Compliance Response Plan shall be initiated. For any failure with corresponding response steps and timetable not described in the Compliance Response Plan, response steps shall be devised within eight (8) business hours of discovery of the failure and shall include a timetable for completion. Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports, shall be considered a violation of this permit. If operations continue after bag failure is observed and it will be 10 days or more after the failure is observed before the failed units will be repaired or replaced, the Permittee shall promptly notify the IDEM, OAQ of the expected date the failed units will be repaired or replaced. The notification shall also include the status of the applicable compliance monitoring parameters with respect to normal, and the results of any response actions taken up to the time of notification.

- (b) For single compartment baghouses, if failure is indicated by a significant drop in the baghouse's pressure readings with abnormal visible emissions or the failure is indicated by an opacity violation, or if bag failure is determined by other means, such as gas temperatures, flow rates, air infiltration, leaks, dust traces or triboflows, then failed units and the associated process will be shut down immediately until the failed units have been repaired or replaced. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section C - Emergency Provisions).

D.1.14 Sulfur Dioxide (SO₂) Sampling and Analysis [326 IAC 7-4-1.1(d)]

Pursuant to 326 IAC 7-4-1.1(d), and in order to comply with condition D.1.5, the Permittee shall submit a sampling and analysis protocol to IDEM. The protocol shall contain the following:

- (a) A description of planned procedures for sampling of sulfur-bearing fuels and materials for analysis of sulfur content, and for any planned direct measurement of sulfur dioxide emissions vented to the atmosphere.
- (b) The protocol shall specify the frequency of sampling, analysis and/or measurement for each fuel and materials for each facility. The department shall incorporate the protocol into the source's operation permit per procedures specified in 326 IAC 2.

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

D.1.15 National Emission Standards for Hazardous Air Pollutants from Integrated Iron and Steel Manufacturing - Record Keeping Requirements for Blast Furnaces [40 CFR 63.7810(b)][40 CFR 63.7] The Permittee shall comply with these requirements on or after May 22, 2006.

- (a) During the period between May 22, 2006 and the date upon which continuous monitoring systems have been installed and certified and any applicable operating limits have been set, the Permittee shall maintain a log detailing the operation and maintenance of the No. 3 Blast Furnace Casthouse and No. 4 Blast Furnace Casthouse process and control equipment in accordance with 40 CFR 63.7810(b).
- (b) The Permittee shall keep the records required by 40 CFR 63.7842(a).
- (c) If a Continuous Opacity Monitoring System (COMS) is used to comply with an opacity standard, the Permittee shall keep the records specified in 40 CFR 63.7842(b).
- (d) The Permittee shall keep the records required in 40 CFR 63.6(h)(6) for visible observations in accordance with 40 CFR 63.7842(c).
- (e) The Permittee shall keep the records required in 40 CFR 63.7833 and 63.7834 to show continuous compliance with each emission limitation and operation and maintenance requirement that applies to the No. 3 Blast Furnace Casthouse and No. 4 Blast Furnace Casthouse in accordance with 40 CFR 63.7842(d).

- (f) The Permittee shall keep the records required by 40 CFR 63, Subpart FFFFF in accordance with 40 CFR 63.7843 and the General Record Keeping Requirements in Section C of this permit.

D.1.16 Record Keeping Requirements

- (a) To document compliance with Conditions D.1.5 and D.1.14, the Permittee shall maintain the following records:
- (1) Records of the total coke oven gas, blast furnace gas, fuel oil, and natural gas usage for each day at the No. 3 and No. 4 Blast Furnaces.
 - (2) Records of the average sulfur content and heating value for each day for each fuel type used during the calendar quarter.
 - (3) Records of any compliance emissions calculations.
- (b) To document compliance with Condition D.1.10, the Permittee shall maintain records of once per shift visible emission notations of the No. 4 Blast Furnace Casthouse Baghouse (S1B).
- (c) To document compliance with Condition D.1.11, the Permittee shall maintain records, once per shift of the pressure drop across the No.4 Blast Furnace Casthouse Baghouse and the number of fans in operation when venting to the atmosphere.
- (d) In order to document compliance with Condition D.1.12, the Permittee shall maintain records of the results of the inspections.
- (f) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

D.1.17 National Emission Standards for Hazardous Air Pollutants from Integrated Iron and Steel Manufacturing - Reporting Requirements for Blast Furnaces [40 CFR 63.7835][40 CFR 63.7840]

- (a) The Permittee shall report each deviation in the Quarterly Deviation and Compliance Monitoring Report required by the C section of this permit, in accordance with 40 CFR 63.7835(a), 40 CFR 63.7841(d), 326 IAC 2-1.1-11, and 326 IAC 2-7-5(3).
- (b) The Permittee shall submit the notifications required by 40 CFR 63.6(h)(4) and (5), 40 CFR 63.7(b) and (c), 40 CFR 63.8(e) and (f)(4), and 40 CFR 63.9(b) through (h) that apply by the dates specified in those sections in accordance with 40 CFR 63.7840(a).
- (c) The Permittee shall submit an initial notification no later than 120 days after May 20, 2003, in accordance with 40 CFR 63.9(b) and 40 CFR 63.7840. The initial notification shall be submitted to:
- Indiana Department of Environmental Management
Compliance Data Section, Office of Air Quality
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015
- The initial notification does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).
- (d) The Permittee shall submit a notification of compliance status in accordance with 40 CFR 63.9(h)(2)(ii) and 40 CFR 63.7840(e).

- (1) For each initial compliance demonstration that does not include a performance test, the Permittee shall submit the notification of compliance status before the close of business on the 30th calendar day following completion of the initial compliance demonstration.
- (2) For each initial compliance demonstration that does include a performance test, the Permittee shall submit the notification of compliance status, including the performance test results, before the close of business on the 60th calendar day following the completion of the performance test according to 40 CFR 63.10(d)(2).
- (3) The notification of compliance status shall be submitted to:

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

The notification of compliance status requires the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

- (e) The Permittee shall submit semiannual compliance reports in accordance with 40 CFR 63.7841(a) and (b).
- (f) If a startup, shutdown, or malfunction occurred during the semiannual reporting period that was not consistent with the startup, shutdown, and malfunction plan, the Permittee shall submit an immediate startup, shutdown, and malfunction report according to the requirements in 40 CFR 63.10(d)(5)(ii) and 40 CFR 63.7841(c).

D.1.18 Requirement to Submit a Significant Permit Modification Application [326 IAC 2-7-12][326 IAC 2-7-5]

The Permittee shall submit an application for a significant permit modification to IDEM, OAQ to include information from the notification of compliance status in the Part 70 Operating Permit.

- (a) The significant permit modification application shall be consistent with 326 IAC 2-7-12, including information sufficient for IDEM, OAQ to incorporate into the Part 70 Operating Permit the applicable requirements of 40 CFR 63, Subpart FFFFF, a description of the affected source and activities subject to the standard, and a description of how the Permittee will meet the applicable requirements of the standard.
- (b) The significant permit modification application shall be submitted no later than nine (9) months prior to May 22, 2006 or the date that the notification of compliance status is submitted, whichever is later.
- (c) The significant permit modification application shall be submitted to:

Indiana Department of Environmental Management
Permits Branch, Office of Air Quality
100 North Senate Avenue
Indianapolis, Indiana 46206-6015

D.1.19 Reporting Requirements

A quarterly report shall be submitted containing the calculated SO₂ emission rate in lb/MMBtu for each facility for each day in quarter, total fuel usage for each type at each facility each day and any violations of limit 326 IAC 7-4-1.1(c)(14)(D), in order to document compliance with Conditions D.1.5 and D.1.16 (a). The quarterly report shall be submitted to the address listed in Section C - General Reporting Requirements, of this permit within thirty (30) days after the end of the quarter being

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

SECTION D.2 FACILITY OPERATION CONDITIONS

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

(b) One (1) Sinter Plant with a maximum raw material usage rate of 2,592,782 tons per year and a maximum annual production capacity of 2,119,920 tons of sinter per year, comprised of the following facilities, fugitive sources, process equipment, and operational practices: (Installed in 1958)

- (1) Raw material handling area consisting of material feeders (storage bins), conveyors, a pug mill and hearth layer returns from screening that combines these raw materials to create a uniform mixed burden that is deposited on the sinter strand.
- (2) One (1) natural gas fired ignition furnace used to ignite the surface of the mixed burden deposited on the sinter strand.
- (3) One (1) sinter plant main windbox, with twenty-one (21) vacuum chambers and emissions controlled by drop- out boxes, multi-cyclones (6 units), settling chamber and a wet venturi scrubber (containing chevrons) having a flow rate of 335,000 acfm, exhausting to stack-(S2A)
- (4) One (1) sinter plant discharge end (breaker), with a hood to capture light dust and controlled by a wet Venturi scrubber having a flow rate of 100,400 acfm, exhausting to stack (S2B)
- (5) One (1) Sinter Cooler and sinter product screening station

(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 General Provisions Relating to HAPs [326 IAC 20-1][40 CFR 63, Subpart A] [Table 4 to 40 CFR 63, Subpart FFFFF]

- (a) The provisions of 40 CFR 63 Subpart A - General Provisions, which are incorporated by reference as 326 IAC 20-1-1, apply to the affected source, Sinter Plant, except when otherwise specified by Table 4 to 40 CFR 63, Subpart FFFFF. The Permittee shall comply with these requirements on and after May 20, 2003.
- (b) Since the applicable requirements associated with the compliance options are not included and specifically identified in this permit, the permit shield authorized by the B section of this permit in the condition titled Permit Shield, and set out in 326 IAC 2-7-15 does not apply to paragraph (a) of this condition, except as otherwise provided in this condition. The permit shield applies to Condition D.2.23 National Emission Standards for Hazardous Air Pollutants from Integrated Iron and Steel Manufacturing - Reporting Requirements for Sinter Plants [40 CFR 63.7835][40 CFR 63.7640]

D.2.2 National Emissions Standards for Hazardous Air pollutants from Integrated Iron and Steel Manufacturing - Emission Limitations for Sinter Plants [40 CFR 63, Subpart FFFFF] The Permittee must comply with these requirements on and after May 22, 2006.

- (a) The provisions of 40 CFR 63, Subpart FFFFF (National Emission Standards for Hazardous Air Pollutants: Integrated Iron and Steel Manufacturing) apply to this source. The Permittee shall comply with these requirements on or after May 22, 2006 for the affected source, the Sinter Plant.
- (b) The following Sinter Plant emission points are subject to 40 CFR 63, Subpart FFFFF: main windbox (S2A), sinter plant discharge (S2B) and sinter cooler.
- (c) The definitions of 40 CFR 63, Subpart FFFFF are applicable to these processes in 40 CFR 63.7852.
- (d) The Permittee shall meet the each emission limitation in 40 CFR 63.7790 that applies to

main windbox (S2A), sinter plant discharge (S2B) and sinter cooler.

- (e) The Permittee shall meet each operation and maintenance requirements in 40 CFR 63.7800 that applies to Sinter Plant and required capture and control equipment.
- (f) The Permittee shall develop and implement a written start-up, shutdown and malfunction plan in accordance with 40 CFR 63.7810(c). During periods of start-up, shutdown or malfunction, the Permittee shall operate in accordance with the plan and 40 CFR 63.7835(b).
- (g) The Permittee shall meet each monitoring requirement in 40 CFR 63.7830 that applies to the Sinter Plant and required capture and control equipment.
- (h) The Permittee shall meet each requirement in 40 CFR 63.7831 regarding installation, operation and maintenance of monitors for each monitor required by 40 CFR 63, Subpart FFFFF, that applies to the Sinter Plant and required capture and control equipment.

D.2.3 Particulate Matter [326 IAC 6-1-10.1(d)]

Pursuant to 326 IAC 6-1-10.1(d) TSP emissions from the Sinter Plant operations shall not exceed the following:

- (a) TSP emissions from the windbox exhausting to stack (S2A) (identified in 326 IAC 6-1-10.1(d) as "stack 08") shall not exceed 0.02 grains per dry standard cubic foot of exhaust air and 49.70 pounds per hour.
- (b) TSP emissions from the sinter plant discharge (breaker) exhausting to stack (S2B) shall not exceed 0.02 grains per dry standard cubic foot of exhaust air and 18.05 pounds per hour.

Each emission limit applies to one (1) stack serving one (1) facility unless otherwise noted. The emission limitations apply to one (1) stack serving the multiple units specified when the facility descriptions notes "stack serving", and to each stack of multiple stacks serving multiple facilities when the facility description notes "each stack serving".

D.2.4 Lake County Sulfur Dioxide (SO₂) Emission Limitations [326 IAC 7-4-1]

Pursuant to 326 IAC 7-4-1.1(c)(14)(C), the SO₂ emissions from the Sinter Plant windbox (S2A) shall not exceed 1.0 pound of sulfur dioxide per ton of process material and 240 pounds of sulfur dioxide per hour.

D.2.5 Sinter Plant Volatile Organic Compounds (VOCs) [326 IAC 8-13-3]

Pursuant to 326 IAC 8-13-3(b) and (c) sinter plant windbox gas VOC emissions shall be limited as follows:

- (a) During the period of May 1 through September 30, the total VOC (seasonal cap) emission limit is calculated and shall not exceed 143,973.0 lbs of VOC per ozone season
- (b) Except as provided in 326 IAC 8-13-3(b)(3), on any day from May 1 through September 30, the sinter plant windbox exhaust VOC emissions (the maximum daily limit) limit is calculated and shall not exceed 1001.3 lbs of VOC per day.
- (c) On any day from May 1 through September 30 when ozone levels in Lake, Porter or LaPorte Counties are expected to exceed the national ambient air quality standard for ozone, the sinter plant windbox exhaust VOC emissions (the lower daily limit) limit is calculated and shall not exceed 941.0 lbs of VOC per day.

A high ozone level day shall be predicted by the Permittee in accordance with a high ozone day action plan developed by the source and submitted to the IDEM, OAQ as part of the report required by 326 IAC 8-13-4(b).

- (d) Pursuant to 326 IAC 8-13-4(b)(8) and an Ozone Action Plan Approval letter date stamped September 7, 1999, the Permittee shall do the following:
- (1) The Permittee will comply with the emissions limits in 326 IAC 8-13 by monitoring sinter burden oil and grease content.
 - (2) The Permittee will limit the oil content of the major oil bearing components (mill scale and filter cake) of the sinter plant feed materials to 0.5%.
 - (3) Based on the compliance demonstrations and limit calculations submitted in a letter dated March 12, 1999:
 - (A) The value of the operating parameter oil content (pounds) determined using the procedure per 326 IAC 8-13-5(d)(10) is 42.2 lbs oil.
 - (B) The operating parameter value that corresponds to the emission rates expressed in pounds of VOC per ton of sinter produced adjusted to the VOC emission limit rates specified in 326 IAC 8-13-3 is calculated as:
 - (i) Ozone Season = 93.06 lbs of oil
 - (ii) Non-ozone season = 134.00 lbs of oil
 - (C) Sinter oil and grease content value in pounds equivalent to one-hundredth (0.01) pound of VOC/ton of sinter produced that is used to determine compliance with 326 IAC 8-13-6 is 2.86 lbs oil for every 0.01 lbs VOC/ton sinter
 - (4) The Permittee shall follow the alternative test procedure submitted to IDEM for oil and grease analysis to meet the requirements of 326 IAC 8-13-5(e)(2).
 - (5) The Permittee shall monitor sinter production by using conveyor belt scales per the procedure identified in the Ozone Action plan.
 - (6) The Permittee will follow the sampling frequency as described in 326 IAC 8-13-6(c)(3)(A).
 - (7) When practical, routine maintenance outages may be rescheduled to coincide with an ozone alert day. Rescheduling is dependant upon the availability of manpower to perform the maintenance.
 - (8) The Permittee shall use IDEM's "Partners for Clean Air" ozone action day notification to predict high ozone days.

D.2.6 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for this facility and any control devices.

Compliance Determination Requirements

D.2.7 National Emission Standards for Hazardous Air Pollutants from Integrated Iron and Steel Manufacturing - Compliance Requirements for Sinter Plants [40 CFR 63.7810(a)][40 CFR 63.7825][40 CFR 63.7826][40 CFR 63.7832] The Permittee shall comply with these requirements on or after May 22, 2006.

-
- (a) Pursuant to 40 CFR 63.7810(a), the Permittee shall be in compliance with the emission

limitations and operation and maintenance requirements in Condition D.2.2 at all times, except during periods of start-up, shutdown and malfunction as defined in 40 CFR 63.2, which incorporated by reference in 326 IAC 20-1-3.

- (b) The Permittee shall demonstrate initial compliance with the emission limitations that apply to the Sinter Plant in accordance with 40 CFR 63.7825.
- (c) The Permittee shall demonstrate initial compliance with the operation and maintenance requirements that apply to the Sinter Plant, in accordance with 40 CFR 63.7826.
- (d) The Permittee shall monitor and collect data to demonstrate continuous compliance with 40 CFR 63, Subpart FFFFF, in accordance with 40 CFR 63.7832.
- (e) The Permittee shall demonstrate continuous compliance with the emissions limitations of 40 CFR 63, Subpart FFFFF that apply to the Sinter Plant and required capture and control equipment in accordance with 40 CFR 63.7833.
- (f) The Permittee shall demonstrate continuous compliance with the operation and maintenance requirements of 40 CFR 63, Subpart FFFFF that apply to the Sinter Plant and required capture and control equipment in accordance with 40 CFR 63.7834.

D.2.8 National Emission Standards for Hazardous Air Pollutants from Integrated Iron and Steel Manufacturing -Testing Requirements [40 CFR 63.7820 through 63.7824] The Permittee shall comply with these requirements on or after May 22, 2006.

- (a) The Permittee shall conduct performance tests and other initial compliance demonstrations that apply to the Sinter Plant, in accordance with 40 CFR 63.7821.
- (b) The Permittee shall conduct subsequent performance tests that apply to the Sinter Plant, in accordance with 40 CFR 63.7821.
- (c) The Permittee shall use the test methods and other procedures in 40 CFR 63.7822 when demonstrating compliance with the emission limits for particulate matter for the main windbox (S2A), sinter plant discharge (S2B) and sinter cooler.
- (d) The Permittee shall use the test methods and other procedures in 40 CFR 63.7823 when demonstrating compliance with the opacity limits for the main windbox (S2A), sinter plant discharge (S2B) and sinter cooler.
- (e) The Permittee shall use the test methods and other procedures in 40 CFR 63.7824 to establish and demonstrate initial compliance with operating limits for the Sinter Plant and required capture and control equipment.

D.2.9 Testing Requirements [326 IAC 2-7-6(1), (6)]

Within thirty (30) months of issuance of this permit, or the date of the last valid compliance test or an alternative date as determined by OAQ, Compliance Data Section, the Permittee shall perform TSP and SO₂ testing on the sinter plant windbox exhaust (S2A) using methods as approved by the Commissioner, in order to demonstrate compliance with conditions D.2.3 and D.2.4. Testing shall be performed using a test method that is listed in 326 IAC 6-1-10.1(f)(2) and is approved by the Commissioner. These tests shall be repeated at least once every two and a one half (2.5) years from the date of this valid compliance demonstration. In addition to these requirements, IDEM may require compliance testing when necessary to determine if the facility is in compliance.

D.2.10 Particulate Matter (PM)

In order to demonstrate compliance with D.2.3, the multi-cyclones and wet venturi scrubbers for particulate matter control shall be in operation and control emissions from the main windbox (S2A)

and sinter plant discharge (S2B) at all times that the sinter plant is in operation.

D.2.11 Windbox Gas VOC [326 IAC 8-13-4]

Pursuant to 326 IAC 8-13-4(g), the Permittee of a sintering operation who elects to change the control measure after the most recent compliance test shall do the following:

- (a) Notify the IDEM at least twenty-one (21) days before implementing the change. Notification shall include the following:
 - (1) A description of the control measure and the appropriate operating parameter.
 - (2) The date the change will be implemented.
 - (3) The plan to comply with Condition D.2.5 with the changed control measure.
- (b) Perform a compliance test within sixty (60) days of implementing the change according to procedures in 326 IAC 8-13-8 or according to the procedures that follow:
 - (1) Follow the source sampling procedures in 326 IAC 3-6-2.
 - (2) Follow the applicable test procedures.
 - (3) Calculate the operating parameter value that demonstrates compliance with the emission limit during the compliance test.
 - (4) Submit the compliance test results according to procedures in 326 IAC 8-13-4(d)(4).
- (c) Maintain the value of the operating parameter within the specified boundaries after the date that the compliance test is complete.
- (d) The Permittee who elects to change compliance demonstration procedures, for example, from sinter burden oil and grease content monitoring to a CEM, shall notify the OAQ at least thirty (30) days prior to making the change.

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

D.2.12 Windbox Gas VOC Emissions Monitoring [326 IAC 8-13-6]

After the date of the initial or subsequent compliance test pursuant to Condition D.2.11, the Permittee shall comply with the following requirements:

- (a) Following procedures in 326 IAC 8-13-5, analyze at least one (1) sample during each of the following operating periods of an operating day:
 - (1) 00:00 - 08:00
 - (2) 08:00 - 16:00
 - (3) 16:00 - 24:00.
- (b) The Permittee may composite a number of grab samples taken within each operating period. If sinter is produced for less than a total of sixty (60) minutes in any operating period, the Permittee is not required to sample for oil and grease content during that operating period.
- (c) Compliance with the oil and grease content requirements shall be determined in one (1) of

the following ways:

- (1) If the Permittee takes one (1) sample per operating period, the sample may be a composite of multiple samples taken within the operating period. The three (3) values shall be averaged over the day; and
 - (A) The daily average value may exceed the operating parameter on not more than five (5) days per month by an oil amount not to exceed one-hundredth (0.01) pound of VOC per ton of sinter produced as determined by the initial or subsequent compliance test;
 - (B) The daily average of the samples taken the day after the day in which the excursion occurred must be in compliance with the operating parameter;
 - (C) An excursion greater than the specified percentage in excess of the operating parameter shall be considered a violation of the rule; and
 - (D) More than five (5) excursions in a single month shall be considered a violation of this rule.
- (2) If the Permittee analyzes four (4) or more samples per operating period and determines the daily average oil and grease content values, then:
 - (A) The daily average oil and grease content shall not exceed the operating parameter determined in 326 IAC 8-13-5(d)(10) or 326 IAC 8-13-5(d)(11);
 - (B) An exceedance of the operating parameter is a violation of the rule; and
 - (C) No excursions are allowed since the greater number of samples should decrease the sampling variation.
- (3) Owners or operators of a sintering process that meet the emission limits in 326 IAC 8-13-3 (Condition D.2.5) by means other than those specified in 326 IAC 8-13-6 (b) or (c) shall describe the following:
 - (A) Operation and maintenance of the control measure;
 - (B) The process parameter or parameters and the value and range of the process parameter or parameters that indicate compliance with the emission limit; and
 - (C) The operating records that will be maintained.

D.2.13 Visible Emissions Notations [326 IAC 2-7-6(1)][326 IAC 2-7-5(1)]

- (a) Visible emission notations of the Sinter Plant windbox main scrubber stack (S2A), and the discharge end scrubber stack (S2B) shall be performed once per shift during normal daylight operations when exhausting to the atmosphere. A trained employee shall record whether emissions are normal or abnormal.
- (b) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.
- (c) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.

- (d) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.
- (e) The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when an abnormal emission is observed. Failure to take response steps in accordance with Section C- Compliance Response Plan - Preparation, Implementation, Records, and Reports, shall be considered a violation of this permit.

D.2.14 Parametric Monitoring [326 IAC 2-7-6(1)][326 IAC 2-7-5(1)]

- (a) The Permittee shall record the total static pressure drop across to the windbox main scrubber used in conjunction with the sinter plant operations, at least once per shift when the windbox (S2A) is in operation when venting to the atmosphere. When for any one reading, the pressure drop across the windbox main baghouse is outside the normal range of 15 to 55 inches of water or a range established during the latest stack test, the Permittee shall take reasonable response steps in accordance with Section C-Compliance Response Plan-Preparation, Implementation, Records and Reports. The Permittee shall record the water flow rate to the windbox main scrubber used in conjunction with the sinter plant operations, at least once per shift when the windbox is in operation when venting to the atmosphere. When for any one reading, the flow rate of the scrubber is below the minimum rate of 1800 gpm or a range established during the latest stack test, the Permittee shall take reasonable response steps in accordance with Section C-Compliance Response Plan-Preparation, Implementation, Records and Reports. A reading that is outside the ranges is not a deviation from this permit. Failure to take response steps in accordance with Section C-Compliance Response Plan-Preparation, Implementation, Records and Reports, shall be considered a violation of this permit.
- (b) The Permittee shall record the total static pressure drop across the sinter plant discharge (breaker) scrubber (S2B) used in conjunction with the sinter plant operations, at least once per shift when the breaker is in operation when venting to the atmosphere. When for any one reading, the pressure drop across the discharge (breaker) scrubber is outside the normal range of 6.0 – 13.0 inches of water or a range established during the latest stack test, the Permittee shall take reasonable response steps in accordance with Section C-Compliance Response Plan-Preparation, Implementation, Records and Reports. The Permittee shall record the water flow rate to the sinter plant discharge (breaker) scrubber used in conjunction with the sinter plant operations, at least once per shift when the breaker is in operation when venting to the atmosphere. When for any one reading, the flow rate of the scrubber is below the minimum rate of 200 gpm or a range established during the latest stack test, the Permittee shall take reasonable response steps in accordance with Section C-Compliance Response Plan-Preparation, Implementation, Records and Reports. A reading that is outside the ranges is not a deviation from this permit. Failure to take response steps in accordance with Section C-Compliance Response Plan-Preparation, Implementation, Records and Reports, shall be considered a violation of this permit.

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

D.2.15 Scrubber Inspection [326 IAC 2-7-6(1)][326 IAC 2-7-5(1)]

An inspection shall be performed each calendar quarter of all scrubbers controlling the windbox main scrubber (S2A) and sinter plant discharge (breaker) scrubber (S2B) when venting to the atmosphere. Inspections required by this condition shall not be performed in consecutive months.

D.2.16 Scrubber Failure Detection [326 IAC 2-7-6(1)][326 IAC 2-7-5(1)]

In the event that scrubber failure has been observed:

Failed units and the associated process will be shut down immediately until the failed units have been repaired or replaced. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions). Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports, shall be considered a violation of this permit.

D.2.17 Cyclone Inspection [326 IAC 2-7-6(1)][326 IAC 2-7-5(1)]

An inspection shall be performed each calendar quarter of all cyclones controlling the sinter plant operations when venting to the atmosphere. A cyclone inspection shall be performed within three months of redirecting vents to the atmosphere and every three months thereafter. Inspections are optional when venting to the indoors. Inspections required by this condition shall not be performed in consecutive months.

D.2.18 Cyclone Failure Detection [326 IAC 2-7-6(1)][326 IAC 2-7-5(1)]

In the event that cyclone failure has been observed:

Failed units and the associated process will be shut down immediately until the failed units have been repaired or replaced. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions). Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports, shall be considered a violation of this permit.

D.2.19 Sulfur Dioxide (SO₂) Sampling and Analysis [326 IAC 7-4-1.1(d)]

Pursuant to 326 IAC 7-4-1.1(d), and in order to comply with condition D.2.4, the Permittee shall submit a sampling and analysis protocol to IDEM. The protocol shall contain the following:

- (a) A description of planned procedures for sampling of sulfur-bearing fuels and materials for analysis of sulfur content, and for any planned direct measurement of sulfur dioxide emissions vented to the atmosphere.
- (b) The protocol shall specify the frequency of sampling, analysis and/or measurement for each fuel and materials for each facility. The department shall incorporate the protocol into the source's operation permit per procedures specified in 326 IAC 2.

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

D.2.20 National Emission Standards for Hazardous Air Pollutants from Integrated Iron and Steel Manufacturing- Record Keeping Requirements for Sinter Plants [40 CFR 63.7810(b)][40 CFR 3 Sinter Plant process and control equipment in accordance with 40 CFR 63.7810(b)] [40 CFR 63.7] The Permittee shall comply with these requirements on or after May 22, 2006.

- (a) During the period between May 22, 2006 and the date upon which continuous monitoring systems have been installed and certified and any applicable operating limits have been set, the Permittee shall maintain a log detailing the operation and maintenance of the Sinter Plant process and control equipment in accordance with 40 CFR 63.7810(b).
- (b) The Permittee shall keep the records required by 40 CFR 63.7842(a).
- (c) If a Continuous Opacity Monitoring System (COMS) is used to comply with an opacity standard, the Permittee shall keep the records specified in 40 CFR 63.7842(b).
- (d) The Permittee shall keep the records required in 40 CFR 63.6(h)(6) for visible observations in accordance with 40 CFR 63.7842(c).
- (e) The Permittee shall keep the records required in 40 CFR 63.7833 and 63.7834 to show

continuous compliance with each emission limitation and operation and maintenance requirement that applies to the Sinter Plant in 40 CFR 63.7842(d).

- (f) The Permittee shall keep the records required by 40 CFR 63, FFFFF in accordance with 40 CFR 63.7843 and the General Record Keeping Requirements in Section C of this permit.

D.2.21 Record Keeping Requirements [326 IAC 8-13-3]

- (a) To document compliance with the limit in Condition D.2.5, the Permittee shall maintain the following records:
- (1) Applicable operating parameter value and actual operating parameter values;
 - (2) Sinter produced in tons each operating day;
 - (3) Material sampled;
 - (4) Sampling date and time;
 - (5) Oil content values;
 - (6) For the period of May 1 through September 30, the following records shall be maintained:
 - (A) The VOC emitted in pounds each operating day.
 - (B) The cumulative total of VOC emitted.
 - (C) VOC emission rate in pounds per ton of sinter produced.

D.2.22 Record Keeping Requirements

- (a) To document compliance with Condition D.2.13, the Permittee shall maintain records of once per shift visible emission notations of the sinter plant stack exhausts.
- (b) To document compliance with Condition D.2.14, the Permittee shall maintain the following:
- (1) Once per shift records of the following operational parameters during normal operation when venting to the atmosphere:
 - (A) Pressure drop across the venturi scrubber
 - (B) Flow rate
- (c) To document compliance with Conditions D.2.15, the Permittee shall maintain records of the results of the inspections.
- (d) To document compliance with Condition D.2.17, the Permittee shall maintain records of the results of the inspections.
- (e) To document compliance with Conditions D.2.4 and D.2.19, the Permittee shall maintain the following records:
- (1) Records of the total coke oven gas, blast furnace gas, fuel oil, and natural gas usage for each day at the Sinter Plant windbox.

- (2) Records of the average sulfur content and heating value for each day for each fuel type used during the calendar quarter.
- (3) Records of any compliance emissions calculations.
- (f) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

D.2.23 National Emission Standards for Hazardous Air Pollutants from Integrated Iron and Steel Manufacturing- Reporting Requirements for Sinter Plants [40 CFR 63.7835][40 CFR 63.7640]

- (a) The Permittee shall report each deviation in the Quarterly Deviation and Compliance Monitoring Report required by the Section C of this permit in accordance with 40 CFR 63.7835(a), 40 CFR 63.7841(d), 326 IAC 2-1.1-11 and 326 IAC 2-7-5(3).
- (b) The Permittee shall submit the notifications required by 40 CFR 63.6(h)(4) and (5), 40 CFR 63.7(b) and (c), 40 CFR 63.8(e) and (f)(4) and 40 CFR 63.9(b) through (h) that apply by the dates specified in those sections in accordance with 40 CFR 63.7840(a).
- (c) The Permittee shall submit an initial notification no later than 120 days after May 20, 2003 in accordance with 40 CFR 63.9(b) and 40 CFR 63.7840. The initial notification shall be submitted to:

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

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

- (d) The Permittee shall submit a notification or compliance status in accordance with 40 CFR 63.9(h)(2)(ii) and 40 CFR 63.7840(e).
 - (1) For each initial compliance demonstration that does not include a performance test, the Permittee shall submit the notification of compliance status before the close of business on the 30th calendar day following completion of the initial compliance demonstration.
 - (2) For each initial compliance demonstration that does include a performance test, the Permittee shall submit the notification of compliance status, including the performance test results, before the close of business on the 60th calendar day following the completion of the performance test according to 40 CFR 63.10(d)(2).
 - (3) The notification of compliance status shall be submitted to:

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

and

United States Environmental Protection Agency, Region V
Director, Air and Radiation Division
77 Jackson Boulevard
Chicago, Illinois 60604-3590

The notification of compliance status requires the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

- (e) The Permittee shall submit semiannual compliance reports in accordance with 40 CFR 63.7841(a) and (b).
- (f) If a start-up, shutdown or malfunction occurred during the semiannual reporting period that was not consistent with the start-up, shutdown or malfunction plan, the Permittee shall submit an immediate start-up, shutdown and malfunction report according to the requirements in 40 CFR 63.10(d)(5)(ii) and 40 CFR 63.7841(c).

D.2.24 Requirements to Submit a Significant Permit Application [326 IAC 2-7-12] [326 IAC 2-7-5]

The Permittee shall submit an application for a significant permit modification to IDEM-OAQ to include information from the notification of compliance status in the Part 70 Operating permit.

- (a) The significant permit modification application shall be consistent with 326 IAC 2-7-12, including information sufficient to IDEM, OAQ to incorporate into the Part 70 Operating permit the applicable requirements of 40 CFR 63, Subpart FFFFF, a description of the affected source and activities subject to the standard and a description of how the Permittee will meet the applicable requirements of the standard.
- (b) The significant permit modification application shall be submitted no later than nine (9) months prior to May 22, 2006 or the date that the notification of compliance status is submitted, whichever ever is later.
- (c) The significant permit modification application shall be submitted to:

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

D.2.25 Reporting Requirements

The Permittee shall submit to the IDEM, OAQ, within thirty (30) days of the end of each calendar quarter the calculated sulfur dioxide emission rate in pounds per million Btu for each facility for each day during the calendar quarter and the total fuel usage for each type at each facility for each day. The summary of the information to document compliance with Condition D.2.22 (e), shall be submitted to the address listed in Section C - General Reporting Requirements, of this permit.

SECTION D.3 FACILITY OPERATION CONDITIONS

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

(c) Basic Oxygen Furnace (BOF) Shop, comprised of the following facilities, process equipment, and operational practices:

- (1) One (1) Hot Metal Reladle/Desulf Complex consisting of two (2) reladle stations, two (2) desulfurization stations and two (2) slag skimming stations, installed in 1982, having a maximum capacity of 5,630,208 tons per year of hot metal and sulfur scavenger. Emissions from all stations are controlled by a baghouse, designated as Baghouse No. 1 with captured emissions exhausting to stack (S3B) and uncaptured/fugitive emissions exhausting through a roof monitor (V3B)
- (2) One (1) Basic Oxygen Furnace (BOF) Complex, consisting of two (2) basic oxygen furnaces, designated as No. 1 and No. 2 Furnace, installed in 1968, having a combined maximum capacity of 7,456,512 tons of hot metal, flux, alloys, and scrap per year. Emissions from furnace operations such as charging, oxygen blowing and tapping are controlled by an electrostatic precipitator, with captured emissions exhausting to stack S3A and uncaptured/fugitive emissions exhausting through a roof monitor at vent V3A;
- (3) One (1) Ladle Metallurgical Facility (LMF), installed in 1988, consisting of (2) heating stations, having a combined maximum capacity of 5,606,400 tons of hot metal, flux and alloys per year. Emissions from LMF operations such as argon stirring, heating, and alloy addition, are controlled by a baghouse, designated as Baghouse No. 5 (LMF), with captured emissions exhausting to stack (S3C) and uncaptured/fugitive emissions exhausting through a roof monitor at vent (V3C)
- (4) One (1) Vacuum Degassing Facility (decarbonization), installed in 1988, with carbon monoxide (CO) emissions controlled by an integral CO scrubber and exhausting to the flare at stack (S3D)
- (5) One (1) Continuous Casting Complex consisting of two (2) single-strand slab casting machines, each with its own ladle turrent, tundish and mold. Molten steel from the LMF is directed into the turrent than cooled in the mold to begin the solidification process. The steel continues to solidify as it passes through the water spray cooling system to produce slabs that are finally cut to length using an acetylene torch-cutting machine. Emissions from water-cooling are directed to stacks (S3E/F).
- (6) Lime handling operations including trailer unloading and lime handling from silos with emissions captured by single compartment, 16 bag filter vents;
- (7) Miscellaneous dust removal process consisting of recovered BOF ESP dust, baghouse dust, handling and conditioning equipment, silos and pug mill; (fugitives)
- (8) Miscellaneous natural gas combustion consisting of ladle preheat, ladle drying, space heaters, tundish preheat and drying, tundish nozzle preheat, ladle shroud preheat, and slab torch cutting; and
- (9) Miscellaneous material handling.

(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 General Provisions Relating to HAPs [326 IAC 20-1][40 CFR 63, Subpart A] [Table 4 to 40 CFR 63, Subpart FFFFF]

- (a) The provisions of 40 CFR 63 Subpart A - General Provisions, which are incorporated by reference as 326 IAC 20-1-1, apply to the affected source, Basic Oxygen Process Furnace (BOPF), except when otherwise specified by Table 4 to 40 CFR 63, Subpart FFFFF. The Permittee shall comply with these requirements on and after May 20, 2003.
- (b) Since the applicable requirements associated with the compliance options are not included and specifically identified in this permit, the permit shield authorized by the B section of this

permit in the condition titled Permit Shield, and set out in 326 IAC 2-7-15 does not apply to paragraph (a) of this condition, except as otherwise provided in this condition. The permit shield applies to Condition D.3.18 National Emission Standards for Hazardous Air Pollutants from Integrated Iron and Steel Manufacturing - Reporting Requirements for Basic Oxygen Process Furnace (BOPF) [40 CFR 63.7835][40 CFR 63.7640]

D.3.2 National Emissions Standards for Hazardous Air pollutants from Integrated Iron and Steel Manufacturing - Emission Limitations for Basic Oxygen Process Furnace (BOPF) [40 CFR 63, Subpart FFFFF] The Permittee shall comply with these requirements on and after May 20, 2003.

The provisions of 40 CFR 63, Subpart FFFFF (National Emission Standards for Hazardous Air Pollutants: Integrated Iron and Steel Manufacturing) apply to this source. The Permittee shall comply with these requirements on or after May 22, 2006 for the affected source, the Basic Oxygen Process Furnace (BOPF). The following emission units comprise the affected source that is subject to specific requirements of 40 CFR 63, Subpart FFFFF: Basic Oxygen Furnace (BOF) Complex, Hot Metal Reladle/Desulfurization Complex (reladling, desulfurization and slag skimming), Ladle Metallurgy Facility and BOPF roof monitor (V3A).

- (a) The definitions of 40 CFR 63, Subpart FFFFF are applicable to these processes in 40 CFR 63.7852.
- (b) The Permittee shall meet the each emission limitation in 40 CFR 63.7790 that applies to: Basic Oxygen Furnace (BOF) Complex, Hot Metal Reladle/Desulfurization Complex (reladling, desulfurization and slag skimming), Ladle Metallurgy Facility and BOPF roof monitor (V3A).
- (c) The Permittee shall meet each operation and maintenance requirements in 40 CFR 63.7800 that applies to Basic Oxygen Process Furnace (BOF) Complex, Hot Metal Reladle/Desulfurization Complex and Ladle Metallurgy Facility and required capture and control equipment.
- (d) The Permittee shall develop and implement a written start-up, shutdown and malfunction plan in accordance with 40 CFR 63.7810(c). During periods of start-up, shutdown or malfunction, the Permittee shall operate in accordance with the plan and 40 CFR 63.7835(b).
- (e) The Permittee shall meet each monitoring requirement in 40 CFR 63.7830 that applies to the Basic Oxygen Process Furnace (BOF) Complex, Hot Metal Reladle/Desulfurization Complex and Ladle Metallurgy Facility and required capture and control equipment.
- (f) The Permittee shall meet each requirement in 40 CFR 63.7831 regarding installation, operation and maintenance of monitors for each monitor required by 40 CFR 63, Subpart FFFFF, that applies to the Basic Oxygen Process Furnace (BOF) Complex, Hot Metal Reladle/Desulfurization Complex and Ladle Metallurgy Facility and required capture and control equipment.

D.3.3 Lake County PM emission requirements [326 IAC 6-1-10.1(d)]

Pursuant to 326 IAC 6-1-10.1(d) (Lake County PM10 Requirements) PM10 emissions from the Basic Oxygen Furnace operations shall not exceed the following:

- (a) PM10 emissions from the Reladle/desulfurization baghouse (Baghouse No.1) exhausting to stack (S3B) shall not exceed 0.008 grains PM10 per dry standard cubic foot of exhaust air and 10.49 pounds PM10 emitted per hour.
- (b) PM10 emissions from the electrostatic precipitator exhausting to stack (S3A) (BOF main stack) shall not exceed 0.018 grains PM10 per dry standard cubic foot of exhaust air and 69.40 pounds PM10 emitted per hour.
- (c) PM10 emissions from the ladle metallurgical station baghouse (LMF Baghouse) exhausting

to stack (S3C) shall not exceed 0.004 grains PM10 per dry standard cubic foot of exhaust air and 3.630 pounds PM10 emitted per hour.

Each emission limit applies to one (1) stack serving one (1) facility unless otherwise noted. The emission limitations apply to one (1) stack serving the multiple units specified when the facility descriptions notes "stack serving", and to each stack of multiple stacks serving multiple facilities when the facility description notes "each stack serving".

D.3.4 Particulate Matter (PM) [326 IAC 6-1-2]

Pursuant to 326 IAC 6-1-2 the Hot Metal Reladle/Desulf Roof Monitor (V3B), BOF Roof Monitor (V3A) and LMF Roof Monitor (V3C) shall not discharge to the atmosphere any gases which contain particulate matter in excess of 0.03 grains per dry standard cubic foot of exhaust air.

D.3.5 Opacity [326 IAC 6-1-10.1(e)]

Pursuant to 326 IAC 6-1-10.1(e), the following opacity limits shall be complied with and shall take precedence over those in 326 IAC 5-1-2 with which they conflict. The opacity limits for the BOF operations shall be as follows:

- (a) Visible emissions from the reladle/desulfurization baghouse (stack S3B) shall not exceed five percent (5%) opacity, three (3) minute average.
- (b) Visible emissions from the basic oxygen furnace main electrostatic precipitator stack (stack S3A) shall not exceed twenty percent (20%) opacity, six (6) minute average.
- (c) Visible emissions from the basic oxygen furnace roof monitor (vent V3A) shall not exceed twenty percent (20%) opacity, three (3) minute average.
- (d) Visible emissions from the ladle metallurgical facility (LMF) baghouse (stack S3C) shall not exceed five percent (5%) opacity, three (3) minute average.

D.3.6 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for this facility and any control devices.

Compliance Determination Requirements

D.3.7 National Emission Standards for Hazardous Air Pollutants from Integrated Iron and Steel Manufacturing - Compliance Requirements for Basic Oxygen Process Furnace (BOPF) [40 CFR 63.7810(a)][40 CFR 63.7825] [40 CFR 63.7826][40 CFR 63.7832] The Permittee shall comply with these requirements on or after May 22, 2006

- (a) Pursuant to 40 CFR 63.7810(a), the Permittee shall be in compliance with the emission limitations and operation and maintenance requirements in Condition D.5.2 at all times, except during periods of start-up, shutdown and malfunction as defined in 40 CFR 63.2, which incorporated by reference in 326 IAC 20-1-3.
- (b) The Permittee shall demonstrate initial compliance with the emission limitations that apply to the Basic Oxygen Process Furnace (BOF) Complex, Hot Metal Reladle/Desulfurization Complex and Ladle Metallurgy Facility in accordance with 40 CFR 63.7825.
- (c) The Permittee shall demonstrate initial compliance with the operation and maintenance requirements that apply to the Basic Oxygen Process Furnace (BOF) Complex, Hot Metal Reladle/Desulfurization Complex and Ladle Metallurgy Facility in accordance with 40 CFR 63.7826.
- (d) The Permittee shall monitor and collect data to demonstrate continuous compliance with 40 CFR 63, Subpart FFFFF, in accordance with 40 CFR 63.7832.
- (e) The Permittee shall demonstrate continuous compliance with the emissions limitations of

40 CFR 63, Subpart FFFFF that apply to the Basic Oxygen Process Furnace (BOF) Complex, Hot Metal Reladle/Desulfurization Complex and Ladle Metallurgy Facility and required capture and control equipment in accordance with 40 CFR 63.7833.

- (f) The Permittee shall demonstrate continuous compliance with the operation and maintenance requirements of 40 CFR 63, Subpart FFFFF that apply to the Basic Oxygen Process Furnace (BOF) Complex, Hot Metal Reladle/Desulfurization Complex and Ladle Metallurgy Facility and required capture and control equipment in accordance with 40 CFR 63.7834.

D.3.8 National Emission Standards for Hazardous Air Pollutants from Integrated Iron and Steel Manufacturing -Testing Requirements [40 CFR 63.7820 through 63.7824] The Permittee shall comply with these requirements on or after May 22, 2006

- (a) The Permittee shall conduct performance tests and other initial compliance demonstrations that apply to the Basic Oxygen Process Furnace (BOF) Complex, Hot Metal Reladle/Desulfurization Complex and Ladle Metallurgy Facility, in accordance with 40 CFR 63.7821.
- (b) The Permittee shall conduct subsequent performance tests that apply to the Basic Oxygen Process Furnace (BOF) Complex, Hot Metal Reladle/Desulfurization Complex and Ladle Metallurgy Facility, in accordance with 40 CFR 63.7821.
- (c) The Permittee shall use the test methods and other procedures in 40 CFR 63.7822 when demonstrating compliance with the emission limits for particulate matter for Basic Oxygen Furnace (BOF) Complex, Hot Metal Reladle/Desulfurization Complex (reladling, desulfurization and slag skimming), Ladle Metallurgy Facility and BOPF roof monitor (V3A).
- (d) The Permittee shall use the test methods and other procedures in 40 CFR 63.7823 when demonstrating compliance with the opacity limits for the Basic Oxygen Furnace (BOF) Complex, Hot Metal Reladle/Desulfurization Complex (reladling, desulfurization and slag skimming), Ladle Metallurgy Facility and BOPF roof monitor (V3A).
- (e) The Permittee shall use the test methods and other procedures in 40 CFR 63.7824 to establish and demonstrate initial compliance with operating limits for the Basic Oxygen Process Furnace (BOF) Complex, Hot Metal Reladle/Desulfurization Complex and Ladle Metallurgy Facility and required capture and control equipment.

D.3.9 Testing Requirements [326 IAC 2-7-6(1), (6)][326 IAC 2-1.1-11]

Within thirty (30) months of issuance of this permit, or the date of the last valid compliance test or an alternative date as determined by OAQ, Compliance Data Section, the Permittee shall perform PM10 testing on the BOF electrostatic precipitator main stack utilizing a testing method approved by the Commissioner in accordance with Section C - Performance Testing. PM10 shall be measured by the appropriate method as listed in 326 IAC 6-1-10.1(f)(1). This test shall be repeated at least once every two and one half (2.5) years from the date of this valid compliance demonstration. In addition to these requirements, IDEM may require compliance testing when necessary to determine if the facility is in compliance.

D.3.10 Particulate Matter (PM) & Carbon Monoxide (CO)

The reladle/desulfurization baghouse, the ladle metallurgical facility (LMF) baghouse, the main electrostatic precipitator, the CO scrubber, and flare shall be in operation at all times when associated processes are in operation.

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

D.3.11 Opacity Continuous Emission Monitoring [326 IAC 6-1-10.1(g)(2)]

Pursuant to 326 IAC 6-1-10.1(g)(2), the main basic oxygen furnace electrostatic precipitator stack shall be equipped with a Continuous Emission Monitoring (COM) for opacity. The COM shall comply with the maintenance, operating procedures, quality assurance procedures, and

performance specifications in 326 IAC 3-5.

D.3.12 Visible Emissions Notations [326 IAC 2-7-6(1)][326 IAC 2-7-5(1)]

- (a) Visible emission notations of the reladle/desulfurization baghouse stack (S3B) and the ladle metallurgical facility (LMF) baghouse stack (S3C) shall be performed once per shift during normal daylight operations when exhausting to the atmosphere. A trained employee shall record whether emissions are normal or abnormal.
- (b) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.
- (c) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.
- (d) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.
- (e) The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when an abnormal emission is observed. Failure to take response steps in accordance with Section C - Compliance Response Plan-Preparation, Implementation, Records and Reports, shall be considered a violation of this permit.

D.3.13 Baghouse Parametric Monitoring [326 IAC 2-7-6(1)][326 IAC 2-7-5(1)]

The Permittee shall record the total static pressure drop across the baghouse used in conjunction with the reladle/desulfurization operations (S3B), and the ladle metallurgical facility (LMF) operations (S3C) at least once per shift when the associated processes are in operation when venting to the atmosphere. When for any one reading, the pressure drop across the baghouse is outside the normal range of 6.0 – 14.0 inches of water or a range established during the latest stack test, for the reladle/desulfurization operations (S3B) and 4.0 to 9.0 inches of water or a range established during the latest stack test for the ladle metallurgical facility (LMF) operations (S3C), the Permittee shall take reasonable response steps in accordance with Section C-Compliance Response Plan-Preparation, Implementation, Records and Reports. A reading that is outside the ranges is not a deviation from this permit. Failure to take response steps in accordance with Section C-Compliance Response Plan-Preparation, Implementation, Records and Reports, shall be considered a violation of this permit.

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

D.3.14 Baghouse Inspections [326 IAC 2-7-6(1)][326 IAC 2-7-5(1)]

An inspection shall be performed each calendar quarter of all bags controlling the reladle/desulfurization operations (S3B), and the ladle metallurgical facility (LMF) operations (S3C) when venting to the atmosphere. A baghouse inspection shall be performed within three months of redirecting vents to the atmosphere and every three months thereafter. Inspections are optional when venting to the indoors. Inspections required by this condition shall not be performed in consecutive months. All defective bags shall be replaced.

D.3.15 Broken or Failed Bag Detection [326 IAC 2-7-6(1)][326 IAC 2-7-5(1)]

In the event that bag failure has been observed:

- (a) For multi-compartment units, the affected compartments will be shut down immediately until the failed units have been repaired, replaced, blanked or isolated. Within eight (8) business hours of the determination of failure, response steps according to the timetable described in the Compliance Response Plan shall be initiated. For any failure with corresponding response steps and timetable not described in the Compliance Response Plan, response

steps shall be devised within eight (8) business hours of discovery of the failure and shall include a timetable for completion. Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports, shall be considered a violation of this permit. If operations continue after bag failure is observed and it will be 10 days or more after the failure is observed before the failed units will be repaired or replaced, the Permittee shall promptly notify the IDEM, OAQ of the expected date the failed units will be repaired or replaced. The notification shall also include the status of the applicable compliance monitoring parameters with respect to normal, and the results of any response actions taken up to the time of notification.

- (b) For single compartment baghouses, if failure is indicated by a significant drop in the baghouse's pressure readings with abnormal visible emissions or the failure is indicated by an opacity violation, or if bag failure is determined by other means, such as gas temperatures, flow rates, air infiltration, leaks, dust traces or triboflows, then failed units and the associated process will be shut down immediately until the failed units have been repaired or replaced. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section C - Emergency Provisions).

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

D.3.16 National Emission Standards for Hazardous Air Pollutants from Integrated Iron and Steel Manufacturing- Record Keeping Requirements for Basic Oxygen Process Furnace (BOPF) [40 CFR 63.7810(b)][40 CFR 3 Basic Oxygen Process Furnace (BOPF) process and control equipment in accordance with 40 CFR 63.7810(b)] [40 CFR 63.7] The Permittee shall comply with these requirements on or after May 22, 2006

- (a) During the period between May 22, 2006 and the date upon which continuous monitoring systems have been installed and certified and any applicable operating limits have been set, the Permittee shall maintain a log detailing the operation and maintenance of the Basic Oxygen Process Furnace (BOPF) process and control equipment in accordance with 40 CFR 63.7810(b).
- (b) The Permittee shall keep the records required by 40 CFR 63.7842(a).
- (c) If a Continuous Opacity Monitoring System (COMS) is used to comply with an opacity standard, the Permittee shall keep the records specified in 40 CFR 63.7842(b).
- (d) The Permittee shall keep the records required in 40 CFR 63.6(h)(6) for visible observations in accordance with 40 CFR 63.7842(c).
- (e) The Permittee shall keep the records required in 40 CFR 63.7833 and 63.7834 to show continuous compliance with each emission limitation and operation and maintenance requirement that applies to the Basic Oxygen Process Furnace (BOPF) in 40 CFR 63.7842(d).
- (f) The Permittee shall keep the records required by 40 CFR 63, FFFFF in accordance with 40 CFR 63.7843 and the General Record Keeping Requirements in Section C of this permit.

D.3.17 Record Keeping Requirements

- (a) In order to document compliance with Condition D.3.12, the Permittee shall maintain records of once per shift visible emission notations of the reladle/desulfurization baghouse stack (S3B) and the ladle metallurgical facility (LMF) baghouse stack (S3C).
- (b) In order to document compliance with condition D.3.13, the Permittee shall maintain records, once per shift of the pressure drop across the baghouse when venting to the atmosphere.
- (c) In order to document compliance with Condition D.3.14, the Permittee shall maintain

records of the results of the inspections.

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

D.3.18 Reporting Requirements

The Permittee shall submit a quarterly excess emissions report, based on the continuous opacity monitor (COM) required in conditions D.3.11 data for opacity, pursuant to 326 IAC 3-5-7. These reports shall be submitted within thirty (30) calendar days following the end of each calendar quarter and in accordance with Section C - 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).

D.3.19 National Emission Standards for Hazardous Air Pollutants from Integrated Iron and Steel Manufacturing- Reporting Requirements for Basic Oxygen Process Furnace (BOPF) [40 CFR 63.7835][40 CFR 63.7640]

- (a) The Permittee shall report each deviation in the Quarterly Deviation and Compliance Monitoring Report required by the Section C of this permit in accordance with 40 CFR 63.7835(a), 40 CFR 63.7841(d), 326 IAC 2-1.1-11 and 326 IAC 2-7-5(3).
- (b) The Permittee shall submit the notifications required by 40 CFR 63.6(h)(4) and (5), 40 CFR 63.7(b) and (c), 40 CFR 63.8(e) and (f)(4) and 40 CFR 63.9(b) through (h) that apply by the dates specified in those sections in accordance with 40 CFR 63.7840(a).
- (c) The Permittee shall submit an initial notification no later than 120 days after May 20, 2003 in accordance with 40 CFR 63.9(b) and 40 CFR 63.7840. The initial notification shall be submitted to:

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

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

- (d) The Permittee shall submit a notification or compliance status in accordance with 40 CFR 63.9(h)(2)(ii) and 40 CFR 63.7840(e).
- (1) For each initial compliance demonstration that does not include a performance test, the Permittee shall submit the notification of compliance status before the close of business on the 30th calendar day following completion of the initial compliance demonstration.
- (2) For each initial compliance demonstration that does include a performance test, the Permittee shall submit the notification of compliance status, including the performance test results, before the close of business on the 60th calendar day following the completion of the performance test according to 40 CFR 63.10(d)(2).
- (3) The notification of compliance status shall be submitted to:

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

and

United States Environmental Protection Agency, Region V
Director, Air and Radiation Division
77 Jackson Boulevard
Chicago, Illinois 60604-3590

The notification of compliance status requires the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

- (e) The Permittee shall submit semiannual compliance reports in accordance with 40 CFR 63.7841(a) and (b).
- (f) If a start-up, shutdown or malfunction occurred during the semiannual reporting period that was not consistent with the start-up, shutdown or malfunction plan, the Permittee shall submit an immediate start-up, shutdown and malfunction report according to the requirements in 40 CFR 63.10(d)(5)(ii) and 40 CFR 63.7841(c).

D.3.20 Requirements to Submit a Significant Permit Application [326 IAC 2-7-12] [326 IAC 2-7-5]

The Permittee shall submit an application for a significant permit modification to IDEM-OAQ to include information from the notification of compliance status in the Part 70 Operating permit.

- (a) The significant permit modification application shall be consistent with 326 IAC 2-7-12, including information sufficient to IDEM, OAQ to incorporate into the Part 70 Operating permit the applicable requirements of 40 CFR 63, Subpart FFFFF, a description of the affected source and activities subject to the standard and a description of how the Permittee will meet the applicable requirements of the standard.
- (b) The significant permit modification application shall be submitted no later than nine (9) months prior to May 22, 2006 or the date that the notification of compliance status is submitted, which ever is later.
- (c) The significant permit modification application shall be submitted to:

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

SECTION D.4 FACILITY OPERATION CONDITIONS

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

(d) 84 Inch Hot Strip Mill, comprising the following facilities, process equipment, and operational practices:

- (1) Three (3) Reheat Furnaces identified as Nos. 1, 2 and 3, installed in 1968, having a heat input rate of 427 MMBtus per hour each.
 - (A) No. 1 Reheat Furnace, having the ability to burn natural gas and fuel oil with emissions exhausting through stack S4A.
 - (B) No. 2 Reheat Furnace, having the ability to burn natural gas and fuel oil with emissions exhausting through stack S4B.
 - (C) No. 3 Reheat Furnace, having the ability to burn natural gas and fuel oil with emissions exhausting through stack S4C.
- (2) One (1) Hot Rolling Mill, where steel slabs from the reheat furnaces are converted to hot bands (steel coils). The mill consists of scale breakers, six (6) roughing stands, a crop shear, seven (7) finishing stands, a cooling table and three (3) downcoilers. The mill fugitive emissions from these processes vent inside the building (V4A).
- (3) One (1), two (2) stand temper mill.
- (4) Twenty-eight (28) natural gas space heaters having a combined heat input rate of 84 MMBtu/hr.

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

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

D.4.1 Particulate Matter [326 IAC 6-1-10.1]

- (a) Pursuant to 326 IAC 6-1-10.1(d)(22) the PM10 emissions from each of the stacks serving the three (3) natural gas/fuel oil furnaces (S4A, S4B and S4C) shall not exceed 0.086 lbs/MMBtu and 36.56 pounds PM10 emitted per hour.
- (b) Pursuant to 326 IAC 6-1-10.1(h)(14) the allowable TSP emissions from the twenty-eight (28) natural gas space heater (V4A) shall not exceed 0.003 lbs/MMBtu and 0.250 pounds per hour period combined and burn natural gas only.

Each emission limit applies to one (1) stack serving one (1) facility unless otherwise noted. The emission limitations apply to one (1) stack serving the multiple units specified when the facility descriptions notes "stack serving", and to each stack of multiple stacks serving multiple facilities when the facility description notes "each stack serving".

D.4.2 Sulfur Dioxide (SO₂) [326 IAC 7-4-1.1(c)(14)(D)]

Pursuant to 326 IAC 7-4-1.1(c)(14)(B), the SO₂ emissions from each of the stacks serving the three (3) natural gas/fuel oil furnaces (S4A, S4B and S4C) shall not exceed 1.254 lb SO₂/MMBtu and 535.1 pounds per hour.

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

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for this facility and any control devices.

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

D.4.4 Visible Emissions Notations [326 IAC 2-7-6(1)][326 IAC 2-7-5(1)]

- (a) Visible emission notations of the three (3) natural gas/fuel oil furnaces stacks (S4A, S4B

and S4C) shall be performed once per shift during normal daylight operations when exhausting to the atmosphere and using fuel oil. A trained employee shall record whether emissions are normal or abnormal.

- (b) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.
- (c) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.
- (d) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.
- (e) The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when an abnormal emission is observed. Failure to take response steps in accordance with Section C - Compliance Response Plan-Preparation, Implementation, Records and Reports, shall be considered a violation of this permit.

D.4.5 Sulfur Dioxide (SO₂) Sampling and Analysis [326 IAC 7-4-1.1(d)]

Pursuant to 326 IAC 7-4-1.1(d), and in order to comply with condition D.4.2, the Permittee shall submit a sampling and analysis protocol to IDEM. The protocol shall contain the following:

- (a) A description of planned procedures for sampling of sulfur-bearing fuels and materials for analysis of sulfur content, and for any planned direct measurement of sulfur dioxide emissions vented to the atmosphere.
- (b) The protocol shall specify the frequency of sampling, analysis and/or measurement for each fuel and materials for each facility. The department shall incorporate the protocol into the source's operation permit per procedures specified in 326 IAC 2.

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

D.4.6 Record Keeping Requirements

- (a) To document compliance with Condition D.4.1 (b), the Permittee shall maintain records of natural gas use at the hot strip space heaters.
 - (b) In order to document compliance with Condition D.4.4, the Permittee shall maintain records of once per shift visible emission notations of the three (3) natural gas/fuel oil furnaces stacks (S4A, S4B and S4C), when using fuel oil.
-
- (c) To document compliance with Conditions D.4.2 and D.4.5, the Permittee shall maintain the following records:
 - (1) Records of the total fuel oil, and natural gas usage for each day at the No. 1, 2 and 3 Reheat Furnaces.
 - (2) Records of the average sulfur content and heating value for each day for each fuel type used during the calendar quarter.
 - (3) Records of any compliance emissions calculations.
 - (d) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

D.4.7 Reporting Requirements

The Permittee shall submit to the IDEM, OAQ, within thirty (30) days of the end of each calendar quarter the calculated sulfur dioxide emission rate in pounds per million Btu for each facility for each day during the calendar quarter and the total fuel usage for each type at each facility for each day. The summary of the information to document compliance with Condition D.4.7 (c), shall be submitted to the address listed in Section C - General Reporting Requirements, of this permit.

SECTION D.5 FACILITY OPERATION CONDITION

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

(e) One (1) Sheet Mill Finishing operation, designated as No. 2 Sheet Mill, having a maximum capacity of 1,404,929 tons per year, comprised of the following facilities, fugitive sources, process equipment, and operational practices:

- (1) No. 1 Galvanizing Line (installed in 1959) consisting of:
 - (A) Flame Furnace having heat input rate of 18 MMBtu/hr with uncontrolled emissions exhausting through vent (V5A) to No. 2 Sheet Mill shop
 - (B) Galvanize furnace having a heat input rate of 37 MMBtu/hr with uncontrolled emissions exhausting through vent (V5A) to No. 2 Sheet Mill shop
 - (C) Zinc coating pot with uncontrolled fugitive emissions exhausting into the No. 2 Sheet Mill shop
 - (D) Chromic Acid Bath with water vapor exhausting into the No. 2 Sheet Mill shop
 - (E) Hot air dryer exhausting to No. 2 Sheet Mill shop
- (2) No. 2 Galvanizing Line (installed in 1988) consisting of:
 - (A) Flame Furnace having heat input rate of 150 MMBtu/hr with uncontrolled emissions exhausting through stack S5B.
 - (B) Galvanize furnace having a heat input rate of 54 MMBtu/hr with uncontrolled emissions exhausting through vent (V5A) to No. 2 Sheet Mill shop
 - (C) One (1) natural gas fired Edge Flame Burner on line No. 2, with uncontrolled emissions venting into the No. 2 Sheet Mill shop
 - (D) Zinc coating pot with uncontrolled fugitive emissions exhausting into the No. 2 Sheet Mill shop
 - (E) One (1) natural gas fired Selas Furnace, with uncontrolled emissions venting through vent (V5A) to No. 2 Sheet Mill shop
 - (F) Hot air dryers exhausting to No. 2 Sheet Mill shop
 - (G) Chromic Acid Bath with water vapor exhausting into the No. 2 Sheet Mill shop
 - (H) Temper Mill
- (3) Seven (7) space heaters (installed in 1968) having a combined heat input of 17.5 MMBtu per hour, with uncontrolled emissions exhausting to vent (V5B) to No. 2 Sheet Mill shop.

(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 [326 IAC 6-1-10.1(h)]

Pursuant to 326 IAC 6-1-10.1(h) (Lake County PM10 Emission Requirements) combustion from the No. 1 and No. 2 Galvanizing Line Flame Furnaces and the No. 1 and No. 2 Galvanizing Line Galvanizer Furnaces at the No. 2 Sheet Mill and the seven (7) space heaters shall be restricted to the use of natural gas as only fuel and the total suspended particulate (TSP) and particulate matter (PM₁₀) emissions shall not exceed the following:

- (a) The total suspended particulate emissions from the No. 1 Galvanizing Line Galvanizer Furnace (V5A) and No. 2 Galvanizing Line Galvanizer Furnace (V5B) shall not exceed 0.003 pounds per MMBtu and 0.265 pounds per one (1) hour period combined.
- (b) The particulate matter (PM₁₀) emissions from the No. 1 Galvanizing Line Flame Furnace (V5A) and No. 2 Galvanizing Line Flame Furnace (S5B) shall not exceed 0.003 pounds per MMBtu and 0.500 pounds per one (1) hour period combined.
- (c) The total suspended particulate emissions from the seven (7) space heaters (V5B) shall not exceed 0.003 pounds per MMBtu and 0.050 pounds per one (1) hour period combined.

D.5.2 Opacity

Pursuant to Construction Permit PC (45) 1702, issued August 4, 1988, the visible emissions from the No. 2 Galvanizing Line Flame Furnace (S5B) shall not exceed 5% opacity, 6-minute average.

D.5.3 Emission Offset [326 IAC 2-3]

Pursuant to Construction Permit PC (45) 1702, issued August 4, 1988, in order to make requirements of 326 IAC 2-2 not applicable the following shall apply:

- (a) NO_x emissions from the No. 2 Galvanizing Line Flame Furnace (S5B) shall be limited to 550 pounds per MMCF of natural gas and 361.35 tons per year.
- (a) the permanent shutdown in 1984 of 10 soaking pit sets, No. 2 slab mill, rated at 90 MMBtu/hr per set, and actual 1983 emissions based on 2,446 million cubic feet per year of natural gas.
- (a) the permanent shutdown in 1984 of the No. 2 High pressure boiler, rated at 190 MMBtu/hr and actual 1984 emissions based on 449 million cubic feet per year of natural gas and 86,000 gallon per year No. 6 fuel oil.

D.5.4 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for this facility and any control devices.

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

D.5.5 Sulfur Dioxide (SO₂) Sampling and Analysis [326 IAC 7-4-1.1(d)]

Pursuant to 326 IAC 7-4-1.1(d), and in order to comply with condition D.5.5, the Permittee shall submit a sampling and analysis protocol to IDEM. The protocol shall contain the following:

- (a) A description of planned procedures for sampling of sulfur-bearing fuels and materials for analysis of sulfur content, and for any planned direct measurement of sulfur dioxide emissions vented to the atmosphere.
- (b) The protocol shall specify the frequency of sampling, analysis and/or measurement for each fuel and materials for each facility. The department shall incorporate the protocol into the source's operation permit per procedures specified in 326 IAC 2.

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

D.5.6 Reporting Requirements

- (a) A quarterly summary of the information to document compliance with Condition D.5.3 shall be submitted to the address listed in Section C – General Reporting Requirements, of this permit, within thirty (30) days after the end of the quarter being reported. The report submitted by the Permittee does require the certification by the “responsible official” as defined by 326 IAC 2-7-1(34).

- (b) Reports shall be submitted in accordance with Section C - General Reporting Requirements of this permit.

SECTION D.6 FACILITY OPERATION CONDITIONS

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

- (f) **One (1) Sheet Mill Finishing operation, designated as No. 3 Sheet Mill, having a maximum capacity of 2,156,537 tons per year, comprised of the following facilities, fugitive sources, process equipment, and operational practices:**
- (1) Seven (7) Single Stack Batch Annealing Furnaces (1-7) (installed in 1965), having a combined heat input of 24.5 MMBtu per hour, with uncontrolled emissions exhausting inside the building to vent (V6A)
 - (2) Eleven (11) Four-Stack Batch Annealing Furnaces (1-11)(installed in 1966), having a combined heat input of 176 MMBtu per hour, with uncontrolled emissions exhausting inside the building to vent (V6A)
 - (3) One (1) Four-Stack Batch Annealing Furnace (13) (installed in 1998) with a heat input capacity of 10 MMBtu per hour, with uncontrolled emissions exhausting inside the building to vent (V6A)
 - (4) One (1) Pickle Line consisting of four (4) HCl process tanks and one (1) water rinse tank (installed in 1964), with acid fumes controlled by a scrubber system (14,000 acfm) comprised of tank hoods and ductwork connected to two (2) scrubbers (in series) exhausting through scrubber stack (S6A)
 - (5) One (1) Shot Blaster, used to put a matte finish on the surface of reconditioned rolls. Emissions are controlled by a small baghouse exhausting through vent (V6B) outside the building.
 - (6) One (1) tempering operation consisting of a 2-Stand Temper Mill with fugitive emissions exhausting inside the building.
 - (7) One (1) steel coil cold reduction operation consisting of one (1) 5- Stand Tandem Mill where steel coil thickness is reduced to final specification, with emissions exhausting through stack (S6B)
 - (8) Miscellaneous activities include two (2) steel sheet edge slitters, electrostatic oiling space heating and portable heating (to prevent equipment freezing).

(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 General Provisions Relating to HAPs [326 IAC 20-1-1][40 CFR 63, Subpart A]

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

D.6.2 National Emission Standards for Hazardous Air Pollutants for Steel Pickling - HCl Process Facilities and Hydrochloric Acid Regeneration Plants [40 CFR 63, Subpart CCC] [40 CFR 63.1157]

Pursuant to 40 CFR 63, Subpart CCC, the Pickling Line (S6A) shall comply with the following requirements:

- (a) The Permittee shall not cause or allow to be discharged into the atmosphere from the affected pickling line:
 - (1) Any gases that contain HCl in a concentration in excess of 18 ppmv; or
 - (2) HCl at a mass emission rate that corresponds to a collection efficiency of less than 97 percent.

D.6.3 NESHAP Maintenance Requirements [40 CFR 63.1160, Subpart CCC]

The Permittee shall comply with the operation and maintenance requirements of 40 CFR 63.6(e) (Subpart A, General Provisions) at the Pickling Line (S6A). Additionally, the Permittee shall prepare an operation and maintenance plan for each emission control device to be implemented no later than the compliance date. The plan shall be incorporated by reference into the source's Part 70 Operating Permit. All such plans must be consistent with good maintenance practices and, for a scrubber emission control device, must at a minimum:

- (a) Require monitoring and recording the pressure drop across the scrubber once per shift while the scrubber is operating in order to identify changes that may indicate a need for maintenance;
- (b) Require the manufacturer's recommended maintenance at the recommended intervals on fresh solvent pumps, recirculating pumps, discharge pumps, and other liquid pumps, in addition to exhaust system and scrubber fans and motors associated with those pumps and fans;
- (c) Require cleaning of the scrubber internals and mist eliminators at intervals sufficient to prevent buildup of solids or other fouling;
- (d) Require an inspection of each scrubber at intervals of no less than 3 months with:
 - (1) Cleaning or replacement of any plugged spray nozzles or other liquid delivery devices;
 - (2) Repair or replacement of missing, misaligned, or damaged baffles, trays, or other internal components;
 - (3) Repair or replacement of droplet eliminator elements as needed;
 - (4) Repair or replacement of heat exchanger elements used to control the temperature of fluids entering or leaving the scrubber; and
 - (5) Adjustment of damper settings for consistency with the required air flow.
- (e) If the scrubber is not equipped with a view port or access hatch allowing visual inspection, alternate means of inspection approved by the Administrator may be used.
- (f) The Permittee shall initiate procedures for corrective action within 1 working day of detection of an operating problem and complete all corrective actions as soon as practicable. Procedures to be initiated are the applicable actions that are specified in the maintenance plan. Failure to initiate or provide appropriate repair, replacement, or other corrective action is a violation of the maintenance requirement.
- (g) The Permittee shall maintain a record of each inspection, including each item identified in (d) above, that is signed by the responsible maintenance official and that shows the date of each inspection, the problem identified, a description of the repair, replacement, or other corrective action taken, and the date of the repair, replacement, or other corrective action taken.

D.6.4 Particulate Matter [326 IAC 6-1-10.1(h)]

Pursuant to 326 IAC 6-1-10.1(h) (Lake County PM10 Emission Requirements) the seven (7) single stack batch annealing furnaces and the eleven (11) multi-stack batch annealing furnaces shall fire natural gas only, and the total suspended particulate (TSP) emissions shall be limited as follows:

- (a) The total suspended particulate emissions from the seven (7) single stack batch annealing furnaces (V6A) shall not exceed 0.003 pounds per MMBtu and 0.071 pounds of TSP emissions emitted per one (1) hour period combined.

- (b) The total suspended particulate emissions from the eleven (11) multi-stack batch annealing furnaces (V6A) shall not exceed 0.003 pounds per MMBtu and 0.520 pounds of TSP emissions emitted per one (1) hour period combined.

D.6.5 Particulate Matter (PM) [326 IAC 6-1-2]

Pursuant 326 IAC 6-1-2, the Pickle Line (S6A), Shot Blaster (V6B), 2-Stand Temper Mill (S6B) and 5-Stand Tandem Mill (V6B) shall not discharge to the atmosphere any gases which contain particulate matter in excess of 0.03 grains per dry standard cubic foot of exhaust air.

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

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for this facility and any control devices.

Compliance Determination Requirements

D.6.7 Testing Requirements [40 CFR 63.1161][40 CFR 63.1162]

- (a) Within twelve (12) months of permit issuance, the Permittee shall conduct a performance test for the Pickling Line (S6A) to determine and demonstrate compliance with the applicable emission limitation according to the requirements of 40 CFR 63.7 (Subpart A, General Provisions). This initial performance test shall meet the following minimum requirements:
- (1) Following approval of the site-specific test plan, the Permittee shall conduct a performance test for each process or control device to either measure simultaneously the mass flows of HCl at the inlet and the outlet of the control device (to determine compliance with the applicable collection efficiency standard) or measure the concentration of HCl in gases exiting the process or the emission control device (to determine compliance with the applicable emission concentration standards).
 - (2) Compliance with the applicable concentration standard or collection efficiency standard shall be determined by the average of three consecutive runs or by the average of any three of four consecutive runs. Each run shall be conducted under conditions representative of normal process operations.
 - (3) Compliance is achieved if either the average collection efficiency as determined by the HCl mass flows at the control device inlet and outlet is greater than or equal to the applicable collection efficiency standard, or the average measured concentration of HCl exiting the process or the emission control device is less than or equal to the applicable emission concentration standard.
- (b) During the performance test for each emission control device, the Permittee using a wet scrubber to achieve compliance shall establish site-specific operating parameter values for the minimum scrubber makeup water flow rate and, for scrubbers that operate with recirculation, the minimum recirculation water flow rate. During the emission test, each operating parameter must be monitored continuously and recorded with sufficient frequency to establish a representative average value for that parameter, but no less frequently than once every 15 minutes. The Permittee shall determine the operating parameter monitoring values as in the averages of the values recorded during any of the runs for which results are used to establish the emission concentration or collection efficiency per 40 CFR 63.1161(a)(2). A Permittee may conduct multiple performance tests to establish alternative compliant operating parameter values. Also, a Permittee may reestablish compliant operating parameter values as part of any performance test that is conducted subsequent to the initial test or tests.
- (c) Conduct performance tests to measure the HCl flows at the control device inlet and outlet or the concentration of HCl exiting the control device according to the procedures described in 40 CFR 63.1161. Performance tests shall be conducted according to an alternative

schedule approved by IDEM, OAQ, every two and half (2.5) years or twice per Part 70 Operating Permit term. If any performance test shows that the HCl emission limitation is being exceeded, the Permittee is in violation of the emission limit.

- (d) Pursuant to 40 CFR 63.1163(d), the Permittee of an affected source shall notify IDEM, OAQ, in writing of his or her intention to conduct a performance test at least 60 calendar days before the performance test is scheduled to begin, to allow IDEM, OAQ, to review and approve the site-specific test plan required under 40 CFR 63.7(c), and, if requested by IDEM, OAQ, to have an observer present during the test.
- (e) The following test methods from Appendix A of 40 CFR 60 shall be used to determine compliance under 40 CFR 63.1157(a);
- (1) Method 1, to determine the number and location of sampling points, with the exception that no sampling traverse point shall be within one inch of the stack or duct wall;
 - (2) Method 2, to determine gas velocity and volumetric flow rate;
 - (3) Method 3, to determine the molecular weight of the stack gas;
 - (4) Method 4, to determine the moisture content of the stack gas; and
 - (5) Method 26A, "Determination of Hydrogen Halide and Halogen Emissions from Stationary Sources – Isokinetic Method," to determine the HCl mass flows at the inlet and outlet of a control device or the concentration of HCl discharged to the atmosphere. If compliance with a collection efficiency standard is being demonstrated, inlet and outlet measurements shall be performed simultaneously. The minimum sampling time for each run shall be 60 minutes and the minimum sample volume 0.85 dry standard cubic meters (dscm) [30 dry standard cubic feet (dscf)]. The concentration of HCl shall be calculated for each run as follows: $C_{HCl(ppmv)} = 0.659 C_{HCl(mg/dscm)}$, where $C_{(ppmv)}$ is concentration in ppmv and $C_{(mg/dscm)}$ is concentration in milligrams per dry standard cubic meter as calculated by the procedure given in Method 26A.
 - (6) The Permittee may use equivalent alternative measurement methods approved by U.S. EPA.

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

D.6.8 Monitoring Requirements [40 CFR 63.1162]

The Permittee shall:

- (a) In addition to conducting performance tests, if a wet scrubber is used as the emission control device, install, operate and maintain systems for the measurement and recording of the scrubber makeup water flow rate and, if required, recirculation water flow rate. These flow rates must be monitored continuously and recorded at least once per shift while the scrubber is operating. Operation of the wet scrubber with excursions of scrubber makeup water flow rate and recirculation water flow rate less than the minimum values established during the performance test or tests will require initiation of corrective action as specified by the maintenance requirements in 40 CFR 63.1160(b)(2).
- (b) Failure to record each of the operating parameters in 40 CFR 63.1162(a)(2) is a violation of the monitoring requirements of 40 CFR 63, Subpart CCC.
- (c) Each monitoring device shall be certified by the manufacturer to be accurate to within 5 percent and shall be calibrated in accordance with the manufacturer's instructions but not less frequently than once per year.

- (d) The Permittee may develop and implement alternative monitoring requirements subject to approval by U.S. EPA.

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

D.6.9 Record Keeping Requirements

- (a) To document compliance with Conditions D.6.2 and D.6.3, the Permittee shall maintain the following records pursuant to 40 CFR 63.1165:
- (1) The Permittee, as required by 40 CFR 63.10(b)(2) (Subpart A, General Provisions), shall maintain general records for 5 years from the date of each record of:
 - (A) The occurrence and duration of each startup, shutdown, or malfunction of operation;
 - (B) The occurrence and duration of each malfunction of the air pollution control equipment;
 - (C) All maintenance performed on the air pollution control equipment;
 - (D) Actions taken during periods of startup, shutdown, and malfunction and the dates of such actions when these actions are different from the procedures specified in the startup, shutdown, and malfunction plan;
 - (E) All information necessary to demonstrate conformance with the startup shutdown, and malfunction plan when all actions taken during periods of startup, shutdown, and malfunction (including corrective actions to restore malfunctioning process and air pollution control equipment to its normal or usual manner of operation) are consistent with the procedures specified in such plan. This information can be recorded in a checklist or similar form (see 40 CFR 63.10(b)(2)(v))
 - (F) All required measurements needed to demonstrate compliance with the standard and to support data that the source is required to report, including but not limited to, performance test measurements (including initial and any subsequent performance tests) and measurements as may be necessary to determine the conditions of the initial test or subsequent tests.
 - (G) All results of initial or subsequent performance tests;
 - (H) If the Permittee has been granted a waiver from record keeping or reporting requirements under 40 CFR 63.10(f), any information demonstrating whether a source is meeting the requirements for a waiver of record keeping or reporting requirements;
 - (I) If the Permittee has been granted a waiver from the initial performance test under 40 CFR 63.7(h), a copy of the full request and approval or disapproval;
 - (J) All documentation supporting initial notifications and notifications of compliance status required by 40 CFR 63.9; and
 - (K) Records of any applicability determination, including supporting analyses.
 - (2) In addition to the general records required by 40 CFR 63.1165(a), the Permittee shall maintain records for 5 years from the date of each record of:

- (A) Scrubber makeup water flow rate and recirculation water flow rate if a wet scrubber is used;
 - (B) Calibration and manufacturer certification that monitoring devices are accurate to within 5 percent;
 - (C) Each maintenance inspection and repair, replacement, or other corrective action; and
- (3) The Permittee shall keep the written operation and maintenance plan on record after it is developed to be made available for inspection, upon request, by IDEM, OAQ, for the life of the affected source or until the source is no longer subject to the provisions of 40 CFR 63, Subpart CCC. In addition, if the operation and maintenance plan is revised, the Permittee shall keep previous (i.e., superseded) versions of the plan on record to be made available for inspection by IDEM, OAQ, for a period of 5 years after each revision to the plan.
- (b) General records and 40 CFR 63, Subpart CCC records, for the most recent 2 years of operation must be maintained on site for 2 years. Records for the 3 previous years may be maintained off site.
 - (c) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

D.6.10 Reporting Requirements [40 CFR 63.1164]

- (a) As required by 40 CFR 63.10(d)(2), the Permittee of an affected source shall report the results of any performance test as part of the notification of compliance status required in 40 CFR 63.1163.
- (b) The Permittee of an affected source who is required to submit progress reports under 40 CFR 63.6(i), shall submit such reports to IDEM, OAQ by the dates specified in the written extension of compliance.
- (c) Pursuant to 40 CFR 63.6(e), the Permittee of an affected source is required to operate and maintain each affected emission source, including associated air pollution control equipment, in a manner consistent with good air pollution control practices for minimizing emissions at least to the level required by the standard at all time, including during any period of startup, shutdown, or malfunction. Malfunctions must be corrected as soon as practicable after their occurrence in accordance with the startup, shutdown, and malfunction plan.
 - (1) Pursuant to 40 CFR 63.6(e)(3), the Permittee shall develop and implement a written startup, shutdown, and malfunction plan that describes, in detail, procedures for operating and maintaining the source during periods of startup, shutdown, or malfunction, and a program of corrective action for malfunctioning process and air pollution control equipment used to comply with the relevant standard.
 - (2) Pursuant to 40 CFR 63.10(d)(5)(I) if actions taken by a Permittee during a startup, shutdown, or malfunction of an affected source (including actions taken to correct a malfunction) are consistent with the procedures specified in the startup, shutdown, and malfunction plan, the Permittee shall state such information in a semiannual report. The report, to be certified by the owner/operator or other responsible official, shall be submitted semiannually and delivered or postmarked by the 30th day following the end of each calendar half; and
 - (3) Any time an action taken by a Permittee during a startup, shutdown, or malfunction (including actions taken to correct a malfunction) is not consistent with the

procedures in the startup, shutdown, and malfunction plan, the Permittee shall comply with all requirements of 40 CFR 63.10(d)(5)(ii).

- (d) Reports shall be submitted in accordance with Section C - General Reporting Requirements of this permit.

SECTION D.7 FACILITY OPERATION CONDITIONS

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

(g) Utilities comprised of the following facilities, process equipment, and operational practices:

- (1) No. 5 Boiler, with a heat input rate of 454 MMBtu/hr fired by blast furnace gas, natural gas and No. 6 fuel oil exhausting through stacks S8C/D, installed in 1952.
- (2) No. 6 Boiler, with a heat input rate of 454 MMBtu/hr fired by blast furnace gas, natural gas and No. 6 fuel oil exhausting through stack S8E, installed in 1956.
- (3) No. 7 Boiler, with a heat input rate of 454 MMBtu/hr fired by blast furnace gas, natural gas and No. 6 fuel oil exhausting through stack S8F, installed in 1956
- (4) No. 8 Boiler, with a heat input rate of 1090 MMBtu/hr fired by blast furnace gas, natural gas and No. 6 fuel oil exhausting through stack S8G, installed in 1967

(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 Particulate Matter [326 IAC 6-1-10.1(d)]

Pursuant to 326 IAC 6-1-10.1(d)(Lake County PM10 Requirements) PM10 emissions from the Utilities operations shall not exceed the following:

- (a) PM10 emissions from Boiler No. 5 (S8C/D) shall not exceed 0.066 lbs/ MMBtu and 25.69 pounds per hour
- (b) PM10 emissions from Boiler No. 6 (S8E) shall not exceed 0.066 lbs/ MMBtu and 25.69 pounds per hour
- (c) PM10 emissions from Boiler No. 7 (S8F) shall not exceed 0.066 lbs/ MMBtu and 25.69 pounds per hour
- (d) PM10 emissions from Boiler No. 8 (S8G) shall not exceed 0.066 lbs/ MMBtu and 61.59 pounds per hour

Each emission limit applies to one (1) stack serving one (1) facility unless otherwise noted. The emission limitations apply to one (1) stack serving the multiple units specified when the facility descriptions notes "stack serving", and to each stack of multiple stacks serving multiple facilities when the facility description notes "each stack serving".

D.7.2 Sulfur Dioxide (SO₂) [326 IAC 7-4-1.1]

Pursuant to 326 IAC 7-4-1.1(c)(14(A)), the sulfur dioxide emission rate from these units shall be limited to the following:

- (a) SO₂ emissions from Boiler No. 5 (S8C/D), shall not exceed 0.896 lbs/ MMBtu.
- (b) SO₂ emissions from Boiler No. 6 (S8E), shall not exceed 0.896 lbs/ MMBtu.
- (c) SO₂ emissions from Boiler No. 7 (S8F), shall not exceed 0.896 lbs/ MMBtu.
- (d) SO₂ emissions from Boiler No. 8 (S8G), shall not exceed 0.896 lbs/ MMBtu.
- (e) Total actual heat input from fuel oil and/or desulfurized coke oven gas usage at all boilers combined shall not exceed nine hundred ninety-three (993) million Btu per hour.

- (f) Boilers shall be fired on fuel oil, blast furnace gas, desulfurized coke oven gas and natural gas only.
- (g) Fuel oil burned shall not exceed one and three-tenths percent (1.3%) sulfur and one and thirty-five hundredths (1.35) pounds per million Btu.

D.7.3 PSD and Emissions Offset Credit Limits [326 IAC 2-2 and 326 IAC 2-3]

Pursuant to CP089-10842-00448 issued on February 2, 2000 to Ironside Energy, LLC, the existing Boiler No. 4 with a heat input rate of 260 MMBtu per hour, owned and operated by ISG-Indiana Harbor (formerly LTV) shall be permanently removed from service upon commercial operation of Boiler No. 9 to render the requirements of 326 IAC 2-3 (Emission Offset) and 326 IAC 2-2 (PSD) not applicable. Boiler No. 4 was shutdown in 2001.

D.7.4 Nitrogen Oxide Reduction program for Specific Source Categories [326 IAC 10-3]

Pursuant to 326 IAC 10-3-3, beginning May 31, 2004, and each ozone control period thereafter, the Permittee shall comply with the following NOx emission limits:

- (a) NOx emissions from any affected boiler subject to this rule shall be limited to seventeen-hundreds pound of NOx per million Btus (0.17 lbs/MMBtu) of heat input over the ozone control period, and
- (b) Ensure that fifty percent (50%) of the heat input shall be derived from blast furnace gas averaged over the ozone control period.
- (c) During periods of blast furnace reline, startup, and period of malfunction, the affected boilers shall not be required to meet the requirement to derive fifty percent (50%) of the heat input from blast furnace gas.

D.7.5 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit is required for this facility and any control devices.

Compliance Determination Requirements

D.7.6 Nitrogen Oxide Reduction program for Specific Source Categories [326 IAC 10-3]

Beginning May 31, 2004, and each ozone control period thereafter, the Permittee shall meet the monitoring of 326 IAC 10-3-3(c). To comply with Condition D.7.4, for each affected boiler, the Permittee shall monitor fuel usage and the percentage heat input derived from each fuel combusted to demonstrate that greater than fifty percent (50%) of heat input is derived from blast furnace gas.

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

D.7.7 Sulfur Dioxide (SO₂) Sampling and Analysis [326 IAC 7-4-1.1(d)]

Pursuant to 326 IAC 7-4-1.1(d), and in order to comply with condition D.7.2, the Permittee shall submit a sampling and analysis protocol to IDEM. The protocol shall contain the following:

- (a) A description of planned procedures for sampling of sulfur-bearing fuels and materials for analysis of sulfur content, and for any planned direct measurement of sulfur dioxide emissions vented to the atmosphere.
- (b) The protocol shall specify the frequency of sampling, analysis and/or measurement for each fuel and materials for each facility. The department shall incorporate the protocol into the source's operation permit per procedures specified in 326 IAC 2.

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

D.7.8 Record Keeping Requirements

- (a) To document compliance with Conditions D.7.2 and D.7.7, the Permittee shall maintain the following records:
 - (1) Records of the total coke oven gas, blast furnace gas, fuel oil, and natural gas usage for each day at the Nos. 5, 6, 7, and 8 Boilers.
 - (2) Records of the average sulfur content and heating value for each day for each fuel type used during the calendar quarter.
 - (3) Records of any compliance emissions calculations.
- (b) Pursuant to 40 CFR 63.1(b)(3) and 40 CFR 63.10 (b)(3), in order to document exclusion from applicability to 40 CFR 63, Subpart DDDDD, the Permittee shall maintain records of fuel usage at boilers 5, 6, 7 and 8, ascertaining that on the annual basis the blast furnace gas usage at each boiler is greater than 90%. These records shall be kept for a period of five (5) years after the determination of exclusion, or until the source changes its operations to become an affected source, whichever comes first.
- (c) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

D.7.9 Reporting Requirements

The Permittee shall submit to the IDEM, OAQ, within thirty (30) days of the end of each calendar quarter the calculated sulfur dioxide emission rate in pounds per million Btu for each facility for each day during the calendar quarter and the total fuel usage for each type at each facility for each day. The summary of the information to document compliance with Condition D.7.8 (a), shall be submitted to the address listed in Section C - General Reporting Requirements, of this permit.

SECTION D.8 FACILITY OPERATION CONDITIONS

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

(h) Shops*

- (1) Machine Shop
- (2) Refrigeration Shop
- (3) Electrical Shop
- (4) Bridge Shop
- (5) Pipe Shop
- (6) Line Shop
- (7) Fabrication Shop
- (8) Carpenter shop
- (9) Paint Shop and Paint Building
- (10) Mason Shop
- (11) Transportation Shop
 - (A) Gasoline Dispensing Facility with 10,000 gallon capacity Storage Tank (T4A22) (162, 504 gal/yr throughput), installed in 1988
 - (B) Two (2) Diesel Fuel Storage Tanks (T-4A7 & T- 4A8) with a 10,000 gallon storage capacity.
- (12) Locomotive Shop including Railcar and Yard Storage

*the activities performed in the shops are listed in the insignificant activities

(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 Gasoline Storage Tank Requirements [326 IAC 8-4-6]

Pursuant to 326 IAC 8-4-6(b) No owner or operator of a gasoline dispensing facility shall allow the transfer of gasoline between any transport and any storage tank unless such tank is equipped with the following:

- (a) A submerged fill pipe.
- (b) Either a pressure relief valve set to release at no less than seven-tenths (0.7) pounds per square inch or an orifice of five-tenths (0.5) inch in diameter.
- (c) A vapor balance system connected between the tank and the transport, operating according to manufacturer's specifications.

D.8.2 Gasoline Dispensing Facility Requirements [326 IAC 8-4-6]

Pursuant to 326 IAC 8-4-6 (e):

- (a) No owner or operator of a gasoline dispensing facility shall cause or allow the dispensing of motor vehicle fuel at any time unless all motor vehicle fuel dispensing operations are

equipped with and utilize a certified vapor collection and control system which is properly installed and operated as follows:

- (1) No vapor collection and control system shall be installed, used, or maintained unless the system has been certified by CARB and meets the testing requirements specified in 326 IAC 8-4-6 (k)(6).
 - (2) Any vapor collection and control system utilized shall be maintained in accordance to its certified configuration and with the manufacturer's specification and maintenance schedule.
 - (3) No elements or components of a vapor collection and control system shall be modified, removed, replaced, or otherwise rendered inoperative in a manner which prevents the system from performing in accordance with its certification and design specifications.
- (b) One (1) operator or employee of the gasoline dispensing facility shall be trained and instructed annually in the proper operation and maintenance of a vapor collection and control system.
- (c) Instructions shall be posted in a conspicuous and visible place within the motor vehicle fuel dispensing area for the system in use at that station. The instructions shall clearly describe how to fuel vehicles correctly with the vapor recovery nozzles utilized at that station. The instructions shall also include a warning that repeated attempts to continue dispensing motor vehicle fuel after the system has indicated that the vehicle fuel tank is full, may result in a spillage of fuel.

D.8.3 Volatile Organic Liquid Storage Vessels [326 IAC 8-9]

Pursuant to 326 IAC 8-9-1, the Permittee is required to keep records on the information in 326 IAC 8-9-6(a)-(b) for the two (2) 10,000 gallon Diesel Fuel Storage Tank (T-4A7 & T-4A8).

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

D.8.4 Gasoline Dispensing Facility Monitoring Requirements [326 IAC 8-4-6]

Pursuant to 326 IAC 8-4-6 (e):

- (a) A vapor collection and control system shall not be operated with defective, malfunctioning, missing, or noncertified components. The following requirements apply to a vapor collection and control system:
- (1) All parts of the system which can be visually inspected must be checked daily by the operator of the facility for the following malfunctions:
 - (A) Absence or disconnection of any component required to be used to certify the system.
 - (B) A vapor hose which is crimped or flattened such that the vapor passage is blocked or severely restricted.
 - (C) A nozzle boot which is torn in either of the following manners:
 - (i) A triangular shaped or similar tear one-half ($\frac{1}{2}$) inch or more to a side or a hole one-half ($\frac{1}{2}$) inch or more in diameter or length.
 - (ii) Slit one (1) inch or more in length.
 - (D) A faceplate or flexible cone which is damaged in the following manner:

- (i) For balance nozzles and nozzles for aspirator and educator assist type systems, damage shall be such that the capability to achieve a seal with a fill pipe interface is affected for one-fourth ($\frac{1}{4}$) of the circumference of the faceplate (accumulated).
 - (ii) For nozzles for vacuum assist type systems that use a flexible cone, having more than one-fourth ($\frac{1}{4}$) of the flexible cone missing.
- (E) A nozzle shutoff mechanism which malfunctions in any manner.
- (F) A vacuum producing device which is inoperative.
- (b) All vapor collection and control systems shall be retested for vapor leakage and blockage, and successfully pass the test, at least every five (5) years or upon major system replacement or modification. A major system modification is considered to be replacing, repairing, or upgrading seventy-five percent (75%) or more of a vapor collection and control system of a facility.

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

D.8.5 Record Keeping Requirements

- (a) Pursuant to 326 IAC 8-4-6 (i), any gasoline dispensing facility subject to 326 IAC 8-4-6 (e) shall retain copies of all records and reports adequate to clearly demonstrate the following:
 - (1) That a certified vapor collection and control system has been installed and tested to verify its performance according to its specifications.
 - (2) That proper maintenance has been conducted in accordance with the manufacturer's specifications and requirements.
 - (3) The time period and duration of all malfunctions of the vapor collection and control system.
 - (4) The motor vehicle fuel throughput of the facility for each calendar month of the previous year.
 - (5) That operators and employees are trained and instructed in the proper operation and maintenance of the vapor collection and control system.
- (b) All records and reports required in 326 IAC 8-4-6 (i) shall be made available to the agency upon request. All records shall be retained for a period of two (2) years
- (c) Pursuant to 326 IAC 8-9, the Permittee must keep records of the following:
 - (1) The vessel identification number;
 - (2) The vessel dimensions; and
 - (3) The vessel capacity.

Records shall be maintained for the life of the vessel.
- (d) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

SECTION D.9 FACILITY OPERATION CONDITIONS

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

(i) Storage Vessels: (all tanks installed before 1975)

- (1) One (1) 400,000 gallon storage tank containing #6 fuel oil (T4F24)
- (2) One (1) 70,000 gallon storage tank containing #6 fuel oil (T4A1)
- (3) One (1) 25,000 gallon diesel fuel storage tank (T4A13)
- (4) One (1) 2,000,000 gallon storage tank containing #6 fuel oil (T4A4)
- (5) One (1) 200,000 gallon storage tank containing #6 fuel oil (T4A5)
- (6) One (1) 3,400,000 gallon storage tank containing #6 fuel oil (T4C9)
- (7) One (1) 3,400,000 gallon storage tank containing #6 fuel oil (T4A C10)
- (8) Three (3) 5,000 gallon bleach storage tanks (TR-05, TR-06, TR-07)
- (9) Two (2) 5,000 gallon storage tanks containing hydrochloric acid (HCl) (TR-22, TR-23)
- (10) One (1) 5,000 gallon storage tanks containing ethylene glycol (T4E15)
- (11) Two (2) 30,000 gallon storage tank containing hydrochloric acid (HCl) (T-238, T-239)
- (12) One (1) 8,000 gallon diesel fuel tank (T-4F95)

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

Emission Limitations and Standards

D.9.1 Volatile Organic Liquid Storage Vessels [326 IAC 8-9]

Pursuant to 326 IAC 8-9-1, the Permittee is required to keep records on the information in 326 IAC 8-9-6(a)-(b) for all storage vessels containing No. 2 fuel oil, No. 6 fuel oil, diesel fuel, bleach and ethylene glycol.

D.9.2 NESHAP Operational and equipment standards [40 CFR 63.63.1159, Subpart CCC]

Hydrochloric acid storage vessels. Pursuant to 40 CFR 63.63.1159, Subpart CCC, the Permittee of an affected vessel shall provide and operate, except during loading and unloading of acid, a closed-vent system for each vessel. Loading and unloading shall be conducted either through enclosed lines or each point where the acid is exposed to the atmosphere shall be equipped with a local fume capture system, ventilated through an air pollution control device.

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

D.9.3 Monitoring Requirements [40 CFR 63.1162]

Pursuant to 40 CFR 63.1162, the Permittee of an affected hydrochloric acid storage vessel shall inspect each vessel semiannually to determine that the closed-vent system and either the air pollution control device or the enclosed loading and unloading line, whichever is applicable, are installed and operating when required.

Record Keeping and Reporting Requirements [326 IAC 2-8-4(3)] [326 IAC 2-8-16]

D.9.4 Record Keeping Requirements

Pursuant to 326 IAC 8-9, the Permittee must keep records of the following:

- (a) The vessel identification number;
- (b) The vessel dimensions; and
- (c) The vessel capacity.

Records shall be maintained for the life of the vessel.

SECTION D.10 FACILITY OPERATION CONDITIONS

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

Insignificant Activities:

- (a) A petroleum fuel, other than gasoline, dispensing facility having a storage capacity less than or equal to 10,500 gallons, and dispensing less than or equal to 230,000 gallons per month. [326 IAC 8-9-1]
- (b) The following VOC and HAP storage containers:
 - (1) Storage tanks with capacity less than or equal to 1,000 gallons and annual throughput less than 12,000 gallons. [326 IAC 8-9-1]
- (c) Degreasing operations that do not exceed 145 gallons per 12 months, except if subject to 326 IAC 20-6. [326 IAC 8-3-2] [326 IAC 8-3-5]
- (d) The following equipment related to manufacturing activities not resulting in the emission of HAPs: brazing equipment, cutting torches, soldering equipment, welding equipment. [326 IAC 6-1-2]
- (e) Grinding and machining operations controlled with fabric filters, scrubbers, mist collectors, wet collectors and electrostatic precipitators with a design grain loading of less than or equal to 0.03 grains per actual cubic foot and a gas flow rate less than or equal to 4000 actual cubic feet per minute, including the following: deburring; buffing; polishing; abrasive blasting; pneumatic conveying; and woodworking operations. [326 IAC 6-1-2]

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

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

D.10.1 Nonattainment Area Particulate Limitations [326 IAC 6-1-2]

Pursuant to 326 IAC 6-1-2 (Nonattainment Area Particulate Limitations), the particulate matter emissions from the brazing equipment, cutting torches, soldering equipment, welding equipment, grinding and machining operations shall not exceed 0.03 grains per dry standard cubic foot (gr/dscf).

D.10.2 Volatile Organic Liquid Storage Vessels [326 IAC 8-9-1]

Pursuant to 326 IAC 8-9-1, the Permittee is required to keep records on the information in 326 IAC 8-9-6(a)-(b) for all stationary vessels used to store volatile organic liquids.

D.10.3 Volatile Organic Compounds (VOC) [326 IAC 8-3-2]

Pursuant to 326 IAC 8-3-2 (Cold Cleaner Operations), for cold cleaning operations existing as of January 1, 1980, located in Clark, Elkhart, Floyd, Lake, Marion, Porter and St. Joseph Counties and which have potential emissions of one hundred (100) tons per year or greater of VOC, the Permittee shall:

- (a) Equip the cleaner with a cover;
- (b) Equip the cleaner with a facility for draining cleaned parts;
- (c) Close the degreaser cover whenever parts are not being handled in the cleaner;
- (d) Drain cleaned parts for at least fifteen (15) seconds or until dripping ceases;
- (e) Provide a permanent, conspicuous label summarizing the operation requirements;
- (f) Store waste solvent only in covered containers and not dispose of waste solvent or transfer

it to another party, in such a manner that greater than twenty percent (20%) of the waste solvent (by weight) can evaporate into the atmosphere.

D.10.4 Volatile Organic Compounds (VOC) [326 IAC 8-3-5]

Pursuant to 326 IAC 8-3-5(a) (Cold Cleaner Degreaser Operation and Control), for cold cleaner degreaser operations without remote solvent reservoirs existing as of July 1, 1990, located in Clark, Elkhart, Floyd, Lake, Marion, Porter or St. Joseph Counties, the Permittee shall ensure that the following requirements are met:

- (1) Equip the degreaser with a cover. The cover must be designed so that it can be easily operated with one (1) hand if:
 - (A) The solvent volatility is greater than two (2) kiloPascals (fifteen (15) millimeters of mercury or three-tenths (0.3) pounds per square inch) measured at thirty-eight degrees Celsius (38^oC) (one hundred degrees Fahrenheit (100^oF));
 - (B) The solvent is agitated; or
 - (C) The solvent is heated.
- (2) Equip the degreaser with a facility for draining cleaned articles. If the solvent volatility is greater than four and three-tenths (4.3) kiloPascals (thirty-two (32) millimeters of mercury or six-tenths (0.6) pounds per square inch) measured at thirty-eight degrees Celsius (38^oC) (one hundred degrees Fahrenheit (100^oF)), then the drainage facility must be internal such that articles are enclosed under the cover while draining. The drainage facility may be external for applications where an internal type cannot fit into the cleaning system.
- (3) Provide a permanent, conspicuous label which lists the operating requirements outlined in subsection (b).
- (4) The solvent spray, if used, must be a solid, fluid stream and shall be applied at a pressure which does not cause excessive splashing.
- (5) Equip the degreaser with one (1) of the following control devices if the solvent volatility is greater than four and three-tenths (4.3) kiloPascals (thirty-two (32) millimeters of mercury or six-tenths (0.6) pounds per square inch) measured at thirty-eight degrees Celsius (38^oC) (one hundred degrees Fahrenheit (100^oF)), or if the solvent is heated to a temperature greater than forty-eight and nine-tenths degrees Celsius (48.9^oC) (one hundred twenty degrees Fahrenheit (120^oF)):
 - (A) A freeboard that attains a freeboard ratio of seventy-five hundredths (0.75) or greater.
 - (B) A water cover when solvent is used is insoluble in, and heavier than, water.
 - (C) Other systems of demonstrated equivalent control such as a refrigerated chiller or carbon adsorption. Such systems shall be submitted to the U.S. EPA as a SIP revision.

Compliance Determination Requirement

D.10.5 Particulate Control

In order to comply with D.10.1, the control equipment for particulate control shall be in operation and control emissions from the grinding and machining operations at all times that the grinding and machining operations are in operation.

Record Keeping and Reporting Requirements [326 IAC 2-8-4(3)] [326 IAC 2-8-16]

D.10.6 Record Keeping Requirements

Pursuant to 326 IAC 8-9, the Permittee must keep records of the following:

- (a) The vessel identification number;
- (b) The vessel dimensions; and
- (c) The vessel capacity.

Records shall be maintained for the life of the vessel

D.10.7 Volatile Organic Compounds (VOC) [326 IAC 8-3-8] (Material requirements for cold cleaning degreasers)

Pursuant to 326 IAC 8-3-8 (Material requirements for cold cleaning degreasers), the users, providers, and manufacturers of solvents for use in cold cleaning degreasers in Clark, Floyd, Lake, and Porter Counties, except for solvents intended to be used to clean electronic components shall do the following:

- (a) On and after November 1, 1999, no person shall Operate a cold cleaning degreaser with a solvent vapor pressure that exceeds two (2) millimeters of mercury (thirty-eight thousandths (0.038) pound per square inch) measured at twenty (20) degrees Celsius (sixty-eight (68) degrees Fahrenheit).
- (b) On and after May 1, 2001, no person shall Operate a cold cleaning degreaser with a solvent vapor pressure that exceeds one (1) millimeter of mercury (nineteen-thousandths (0.019) pound per square inch) measured at twenty (20) degrees Celsius (sixty-eight (68) degrees Fahrenheit).
- (c) On and after November 1, 1999, all persons subject to the requirements of 326 IAC 8-3-8 (c)(1)(B) and (c)(2)(B) shall maintain each of the following records for each purchase:
 - (1) The name and address of the solvent supplier.
 - (2) The date of purchase.
 - (3) The type of solvent.
 - (4) The volume of each unit of solvent.
 - (5) The total volume of the solvent.
 - (6) The true vapor pressure of the solvent measured in millimeters of mercury at twenty (20) degrees Celsius (sixty-eight (68) degrees Fahrenheit).
- (d) All records required by 326 IAC 8-3-8 (d) shall be retained on-site for the most recent three (3) year period and shall be reasonably accessible for an additional two (2) year period.

SECTION D.11 FACILITY OPERATION CONDITIONS

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

Fugitive Dust Sources consisting of, but not limited to the following:

- (1) Paved Roads and Parking Lots
- (2) Unpaved Roads and Parking Lots
- (3) Batch Transfer-Loading and Unloading Operations
- (4) Continuous Transfer In and Out of Storage Piles
- (5) Batch Transfer Operations-Slag and Kish Handling
- (6) Wind Erosion from Storage Piles and Open Areas
- (7) In Plant Transfer by Truck or Rail
- (8) In Plant Transfer by Front End Loader or Skip Hoist
- (9) Material Processing Facility (except Crusher Fugitive Emissions)
- (10) Crusher Fugitive Emissions
- (11) Material Processing Facility Building Openings
- (12) Dust Handling Equipment

(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.11.1 Particulate Matter (PM)[326 IAC 6-1-11.1]

Pursuant to 326 IAC 6-1-11.1 (Lake County Fugitive Particulate Matter Control Requirements), compliance with the opacity limits specified in Section C-Fugitive Dust Emissions shall be achieved by controlling fugitive particulate matter emissions according to the revised Fugitive Dust Control Plan (FDCP). If it is determined that the control procedures specified in the FDCP do not demonstrate compliance with the fugitive emission limitations, IDEM, OAQ may request that the FDCP be revised and submitted for approval.

Compliance Determination Requirements

D.11.2 Particulate Matter (PM)

Pursuant to 326 IAC 6-1-11.1 (Lake County Fugitive Particulate Matter Control Requirements), opacity from the activities shall be determined as follows:

- (a) Paved Roads and Parking Lots
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.

The three (3) readings shall be taken at the point of maximum opacity. The observer shall stand approximately fifteen (15) feet 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 roadway or parking area.

- (b) **Unpaved Roads and Parking Lots**
The fugitive particulate emissions from unpaved roads shall be controlled by the implementation of a work program and work practice under the fugitive dust control plan.
- (c) **Batch Transfer**
The average instantaneous opacity shall consist of the average of three (3) opacity readings taken five (5) seconds, ten (10) seconds, and fifteen (15) seconds after the end of one (1) batch loading or unloading operation. The three (3) readings shall be taken at the point of maximum opacity. The observer shall stand approximately fifteen (15) feet from the plume and at approximately right angles to the plume.
- (d) **Continuous Transfer**
The opacity shall be determined using 40 CFR 60, Appendix A, Method 9. The opacity readings shall be taken at least four (4) feet from the point of origin.
- (e) **Wind Erosion from Storage Piles**
The opacity shall be determined using 40 CFR 60, Appendix A, Method 9, except that the opacity shall be observed at approximately four (4) feet from the surface at the point of maximum opacity. The observer shall stand approximately fifteen (15) feet from the plume and at approximately right angles to the plume. The limitations may not apply during periods when application of fugitive particulate control measures are either ineffective or unreasonable due to sustained very high wind speeds. During such periods, the company must continue to implement all reasonable fugitive particulate control measures and maintain records documenting the application of measures and the basis for a claim that meeting the opacity limitation was not reasonable given prevailing wind conditions.
- (f) **Wind Erosion from Exposed Areas**
The opacity shall be determined using 40 CFR 60, Appendix A, Method 9.
- (g) **Material Transported by Truck or Rail**
Compliance with this limitation shall be determined by 40 CFR 60, Appendix A, Method 22, except that the observation shall be taken at approximately right angles to the prevailing wind from the leeward side of the truck or railroad car. Material transported by truck or rail that is enclosed and covered shall be considered in compliance with the inplant transportation requirement.
- (h) **Material Transported by Front End Loader or Skip Hoist**
Compliance with this limitation shall be determined by the average of three (3) opacity readings taken at five (5) second intervals. The three (3) opacity readings 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.The three (3) readings shall be taken at the point of maximum opacity. The observer shall stand at least fifteen (15) feet from the plume approximately and at right angles to the plume. Each reading shall be taken approximately four (4) feet above the surface of the roadway or parking area.
- (i) **Material Processing Limitations**
Compliance with all opacity limitations from material processing equipment shall be

determined using 40 CFR 60, Appendix A, Method 9. Compliance with all visible emissions limitations from material processing equipment shall be determined using 40 CFR 60, Appendix A, Method 22. Compliance with all particulate matter limitations from material processing equipment shall be determined using 40 CFR 60, Appendix A, Method 5 or 17.

- (j) Dust Handling Equipment
Compliance with this standard shall be determined by 40 CFR 60, Appendix A, Method 9.

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

D.11.3 Record Keeping Requirements

Pursuant to 326 IAC 6-1-11.1 (Lake County Fugitive Particulate Matter Control Requirements):

- (a) The source shall keep the following documentation to show compliance with each of its control measures and control practices:
- (1) A map or diagram showing the location of all emission sources controlled, including the location, identification, length, and width of roadways.
 - (2) For each application of water or chemical solution to roadways, the following shall be recorded:
 - (A) The name and location of the roadway controlled
 - (B) Application rate
 - (C) Time of each application
 - (D) Width of each application
 - (E) Identification of each method of application
 - (F) Total quantity of water or chemical used for each application
 - (G) For each application of chemical solution, the concentration and identity of the chemical
 - (H) The material data safety sheets for each chemical
 - (3) For application of physical or chemical control agents not covered by 326 IAC 6-1-11.1(B), the following:
 - (A) The name of the agent
 - (B) Location of application
 - (C) Application rate
 - (D) Total quantity of agent used
 - (E) If diluted, percent of concentration
 - (F) The material data safety sheets for each chemical
 - (4) A log recording incidents when control measures were not used and a statement of explanation.
 - (5) Copies of all records required by this section shall be submitted to the department

within twenty (20) working days of a written request by the department.

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

D.11.4 Reporting Requirements

- (a) Pursuant to 326 IAC 6-1-11.1 (Lake County Fugitive Particulate Matter Control Requirements), a quarterly report shall be submitted, stating the following:
 - (1) The dates any required control measures were not implemented
 - (2) A listing of those control measures
 - (3) The reasons that the control measures were not implemented
 - (4) Any corrective action taken
- (b) The Permittee shall submit to the IDEM, OAQ, within thirty (30) days of the end of each calendar quarter, the quarterly report in accordance with Section C - General Reporting Requirements of this permit.

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT OFFICE OF AIR QUALITY

PART 70 OPERATING PERMIT CERTIFICATION

Source Name: ISG Indiana Harbor Inc.
Source Address: 3001 Dickey Road, East Chicago 46312
Mailing Address: 3001 Dickey Road, East Chicago 46312
Part 70 Permit No.: T089-7099-00318

**This certification shall be included when submitting monitoring, testing reports/results
or other documents as required by this permit.**

Please check what document is being certified:

- Annual Compliance Certification Letter
- Test Result (specify)
- Report (specify)
- Notification (specify)
- Affidavit (specify)
- Other (specify)

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

Signature:

Printed Name:

Title/Position:

Phone:

Date:

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE BRANCH
100 North Senate Avenue
P.O. Box 6015
Indianapolis, Indiana 46206-6015
Phone: 317-233-5674
Fax: 317-233-5967**

**PART 70 OPERATING PERMIT
EMERGENCY OCCURRENCE REPORT**

Source Name: ISG Indiana Harbor Inc.
Source Address: 3001 Dickey Road, East Chicago 46312
Mailing Address: 3001 Dickey Road, East Chicago 46312
Part 70 Permit No.: T089-7099-00318

This form consists of 2 pages

Page 1 of 2

<p>9 This is an emergency as defined in 326 IAC 2-7-1(12)</p> <ul style="list-style-type: none">C The Permittee must notify the Office of Air Quality (OAQ), within four (4) business hours (1-800-451-6027 or 317-233-5674, ask for Compliance Section); andC The Permittee must submit notice in writing or by facsimile within two (2) working days (Facsimile Number: 317-233-5967), and follow the other requirements of 326 IAC 2-7-16.

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

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

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

Page 2 of 2

Date/Time Emergency started:
Date/Time Emergency was corrected:
Was the facility being properly operated at the time of the emergency? Y N
Type of Pollutants Emitted: TSP, PM-10, SO 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:

Phone:

A certification is not required for this report.

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

**PART 70 OPERATING PERMIT
SEMI-ANNUAL NATURAL GAS FIRED BOILER CERTIFICATION**

Source Name: ISG Indiana Harbor Inc.
Source Address: 3001 Dickey Road, East Chicago 46312
Mailing Address: 3001 Dickey Road, East Chicago 46312
Part 70 Permit No.: T089-7099-00318

<input checked="" type="checkbox"/> Natural Gas Only
<input checked="" type="checkbox"/> Alternate Fuel burned
From:___ To:___

I certify that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.
Signature:
Printed Name:
Title/Position:
Phone:
Date:

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**

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

Source Name: ISG Indiana Harbor Inc.
Source Address: 3001 Dickey Road, East Chicago 46312
Mailing Address: 3001 Dickey Road, East Chicago 46312
Part 70 Permit No.: T089-7099-00318

Months: ____ to ____ Year: ____

Page 1 of 2

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

NO DEVIATIONS OCCURRED THIS REPORTING PERIOD.

THE FOLLOWING DEVIATIONS OCCURRED THIS REPORTING PERIOD

Permit Requirement (specify permit condition #)

Date of Deviation:

Duration of Deviation:

Number of Deviations:

Probable Cause of Deviation:

Response Steps Taken:

Permit Requirement (specify permit condition #)

Date of Deviation:

Duration of Deviation:

Number of Deviations:

Probable Cause of Deviation:

Response Steps Taken:

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

Form Completed By:

Title/Position:

Date:

Phone:

Attach a signed certification to complete this report.