



INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

We Protect Hoosiers and Our Environment.

Mitchell E. Daniels Jr.
Governor

Thomas W. Easterly
Commissioner

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

TO: Interested Parties / Applicant

DATE: April 24, 2008

RE: US Steel - Gary Works / 089-26246-00121

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

Notice of Decision – Approval

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 326 IAC 2, this approval was effective immediately upon submittal of the application.

If you wish to challenge this decision, IC 4-21.5-3-7 requires that you file a petition for administrative review. This petition may include a request for stay of effectiveness and must be submitted to the Office of Environmental Adjudication, 100 North Senate Avenue, Government Center North, Suite N 501E, Indianapolis, IN 46204, **within eighteen (18) calendar days from the mailing of this notice**. The filing of a petition for administrative review is complete on the earliest of the following dates that apply to the filing:

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

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

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

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

Enclosures
FNPER-AM.dot12/3/07



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Mr. James Alexander
U.S. Steel - Gary Works
One North Broadway
Gary, IN 46402

April 24, 2008

Re: T089-26246-00121
Second Administrative Amendment to
Part 70 Permit No. T089-7663-00121

Dear Mr. Alexander:

U.S. Steel - Gary Works was issued a Part 70 Operating Permit on August 18, 2006 for an integrated steel mill. Gary Coal Processing, LP, source ID 089-00169, has previously been permitted as part of the same major source as US Steel - Gary Works, source ID 089-00121. They were issued separate permits solely for administrative purposes. US Steel - Gary Works will be taking over operation of Gary Coal Processing, LP and has requested the Gary Coal Processing, LP permit to be incorporated into the U.S. Steel - Gary Works permit. The current Gary Coal Processing, LP permit will be revoked upon completion of this permit transfer to US Steel - Gary Works.

Pursuant to the provisions of 326 IAC 2-7-11, the permit is hereby administratively amended as follows (deletions are marked with a ~~strikeout~~ and the new information is in **bold**):

- (a) The entire Section D and the applicable Quarterly Report forms of the Gary Coal Processing, LP permit has been incorporated into the US Steel -Gary Works permit under Section E. The Section A listings and the Quarterly Reports have been revised accordingly. The typographical errors to the formula under E.3.2(a)(1)(A) have been corrected. The existing Nitrogen Oxide Budget Source information under Section E has been revised to Section F.
- (b) Brandenburg Industrial Service Company, source ID 089-00176, had previously been permitted as part of the same major source as US Steel - Gary Works, source ID 089-00121. They were issued separate permits solely for administrative purposes. IDEM, OAQ examined whether these two plants should remain combined as one "major source" as defined in 326 IAC 2-7-1(22). In order for these two plants to be considered one major source, they must meet all three of the following criteria:
 - (1) the plants must be under common ownership or common control;
 - (2) the plants must have the same two-digit Standard Industrial Classification (SIC) Code, or one must serve as a support facility for the other; and
 - (3) the plants must be located on contiguous or adjacent properties.

Brandenburg Industrial Service Company is an on-site contractor for US Steel - Gary Works that processes scrap steel. Brandenburg Industrial Service Company's revenue from US Steel - Gary Works in 2006 was approximately 7% of its total revenue. From 2003 to 2006, US Steel - Gary Works accounted for less than 17% of Brandenburg Industrial Service Company's total revenue. Most of Brandenburg Industrial Service Company's output goes to sources other than US Steel - Gary Works.

IDEM's Nonrule Policy Document Air-006-NPD states that an on-site contractor is presumed to be part of the primary source if the contractor supplies a majority of its goods or services to the primary source. This presumption may be rebutted by showing that the on-site contractor does not provide a majority of its output to the primary source. Brandenburg Industrial Service Company has demonstrated that it no longer provides a majority of its goods or services to US Steel - Gary Works. US Steel - Gary Works and Brandenburg Industrial Service Company do not have a common owner, and there appears to no longer be any common control.

US Steel - Gary Works has the two digit SIC Code of 33 for Primary Metal Industries. Brandenburg Industrial Service Company has the two digit SIC Code of 50 for Wholesale Trade-durable Goods. Brandenburg Industrial Service Company supplies less than 50% of its output to US Steel - Gary Works. The two plants have different two digit SIC Codes and there is no support relationship. US Steel - Gary Works and Brandenburg Industrial Service Company are located on contiguous properties at One North Broadway in Gary.

IDEM, OAQ finds that Brandenburg Industrial Service Company and US Steel - Gary Works are no longer part of the same major source. Each plant will be permitted as a separate source. Therefore, U.S. Steel - Gary Works' Part 70 Operating Permit No. T089-7663-00121 is being revised to remove Brandenburg Industrial Service Company, Plant ID 089-00176, located at One North Broadway, Gary, Indiana 46402 from Section A.2 Part 70 Source Definition [326 IAC 2-7-1(22)]. This update is considered a descriptive change and will not trigger a new applicable requirement or violate a permit term.

- (c) Koppers, Inc. is no longer operating at the coke plant. AKJ Industries, Inc., plant Id 089-00505, has taken its place. Section A.2 has been revised accordingly.

Pursuant to the provisions of 326 IAC 2-7-11, the permit is hereby administratively amended as follows (deletions are marked with a ~~strikeout~~ and the new information is in **bold**):

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

This integrated steel mill consists of a main mill and ~~nine (9)~~ **eight (8)** on-site contractors:

- (a) U. S. Steel - Gary Works, plant Id 089-00121, the primary operation, located at One North Broadway, Gary, Indiana 46402;
- (b) ~~Brandenburg Industrial Service Company, plant Id 089-00176, the on-site contractor, located at One North Broadway, Gary, Indiana 46402;~~
- (~~e~~) **(b)** Central Teaming Company, plant Id 089-00172, the on-site contractor, located at One North Broadway, Gary, Indiana 46402;
- (d) ~~Gary Coal Processing, LP, plant Id 089-00169, the on-site contractor, located at One North Broadway, Gary, Indiana 46402;~~
- (~~e~~) **(c)** Heckett Multiserv, plant Id 089-00170, the on-site contractor, located at One North Broadway, Gary, Indiana 46402;
- (f) **(d)** International Mill Service, Inc., plant Id 089-00132, the on-site contractor, located at One North Broadway, Gary, Indiana 46402;
- (~~g~~) **(e)** **AKJ Industries, Inc., plant Id 089-00505, Koppers, Inc., plant Id 089-00180,** the on-site contractor, located at One North Broadway, Gary, Indiana 46402;
- (~~h~~) **(f)** Levy- Indiana Slag Company, plant Id 089-00133, the on-site contractor, located at One North Buchanan Street, Gary, Indiana 46401;

- (g) Mid-Continent Coal and Coke Company, plant Id 089-00173, the on-site contractor, located at One North Broadway, Gary, Indiana 46402;
- (h) Tube City, Inc., plant Id 089-00174, the on-site contractor, located at One North Broadway, Gary, Indiana 46401;
- (i) U.S. Aggregates, Inc., plant Id 089-05256, the on-site contractor, located at One North Broadway, Gary, Indiana 46402.

Separate Part 70 permits will be issued to US Steel - Gary Works and each on site contractor, solely for administrative purposes.

Company Name	Part 70 Permit Number
U.S. Steel - Gary Works	089-7663-00121
Brandenburg Industrial Service Company	089-8013-00176
Central Teaming Company, Inc.	089-7684-00172
Gary Coal Processing, LP	089-7171-00169
Heckett Multiserv	089-7649-00170
International Mill Service, Inc.	089-5630-00132
Keppers, Inc. AKJ Industries, Inc.	089-13872-00180 089-22772-00505
Levy-Indiana Slag Company	089-7719-00133
Mid-Continent Coal and Coke Company	089-8064-00173
Tube City, Inc.	089-7648-00174
U.S. Aggregates, Inc.	089-21828-05256

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

The integrated steel mill, US Steel-Gary Works consists of the following:

...

Coal Pulverization and Air Preheater System

- (a) One (1) coal pulverization equipment train, identified as SS-1 that consists of a pulverizer with a maximum capacity of 90 tons per hour; a preheater with a maximum heat input capacity of 37.3 MMBtu per hour, and a dual process separation cyclone, constructed in 1993, and exhausting to one baghouse with three modules (three stacks) 1A, 1B and 1C.
- (b) One (1) coal pulverization equipment train, identified as SS-2 that consists of a pulverizer with a maximum capacity of 90 tons per hour; a preheater with a maximum heat input capacity of 37.3 MMBtu per hour, and a dual process separation cyclone, constructed in 1993, and exhausting to one baghouse with three modules (three stacks) 2A, 2B and 2C.
- (c) One (1) coal pulverization equipment train, identified as SS-3 that consists of a pulverizer with a maximum capacity of 90 tons per hour; a preheater with a maximum heat input capacity of 37.3 MMBtu per hour, and a dual process separation cyclone, constructed in 1993, and exhausting to one baghouse with three modules (three stacks) 3A, 3B and 3C.

Pulverized Coal Storage and Feed System

- (a) One (1) Pulverized coal Transport, identified as Line A, constructed in 1993, with a

maximum capacity of 210 tons per hour, ducted to a baghouse (A) exhausting to stack (SS-5),

- (b) One (1) Pulverized coal Transport, identified as Line B, constructed in 1993, with a maximum capacity of 210 tons per hour, ducted to a baghouse (B) exhausting to stack (SS-6),
- (c) One (1) Pulverized coal storage reservoir, constructed in 1993, with a maximum capacity of 600 tons, blanketed with nitrogen and ducted to a baghouse (vent filter house) exhausting to stack (SS-7),

Railcar Heater

One (1) railcar heater system, constructed in 1993, with a maximum capacity of 14 MMBtu per hour, exhausting inside the building.

Coal Handling Operations

Coal Handling System

- (a) One (1) Railcar Dumper, identified as RCD-1, constructed in 1993, with a maximum capacity of 600 tons per hour, ducted to a baghouse 8AB exhausting through one or two fans to stacks 8A and/or 8B.
- (b) One (1) Reclaim Hopper, identified as RCH-1, constructed in 1993, with a maximum capacity of 300 tons per hour, ducted to baghouse DC-6 and exhausting to stack DC-6.
- (c) One (1) Car Dump Hopper 1/C1, identified as FS-8, constructed in 1993, with a maximum capacity of 200 tons per hour, ducted to baghouse DC-1 exhausting to stack F1,
- (d) One (1) Car dump Hopper 2/C1, identified as FS-9, constructed in 1993, with a maximum capacity of 200 tons per hour, ducted to a baghouse DC-2 exhausting to stack F2,
- (e) One (1) Car Dump Hopper 3/C1, identified as FS-10, constructed in 1993, with a maximum capacity of 200 tons per hour, ducted to a baghouse DC-3 exhausting to stack F3,
- (f) One (1) Transfer Point C1/C2, identified as FS-2, constructed in 1993, with a maximum capacity of 600 tons per hour, ducted to a baghouse DC-4 exhausting to stack F4,
- (g) One (1) Reclaim Hopper/C2, identified as FS-14, constructed in 1993, with a maximum capacity of 300 tons per hour, ducted to a baghouse DC-5 exhausting to stack F5,
- (h) One (1) Screen Transfer/C2, identified as FS-3, constructed in 1993, with a maximum capacity of 600 tons per hour, ducted to a baghouse DC-7 exhausting to stack F7,
- (i) One (1) Screen/C3 Gate Transfer identified as FS-11, constructed in 1993, ducted to a baghouse DC-8 exhausting to stack F8,

- (j) **One (1) Screen/C4 Gate Transfer, identified as FS-12, constructed in 1993, with a maximum capacity of 600 tons per hour, ducted to a baghouse DC-9 exhausting to stack F9,**
- (k) **One (1) Transfer Point C4/C5, identified as FS-4, constructed in 1993, ducted to a baghouse DC-10 exhausting to stack F10.**

East Building – Coal handling

- (a) **One (1) Transfer Point C5/C6, identified as FS-5, constructed in 1993, with a maximum capacity of 600 tons per hour, ducted to a baghouse DC-11 exhausting to stack F11,**
- (b) **One (1) Transfer Point C6/Bin 1, identified as FS-7, constructed in 1993, ducted to baghouse DC-12 exhausting to stack F12,**
- (c) **One (1) Transfer Point C5/Bin 2, identified as FS-6, constructed in 1993, ducted to baghouse DC-13 exhausting to stack F13,**
- (d) **One (1) Transfer Point C6/Bin 3, identified as FS-13, constructed in 1993, with a maximum capacity of 600 tons per hour, ducted to baghouse DC-14 exhausting to stack F14.**

Coal Piles and Haul Roads

- (a) **One (1) coal pile and handling operation, identified as F17, constructed in 1993, with a storage capacity of 100,000 tons and an area of 2 acres, having a maximum throughput of 200,000 tons per year.**
- (b) **Haul Roads - Vehicle Traffic**

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

- ...
- (b) **Specifically regulated insignificant activities (former Gary Coal Processing, LP):**
 - (1) **Degreasing operations that do not exceed 145 gallons per 12 months, except if subject to 326 IAC 20-6.[326 IAC 8-3-5][326 IAC 8-3-8]**
 - (2) **Cleaners and solvents characterized as follows:**
 - (A) **Having a vapor pressure equal to or less than 2 kPa; 15 mm Hg; or 0.3 psi measured at 38°C (100°F) or;**
 - (B) **Having a vapor pressure equal to or less than 0.7 kPa; 5mm Hg; or 0.1 psi measured at 20°C (68°F); the use of which for all cleaners and solvents combined does not exceed 145 gallons per 12 months. [326 IAC 8-3-2] [326 IAC 8-3-5] p326 IAC 8-3-8]**
 - (3) **One (1) 5, 000 gallon #2 diesel fuel tank - 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) (c) **Other Insignificant Activities**

SECTION E.1 FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)]: The coal pulverization and air preheater system, located in the East Building consists of the following:

- (a) One (1) coal pulverization equipment train, identified as SS-1 that consists of a pulverizer with a maximum capacity of 90 tons per hour; a preheater with a maximum heat input capacity of 37.3 MMBtu per hour, and dual process separation cyclone, constructed in 1993, and exhausting to one baghouse with three modules (three stacks) 1A, 1B and 1C.
- (b) One (1) coal pulverization equipment train,, identified as SS-2 that consists of a pulverizer with a maximum capacity of 90 tons per hour; a preheater with a maximum heat input capacity of 37.3 MMBtu per hour, and dual process separation cyclone, constructed in 1993, and exhausting to one baghouse with three modules (three stacks) 2A, 2B and 2C.
- (c) One (1) coal pulverization equipment train, identified as SS-3 that consists of a pulverizer with a maximum capacity of 90 tons per hour; a preheater with a maximum heat input capacity of 37.3 MMBtu per hour, and dual process separation cyclone, constructed in 1993, and exhausting to one baghouse with three modules (three stacks) 3A, 3B and 3C.

(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)]

E.1.1 General Provisions Relating to NSPS [326 IAC 12-1][40 CFR Part 60, Subpart A]

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

E.1.2 NSPS Coal Preparation Plant [326 IAC 12-1][40 CFR 60 Subpart Y]

Pursuant to 40 CFR 60.252 (a) and (c):

- (a) The Permittee shall not cause to be discharged into the atmosphere from any thermal dryer (preheater) gases which contain particulate matter in excess of 0.031 gr/dscf.
- (b) The Permittee shall not cause to be discharged into the atmosphere from any coal processing equipment gases which exhibit twenty percent (20%) opacity or greater.

E.1.3 PSD Minor Limit (NOx) [326 IAC 2-2]

Pursuant to CP (45) 1895 issued October 26, 1990, the NOx emissions from the pulverized coal preheaters and railcar heater (Section E.3) shall be limited to 37 tons per 12 consecutive month period. Pursuant to CP(45) 1895, the natural gas usage in the three (3) preheaters shall be limited to less than 549 million cubic feet per 12 consecutive month period with compliance demonstrated at the end of each month. The natural gas usage in the three (3) preheaters shall be limited to less than 183 million cubic feet per month. Compliance with this limit restricts the potential to emit for NOx to less than 37 tons per year for the three (3) preheaters and makes the provisions of 326 IAC 2-2 Prevention of Significant Deterioration (PSD), not applicable.

E.1.4 PM and PM₁₀ Minor Limits [326 IAC 2-2][326 IAC 2-1.1-5]

- (a) The particulate matter (PM) from SS-1 stacks 1A, 1B and 1C; SS-2 stacks 2A, 2B and 2C; and SS-3 stacks 3A, 3B and 3C shall each not exceed 0.2 pounds per hour.
- (b) The particulate matter less than 10 microns (PM₁₀) from SS-1 stacks 1A, 1B and 1C; SS-2 stacks 2A, 2B and 2C; and SS-3 stacks 3A, 3B and 3C shall each not exceed 0.12 pounds per hour.
- (c) Compliance with the limitations in conditions E.1.4(a), E.2.3(a) and E.4.3(a) combined limits PM to less than 25 tons per year and makes 326 IAC 2-2 and 326 IAC 2-1.1-5 not applicable.
- (d) Compliance with the limitations in conditions E.1.4(b), E.2.3(b) and E.4.3(b) combined limits PM₁₀ to less than 15 tons per year and makes 326 IAC 2-2 and 326 IAC 2-1.1-5 not applicable.

E.1.5 Particulate Limitations [326 IAC 6.8-1-2(a)]

Pursuant to 326 IAC 6.8-1-2(a) (Particulate Matter Limitations for Lake County), the particulate matter from the coal pulverization equipment trains 1, 2 and 3 shall not exceed three-hundredths (0.03) grain per dry standard cubic foot (dscf).

E.1.6 Preventive Maintenance Plan

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for the pulverizers, preheaters, dual process separation cyclones and associated baghouses.

Compliance Determination Requirements

E.1.7 Testing Requirements

Within 36 months after issuance of Part 70 Operating Permit No. T089-7171-00169 (issued on July 19, 2006) and in order to comply with conditions E.1.2, E.1.4, and E.1.5 the Permittee shall perform PM/PM₁₀ stack tests on the three pulverization equipment train SS-1 baghouse stacks 1A, 1B and 1C, the three pulverization equipment train SS-2 baghouse stacks 2A, 2B and 2C, or the three pulverization equipment train SS-3, baghouse stacks 3A, 3B and 3C utilizing a testing method approved by the commissioner in accordance with Section C – Performance Testing. PM₁₀ includes filterable and condensable PM₁₀. These tests shall be repeated at least once every five years from the date of this valid compliance demonstration. The second five year cycle of tests shall be performed on the three pulverization equipment train baghouse SS-1 stacks 1A, 1B and 1C, the three pulverization equipment train SS-2 baghouse stacks 2A, 2B and 2C or the three pulverization equipment train SS-3 baghouse stacks 3A, 3B and 3C not previously tested in accordance with Section C- Performance Testing. The third year cycle of tests shall be performed on the three pulverization equipment train baghouse SS-1 stacks 1A, 1B and 1C, the three pulverization equipment train SS-2 baghouse stacks 2A, 2B and 2C or the three pulverization equipment train SS-3 baghouse stacks 3A, 3B and 3C not previously tested in accordance with Section C- Performance Testing. Then the five year cycle of test begins on the first three pulverization equipment train baghouse stacks tested.

E.1.8 NSPS Coal Preparation Plant [40 CFR 60.245]

Pursuant to 40 CFR 60.254, the Permittee shall demonstrate compliance as follows:

- (a) In conducting the performance tests required in 40 CFR 60.8, the Permittee shall

use as reference methods and procedures, the test methods in 40 CFR 60 Appendix A or other methods and procedures as specified in 40 CFR 60.254, except as provided in 40 CFR 60.8(b).

- (b) The Permittee shall determine compliance with the particulate matter standards in condition E.1.2 as follows:
 - (1) For condition E.1.2(a), Method 5 shall be used to determine the particulate matter concentration. The sampling time and sample volume for each run shall be at least 60 minutes and 30 dscf. Sampling shall begin no less than 30 minutes after start-up and shall terminate before shutdown procedures begin.
 - (2) For condition E.1.2(b), method 9 and the procedures in 40 CFR 60.11, shall be used to determine the opacity.

E.1.9 Particulate Matter Control [326 IAC 2-7-6(6)]

- (a) The baghouses for particulate control shall be in operation and control particulate emissions at all times the three (3) pulverization equipment trains are in operation.
- (b) In the event that bag failure is observed in a multi-compartment baghouse, if operations will continue for ten (10) days or more after the failure is observed before the failed units will be repaired or replaced, the Permittee shall promptly notify the IDEM, OAQ of the expected date the failed units will be repaired or replaced. The notification shall also include the status of the applicable compliance monitoring parameters with respect to normal, and the results of any response actions taken up to the time of notification.

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

E.1.10 NSPS Coal Preparation Monitoring Requirements [40 CFR 60.254]

Pursuant to 40 CFR 60.253(a), the Permittee of any thermal dryer shall install, calibrate, maintain and continuously operate monitoring devices as follows:

- (1) A monitoring device for the measurement of the temperature of the gas stream at the exit of the thermal dryer on a continuous basis. The monitoring device is to be certified by the manufacturer to be accurate within +/- 3 degrees F.
- (2) All monitoring devices under 40 CFR 60.254(a) are to be recalibrated annually in accordance with procedures under 40 CFR 60.13(b).

E.1.11 Visible Emissions Notations

- (a) Visible emission notations of the pulverization equipment train SS-1 baghouse stacks 1A, 1B and 1C; pulverization equipment train SS-2 baghouse stacks 2A, 2B and 2C; and pulverization equipment train SS-3, baghouse stacks 3A, 3B and 3C shall be performed once per day during normal daylight operations when exhausting to the atmosphere. A trained employee shall record whether emissions are normal or abnormal.
- (b) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.
- (c) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest

emissions.

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

E.1.12 Parametric Monitoring

The Permittee shall record the pressure drop across the baghouses used in conjunction with each pulverization equipment train, at least once per day when each pulverization equipment train is in operation. When for any one reading, the pressure drop across the baghouse is outside the normal range of 1.0 and 8.0 inches of water or a range established during the latest stack test, the Permittee shall take reasonable response steps in accordance with Section C- Response to Excursions or Exceedances. A pressure reading that is outside the above mentioned range is not a deviation from this permit. Failure to take response steps in accordance with Section C - Response to Excursions or Exceedances, shall be considered a deviation of this permit.

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

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

E.1.13 Record Keeping Requirements

- (a) To document compliance with Condition E.1.3, the Permittee shall maintain records of the monthly natural gas usage in the three (3) air preheaters.
- (b) To document compliance with Conditions E.1.11, the Permittee shall maintain records of once per day visible emission notations of the three (3) pulverization equipment train baghouse stacks exhaust.
- (c) To document compliance with Condition E.1.12, the Permittee shall maintain records once per day of the pressure drop during normal operation.
- (d) To document compliance with Condition E.1.7, the Permittee shall maintain records of the stacks tested during each five year test cycle.
- (e) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

E.1.14 Reporting Requirements

A quarterly summary of the information to document compliance with conditions E.1.3 shall be submitted to the addresses listed in Section C - General Reporting Requirements, of this permit, using the reporting forms located at the end of this permit, or their equivalent, within thirty (30) days after the end of the quarter being reported. The report submitted by the Permittee does require the certification by the responsible official.

Facility Description [326 IAC 2-7-5(15)]: The pulverized coal storage and feed system located in the West :

- (a) One (1) Pulverized Coal Transport, identified as Line A, constructed in 1993, with a maximum capacity of 210 tons per hour, ducted to a baghouse (A) exhausting to stack (SS-5),
- (b) One (1) Pulverized Coal Transport, identified as Line B, constructed in 1993, with a maximum capacity of 210 tons per hour, ducted to a baghouse (B) exhausting to stack (SS-6),
- (c) One (1) Pulverized Coal storage reservoir, constructed in 1993, with a maximum capacity of 600 tons, blanketed with nitrogen and ducted to a baghouse (vent filter house) exhausting to stack (SS-7),

(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)]

E.2.1 General Provisions Relating to NSPS [326 IAC 12-1][40 CFR Part 60, Subpart A]

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

E.2.2 NSPS Coal Preparation Plant [326 IAC 12-1][40 CFR 60 Subpart Y]

Pursuant to 40 CFR 60.252 (c), the Permittee shall not cause to be discharged into the atmosphere from any coal processing equipment (two (2) coal transport lines and coal storage reservoir) gases which exhibit twenty percent (20%) opacity or greater.

E.2.3 PM and PM₁₀ Minor Limits [326 IAC 2-2][326 IAC 2-1.1-5]

- (a) The particulate matter (PM) from stacks SS-5, SS-6 and SS-7 shall each not exceed 0.2 pounds per hour.
- (b) The particulate matter less than 10 microns (PM₁₀) from stacks SS-5, SS-6 and SS-7 shall each not exceed 0.12 pounds per hour.
- (c) Compliance with the limitations in conditions E.1.4(a), E.2.3(a) and E.4.3(a) combined limits PM to less than 25 tons per year and makes 326 IAC 2-2 and 326 IAC 2-1.1-5 not applicable.
- (d) Compliance with the limitations in conditions E.1.4(b), E.2.3(b) and E.4.3(b) combined limits PM₁₀ to less than 15 tons per year and makes 326 IAC 2-2 and 326 IAC 2-1.1-5 not applicable.

E.2.4 Particulate Limitations [326 IAC 6.8-1-2(a)]

Pursuant to 326 IAC 6.8-1-2(a) (Particulate Matter Limitations for Lake County), the particulate matter from the stacks SS-5, SS-6 and SS-7 shall not exceed three-hundredths (0.03) grain per dry standard cubic foot (dscf).

E.2.5 Preventive Maintenance Plan

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance

Plan, of this permit, is required for the pulverized coal transport lines, coal storage reservoir and the associated baghouses.

Compliance Determination Requirements

E.2.6 NSPS Coal Preparation Plant [40 CFR 60.245]

Pursuant to 40 CFR 60.254, the Permittee shall demonstrate compliance as follows:

- (a) In conducting the performance tests required in 40 CFR 60.8, the Permittee shall use as reference methods and procedures, the test methods in 40 CFR 60 Appendix A or other methods and procedures as specified in 40 CFR 60.254, except as provided in 40 CFR 60.8(b).**
- (b) The Permittee shall determine compliance with the opacity standards in condition E.2.2, Method 9 and the procedures in 40 CFR 60.11, shall be used to determine opacity.**

E.2.7 Testing Requirements

Within 36 months after issuance of this Part 70 Operating Permit No. T089-7171-00169 (issued on July 19, 2006) and in order to comply with conditions E.2.3 and E.2.4 the Permittee shall perform PM/PM₁₀ stack tests on one of the pulverized coal transport stacks SS-5 or SS-6 and the pulverized coal storage reservoir stack SS-7, utilizing a testing method approved by the commissioner in accordance with Section C – Performance Testing. PM₁₀ includes filterable and condensable PM₁₀. These tests shall be repeated at least once every five years from the date of this valid compliance demonstration.

The second five year cycle of tests shall be performed on the pulverized coal transport stacks SS-5 or SS-6 not previously tested and the pulverized coal storage reservoir stack SS-7 in accordance with Section C – Performance Testing. PM₁₀ includes filterable and condensable PM₁₀. These tests shall be repeated at least once every five years from the date of this valid compliance demonstration.

The next five year test cycle will repeat the first five year cycle of testing.

E.2.8 Particulate Control

The baghouses and vent filter house for the for particulate control shall be in operation and control particulate emissions at all times when the pulverized coal transport lines and coal storage reservoir are in operation.

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

E.2.9 Record Keeping Requirements

- (a) To document compliance with Condition E.2.7, the Permittee shall maintain records of the stacks tested during each five year testing cycle.**
- (b) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.**

SECTION E.3 FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)]: The coal handling thaw shed

One (1) non-vented railcar heater system, constructed in 1993, with a maximum capacity of 14 MMBtu per hour.

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

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

E.3.1 PSD Minor Limit (NOx) [326 IAC 2-2]

Pursuant to CP (45) 1895 issued October 26, 1990, the NOx emissions from the railcar heater and pulverized coal preheaters (Section E.1) shall be limited to 37 tons per 12 consecutive month period. Pursuant to CP(45) 1895, the natural gas usage in the railcar heater shall be limited to less than 12.504 million cubic feet per 12 consecutive month period with compliance demonstrated at the end of each month. The natural gas usage in the railcar heater shall be limited to less than 5 million cubic feet per month. Compliance with this limit restricts the potential to emit for NOx to less than 37 tons per year for the railcar heater and makes the provisions of 326 IAC 2-2 Prevention of Significant Deterioration (PSD), not applicable.

E.3.2 Fugitive Dust Emission Limitations [326 IAC 6-4-2][326 IAC 6.8-10-3]

(a) Pursuant to 326 IAC 6-4-2:

(1) The railcar heater generating fugitive dust shall be in violation of this rule (326 IAC 6-4) if any of the following criteria are violated:

(A) A source or combination of sources which cause to exist fugitive dust concentrations greater than sixty-seven percent (67%) in excess of ambient upwind concentrations as determined by the following formula:

$$P = \frac{100(R - U)}{U}$$

Where

P = Percentage increase

R = Number of particles of fugitive dust measured at downward receptor site

U = Number of particles of fugitive dust measured at upwind or background site

(B) The fugitive dust is comprised of fifty percent (50%) or more respirable dust, then the percent increase of dust concentration in subdivision (1) of this section shall be modified as follows:

$$PR = (1.5 \pm N) P$$

Where

N = Fraction of fugitive dust that is respirable dust;

PR = allowable percentage increase in dust concentration above background; and

P = no value greater than sixty-seven percent (67%).

(C) The ground level ambient air concentrations exceed fifty (50) micrograms per cubic meter above background concentrations for a sixty (60) minute period.

(D) If fugitive dust is visible crossing the boundary or property line of a

source. This subdivision may be refuted by factual data expressed in subdivisions (1), (2) or (3) of this section. 326 IAC 6-4-2(4) is not federally enforceable.

- (2) Pursuant to 326 IAC 6-4-6(6) (Exceptions), fugitive dust from a source caused by adverse meteorological conditions will be considered an exception to this rule (326 IAC 6-4) and therefore not in violation.
- (b) Pursuant to 326 IAC 6.8-10-3 Lake County Fugitive Particulate Matter Emissions Limitations, fugitive emissions from the railcar heater generating fugitive dust shall comply with the emissions limitations in Section C - Fugitive Dust Emissions.

E.3.3 Preventive Maintenance Plan

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

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

E.3.4 Record Keeping Requirements

- (a) To document compliance with Conditions E.3.1, the Permittee shall maintain records of the monthly natural gas usage in the rail car heaters.
- (b) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

E.3.5 Reporting Requirements

A quarterly summary of the information to document compliance with condition E.3.1 shall be submitted to the addresses listed in Section C - General Reporting Requirements, of this permit, using the reporting forms located at the end of this permit, or their equivalent, within thirty (30) days after the end of the quarter being reported. The report submitted by the Permittee does require the certification by the responsible official.

SECTION E.4 FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)]: The coal handling processes

- (a) One (1) Railcar Dumper, identified as RCD-1, constructed in 1993, with a maximum capacity of 600 tons per hour, ducted to a baghouse 8AB exhausting through one or two fans to stacks 8A and/or 8B.
- (b) One (1) Reclaim Hopper, identified as RCH-1, constructed in 1993, with a maximum capacity of 300 tons per hour, ducted to baghouse DC-6 and exhausting to stack DC-6.
- (c) One (1) Car Dump Hopper 1/C1, identified as FS-8, constructed in 1993, with a maximum capacity of 200 tons per hour, ducted to baghouse DC-1 exhausting to stack F1,
- (d) One (1) Car dump Hopper 2/C1, identified as FS-9, constructed in 1993, with a maximum capacity of 200 tons per hour, ducted to a baghouse DC-2 exhausting to stack F2,
- (e) One (1) Car Dump Hopper 3/C1, identified as FS-10, constructed in 1993, with a maximum capacity of 200 tons per hour, ducted to a baghouse DC-3 exhausting to stack F3,
- (f) One (1) Transfer Point C1/C2, identified as FS-2, constructed in 1993, with a maximum capacity of 600 tons per hour, ducted to a baghouse (DC-4) exhausting to stack (F4),

- (g) One (1) Reclaim Hopper/C2, identified as FS-14, constructed in 1993, with a maximum capacity of 300 tons per hour, ducted to a baghouse DC-5 exhausting to stack F5,**
- (h) One (1) Screen Transfer/C2, identified as FS-3, constructed in 1993, with a maximum capacity of 600 tons per hour, ducted to a baghouse DC-7 exhausting to stack F7,**
- (i) One (1) Screen/C3 Gate Transfer identified as FS-11, constructed in 1993, ducted to a baghouse DC-8 exhausting to stack F8,**
- (j) One (1) Screen/C4 Gate Transfer, identified as FS-12, constructed in 1993, with a maximum capacity of 600 tons per hour, ducted to a baghouse DC-9 exhausting to stack F9,**
- (k) One (1) Transfer Point C4/C5, identified as FS-4, constructed in 1993, ducted to a baghouse DC-10 exhausting to stack F10,**

East Building- Coal Handling

- (a) One (1) Transfer Point C5/C6, identified as FS-5, constructed in 1993, with a maximum capacity of 600 tons per hour, ducted to a baghouse DC-11 exhausting to stack F11,**
- (b) One (1) Transfer Point C6/Bin 1, identified as FS-7, constructed in 1993, ducted to baghouse DC-12 exhausting to stack F12,**
- (c) One (1) Transfer Point C5/Bin 2, identified as FS-6, constructed in 1993, ducted to baghouse DC-13 exhausting to stack F13,**
- (d) One (1) Transfer Point C6/Bin 3, identified as FS-13, constructed in 1993, with a maximum capacity of 600 tons per hour, ducted to baghouse DC-14 exhausting to stack F14.**

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

Facility Description [326 IAC 2-7-5(15)]: The coal handling operations (continued)

Coal Piles and Haul Roads

- (a) One coal pile operation, identified as F17, constructed in 1993, with a storage capacity of 100,000 tons and an area of 2 acres.**
- (b) Haul – Roads – Vehicle Traffic**

(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)]

E.4.1 General Provisions Relating to NSPS [326 IAC 12-1][40 CFR Part 60, Subpart A]

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

E.4.2 NSPS Coal Preparation Plant [326 IAC 12-1][40 CFR 60 Subpart Y]

Pursuant to 40 CFR 60.252 (c), the particulate matter opacity from the coal handling processes, shall not exceed twenty percent (20%) opacity.

E.4.3 PM and PM₁₀ Minor Limits [326 IAC 2-2][326 IAC 2-1.1-5]

- (a) The particulate matter (PM) from stacks 8A, 8B, DC-6, F1 through F5 and F7 through F17 shall each not exceed 0.2 pounds per hour.
- (b) The particulate matter less than 10 microns (PM₁₀) from stacks 8A, 8B, DC-6, F1 through F5 and F7 through F17 shall each not exceed 0.12 pound per hour.
- (c) Compliance with the limitations in conditions E.1.4(a), E.2.3(a) and E.4.3(a) combined limits PM to less than 25 tons per year and makes 326 IAC 2-2 and 326 IAC 2-1.1-5 not applicable.
- (d) Compliance with the limitations in conditions E.1.4(b), E.2.3(b) and E.4.3(b) combined limits PM₁₀ to less than 15 tons per year and makes 326 IAC 2-2 and 326 IAC 2-1.1-5 not applicable.

E.4.4 Particulate Limitations [326 IAC 6.8-1-2(a)]

Pursuant to 326 IAC 6.8-1-2(a) (Particulate Matter Limitations for Lake County), the particulate matter from the railcar dumpers, hoppers, screens, transfer points and east building transfer points and bins stacks 8A, 8B, DC-6, F1 through F5, F7 through F14 shall not exceed three-hundreds (0.03) grain per dry standard cubic foot (dscf).

E.4.5 Preventive Maintenance Plan

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for the railcar dumpers, hoppers screens, transfer points and associated baghouses.

Compliance Determination Requirements

E.4.6 NSPS Coal Preparation Plants [40 CFR 60.254]

Pursuant to 40 CFR 60.254, the Permittee shall demonstrate compliance using the following:

- (a) In conducting the performance tests required in 40 CFR 60.8, the Permittee shall use as reference methods and procedures, the test methods in 40 CFR 60 Appendix A or other methods and procedures as specified in 40 CFR 60.254, except as provided in 40 CFR 60.8(b).
- (b) The Permittee shall determine compliance with the particulate matter standards in condition D.4.2, Method 9 and the procedures in 40 CFR 60.11, shall be used to

determine opacity.

E.4.7 Testing Requirements

Within 36 months after issuance of this Part 70 Operating Permit No. T089-7171-00169 (issued on July 19, 2006) and in order to comply with conditions E.4.3 and E.4.4 the Permittee shall perform PM/PM₁₀ stack tests on Railcar Dumper Stacks 8A and 8B and one of each of the following:

Reclaim Hopper RCH-1 baghouse Stack DC-6 or Reclaim Hopper/C2 stack F5;
Car Dump Hopper 1/C1 stack F1, Car Dump Hopper 2/C2 stack F2 or Car Dump Hopper 3/C3 stack F3;
Transfer Point C1/C2 Stack F4, Transfer Point C4/C5 stack F10 or Transfer Point C5/C6 stack F11;
Screen Transfer/C2 stack F7, Screen Transfer/C3 gate Transfer stack F8 or Screen Transfer/C4 Gate Transfer stack F9; and
Transfer Point C6/Bin 1, stack F12, Transfer Point C5/Bin 2, stack F13 or Transfer Point C6/Bin 3 stack F14

utilizing a testing method approved by the commissioner in accordance with Section C – Performance Testing. PM₁₀ includes filterable and condensable PM₁₀. These tests shall be repeated at least once every five years from the date of this valid compliance demonstration.

The second five year cycle of PM/PM₁₀ tests shall be performed on the Railcar Dumper Stacks 8A and 8B and one of each of the following not tested previously:

Reclaim Hopper RCH-1 baghouse Stack DC-6 or Reclaim Hopper/C2 stack F5;
Car Dump Hopper 1/C1 stack F1, Car Dump Hopper 2/C2 stack F2 or Car Dump Hopper 3/C3 stack F3;
Transfer Point C1/C2 Stack F4, Transfer Point C4/C5 stack F10 or Transfer Point C5/C6 stack F11;
Screen Transfer/C2 stack F7, Screen Transfer/C3 gate Transfer stack F8 or Screen Transfer/C4 Gate Transfer stack F9; and
Transfer Point C6/Bin 1, stack F12, Transfer Point C5/Bin 2, stack F13 or Transfer Point C6/Bin 3 stack F14

utilizing a testing method approved by the commissioner in accordance with Section C – Performance Testing. PM₁₀ includes filterable and condensable PM₁₀. These tests shall be repeated at least once every five years from the date of this valid compliance demonstration in accordance with Section C – Performance Testing.

The third five year cycle of PM/PM₁₀ tests shall be performed on the Railcar Dumper Stacks 8A and 8B, Reclaim Hopper RCH-1 baghouse Stack DC-6 or Reclaim Hopper/C2 stack F5 and one of each of the following not tested previously in test cycle one or two:

Car Dump Hopper 1/C1 stack F1, Car Dump Hopper 2/C2 stack F2 or Car Dump Hopper 3/C3 stack F3;
Transfer Point C1/C2 Stack F4, Transfer Point C4/C5 stack F10 or Transfer Point C5/C6 stack F11;
Screen Transfer/C2 stack F7, Screen Transfer/C3 gate Transfer stack F8 or Screen Transfer/C4 Gate Transfer stack F9; and
Transfer Point C6/Bin 1, stack F12, Transfer Point C5/Bin 2, stack F13 or Transfer Point C6/Bin 3 stack F14

utilizing a testing method approved by the commissioner in accordance with Section C –

Performance Testing. PM_{10} includes filterable and condensable PM_{10} . These tests shall be repeated at least once every five years from the date of this valid compliance demonstration in accordance with Section C – Performance Testing.

E.4.8 Particulate Control

The baghouses for particulate control shall be in operation and control particulate emissions at all times the railcar dumpers, hoppers screens, and transfer points are in operation.

E.4.9 Fugitive Dust Control

A dust suppressant shall be applied to the coal piles and roads as necessary during the handling and transporting of coal.

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

E.4.10 Record Keeping Requirements

- (a) To document compliance with Condition E.4.7, the Permittee shall maintain records of the stacks tested during each five year testing cycle.
- (b) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

SECTION E.5 FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)]: Specifically Regulated insignificant activities include the following facilities, emission units, fugitive sources, control equipment, process equipment and operational practices:

- (a) Degreasing operations that do not exceed 145 gallons per 12 months, except if subject to 326 IAC 20-6.
- (b) Cleaners and solvents characterized as follows:
 - (1) Having a vapor pressure equal to or less than 2 kPa; 15 mm Hg; or 0.3 psi measured at 38°C (100°F) or;
 - (2) Having a vapor pressure equal to or less than 0.7 kPa; 5mm Hg; or 0.1 psi measured at 20°C (68°F); the use of which for all cleaners and solvents combined does not exceed 145 gallons per 12 months.
- (c) One (1) 5,000 gallon #2 diesel fuel tank - 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.

(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)]

E.5.1 Volatile Organic Compounds (VOC) [326 8-3-5]

- (a) 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°C) (one hundred degrees Fahrenheit (100°F));**
 - (B) The solvent is agitated; or**
 - (C) The solvent is heated.**
 - (2) Equip the degreaser with a facility for draining cleaned articles. If the solvent volatility is greater than four and three-tenths (4.3) kiloPascals (thirty-two (32) millimeters of mercury or six-tenths (0.6) pounds per square inch) measured at thirty-eight degrees Celsius (38°C) (one hundred degrees Fahrenheit (100°F)), then the drainage facility must be internal such that articles are enclosed under the cover while draining. The drainage facility may be external for applications where an internal type cannot fit into the cleaning system.**
 - (3) Provide a permanent, conspicuous label which lists the operating requirements outlined in subsection (b).**
 - (4) The solvent spray, if used, must be a solid, fluid stream and shall be applied at a pressure which does not cause excessive splashing.**
 - (5) Equip the degreaser with one (1) of the following control devices if the solvent volatility is greater than four and three-tenths (4.3) kiloPascals (thirty-two (32) millimeters of mercury or six-tenths (0.6) pounds per square inch) measured at thirty-eight degrees Celsius (38°C) (one hundred degrees Fahrenheit (100°F)), or if the solvent is heated to a temperature greater than forty-eight and nine-tenths degrees Celsius (48.9°C) (one hundred twenty degrees Fahrenheit (120°F)):**
 - (A) A freeboard that attains a freeboard ratio of seventy-five hundredths (0.75) or greater.**
 - (B) A water cover when solvent is used is insoluble in, and heavier than, water.**
 - (C) Other systems of demonstrated equivalent control such as a refrigerated chiller or carbon adsorption. Such systems shall be submitted to the U.S. EPA as a SIP revision.**
- (b) Pursuant to 326 IAC 8-3-5(b) (Cold Cleaner Degreaser Operation and Control), the owner or operator of a cold cleaning facility construction of which commenced after July 1, 1990, shall ensure that the following operating requirements are met:**
- (1) Close the cover whenever articles are not being handled in the degreaser.**
 - (2) Drain cleaned articles for at least fifteen (15) seconds or until dripping ceases.**

- (3) Store waste solvent only in covered containers and prohibit the disposal or transfer of waste solvent in any manner in which greater than twenty percent (20%) of the waste solvent by weight could evaporate.

E.5.2 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.

E.5.3 Volatile Organic Liquid Storage Vessels [326 IAC 8-9-1]

- (a) Pursuant to 326 IAC 8-9-1(a) and (b) (Volatile Organic Liquid Storage Vessels), on and after October 1, 1995, stationary vessels used to store volatile organic liquids (VOL), that are located in Clark, Floyd, Lake or Porter County with a capacity of less than thirty nine thousand (39,000) gallons are subject to the reporting and record keeping requirements of this rule. The VOL storage vessels are exempted from all other provisions of this rule.
- (b) Pursuant to 326 IAC 8-9-6(a) and (b), the Permittee shall maintain the following records for the life of the stationary storage vessels and submit a report to IDEM, OAQ containing the following for each vessel:
 - (1) The vessel identification number,

- (2) The vessel dimensions, and**
- (3) The vessel capacity.**

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

Part 70 Quarterly Report

Source Name: ~~Gary Coal Processing LP, an on-site Contractor of US Steel - Gary Works~~
Source Address: One North Broadway, Gary, IN 46402
Mailing Address: ~~111 Market Place Suite 200, Baltimore, MD 21202~~
One North Broadway, Gary, IN 46402
Part 70 Permit No.: ~~T089-7171-00169~~ **T089-7663-00121**
Facility: Air Preheaters 1, 2 and 3 combined (**former Gary Coal Processing, LP**)
Parameter: Natural gas usage
Limit: Natural gas usage of 549 MMcf per 12 consecutive month period with compliance demonstrated at the end of each month and less than 183 MMcf per month.

YEAR: _____

Month	Column 1	Column 2	Column 1 + Column 2
	This Month	Previous 11 Months	12 Month Total
Month 1			
Month 2			
Month 3			

No deviation occurred in this quarter.

Deviation/s occurred in this quarter.

Deviation has been reported on: _____

Submitted by: _____

Title/Position: _____

Signature: _____

Date: _____

Phone _____

Attach a signed certification to complete this report.

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

Part 70 Quarterly Report

Source Name: ~~Gary Coal Processing LP, an on-site Contractor of US Steel - Gary Works~~
Source Address: One North Broadway, Gary, IN 46402
Mailing Address: ~~111 Market Place Suite 200, Baltimore, MD 21202~~
One North Broadway, Gary, IN 46402
Part 70 Permit No.: ~~T089-7171-00169~~ **T089-7663-00121**
Facility: Railcar Heater - Thaw shed (**former Gary Coal Processing, LP**)
Parameter: Natural gas usage
Limit: Natural gas usage of 12.504 MMcft per 12 consecutive month period with compliance demonstrated at the end of each month and less than 5 MMcft per month.

YEAR: _____

Month	Column 1	Column 2	Column 1 + Column 2
	This Month	Previous 11 Months	12 Month Total
Month 1			
Month 2			
Month 3			

No deviation occurred in this quarter.

Deviation/s occurred in this quarter.

Deviation has been reported on:

Submitted by: _____

Title/Position: _____

Signature: _____

Date: _____

Phone _____

Attach a signed certification to complete this report.

All other conditions of the permit shall remain unchanged and in effect. Please find attached the entire Part 70 Operating Permit as modified.

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 John Haney, at (800) 451-6027, and ask for John Haney or extension 4-5328, or dial (317) 234-5328.

Original signed by,

Donald F. Robin, P.E., Section Chief
Permits Branch
Office of Air Quality

Attachments: Revised permit
DFR/jeh

cc: File - Lake County
U.S. EPA, Region V
Lake County Health Department
Gary Department of Environmental Affairs
Northwest Regional Office
Air Compliance Section Inspector
Compliance Data Section
Administrative and Development



INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

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Mitchell E. Daniels Jr.
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Thomas W. Easterly
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Indianapolis, Indiana 46204
(317) 232-8603
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www.idem.IN.gov

PART 70 OPERATING PERMIT OFFICE OF AIR QUALITY

US Steel - Gary Works One North Broadway Gary, Indiana 46402

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

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

This permit is issued in accordance with 326 IAC 2 and 40 CFR Part 70 Appendix A and contains the conditions and provisions specified in 326 IAC 2-7 as required by 42 U.S.C. 7401, et. seq. (Clean Air Act as amended by the 1990 Clean Air Act Amendments), 40 CFR Part 70.6, IC 13-15 and IC 13-17. This permit also addresses certain new source review requirements for existing equipment and is intended to fulfill the new source review procedures pursuant to 326 IAC 2-7-10.5, applicable to those conditions.

Operation Permit No.: T089-7663-00121	
Original signed by: Nisha Sizemore, Branch Chief Office of Air Quality	Issuance Date: August 18, 2006 Expiration Date: August 18, 2011

First Administrative Amendment No. 089-25923-00121 issued on February 25, 2008.

Second Administrative Amendment No.: 089-26246-00121	
Original signed by: Donald F. Robin, P.E., Section Chief Permits Branch Office of Air Quality	Issuance Date: April 24, 2008 Expiration Date: August 18, 2011

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SOURCE SUMMARY

A Source Definition

- 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)]
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- A.4 Insignificant Activities [326 IAC 2-7-1(21)][326 IAC 2-7-4(c)][326 IAC 2-7-5(15)]
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- B.2 Permit Term [326 IAC 2-7-5(2)][326 IAC 2-1.1-9.5][326 IAC 2-7-4(a)(1)(D)]
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- B.3 Term of Conditions [326 IAC 2-1.1-9.5]
- B.4 Enforceability [326 IAC 2-7-7]
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- 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)]
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- 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]
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- 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]
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- C.8 Performance Testing [326 IAC 3-6]
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- C.16 Emergency Reduction Plans [326 IAC 1-5-2] [326 IAC 1-5-3]
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- 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] [326 IAC 2-2] [326 IAC 2-3]
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- C.25 Compliance with 40 CFR 82 and 326 IAC 22-1

D.1 FACILITY OPERATION CONDITIONS - Coal Handling Operations

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- D.1.2 Fugitive Dust Emission Limitations [326 IAC 6-4-2][326 IAC 6.8-10-3]
- D.1.3 Coke Oven Batteries Emission Limitations – Prerocarbonization [326 IAC 6.8-9-3(a)(9)(A)] [326 IAC 11-3-2(a)(1)]
- D.1.4 Opacity Limitations [326 IAC 6.8-9-3(a)(9)(B)]
- D.1.5 Coke Oven Batteries Opacity Limitations - Prerocarbonization [326 IAC 11-3-2(a)(2)]
- D.1.6 General Provisions Relating to NSPS [326 IAC 12-1][40 CFR 60, Subpart A]
- D.1.7 New Source Performance Standards - Opacity Limitations Coal Preparation Plant [326 IAC 12-1][40 CFR 60 Subpart Y]
- D.1.8 Sulfur Dioxide (SO₂) Limitations [326 IAC 7-4.1-20(c)(3)]
- D.1.9 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

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- D.1.10 Testing Requirements [326 IAC 2-7-6(1),(6)][326 IAC 2-1.1-11]
- D.1.11 Particulate Matter Control

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

- D.1.12 Nos. 2 and 3 Prerocarbonization [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.1.13 Record Keeping Requirements
- D.1.14 Reporting Requirements

D.2 FACILITY OPERATION CONDITIONS - Coke Oven Batteries (Nos. 2, 3, 5 and 7) Operations

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

- D.2.1 General Provisions relating to National Emission Standards for Hazardous Air Pollutant (NESHAP) [326 IAC 20-3][40 CFR Part 63, Subpart A] [40 CFR 63 Subpart L] [Table 1 of 40 CFR 63 Subpart CCCCC]
- D.2.2 National Emission Standards for Hazardous Air Pollutants (NESHAP) - Coke Oven Batteries [326 IAC 20-3] [40 CFR 63, Subpart L]
- D.2.3 Lake County PM₁₀ Emission Requirements [326 IAC 6.8-2-38] [326 IAC 6.8-9-3(a)(8)] [326 IAC 11-3-2(i)]
- D.2.4 Lake County PM₁₀ Coke Battery Emission Requirements [326 IAC 6.8-9]
- D.2.5 Emissions Limitations for Coke Oven Batteries [326 IAC 11-3-2]
- D.2.6 Coke Oven Identification [326 IAC 11-3-3]
- D.2.7 Sulfur Dioxide (SO₂) Limitations [326 IAC 7-4.1-20] [326 IAC 11-3-2(i)]
- D.2.8 Nitrogen Oxide (NOx) Limitations PSD [326 IAC 2-2] and Emissions Offsets [326 IAC 2-3]
- D.2.9 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

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- D.2.10 National Emission Standards for Hazardous Air Pollutants (NESHAP) from Coke Oven Batteries - Visible Emissions Inspection Requirements [40 CFR 63.309][326 IAC 20]
- D.2.11 Visible Emission Inspections for Charging [326 IAC 11-3-4(a)]
- D.2.12 Charge Port Lids and Off take Piping - Emissions Testing [326 IAC 11-3-4(b)]
- D.2.13 Visible Emission for Oven Doors [326 IAC 11-3-4(c)]
- D.2.14 Visible Emission Inspections for Gas Collector Main [326 IAC 11-3-4(e)]
- D.2.15 Visible Emission Inspections for Pushing [326 IAC 6.8-9-3(a)(3)]
- D.2.16 Testing Requirements [326 IAC 2-7-6(1),(6)] [326 IAC 2-1.1-11]
- D.2.17 Sulfur Fuel Sampling and Analysis [326 IAC 7-4-1(d)]
- D.2.18 Particulate Matter Control

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

- D.2.19 Visible Emissions Notations
- D.2.20 Parametric Monitoring
- D.2.21 Continuous Opacity Monitoring (COM) [326 IAC 3-5]
- D.2.22 Maintenance of Continuous Opacity Monitoring [326 IAC 2-7-5(3)(A)(iii)]

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

- D.2.23 National Emission Standards for Hazardous Air Pollutants from Coke Oven Batteries Record Keeping and Reporting Requirements [40 CFR 63.311][326 IAC 20]
- D.2.24 Record Keeping Requirements
- D.2.25 Reporting Requirements

National Emission Standards for Hazardous Air Pollutants (NESHAP) for Coke Ovens: Pushing, Quenching and Battery Stacks [40 CFR 63, Subpart CCCCC]

- D.2.26 National Emission Standards for Hazardous Air Pollutants (NESHAP) for Coke Ovens: Pushing, Quenching and Battery Stacks 40 CFR 63, Subpart CCCCC]

D.3 FACILITY OPERATION CONDITIONS - Coke By-Product Plant

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

- D.3.1 General Provisions Relating to Hazardous Air Pollutants (HAPs) [326 IAC 14] [40 CFR Part 61 Subpart A]
- D.3.2 National Emission Standards for Hazardous Air Pollutants (NESHAP) - Benzene Limitations from Coke Byproduct Recovery Plants [40 CFR 61Subpart L][326 IAC 14]
- D.3.3 National Emission Standards for Hazardous Air Pollutants (NESHAP) - Coke Byproduct Recovery Plants: Equipment Leaks [326 IAC 14] [40 CFR 61Subpart V]
- D.3.4 National Emission Standard for Benzene Waste Operations [40 CFR Part 61, Subpart FF]
- D.3.5 Particulate Emissions Limitations [326 IAC 6.8-1-2(a)]
- D.3.6 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

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- D.3.7 National Emission Standards for Hazardous Air Pollutants (NESHAP) - Coke By-product Recovery Plant Benzene Testing Requirements [326 IAC 2-7-6(1)]
[40 CFR 61, Subpart L][326 IAC 14]
- D.3.8 National Emission Standards for Hazardous Air Pollutants (NESHAP) - Coke By-product Recovery Plant Monitoring Procedures for Equipment Leaks [326 IAC 2-7-6(1)]
[40 CFR 61, Subpart V]
- D.3.9 National Emission Standards for Hazardous Air Pollutants (NESHAP) - Coke By-product Recovery Plant Leak Detection Testing Requirements [326 IAC 2-7-6(1)]
[40 CFR 61, Subpart V]
- D.3.10 National Emission Standards for Hazardous Air Pollutants (NESHAP) - Benzene Waste Operations Methods, Procedures and Compliance [326 IAC 2-7-6(1)]
[40 CFR 61, Subpart FF]

Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19][40 FR 61]

- D.3.11 National Emission Standards for Hazardous Air Pollutants (NESHAP) Coke byproducts Recovery Plant - Benzene Record Keeping Requirements [40 CFR 61, Subpart L]
- D.3.12 National Emission Standards for Hazardous Air Pollutants (NESHAP) Coke Byproducts Recovery Plant - Record Keeping Requirements for Equipment Leaks
[40 CFR 61, Subpart V]
- D.3.13 National Emission Standards for Hazardous Air Pollutants (NESHAP) - Benzene Waste Operations Record Keeping Requirements [40 CFR 61, Subpart FF]
- D.3.14 National Emission Standards for Hazardous Air Pollutants (NESHAP) Coke Byproducts Recovery Plant - Benzene Reporting Requirements [40 CFR 61 Part L][326 IAC 14]
- D.3.15 National Emission Standards for Hazardous Air Pollutants (NESHAP) Coke Byproducts Recovery Plant - Reporting Requirements for Equipment Leaks [40 CFR 61, Subpart V]
- D.3.16 National Emission Standards for Hazardous Air Pollutants (NESHAP) - Benzene Waste Operations Reporting Requirements [40 CFR 61, Subpart FF]

D.4 FACILITY OPERATION CONDITIONS - Coke Oven Gas Desulfurization Facility

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

- D.4.1 Lake County PM₁₀ Emission Limitation [326 IAC 6.8-2-38]
- D.4.2 Sulfur Dioxide (SO₂) Emissions Limitations [326 IAC 7-4.1-20]
- D.4.3 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

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

- D.4.4 Record Keeping Requirements
- D.4.5 Reporting Requirements

D.5 FACILITY OPERATION CONDITIONS - Number 2 Coke Plant Boiler House

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

- D.5.1 Lake County PM₁₀ Emission Requirements [326 IAC 6.8-2-38]
- D.5.2 Sulfur Dioxide (SO₂) Limitations 326 IAC 7-4-1.1(c)(22)(D)]
- D.5.3 Nonattainment NSR Minor Limits [326 IAC 2-1.1-5]
- D.5.4 PSD Minor Limit [326 IAC 2-2]
- D.5.5 General Provisions Relating to NSPS [326 IAC 12-1][40 CFR Part 60 Subpart A]
- D.5.6 NO_x Emissions [326 IAC 12-1][40 CFR 60, Subpart Db]
- D.5.7 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

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- D.5.8 Testing Requirements [326 IAC 2-7-6(1),(6)] [326 IAC 2-1.1-11] [326 IAC 2-1.1-5]
[40 CFR 60, Subpart Db]
- D.5.9 Sulfur Fuel Sampling and Analysis [326 IAC 7-4-1(d)]
- D.5.10 Particulate Matter Control

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

D.5.11 Continuous Emissions Monitoring [326 IAC 3-5] [326 IAC 12] [40 CFR 60, Subpart Db]
[326 IAC 2-7-6(1),(6)]

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

D.5.12 Record Keeping Requirements
D.5.13 Reporting Requirements
D.5.14 Natural Gas Fired Boiler Certification

D.6 FACILITY OPERATION CONDITIONS - No. 3 Sinter Plant

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

D.6.1 General Provisions Relating to Hazardous Air Pollutants (HAPs) [326 IAC 20-1]
[40 CFR 63, Subpart A][Table 4 to 40 CFR 63, Subpart FFFFF]
D.6.2 Particulate Emission Offset [326 IAC 2-3]
D.6.3 Lake County PM₁₀ Emission Requirements [326 IAC 6.8-2-38]
D.6.4 Sulfur Dioxide (SO₂) Limitations [326 IAC 7-4-1.1(c)(22)(I)]
D.6.5 Volatile Organic Compounds (VOC) Limitations [326 IAC 8-13-3]
D.6.6 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

Compliance Determination Requirements

D.6.7 Testing Requirements [326 IAC 2-7-6(1),(6)][326 IAC 2-1.1-11]
D.6.8 Particulate Matter Control

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

D.6.9 Visible Emissions Notations
D.6.10 Parametric Monitoring
D.6.11 Scrubber Failure Detection
D.6.12 Continuous Emissions Monitoring (VOC) [326 IAC 8-13-8]
D.6.13 VOC Monitoring Downtime [326 IAC 2-7-6] [326 IAC 2-7-5(3)]

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

D.6.14 General Record Keeping Requirements
D.6.15 General Reporting Requirements

National Emission Standards for Hazardous Air Pollutants (NESHAP) from Integrated Iron and Steel manufacturing [40 CFR 63, Subpart FFFFF]

D.6.16 National Emission Standards for Hazardous Air Pollutants (NESHAP) from Integrated Iron and Steel Manufacturing – Sinter Plants [40 CFR 63, Subpart FFFFF][326 IAC 2-7-5]

D.7 FACILITY OPERATION CONDITIONS - Blast Furnaces (Nos. 4, 6, 8 and 13)

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

D.7.1 Emission Offset Minor Limit [326 IAC 2-3]
D.7.2 Particulate Emission Limitation [326 IAC 6.8-1-2(a)]
D.7.3 General Provisions Relating to Hazardous Air Pollutants (HAPs) [326 IAC 20-1]
[40 CFR 63, Subpart A][Table 4 to 40 CFR 63, Subpart FFFFF]
D.7.4 Lake County PM₁₀ Emission Requirements [326 IAC 6.8-2-38]
D.7.5 Fugitive Dust Emission Limitations [326 IAC 6-4-2][326 IAC 6.8-10-3]
D.7.6 Sulfur Dioxide (SO₂) Limitations [326 IAC 7-4-1.1(c)(22)(J)]
D.7.7 Carbon Monoxide (CO) Limitations [326 IAC 9-1-2(2)]
D.7.8 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

Compliance Determination Requirements

D.7.9 Testing Requirements [326 IAC 2-7-6(1),(6)][326 IAC 2-1.1-11]
D.7.10 Sulfur Fuel Sampling and Analysis [326 IAC 7-4-1(d)]
D.7.11 Particulate Matter and CO Control [326 IAC 2-7-6(6)]

D.7.12 Fugitive Dust Control

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

D.7.13 Visible Emissions Notations

D.7.14 Parametric Monitoring

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

D.7.15 General Record Keeping Requirements

D.7.16 General Reporting Requirements

D.7.17 Actual to Projected Actual Applicability Test [326 IAC 2-2-2(d)] [326 IAC 2-2-3(c)]

D.7.18 Volatile Organic Compounds (VOC) De Minimis [326 IAC 2-3-2(b)]

National Emission Standards for Hazardous Air Pollutants (NESHAP) from Integrated Iron and Steel manufacturing [40 CFR 63, Subpart FFFFF]

D.7.19 National Emission Standards for Hazardous Air Pollutants (NESHAP) from Integrated Iron and Steel manufacturing – Blast Furnaces [40 CFR 63, Subpart FFFFF]

D.8 FACILITY OPERATION CONDITIONS - No. 1 BOP Shop

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

D.8.1 General Provisions Relating to HAPS [326 IAC 20-1][40 CFR 63, Subpart A]
[Table 4 to 40 CFR 63, Subpart FFFFF]

D.8.2 Lake County PM₁₀ Emission Requirements [326 IAC 6.8-2-38]

D.8.3 Particulate Emissions Limitation [326 IAC 6.8-1-2(a)]

D.8.4 Lake County Opacity Limitations [326 IAC 6.8-3-4]

D.8.5 Sulfur Dioxide (SO₂) Limitations [326 IAC 7-4.1-20(c)(3)]

D.8.6 Sulfur Dioxide (SO₂) Limitations Hot Metal Transfer and Desulfurization Stations
[326 IAC 7-4.1-20]

D.8.7 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

Compliance Determination Requirements

D.8.8 Particulate Matter Testing Requirements [326 IAC 2-7-6(1),(6)][326 IAC 2-1.1-11]

D.8.9 Sulfur Dioxide Testing Requirements

D.8.10 Particulate Matter Control

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

D.8.11 Visible Emissions Notations

D.8.12 Parametric Monitoring

D.8.13 Scrubber Failure Detection

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

D.8.14 General Record Keeping Requirements

National Emission Standards for Hazardous Air Pollutants (NESHAP) from Integrated Iron and Steel manufacturing [40 CFR 63, Subpart FFFFF]

D.8.15 National Emission Standards for Hazardous Air Pollutants (NESHAP) from Integrated Iron and Steel manufacturing – Basic Oxygen Process Furnaces (BOPF)
[40 CFR 63, Subpart FFFFF]

D.9 FACILITY OPERATION CONDITIONS - No. 2 Q-BOP Shop

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

D.9.1 General Provisions Relating to HAPS [326 IAC 20-1][40 CFR 63, Subpart A]
[Table 4 to 40 CFR 63, Subpart FFFFF]

D.9.2 Lake County PM₁₀ Emission Requirements [326 IAC 6.8-2-38]

D.9.3 Particulate Matter Limitations [326 IAC 6.8-1-2(a)]

D.9.4 Lake County Opacity Limitations [326 IAC 6.8-3-4]

D.9.5 Sulfur Dioxide (SO₂) Limitations [326 IAC 7-4-1.1(a)]

- D.9.6 Sulfur Dioxide (SO₂) Limitations – Hot Metal Transfer and Desulfurization Stations [326 IAC 7-4.1-20]
- D.9.7 Carbon Monoxide (CO) Limitations [326 IAC 9-1-2]
- D.9.8 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

Compliance Determination Requirements

- D.9.9 Particulate Testing Requirements [326 IAC 2-7-6(1),(6)][326 IAC 2-1.1-11]
- D.9.10 Sulfur Dioxide (SO₂) Testing Requirements
- D.9.11 Particulate Matter Control
- D.9.12 Carbon Monoxide Control

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

- D.9.13 Visible Emissions Notations
- D.9.14 Parametric Monitoring
- D.9.15 Scrubber Failure Detection

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

- D.9.16 General Record Keeping Requirements

National Emission Standards for Hazardous Air Pollutants (NESHAP) from Integrated Iron and Steel manufacturing [40 CFR 63, Subpart FFFFF]

- D.9.17 National Emission Standards for Hazardous Air Pollutants (NESHAP) from Integrated Iron and Steel manufacturing – Basic Oxygen Process Furnaces (BOPF) [40 CFR 63, Subpart FFFFF]

D.10 FACILITY OPERATION CONDITIONS - Hot Rolling Mill

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

- D.10.1 Lake County PM₁₀ Emission Requirements [326 IAC 6.8-2-38]
- D.10.2 Sulfur Dioxide (SO₂) Limitations [326 IAC 7-4-1.1(c)(22)(G)]
- D.10.3 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

Compliance Determination Requirements

- D.10.4 Testing Requirements
- D.10.5 Sulfur Fuel Sampling and Analysis [326 IAC 7-4.1-2]

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

- D.10.6 Record Keeping Requirements
- D.10.7 Reporting Requirements

D.11 FACILITY OPERATION CONDITIONS - Continuous Pickling Line

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

- D.11.1 General Provisions Relating to Hazardous Air Pollutants (HAPs) [326 IAC 20-1-1] [40 CFR 63, Subpart A]
- D.11.2 National Emission Standards for Hazardous Air Pollutants (NESHAP) for Steel Pickling - HCl Process Facilities and Hydrochloric Acid Regeneration Plants [40 CFR 63, Subpart CCC][40 CFR Part 63.1157]
- D.11.3 National Emission Standards for Hazardous Air Pollutants (NESHAP) Maintenance Requirements [40 CFR 63.1160]
- D.11.4 National Emission Standards for Hazardous Air Pollutants (NESHAP) Operational and Equipment Standards [40 CFR Part 63.1159, Subpart CCC]
- D.11.5 Particulate Emission Limitations [326 IAC 6.8-1-2(a)]

Compliance Determination Requirements

- D.11.6 Testing Requirements [40 CFR 63.116, Subpart CCC]

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

- D.11.7 National Emission Standards for Hazardous Air Pollutants (NESHAP) Monitoring Requirements [40 CFR 63.1162, Subpart CCC]
- D.11.8 Monitoring Requirements [40 CFR Part 63.1162]

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

- D.11.9 Record Keeping Requirements [40 CFR Part 63.1165]
- D.11.10 Reporting Requirements [40 CFR Part 63.1164]

D.12 FACILITY OPERATION CONDITIONS - Sheet Products Division

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

- D.12.1 General Provisions Relating to New Source Performance Standards (NSPS) [326 IAC 12-1][40 CFR 60, Subpart A]
- D.12.2 Lake County PM₁₀ Emission Requirements [326 IAC 6.8-2-38]
- D.12.3 Particulate Emissions Limitations [326 IAC 6.8-1-2(a)]
- D.12.4 Nitrogen Dioxide (NO_x) Emission Offsets [326 IAC 2-3]
- D.12.5 Sulfur Dioxide (SO₂) Limitations [326 IAC 7-4-1.1(a)]
- D.12.6 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

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

- D.12.7 Record Keeping Requirements
- D.12.8 Reporting Requirements

D.13 FACILITY OPERATION CONDITIONS - Tin Mill Operations

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

- D.13.1 Particulate Emissions Limitations [326 IAC 6.8-1-2(a)]
- D.13.2 Sulfur Dioxide (SO₂) Limitations [326 IAC 7-4-1.1(a)]

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

- D.13.3 Record Keeping Requirements

D.14 FACILITY OPERATION CONDITIONS - No. 4 Boiler House

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

- D.14.1 Lake County PM₁₀ Emission Requirements [326 IAC 6.8-2-38]
- D.14.2 Sulfur Dioxide (SO₂) Limitations [326 IAC 7-4-1.1(c)(22)(B)]
- D.14.3 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

Compliance Determination Requirements

- D.14.4 Sulfur Fuel Sampling and Analysis [326 IAC 7-4.1-2]

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

- D.14.5 Visible Emission Notations

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

- D.14.6 Record Keeping Requirements
- D.14.7 Reporting Requirements
- D.14.8 Natural Gas Fired Boiler Certification

D.15 FACILITY OPERATION CONDITIONS - Turboblower Boiler House (TBBH)

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

- D.15.1 General Provisions Relating to NSPS [326 IAC 12-1][40 CFR 60, Subpart A]
- D.15.2 NSPS Particulate Matter Limitations [326 IAC 12][40 CFR 60, Subpart D]
- D.15.3 Lake County PM₁₀ Emission Requirements [326 IAC 6.8-2-38]
- D.15.4 Sulfur Dioxide (SO₂) Limitations [326 IAC 7-4-1.1(c)(22)(A)]

- D.15.5 PSD Nitrogen Oxides (NOx) Offset Limitations [326 IAC 2-2][326 IAC 2-3]
- D.15.6 Nitrogen Oxides (NOx) Limitations [326 IAC 12][40 CFR 60, Subpart D]
- D.15.7 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

Compliance Determination Requirements

- D.15.8 Testing Requirements [326 IAC 2-7-6(1),(6)][326 IAC 2-1.1-11]
- D.15.9 Sulfur Fuel Sampling and Analysis [326 IAC 7-4.1-2]
- D.15.10 Nitrogen Oxides (NOx) Emissions Monitoring for No. 4A Boiler [40 CFR 60.48b]

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

- D.15.11 Visible Emission Notations

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

- D.15.12 Record Keeping Requirements
- D.15.13 Reporting Requirements
- D.15.14 Natural Gas Fired Boiler Certification

D.16 FACILITY OPERATION CONDITIONS - Fugitive Dust Sources

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

- D.16.1 Particulate Matter (PM) Lake County PM₁₀ Emission Requirements [326 IAC 6.8-10-4]

Compliance Determination Requirements

- D.16.2 Particulate Matter Control

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

- D.16.3 Record Keeping Requirements
- D.16.4 Reporting Requirements

D.17 FACILITY OPERATION CONDITIONS - Insignificant Activities

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

- D.17.1 Dust Emission Limitations [326 IAC 6-4-2][326 IAC 6.8-10-3]
- D.17.2 Volatile Organic Compounds (VOC) [326 IAC 8-3-2 (Cold Cleaner Operation)]
- D.17.3 Volatile Organic Compounds (VOC) [326 IAC 8-3-5 (Cold Cleaner Operation and Control)]
- D.17.4 Volatile Organic Compounds [326 IAC 8-3-8 (Material Requirements for Cold Cleaning Degreasers)]
- D.17.5 Volatile Organic Liquid Storage Vessels [326 IAC 8-9-1]

E.1 FACILITY OPERATION CONDITIONS - Coal Pulverizer and Air Preheater System (E. Bldg)

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

- E.1.1 General Provisions Relating to NSPS [326 IAC 12-1][40 CFR Part 60, Subpart A]
- E.1.2 NSPS Coal Preparation Plant [326 IAC 12] [40 CFR 60 Subpart Y]
- E.1.3 PSD Minor Limit (NOx) [326 IAC 2-2]
- E.1.4 PM and PM₁₀ Minor Limits [326 IAC 2-2][326 IAC 2-1.1-5]
- E.1.5 Particulate Limitations [326 IAC 6.8-1-2(a)]
- E.1.6 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

Compliance Determination Requirements

- E.1.7 Testing Requirements [326 IAC 2-7-6(1),(6)][326 IAC 2-1.1-11]
- E.1.8 NSPS Coal Preparation Plant Testing Requirements [40 CFR 60.254]
- E.1.9 Particulate Control

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

- E.1.10 NSPS Coal Preparation Plant Monitoring Requirements [40 CFR 60.254]
- E.1.11 Visible Emissions Notations

E.1.12 Parametric Monitoring

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

- E.1.13 Record Keeping Requirements
- E.1.14 Reporting Requirements

E.2 FACILITY OPERATION CONDITIONS - Pulverized Coal and Feed System

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

- E.2.1 General Provisions Relating to NSPS [326 IAC 12-1][40 CFR Part 60, Subpart A]
- E.2.2 NSPS Coal Preparation Plant [326 IAC 12] [40 CFR 60 Subpart Y]
- E.2.3 PM and PM₁₀ Minor Limits [326 IAC 2-2][326 IAC 2-1.1-5]
- E.2.4 Particulate Limitations [326 IAC 6.8-1-2(a)]
- E.2.5 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

Compliance Determination Requirements

- E.2.6 Coal Preparation Plant Testing Requirements [40 CFR 60.254]
- E.2.7 Testing Requirements
- E.2.8 Particulate Control

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

- E.2.9 Record Keeping Requirements

E.3 FACILITY OPERATION CONDITIONS - Coal Handling Thaw Shed (Rail Car Heater)

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

- E.3.1 PSD Minor Limit (NOx) [326 IAC 2-2]
- E.3.2 Fugitive Dust Emission Limitations [326 IAC 6-4-2][326 IAC 6.8-10-3]
- E.3.3 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

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

- E.3.4 Record Keeping Requirements
- E.3.5 Reporting Requirements

E.4 FACILITY OPERATION CONDITIONS - Coal Handling Operations (Coal Handling system, coal piles and haul roads)

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

- E.4.1 General Provisions Relating to NSPS [326 IAC 12-1][40 CFR Part 60, Subpart A]
- E.4.2 NSPS Coal Preparation Plant [326 IAC 12-7] [40 CFR 60 Subpart Y]
- E.4.3 PM and PM₁₀ Minor Limits [326 IAC 2-2][326 IAC 2-1.1-5]
- E.4.4 Particulate Matter Limitations [326 IAC 6.8-1-2(a)]
- E.4.5 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

Compliance Determination Requirements

- E.4.6 NSPS Coal Preparation Plant Testing Requirements [40 CFR 60.254]
- E.4.7 Testing Requirements
- E.4.8 Particulate Control
- E.4.9 Fugitive Dust Control

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

- E.4.10 Record Keeping Requirements

E.5 FACILITY OPERATION CONDITIONS - Specifically Regulated Insignificant Activities

- E.5.1 Volatile Organic Compounds (VOC) [326 8-3-5]
- E.5.2 Volatile Organic Compounds (VOC) [326 IAC 8-3-8]
- E.5.3 Volatile Organic Liquid Storage Vessels [326 IAC 8-9-1]

F NITROGEN OXIDES BUDGET TRADING PROGRAM - NO_x Budget Permit

- F.1 Automatic Incorporation of Definitions [326 IAC 10-4-7(e)]
- F.2 Standard Permit Requirements [326 IAC 10-4-4(a)]
- F.3 Monitoring Requirements [326 IAC 10-4-4(b)]
- F.4 Nitrogen Oxides Requirements [326 IAC 10-4-4(c)]
- F.5 Excess Emissions Requirements [326 IAC 10-4-4(d)]
- F.6 Record Keeping Requirements [326 IAC 10-4-4(e)] [326 IAC 2-7-5(3)]
- F.7 Reporting Requirements [326 IAC 10-4-4(e)]
- F.8 Liability [326 IAC 10-4-4(f)]
- F.9 Effect on Other Authorities [326 IAC 10-4-4(g)]

Certification

Emergency Occurrence Report

Quarterly Deviation and Compliance Monitoring Report

Semi- Annual Natural Gas Boiler Certification

Quarterly Reports

SECTION A

SOURCE SUMMARY

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

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

The Permittee owns and operates an integrated steel mill.

Source Address:	1 North Broadway, Gary, Indiana 46402
Mailing Address:	1 North Broadway, Gary, Indiana 46402
General Source Phone Number:	219-888-3387
SIC Code:	3312
County Location:	Lake
Source Location Status:	Nonattainment for 8-hour ozone Nonattainment for PM 2.5 Attainment or unclassifiable for all other criteria pollutants
Source Status:	Part 70 Permit Program Major Source, under PSD, nonattainment for NSR and Emission Offset Rules; Major Source, Section 112 of the Clean Air Act 1 of 28 Source Categories

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

This integrated steel mill consists of a main mill and eight (8) on-site contractors:

- (a) U. S. Steel - Gary Works, plant Id 089-00121, the primary operation, located at One North Broadway, Gary, Indiana 46402;
- (b) Central Teaming Company, plant Id 089-00172, the on-site contractor, located at One North Broadway, Gary, Indiana 46402;
- (c) Heckett Multiserv, plant Id 089-00170, the on-site contractor, located at One North Broadway, Gary, Indiana 46402;
- (d) International Mill Service, Inc. plant Id 089-00132, the on-site contractor, located at One North Broadway, Gary, Indiana 46402;
- (e) AKJ Industries, Inc., plant Id 089- 00505, the on-site contractor, located at One North Broadway, Gary, Indiana 46402;
- (f) Levy- Indiana Slag Company, plant Id 089-00133, the on-site contractor, located at One North Buchanan Street, Gary, Indiana 46401;
- (g) Mid-Continent Coal and Coke Company, plant Id 089-00173, the on-site contractor, located at One North Broadway, Gary, Indiana 46402;
- (h) Tube City, Inc., plant Id 089-00174, the on-site contractor located at One North Broadway, Gary, Indiana 46401.
- (i) U.S. Aggregates, Inc., Id 089- 05256, the on-site contractor, located at One North Broadway, Gary, Indiana 46402.

Separate Part 70 permits will be issued to US Steel - Gary Works and each on site contractor, solely for administrative purposes.

Company Name	Part 70 Permit Number
U.S. Steel - Gary Works	089-7663-00121
Central Teaming Company, Inc.	089-7684-00172
Heckett Multiserv,	089-7649-00170
International Mill Service, Inc.	089-5630-00132
AKJ Industries, Inc.	089-22772-00505
Levy-Indiana Slag Company	089-7719-00133
Mid-Continent Coal and Coke Company	089-8064-00173
Tube City, Inc.	089-7648-00174
U.S. Aggregates, Inc.	089-21828-05256

Permitted Emission Units and Pollution Control Equipment

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

The integrated steel mill, US Steel-Gary Works consists of the following:

Coal Handling Operation

- (a) One (1) coal car bottom thaw shed (holding yard), identified as CHY00071, constructed in 1959, combusting coke oven gas, with a maximum heat input capacity of 25 MMBtu per hour, with an open flame heater, with uncontrolled fugitive emissions.
- (b) One (1) coal car side thaw station, identified as CHT0001, constructed in 1959, combusting natural gas, with a maximum heat input capacity of 15 MMBtu per hour, with an open flame heater, with uncontrolled fugitive emissions.
- (c) One (1) No. 2 Coke Battery Precarbonization facility, consisting of three (3) lines, Line A, Line B and Line C identified as CH2A0020, CH2B0021 and CH2C0022, constructed prior to October 24, 1974, each with a maximum capacity of 153.5 tons per hour. Particulate matter emissions from the three lines are controlled by electrostatic precipitators (ESP), ESP A, ESP B and ESP C, identified as CH3029, CH3030 and CH3031, exhausting through stacks CH6034, CH6035 and CH6037, respectively.
- (d) One (1) No. 3 Coke Battery Precarbonization facility consisting of three (3) lines Line A, Line B and Line C identified as CH3A0017, CH3B0018 and CH3C0019, constructed prior to October 24, 1974, each with a maximum capacity of 153.5 tons per hour. Particulate matter emissions from the three lines are controlled by electrostatic precipitators (ESP), ESP A, ESP B and ESP C, CH3026, CH3027 and CH3028, exhausting through stacks CH6028, CH6029 and CH6031, respectively.
- (e) One (1) coal crusher: system consisting of three (3) enclosed hammer mills with a maximum capacity of 160 tons per hour, three (3) enclosed hammer mills with a maximum capacity of 150 tons per hour, and (2) enclosed hammer mills with a maximum capacity of 100 tons per hour, with fugitive emissions contained within the coal blending building.
- (f) One (1) enclosed petroleum coke crusher with a maximum capacity of 400 tons per hour which also operates as a coal breaker with a maximum capacity of 1200 tons per hour. This unit is a totally enclosed hammer mill with fugitive emissions contained within the coal blending building.
- (g) Coal Handling Storage Facilities, identified as CHSQ0003.

- (h) One (1) frozen coal breaker, installed in 1959, with a maximum capacity of 1300 tons per hour, with fugitive emissions contained within the coal blending building.

Coke Batteries

(a) No. 2 Coke Battery

- (1) One (1) six (6) meter tall vertical flue coke battery with 57 ovens, No. 2 Coke Battery, identified as CP2B0079, constructed in November 1975, with a maximum charging capacity of 217 tons per hour. Excessive coke oven gas back pressure is controlled by three (3) flares lit with internal flare igniters CP3060, CP3061 and CP3062, exhausting to Bypass/Bleeder Flare Stacks CP6105, CP6106 and CP 6107.
- (2) The No. 2 Coke Battery underfiring system has a maximum combustion heat input capacity of 250 MMBtu per hour, exhausting to stack CP6040 equipped with a continuous opacity monitor (COM).
- (3) The No. 2 Coke Battery has a maximum pushing capacity of 161 tons of coke per hour, with particulate emissions controlled by a Mobile Scrubber Car 9119, 9120, 9121 or 9122, identified as CP3034, exhausting to Stack CP6041.
- (4) Nos. 2 and 3 Quench Towers identified as CP1Q0080 and CP2Q0081, constructed in 1975, with a maximum combined capacity of 322 tons of coke per hour, and No. 1 Quench Tower identified as CPQ0087 constructed in 1975 with a capacity of 322 tons of coke per hour, each equipped with a quench water header and baffle system with sprays. Nos. 2 and 3 Quench Towers service Nos. 2 and 3 Coke Batteries. No.1 Quench Tower services Nos. 2, 3, 5 and 7 Coke Batteries.
- (5) The No. 2 Coke Battery fugitive emissions are generated from charging operations, off take piping, door leaks, lid leaks and collector main leaks.

(b) No. 3 Coke Battery

- (1) One (1) six (6) meter tall vertical flue coke battery with 57 ovens, No.3 Coke Battery, identified as CP3B0086, constructed in November 1974, with a maximum charging capacity of 217 tons per hour. Excessive coke oven gas back pressure is controlled by three (3) flares lit with internal flare igniters CP3063, CP3064 and CP3065, exhausting to Bypass/Bleeder Flare stacks CP6108, CP6109 and CP 6110.
- (2) The No. 3 Coke Battery underfiring system has a maximum combustion heat input capacity of 250 MMBtu per hour, exhausting to stack CP6045, equipped with a continuous opacity monitor (COM).
- (3) The No. 3 Coke Battery has a maximum pushing capacity of 161 tons of coke per hour, with particulate emissions controlled by a Mobile Scrubber Car 9119, 9120, 9121 or 9122, identified as CP3038, exhausting to stack CP6046.
- (4) The No. 1 Quench Tower, identified as CP3Q0087, constructed in 1975, with a maximum capacity of 322 tons of coke per hour and Nos. 2 and 3 Quench Towers, identified as CP1Q0080 and CP2Q0081 constructed in 1975 with a maximum capacity of 322 tons of coke per hour, equipped with a quench water header and baffle system with sprays. Nos. 2 and 3 Quench Towers service Nos. 2 and 3 Coke Batteries. No. 1 Quench Tower services Nos. 2, 3, 5 and 7 Coke Batteries.

- (5) The No. 3 Coke Battery fugitive emissions are generated from charging operations, offtake piping, door leaks, lid leaks and collector main leaks.

(c) No. 5 Coke Battery

- (1) One (1) three (3) meter short vertical flue coke oven battery with 77 ovens, No. 5 Coke Battery, identified as CP5B0090, constructed in 1954, with a maximum charging capacity of 84 tons per hour. Excessive coke oven gas back pressure is controlled by two (2) flares lit with internal flare igniters CP3066 and CP3067, exhausting to Bypass/Bleeder Flare stacks CP6111 and CP 6112.
- (2) The No. 5 Coke Battery underfiring system has a maximum combustion heat input capacity of 125 MMBtu per hour, exhausting to stack CP6049, equipped with a COM.
- (3) The No. 5 and No.7 Coke Batteries have a combined maximum pushing capacity of 103 tons of coke per hour, with particulate emissions controlled by a common baghouse, identified as CP3041, exhausting to stack CP6050.
- (4) Nos. 5 and 6 Quench Towers identified as CP5Q0091 and CP5Q0095, constructed in 1954, with a maximum combined capacity of 103 tons of coke per hour, equipped with a quench water header and baffle system with sprays. These towers service Nos. 5 and 7 Coke Batteries.
- (5) The No. 5 Coke Battery fugitive emissions are generated from charging operations, offtake piping, door leaks, lid leaks and collector main leaks.

(d) No. 7 Coke Battery

- (1) One (1) three (3) meter short vertical flue coke oven battery, with 77 ovens, No.7 Coke Battery, identified as CP7B0094, constructed in 1954, with a maximum charging capacity of 84 tons per hour. Excessive coke oven gas back pressure is controlled by two (2) flares lit with internal flare igniters CP3068 and CP3069, exhausting to Bypass/Bleeder Flare stacks CP6113 and CP6114.
- (2) The No. 7 Coke Battery underfiring system has a maximum combustion heat input capacity of 125 MMBtu per hour, exhausting to stack CP6053 equipped with a COM.
- (3) The No. 5 and No.7 Coke Batteries have a combined maximum pushing capacity of 103 tons of coke per hour, with particulate emissions controlled by a common baghouse, identified as CP3041, exhausting to stack CP6050.
- (4) Nos. 5 and 6 Quench Towers identified as CP5Q0091 and CP5Q0095, constructed in 1954, with a maximum combined capacity of 103 tons of coke per hour, equipped with a quench water header and baffle system with sprays. These towers service Nos. 5 and 7 Coke Batteries.
- (5) The No. 7 Coke Battery fugitive emissions are generated from charging operations, offtake piping, door leaks, lids leaks and collector main leaks.

(e) Natural Gas Underfiring Injection System Jets

Three (3) natural gas injection jets, identified as CPNGI001, CPNGI002 and CPNGI003, constructed in 2001, with heat input capacities of 22 MMBtu per hour, 43 MMBtu per hour and 122 MMBtu per hour, respectively. Natural gas injection provides Btu stabilization control, coke oven gas quality control and emergency gas supply to the battery underfiring system.

Coke By-Products Recovery Plant

(a) Control Station No.1

- (1) Four (4) Predecanters D-101A, D-101B, D-101C and D-101D, identified as CBP10100, CBP20101, CBP30102 and CBP30103, constructed in 1975, with vapors directed by a natural gas blanketing system CB3080 to Control Station No.1 and into the 72- inch Suction Main.
- (2) Two (2) Still Decanters D-102B and D-102A, identified as CBD00104 and CBD00105, constructed in 1975, with vapors directed by a natural gas blanketing system CB3080 to Control Station No.1 and into the 72-inch Suction Main.
- (3) Two (2) Gary Decanters D-5 and D-4, identified as CBD20107 and CBD30108, constructed in 1975 with vapors directed by a natural gas blanket system CB3080 to Control Station No.1 and into the 72-inch Suction Main.
- (4) One (1) Bleed-Off Tank B101, identified as CBB10106, constructed in 1975, with vapors directed by a natural gas blanketing system CB3080 to Control Station No.1 and into the 72-inch Suction Main.
- (5) One (1) Liquor Storage Tank T-7, identified as CBL10109, constructed in 1975, with vapors directed by a natural gas blanketing system CB3080 to Control Station No.1 into the 72-inch Suction Main.
- (6) Two (2) Tar Storage Tanks T-2 and T-3, identified as CBT00110 and CBT00111, constructed in 1968 with vapors, directed by a natural gas blanketing system CB3080 to Control Station No.1 and into the 72-inch Suction Main.
- (7) One (1) Storage Tank T-6, identified as CBT20112, constructed in 1968, with vapors, directed by a natural gas blanketing system CB3080 to Control Station No.1 and into the 72-inch Suction Main.
- (8) Two (2) PC Tar Storage Tanks T-363D and T-363A, identified as CBT30113 and CB40114, constructed in 1975, with vapors directed by a natural gas blanketing system CB3080 to Control Station No.1 into the 72-inch Suction Main.
- (9) One (1) Dry Tar Storage Tank T-9, identified as CBT50115, constructed in 1975, with vapors directed by a natural gas blanketing system CB3080 to Control Station No.1 and into the 72-inch Suction Main.
- (10) One (1) Sump S-9 serving Dry Tar Storage Tank ST-9, identified as CBS10116, constructed in 1991, with vapors, directed by a natural gas blanketing system CB3080 to Control Station No.1 and into the 72-inch Suction Main.

(b) Control Station No. 2

- (1) Three (3) Tar Tanks T-304C, T-304B and T-304A , identified as CBT60118, CBT70119, and CBT80121, constructed in 1990, 1953 and 1953, respectively, with vapors directed by a natural gas blanketing system CB3081 to Control Station No.2 and into the 72-inch Suction Main.
- (2) One (1) Tar Feed Tank T-306C, identified as CBTF0164, constructed in 1953, with vapors directed by a natural gas blanketing system CB3081 to Control Station No.2 and into the 72-inch Suction Main.

- (3) One (1) Wash Oil Tank T-331AN, identified as CBO10123, constructed in 1961, with vapors directed by a natural gas blanketing system CB3081 to Control Station No. 2 into the 72-inch Suction Main.
 - (4) Two (2) Light Oil Storage Tanks T-312 and T-311, identified as CBO20124 and CBO30125, constructed in 1953 with vapors directed by a natural gas blanketing system CB3081 to Control Station No. 2 and into the 72-inch Suction Main.
 - (5) One (1) sump S-304/306, constructed in 1996, with vapors directed by a natural gas blanketing system CB3081 to Control Station No. 2 and into the 72-inch Suction Main.
- (c) Control Station No. 3
- (1) Four (4) Predecanters D-105A, D-105B, D-105C and D-105D, identified as CBP70137, CBP80138, CBP50139 and CBP60140, constructed in 1976, with vapors directed by a natural gas blanketing system CB3082 to Control Station No. 3 and into the 72-inch Suction Main.
 - (2) Two (2) Still Decanters D-106A and D-106B, identified as CBD60134 and CBD70136, constructed in 1976, with vapors directed by a natural gas blanketing system CB3082 to Control Station No. 3 and into the 72-inch Suction Main.
 - (3) Two (2) Gary Decanters D-6 and D-7, identified as CBD40132 and CBD50133, constructed in 1976, with vapors directed by a natural gas blanketing system CB3082 to Control Station No. 3 and into the 72-inch Suction Main.
 - (4) Two (2) Tar Decanters D-5/7N and D-5/7S, identified as CBD80141 and CBD90142, constructed in 1953, with vapors directed by a natural gas blanketing system CB3082 to Control Station No. 3 and into the 72-inch Suction Main.
 - (5) One (1) Bleed-Off Tank B-104, identified as CBB20135, constructed in 1976 with vapors directed by a natural gas blanketing system CB3082 to Control Station No. 3 and into the 72-inch Suction Main.
 - (6) One (1) Liquor Surge Tank T-11, identified as CBL60131, constructed in 1975, with vapors directed by a natural gas blanketing system CB3082 to Control Station No. 3 and into the 72-inch Suction Main.
- (d) Control Station No. 4
- (1) Four (4) Circulating Liquor Decanters L-100B, L-100C, L-100D and L-100E, identified as CBC30127, CBC40128, CBC50129 and CBL80145, constructed in 1975, with vapors directed by a natural gas blanketing system CB3083 to Control Station No. 4 and into the 72-inch Suction Main.
 - (2) Two (2) Liquor Surge Tanks T-340A and T-340B, identified as CBC20126 and CBL70143, constructed in 1995, with vapors directed by a natural gas blanketing system CB3083 to Control Station No. 4 and into the 72-inch Suction Main.
 - (3) One (1) Primary Cooler Tank T-345A, identified as CBTF0130, constructed in 1995 with vapors directed by a natural gas blanketing system CB3083 to Control Station No. 4 and into the 72-inch Suction Main.

- (e) Control Station No. 5
 - (1) One (1) Sump of Circulating Liquor Ls-100E, identified as CBS40144, constructed in 1991, with vapors directed by a natural gas blanketing system CB3051 to Control Station No. 5 and into the 72-inch Suction Main.
 - (2) Three (3) Tar Storage Tanks T-301, T-302A, T-302B, identified as CBTA0146, CBTB0147 and CBTC0148, constructed in 1948, 1930, and 1930, respectively, with vapors directed by a natural gas blanketing system CB3051 to Control Station No. 5 and into the 72-inch Suction Main.
 - (3) Two (2) Storage Tanks T-7100, T-7110 and T-7120, constructed and refurbished in 1997, with vapors directed by a natural gas blanketing system CB3051 to Control Station No. 5 and into the 72-inch Suction Main.
 - (4) Two (2) Oil/Tar Separator Tanks, T-7000 and T-7010, constructed in 1997, with vapors directed by a natural gas blanketing system CB3051 to Control Station No. 5 and into the 72-inch Suction Main.
 - (5) Two (2) Oil and Tar Receiver Tanks, T-7020 and T-7030, constructed in 1997 with vapors directed by a natural gas blanketing system CB3051 to Control Station No. 5 and into the 72-inch Suction Main.
- (f) One (1) Surge Tank T-7800, constructed in 1997, with vapors directed to a nitrogen gas blanketing system.
- (g) Distillation Sump Emission Control

One (1) Distillation Sump Emission Control System, identified as CBS80151, constructed in 1989 with vapors directed to a nitrogen gas blanketing system.
- (h) Coke Oven Gas (COG) High Pressure Control System, constructed in 1991, contains instrumentation and control valves designed to limit the maximum pressure in the COG distribution system. Excess COG pressure is directed to and combusted in a bleeder flare with emissions exhausting to Stack CG6077.
- (i) Equipment in Benzene Service consist of several hundred components pumps, exhausters, valves, flanges and pressure relief devices in benzene service within the byproducts plant.

Coke Oven Gas (COG) Desulfurization Facility

- (a) One (1) amine unit, constructed in 1997, removes hydrogen sulfide and other organic sulfur compounds from the coke oven gas (COG) stream.
- (b) One (1) reflux unit, constructed in 1997, recycles ammonia and acid gas into the COG stream.
- (c) One (1) hydrogen cyanide (HCN) destruction unit, constructed in 1997 converts HCN in the acid gas stream to ammonia to minimize corrosion to the Sulfur Recovery Unit.
- (d) One (1) sulfur recovery unit, constructed in 1997, converts sulfur compounds in the acid gas stream to elemental sulfur. This sulfur is sold as a product.
- (e) One (1) incineration unit, constructed in 1997, converts remaining sulfur compounds not removed by the sulfur recovery unit into sulfur dioxide.

Coke Plant Boiler House

- (a) Two (2) Boilers, Nos. 1 and 2, identified as CSS10155 and CSS20156, constructed prior to 1970, with a maximum heat input capacity of 160 MMBtu per hour each, exhausting to stack CS6061. These boilers are equipped to combust natural gas.
- (b) One (1) Boiler, No. 3, identified as CSS30157, constructed in 1943, with a maximum heat input capacity of 160 MMBtu per hour, exhausting to stack CS6062. This boiler is equipped to combust natural gas and coke oven gas.
- (c) Two (2) Boilers, Nos. 4 and 5, identified as CSS40158 and CSS50159, constructed prior to 1955, with a maximum heat input of 170 MMBtu per hour each, exhausting to stack CS6063. These boilers are equipped to combust natural gas and coke oven gas.
- (d) One (1) Boiler No. 6, identified as CSS60160, constructed in 1955, with a maximum heat input capacity of 170 MMBtu per hour, exhausting to stack CS6064. This boiler is equipped to combust natural gas and coke oven gas.
- (e) One (1) Boiler, No. 7, identified as CS70161, constructed in 1976, with a maximum heat input capacity of 170 MMBtu per hour, exhausting to stack CS6065. This boiler is equipped to combust natural gas and coke oven gas.
- (f) One (1) Boiler, No. 8, identified as CSS80162, constructed in 1981, with a maximum heat input capacity of 249 MMBtu per hour, exhausting to stack CS6066. This boiler is equipped to combust natural gas and coke oven gas.
- (g) One (1) natural gas fired boiler at the coke plant boiler house, identified as the temporary rental boiler CSS80163, constructed in 2004 with a maximum heat input capacity of 235 MMBtu/hr and equipped with a low NOx burner, exhausting to the existing stack CS6066.
- (h) Two (2) boilers at the coke plant boiler house, identified as Boilers No. 9 CSS80164 and No. 10 CSS 80165, constructed in 2004, each with a maximum heat input capacity of 235 MMBtu/hr, exhausting to stacks CS6067 and CS6068, respectively. These boilers are equipped to burn natural gas and coke oven gas.
- (i) One (1) lime storage silo with a maximum capacity of 20 tons per hour and emissions controlled by a baghouse LRS-1, constructed in 2001, exhausting inside the building.

Number 3 Sinter Plant

- (a) Three (3) Sinter Strands, constructed in 1958, identified as ISS10379, ISS20380 and ISS30381, each with a 50 MMBtu per hour reheat burners identified as ISB001, ISB002 and ISB003 and a maximum capacity of 225 tons of sinter per hour each, controlled by two (2) Windbox Gas Cleaning Systems IS3203 and IS3204, installed in 1996, each comprised of a Quench Reactor, Dry Venturi Scrubber, a baghouse operated in series, exhausting to Windbox stacks IS6198 and IS6199 which are equipped with VOC CEMS.
- (b) One (1) Cold Screen Station, identified as ISR00389, constructed in 1958, with a maximum capacity of 450 tons per hour, using a Baghouse IS3209 as a control device and exhausting to stack IS6207.
- (c) One (1) S1/S2 Conveyer System, identified as ISY00388, constructed in 1979, with a maximum capacity of 450 tons per hour, that transfers sinter from the sinter coolers to the cold screening station, using a baghouse IS3208 as a control device and exhausting to stack IS6206.

- (d) Three (3) Sinter Coolers, identified as ISC10385, ISC20386, and ISC30387, constructed in 1958, with a maximum capacity of 225 ton per hour each, with emissions exhausting to stacks IS6203, IS6204, and IS6205 respectively.
- (e) Three (3) Sinter Strand Discharge End Areas, identified as ISS10379, ISS20380 and ISS0381, constructed in 1958, using three (3) baghouses as control devices, designated as IS3205, IS3206, and IS3207, exhausting to stacks IS6200, IS6201, and IS6202 respectively.
- (f) Blended Material Storage Bin Building, identified as ISB00377, constructed in 1979, including bins, feeders and conveyors, with a maximum capacity of 1,000 tons per hour, using a baghouse IS3196 as a control device and exhausting to stack IS6197.
- (g) Storage and Blending Piles, identified as ISBP0376, with fugitive emissions.

Blast Furnaces

- (a) Raw materials shipped to the ore yard identified as IAOYO366, are transferred to the Highline, identified as IAHL0307, from which raw material shipments and coke are sent through the Stockhouse.
- (b) The No. 14 Blast Furnace Stockhouse, constructed in 1979, identified as IDSH0367, controlled by dust suppression, services Blast Furnace 14. The No 4 Blast Furnace Stockhouse constructed in 1979, controlled by dust suppression, services Blast Furnace No. 4. The No 6 Blast Furnace Stockhouse constructed in 1979, controlled by dust suppression, services Blast Furnace No. 6. The No. 8 Blast Furnace Stockhouse constructed in 1979, controlled by dust suppression, services Blast Furnace No. 8.
- (c) No. 4 Blast Furnace, constructed in 1917, with a maximum capacity of 200 tons per hour, identified as IABF0308, using a Blast Furnace Gas Distribution System to collect the blast furnace gas and using pulverized coal at a rate of 26 tons per hour, oil (from on-site contractor when it meets specifications) at a rate of 70 gallons per minute and/or coal tar (when the on-site contractor tar centrifuge is not operating) at a rate of 70 gallons per minute.
 - (1) Three (3) No. 4 Blast Furnace Stoves identified as IAST0360, replaced in 1947, with a maximum heat input capacity of 350 MMBtu per hour total combusting blast furnace gas (BFG) and natural gas, exhausting to the combustion stack IA6160.
 - (2) No. 4 Blast Furnace Casthouse, identified as IABF0308, constructed in 1917, with emissions from tapping and runners controlled by a natural gas iron oxide fume suppression system IA3177, exhausting to casthouse roof monitor IA6010.
 - (3) One (1) Slag Pit, identified as IASP0311, with fugitive emissions.
- (d) No. 6 Blast Furnace, constructed in 1910, with a maximum capacity of 200 tons per hour, identified as IBBFO341, using a Blast Furnace Gas Distribution System to collect the blast furnace gas and using pulverized coal injected at a rate of 26 tons per hour, oil at a rate of 70 gallons per minute and /or coal tar at a rate of 70 gallons per minute.
 - (1) Four (4) No. 6 Blast Furnace Stoves identified as IBST0361, replaced in 1997, with a maximum heat input capacity of 350 MMBtu per hour total, combusting Blast Furnace Gas (BFG) and natural gas exhausting to the combustion stack IB6168.

- (2) No. 6 Blast Furnace Casthouse, identified as IBBF0341, constructed in 1910, with emissions from tapping and runners controlled by a natural gas iron oxide fume suppression system IB3178, exhausting to casthouse roof monitor IB6011.
 - (3) One (1) Slag Pit, identified as IBSP0335, with fugitive emissions.
- (e) No. 8 Blast Furnace, constructed in 1909, with a maximum capacity of 183 tons per hour, identified as ICBFO354, using a Blast Furnace Gas Distribution System to collect the blast furnace gas and using pulverized coal injected at a rate of 26 ton per hour, oil at a rate of 70 gallons per minute and/or coal tar at a rate of 70 gallons per minute.
- (1) Four (4) No. 8 Blast Furnace Stoves, identified as ICST0362, replaced in 1999, with a maximum heat input capacity of 325 MMBtu per hour total, combusting Blast Furnace Gas and natural gas, exhausting to the combustion stack IC6175.
 - (2) No. 8 Blast Furnace Casthouse, identified as ICBF0354, constructed in 1909, with emissions from tapping and runners controlled by a natural gas iron oxide fume suppression system IC3179, exhausting to cast house roof monitor IC6012.
 - (3) One (1) Slag Pit, identified as ICSP0363, with fugitive emissions.
- (f) No. 14 Blast Furnace, constructed in 1974, with a maximum capacity of 450 tons per hour, identified as IDBF0369, using a Blast Furnace Gas Distribution System to collect the blast furnace gas and using pulverized coal injected at a rate of 80 tons per hour, oil at a rate of 150 gallons per minute and/or coal tar at a rate of 150 gallons per minute.
- (1) Three (3) No. 14 Blast Furnace Stoves identified as IDST0359, constructed in 1974, with a maximum heat input capacity of 700 MMBtu per hour total, combusting blast furnace gas and natural gas, exhausting to the combustion stack ID6184;
 - (2) No. 14 Blast Furnace Casthouse, identified as IDBF0369, constructed in 1974 with emissions controlled by a baghouse, identified as ID3185, exhausting to stack ID6187 and fugitive emissions exhausting through the casthouse roof monitor ID6013;
 - (3) One (1) Slag Pit, identified as IDSP0371, with fugitive emissions.
 - (4) Pursuant to Significant Source Modification 089-20118-00121, issued October 20, 2005, the following activities involved in the No. 14 Blast Furnace Reline Project were approved for construction:
 - (A) Replacement of furnace refractory lining with new and thinner refractory brick.
 - (B) Replacement of furnace shell.
 - (C) Removal and replacement of the top charging system with a new “bell-less” charging system.
 - (D) Placement of new copper staves in the mantle area of the furnace.
 - (E) Installation of copper cooling plates and a new bustle pipe.
 - (F) Repair of the checker work brick in the stoves and various structural, mechanical and electrical repairs.
 - (G) Enlargement of the slag granulator and addition of a stack.

- (H) Changes to the casthouse and casthouse emissions control system to improve capture efficiency of hoods at the tap holes, iron troughs and runners.
 - (I) Removal and replacement of the existing system for cleaning blast furnace gas with a more efficient scrubbing system.
- (g) One (1) No. 14 Blast Furnace Slag Granulation Plant owned by US Steel -Gary Works and operated by US Steel - Gary Works as part of the slag processing operation. The granulation plant has a maximum capacity of 1,704,000 tons of steel mill slag per year, consisting of the following:
- (1) One (1) hot slag quenching operation, constructed in 1991, directed to a hooded exhaust stack.
 - (2) Two (2) silos, constructed in 1991, for temporary slag storage.
 - (3) Two (2) belt conveyers, constructed in January 1995.
 - (4) One (1) storage silo and loadout bay, constructed in May 1995, with a capacity of 400,000 tons per year.
- (h) One (1) blast furnace gas distribution system consisting of instrumentation and valves designed to limit the maximum pressure through the distribution system by venting excess blast furnace gas to the three (3) bleeder stacks equipped with Flare No. 1 identified as BG6073, constructed before 1920, Flare No. 2, identified as BG6074 constructed before 1920 and Flare No. 4 identified as BG6075, constructed in 1974.
- (i) One (1) iron beaching process, constructed prior to 1965, identified as IMIB0378.
- (j) One (1) transfer ladle maintenance operation, constructed prior to 1965, identified as, IMVM0375.

Number One Basic Oxygen Process (BOP) Shop

- (a) Two (2) Stations, identified as No. 1 and No. 2, Hot Metal Transfer and Desulfurization Stations. The Desulfurization Stations were originally constructed in 1981 and the Hot Metal Transfer Stations were originally constructed in 1965, and replaced in 1998. Each station consists of Hot Metal Desulfurization, SSDS0201, Hot Metal Transfer SSMT0203 and Slag Skimming SSSS0205. Hot metal from the blast furnaces is desulfurized and skimmed prior to charging in the steel making vessels. The maximum capacity of each station is 456 tons per hour. Each station is equipped with a local exhaust ventilation hood to capture emissions ducted to the Hot Metal Desulfurization/Skimming Stations Baghouse SS3100. The desulfurization units are equipped with nitrogen suppression around where the desulfurization lance penetrates the hood hole.
- (b) One (1) Flux handling system, identified as SSFH0206, constructed in 1965, used for unloading, temporary storage, and transfer of fluxing agents to the steel making vessels, with a maximum capacity of 80 tons per hour. Emissions are controlled by No.1, No. 2 and No. 3 baghouses SS3058, SS3059, and SS3053. Nos.1 and 2 exhaust inside the building and No. 3 discharges through stack SS6056.
- (c) Basic Oxygen Process (BOP) Vessels, constructed in 1965, consisting of BOP vessel M, identified as SSVM0234, vessel E, identified as SSVE0235 and vessel D, identified as SSVD0236, with a maximum capacity of 250 tons per hour each. Emissions are controlled by open combustion hoods and an exhaust emission hood collection system, which exhausts emissions to the Gas Cleaning Systems SS3103 and SS3104.

- (d) Two (2) gas cleaning systems SS3103 and SS3104 that process the exhaust gases from the three (3) steel making vessels consisting of three (3) quenchers, two (2) scuppers, two (2) venturi scrubbers, two (2) separators, two (2) gas coolers fitted with internal mist eliminators and two (2) induced draft fans. Emissions exhaust through stacks SS6102 and SS6103.
- (e) CASbell/OB Lancing Stations M, D and E, include the controlled argon stirring process and blowing of oxygen to maintain temperature and chemistry. Constructed in 1981, Station M, identified as SSCM0231, Station E identified as SSCE0232, and Station D identified as SSCD0233 with a maximum capacity of 250 tons per hour each. Emissions are controlled by the CASbell/OB Lancing baghouse SS3105, exhausting through Stack SS6104 and uncaptured emissions venting to the roof monitor SS6636.
- (f) One (1) Slingot Moulding Station, including the casting of bottom-poured steel ingots, identified as SSMS0227, constructed in 1965, exhausting to the roof monitor SS6637.
- (g) Nine (9) natural gas fired Ladle Preheaters and Dryers identified as No. 1 through 9, with 1 through 4, constructed in 1983, 5 and 6 constructed in 1982 and 7 through 9 construction unknown. Six (6) Preheaters with a capacity of 14 MMBtu/hr each and three (3) Dryers with a capacity of 10 MMBtu/hr each, identified as SSLD0230, exhausting through Roof Monitor SS6637.
- (h) One (1) Continuous Caster, identified as SCSC0274, constructed in 1967, including a Tundish dryer with a heating capacity of 7.0 MMBtu/hr per hour, continuously casting steel slabs with a maximum capacity of 275 tons per hour. Emissions exhaust through Roof Monitor SC6638.
- (i) One (1) fugitive emissions mitigation system at the No.1 BOP Shop, constructed in June 2002, consisting of a capture hood system ducted to a 99% efficient baghouse with a flow rate of 11,500 acfm.
- (j) One emergency slag skimming station with a maximum capacity of 456 tons per hour with emissions ducted to the Hot Metal Transfer Station and Desulfurization/Skimming Stations Baghouse SS3100.

Number Two Q-BOP Shop

- (a) Two (2) Hot Metal Transfer and Desulfurization Stations, identified as NSDS0246, constructed in 1987, with a maximum capacity of 510 tons per hour. These stations included: two (2) Hot Metal Mixers, identified as NSMM0264 and two (2) Hot Metal Mixer Heaters, identified as NSMH0251, constructed in 1973, with a maximum capacity of 255 tons per hour. The natural gas fired mixer heaters have a heat input capacity of 10 MMBtu/hr each. Emissions from the hot metal transfer and desulfurization stations, mixers and heaters are controlled by the Hot Metal Transfer and Desulfurization Stations Baghouse NS3115, discharging through NS6144 and the uncontrolled emissions go through roof monitor NS6631.
- (b) Q-Basic Oxygen Process (BOP) vessels, constructed in 1973, consisting of BOP vessel T identified as NSVT0268, vessel W, identified as NSVW0269, and vessel Y, identified as NSVY0270, with a maximum capacity of 250 tons per hour each. Primary emissions are controlled by open combustion hood and two (2) Gas Cleaning Systems, secondary emissions are controlled by the Secondary Emissions Baghouse NS3124, exhausting to stack NS6123, and uncontrolled emissions exhaust through Roof Monitor NS6632.
- (c) Two (2) Gas Cleaning Systems, identified as NS3125 and NS3126 located in the gas cleaner facility, constructed in 1973, process the exhaust gases from the three (3) steel making vessels through three (3) quenchers, two (2) scuppers (tank like structures that

remove excess quench water and solids from the gas stream), two (2) venturi scrubbers, two (2) separators, two (2) gas coolers with mist eliminators, and two (2) induced draft fans exhausting to Stacks NS6124 and NS6125.

- (d) Three (3) Flux Bins T, W, and Y, identified as NSVT0265, NSVW0266 and NSVY0267, constructed in 1973, with a maximum capacity of 141 tons per hour each. Emissions are controlled by five (5) baghouses. Three (3) Flux Transfer Baghouses at 166' level identified as NS3112, NS3108, and NS3107, exhausting through Stacks NS6623, NS6627 and NS6628 recycling captured material back to the process; One (1) North Flux Handling Baghouse at 116' level identified as NS3109 and one (1) South Flux Handling Baghouse at 116' level identified as NS3110, exhausting through stacks NS6626 and NS6625. Uncontrolled emissions exhaust through the roof monitor NS6632.
- (e) Three (3) Ladle Metallurgical Facilities, LMF1 identified as NSL10293, LMF 2 identified as NSL20294 were constructed in 1986 and LMF 3 identified as NSL30295, constructed in 1991 with a maximum capacity of 348 tons per hour each. Hot fume emissions from LMF 1 and 2 are controlled by Nos. 1 and 2 LMF Hot Fume Exhaust baghouses NS3135 and NS3136, exhausting through stacks NS6146 and NS6147. Material handling emissions at LMF 1 and 2 are controlled by the LMF Nos. 1 and 2 Material Handling baghouse NS3052, exhausting through stack NS6055. The LMF 3 Hot Fume Exhaust and Material Handling emissions are controlled by the LMF 3 Hot Fume and Material Handling Baghouse NS3137, exhausting to stack NS6148. All uncontrolled emissions exhaust through the roof monitor NS6634.
- (f) One (1) R-H Vacuum Degasser, identified as NSVD0271, constructed in 1989, with a maximum capacity of 297.1 tons of steel per hour consisting of two (2) natural gas fired heaters, one (1) active and one (1) spare, identified as NSAB0276 and NSSB0275, with heat input capacities of 12 MMBtu per hour and 3 MMBtu per hour, respectively. Carbon monoxide and other combustible gas emissions are controlled with a flare that exhausts through Stack NS6145 and uncontrolled emissions exhaust through the Roof Monitor NS6634.
- (g) One (1) Slag Conditioning Station servicing the RH Vacuum Degasser, constructed in 1997, with a maximum capacity of 297.1 tons of steel per hour.
 - (1) PM₁₀ emissions from the station are controlled by a baghouse exhausting through Stacks S-1 through S-6 and recycling captured material back to the process.
 - (2) PM₁₀ emissions from the material handling of slag conditioning and metallurgical agents are exhausted through the RH Vacuum Degasser Slag Conditioning Baghouse NS3207, exhausting through Stack NS6636.
- (h) One (1) Daytank Lime Silo at the lime dumping station, identified as NSDS0250 constructed in 1971. Emissions are controlled by the Daytank Lime Silo baghouse NS3106, exhausting through the stack, NS6629.
- (i) Three (3) Continuous Casting Lines, identified as Lines A, B and C identified as, NCCA0284, NCCB0285 and NCCC0286, with a total maximum capacity of 800 tons per hour combined. Lines A and B were constructed in 1986. Line C was constructed in 1991. Emissions from the continuous casters go to the Roof Monitor NC6635.
- (j) Fourteen (14) natural gas fired Ladle Preheaters, identified as NBLD0262, eleven (11) with a heat input capacity of 9 MMBtu per hour each and three (3) with a heat input of 10 MMBtu per hour each. Emissions go through Roof Monitor NS6633.
- (k) Two (2) Hot Metal Ladle Skimmers, identified as NSLS0248, constructed in 1973. Emissions go through Roof Monitor NS6631.

- (l) Two (2) Steel Slag Skimming Stations, consisting of slag skimmers, identified as NSS10292 and NSS20287. Both were constructed in 1973. Emissions go through Roof Monitor NS6633.
- (m) One (1) Slingot Station, identified as NSST0290, constructed in 1986. Emissions go through Roof Monitor NS6634.
- (n) Eight (8) natural gas fired Tundish Preheaters located at the No. 2 Caster, with a heat input capacity of 6 MMBtu per hour each. Emissions go through Roof Monitor NC6635.

Hot Rolling Mill

- (a) Four (4) reheat furnaces Nos. 1, 2, 3 and 4, identified as RMF10500, RMF20501, RMF30502 and RMF40503 commenced operation in 1967, with heat input capacity of 600 MMBtu per hour each. Each furnace is equipped to combust natural gas and coke oven gas with emissions exhausting through Stacks RM6500, RM6501, RM6502 and RM6503.
- (b) Two (2) waste heat boilers Nos. 1 and 2, identified as RB1B0508 and RB2B0509, commenced operation in 1967, with a heat input capacity of 226 MMBtu per hour each. The heat input capacity from fuel from these boilers is derived from a combination of waste heat ducted from the reheat furnaces and the combustion of natural gas and coke oven gas. Emissions exhaust through the waste heat boiler stacks HB6504 and HB6505.
- (c) One (1) 84-inch Hot Strip Mill, identified as RMV00504, commenced operation in 1967, with a maximum capacity of 856 tons per hour, 5 roughing mills and a 7-stand finishing mill with fugitive emissions through a Roof Monitor RM6630.

Continuous Pickling Lines

- (a) One (1) 84-inch Pickle Line, the North Continuous Pickle Line, identified as HWPO0625, constructed in 1968, with a maximum capacity of 314 tons per hour consisting of four (4) pickle tanks and two (2) rinse tanks (hot and cold). Emissions at this pickle line are controlled by a fume exhaust scrubber, HW3545 exhausting to stack HW6525.
- (b) One (1) 80-inch Pickle Line, the South Continuous Pickle Line, identified as HMPO0589, constructed in 1948, with a maximum capacity of 91 tons per hour, consisting of three (3) pickle tanks and two (2) rinse tanks (hot and cold). Emissions are controlled by a fume exhaust scrubber, HM3540, exhausting to stack HM6520.

Sheet Products Division

- (a) North Sheet Mill
 - (1) One (1) 5-Stand Cold Reduction Mill, identified as H5M50637, constructed in 1964, with a maximum capacity of 400 tons per hour, consisting of 5 Mill Stands. Emissions are controlled by fume collection H53547, exhausting to Stack H56527.
 - (2) Twenty-six (26) 4-Stack A Box Annealing Furnaces and 50 bases, identified as HTAF0813 through HTAF0838, constructed in 1964, with a heat input capacity of 12 MMBtu per hour each. These furnaces are direct fired with emissions exhausting through vent pipes HT6530 through HT6555.
 - (3) One (1) 80-inch temper mill, constructed in 1964, with a maximum capacity of 250 tons per hour, with fugitive emissions.

- (4) One (1) 80-inch Recoil Line, constructed in 1964, with a maximum capacity 120 tons per hour, with fugitive emissions.
- (b) South Sheet Mill
 - (1) Seventeen (17) 8-Stack A Box Annealing furnaces and 66 bases, identified as HXBA0560 through HXBA0576, constructed in 1948. Eleven (11) furnaces have a heat input capacity of 15 MMBtu per hour each and the remaining six (6) are rated at 18 MMBtu per hour each. Emissions from these furnaces exhaust through the Roof Monitor HX6003.
 - (2) One (1) 2-Stand Temper Mill, identified as H2M00579, constructed in 1974, with a maximum capacity of 89 tons per hour, with fugitive emissions through Roof Monitor H26004.
 - (3) One (1) No. 6 East Galvanizing Line, constructed in 1962, with a maximum capacity of 48 tons an hour, with one (1) annealing furnace identified as H6F10527 with a heat input of 45 MMBtu per hour and emissions through stack H66516. Also, contains one (1) Galvanneal Furnace identified as HF20529 with a heat input capacity of 20.0 MMBtu per hour and emissions exhausting through Roof Monitor H66006.
 - (4) Two (2) hydrogen atmosphere batch annealing furnaces, with a total heat input capacity of 10.26 MMBtu per hour, constructed in 1997, consisting of three (3) fixed bases and two (2) movable cooling hoods.
 - (5) One (1) 84-inch Hot Roll Temper Mill, constructed in 1967, with a maximum capacity of 124 tons per hour, with fugitive emissions.
 - (6) One (1) coil prep line, constructed in 1968, with a maximum capacity of 73 tons per hour, with fugitive emissions.
- (c) Electro-galvanizing Line (EGL)
 - (1) One (1) Electro-galvanizing Line (EGL), with one HCl pickle tank, No.1 Pickle tank, identified as HET20685, a cleaner section, a plating section and associated scrubber, with a maximum capacity of 60.5 tons per hour. Fumes from the Pickle Section are controlled by a fume scrubber HE3583 exhausting through stack HE6563. The single sided process for this coating line was constructed in 1977 and was modified in 1993 to a double sided process for coating.
 - (2) One (1) natural gas fired Boiler No. 1 in the EGL Boiler House, identified as HBB10675, constructed in 1978 and modified in 2001, with a heat input capacity of 39.147 MMBtu per hour, exhausting through stack HB6559.

Tin Division

- (a) One (1) 6-Stand Cold Reduction Mill, identified as TRM00709, constructed in 1967, with a maximum capacity of 150 tons per hour. Emissions are controlled by a mist eliminator TR3600, exhausting to stack TR6575.
- (b) One (1) cleaning line, identified as No. 7 Cleaning Line, constructed in 1967, with a maximum capacity of 80 tons per hour. Fumes are controlled by a fume scrubber exhausting to a stack.
- (c) Two (2) Annealing Lines, No. 1 and No. 2, each containing an annealing furnace, identified as T1AF0794 and T2AF0799, No.1 constructed in 1950 and No. 2 constructed in 1959, with a maximum heat input capacities of 32 and 35 MMBtu per hour,

respectively. Emissions exhaust to stacks T16609 and T26610. The No. 2 Continuous Anneal Line has a cleaning section with fumes collected in a fume scrubber exhausting through a stack.

- (d) Five (5) 4-Stack A Box Annealing Furnaces and 12 bases, identified as TXAF0765 through TXAF0769, constructed in 1968. All furnaces have a heat input of 10.5 MMBtu per hour each. Emissions exhaust to stacks TX6580 through TX6584.
- (e) One (1) 48-inch Temper Mill, constructed in 1958, with a maximum capacity of 150 tons per hour, with fugitive emissions. This unit has a dust filter that exhausts inside the building.
- (f) One (1) Double Reduction Mill with two (2) mill stands, identified as TDMO0742, constructed in 1963, with a maximum capacity of 75 tons per hour. Emissions are controlled by a mist eliminator D3603, exhausting to stack TD6595.
- (g) One (1) No.1 Tin Free Steel Line (TFS), constructed in 1950, with a maximum capacity of 24 tons per hour. The chemical treatment rinse section, TFR00753 exhaust through stack TF6597 and all other fugitive emissions from the line to roof monitor TF6661.
- (h) One (1) No. 5 Electrolytic Tinning Line 5 (ETL), constructed in 1957, and with a maximum capacity of 50 tons per hour. The No. 5 ETL contains a Plating and Chemical Treatment Tank, identified as TFR00777, with fugitive emissions through Roof Monitor T56071.
- (i) One (1) No. 6 Electrolytic Tinning Line (6 ETL), constructed in 1966, with a maximum capacity of 120 tons per hour. The 6 ETL also contains a Plating and Chemical Treatment Tank, identified as T6H00786, with fugitive emissions through Roof Monitor T56071.
- (j) One (1) Tin Anode Caster, constructed in 1965, with a maximum capacity of 0.57 tons per hour, with fugitive emissions through roof monitor.
- (k) One (1) Tin Mill Recoil and inspection Line, constructed in 1967, with a maximum capacity of 14.8 tons per hour.
- (l) One (1) 45" Side Trimmer, constructed in 1961, with fugitive emissions through the roof monitor.

No. 4 Boiler House

- (a) Two (2) Boilers, No. 1 and No. 2, identified as O4B10459 and O4B20460, constructed in 1967, equipped to combust natural gas, blast furnace gas and fuel oil, with a maximum heat input of 500 MMBtu per hour each, exhausting through Stacks O46268 and O46269, respectively.
- (b) One (1) Boiler, No. 3, identified as O4B30461, constructed in 1967, equipped to combust blast furnace gas and natural gas, with a maximum heat input of 500 MMBtu per hour, exhausting through Stack O46270.

Turboblower Boiler House (TBBH)

- (a) Three (3) Boilers, No. 1, No. 2 and No. 3, identified as OTB10462, OTB20463 and OTB30464, constructed in 1948, equipped to combust blast furnace gas, coke oven gas, fuel oil and natural gas, with a maximum heat input of 410 MMBtu per hour each, exhausting through Stacks OT6271, OT6272 and OT6273, respectively.
- (b) One (1) Boiler, No. 4A, identified as OTB40465, constructed in 1990, with a maximum heat input of 244 MMBtu per hour when combusting natural gas. Emissions exhaust

through Stack OT6274, with NOx emissions monitored by a Predictive Emissions Monitoring System (PEMS).

- (c) One (1) Boiler No. 5, identified as OTB50466, constructed in 1958, equipped to combust blast furnace gas, coke oven gas, fuel oil and natural gas, with a maximum heat input of 410 MMBtu per hour, exhausting through Stack OT6275.
- (d) One (1) boiler, No. 6, identified as OTB60467, constructed after August 17, 1971, equipped to combust blast furnace gas and natural gas, with a maximum heat input capacity of 710 MMBtu per hour, exhausting through Stack OT6276.

Coal Pulverization and Air Preheater System

- (a) One (1) coal pulverization equipment train, identified as SS-1 that consists of a pulverizer with a maximum capacity of 90 tons per hour; a preheater with a maximum heat input capacity of 37.3 MMBtu per hour, and a dual process separation cyclone, constructed in 1993, and exhausting to one baghouse with three modules (three stacks) 1A, 1B and 1C.
- (b) One (1) coal pulverization equipment train, identified as SS-2 that consists of a pulverizer with a maximum capacity of 90 tons per hour; a preheater with a maximum heat input capacity of 37.3 MMBtu per hour, and a dual process separation cyclone, constructed in 1993, and exhausting to one baghouse with three modules (three stacks) 2A, 2B and 2C.
- (c) One (1) coal pulverization equipment train, identified as SS-3 that consists of a pulverizer with a maximum capacity of 90 tons per hour; a preheater with a maximum heat input capacity of 37.3 MMBtu per hour, and a dual process separation cyclone, constructed in 1993, and exhausting to one baghouse with three modules (three stacks) 3A, 3B and 3C.

Pulverized Coal Storage and Feed System

- (a) One (1) Pulverized coal Transport, identified as Line A, constructed in 1993, with a maximum capacity of 210 tons per hour, ducted to a baghouse (A) exhausting to stack (SS-5),
- (b) One (1) Pulverized coal Transport, identified as Line B, constructed in 1993, with a maximum capacity of 210 tons per hour, ducted to a baghouse (B) exhausting to stack (SS-6),
- (c) One (1) Pulverized coal storage reservoir, constructed in 1993, with a maximum capacity of 600 tons, blanketed with nitrogen and ducted to a baghouse (vent filter house) exhausting to stack (SS-7),

Railcar Heater

One (1) railcar heater system, constructed in 1993, with a maximum capacity of 14 MMBtu per hour, exhausting inside the building.

Coal Handling Operations

Coal Handling System

- (a) One (1) Railcar Dumper, identified as RCD-1, constructed in 1993, with a maximum capacity of 600 tons per hour, ducted to a baghouse 8AB exhausting through one or two fans to stacks 8A and/or 8B.
- (b) One (1) Reclaim Hopper, identified as RCH-1, constructed in 1993, with a maximum capacity of 300 tons per hour, ducted to baghouse DC-6 and exhausting to stack DC-6.

- (c) One (1) Car Dump Hopper 1/C1, identified as FS-8, constructed in 1993, with a maximum capacity of 200 tons per hour, ducted to baghouse DC-1 exhausting to stack F1,
- (d) One (1) Car dump Hopper 2/C1, identified as FS-9, constructed in 1993, with a maximum capacity of 200 tons per hour, ducted to a baghouse DC-2 exhausting to stack F2,
- (e) One (1) Car Dump Hopper 3/C1, identified as FS-10, constructed in 1993, with a maximum capacity of 200 tons per hour, ducted to a baghouse DC-3 exhausting to stack F3,
- (f) One (1) Transfer Point C1/C2, identified as FS-2, constructed in 1993, with a maximum capacity of 600 tons per hour, ducted to a baghouse DC-4 exhausting to stack F4,
- (g) One (1) Reclaim Hopper/C2, identified as FS-14, constructed in 1993, with a maximum capacity of 300 tons per hour, ducted to a baghouse DC-5 exhausting to stack F5,
- (h) One (1) Screen Transfer/C2, identified as FS-3, constructed in 1993, with a maximum capacity of 600 tons per hour, ducted to a baghouse DC-7 exhausting to stack F7,
- (i) One (1) Screen/C3 Gate Transfer identified as FS-11, constructed in 1993, ducted to a baghouse DC-8 exhausting to stack F8,
- (j) One (1) Screen/C4 Gate Transfer, identified as FS-12, constructed in 1993, with a maximum capacity of 600 tons per hour, ducted to a baghouse DC-9 exhausting to stack F9,
- (k) One (1) Transfer Point C4/C5, identified as FS-4, constructed in 1993, ducted to a baghouse DC-10 exhausting to stack F10.

East Building – Coal handling

- (a) One (1) Transfer Point C5/C6, identified as FS-5, constructed in 1993, with a maximum capacity of 600 tons per hour, ducted to a baghouse DC-11 exhausting to stack F11,
- (b) One (1) Transfer Point C6/Bin 1, identified as FS-7, constructed in 1993, ducted to baghouse DC-12 exhausting to stack F12,
- (c) One (1) Transfer Point C5/Bin 2, identified as FS-6, constructed in 1993, ducted to baghouse DC-13 exhausting to stack F13,
- (d) One (1) Transfer Point C6/Bin 3, identified as FS-13, constructed in 1993, with a maximum capacity of 600 tons per hour, ducted to baghouse DC-14 exhausting to stack F14.

Coal Piles and Haul Roads

- (a) One (1) coal pile and handling operation, identified as F17, constructed in 1993, with a storage capacity of 100,000 tons and an area of 2 acres, having a maximum throughput of 200,000 tons per year.
- (b) Haul Roads - Vehicle Traffic

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

- (a) Paved Roads and Parking Lots
- (b) Unpaved Roads and Parking Lots

- (c) Batch Transfer-Loading and Unloading Operations
- (d) Continuous Transfer In and Out of Storage Piles
- (e) Batch Transfer Operations-Slag and Kish Handling
- (f) Wind Erosion from Storage Piles and Open Areas
- (g) In Plant Transfer by Truck or Rail
- (h) In Plant Transfer by Front End Loader or Skip Hoist
- (i) Material Processing Facility
- (j) Crusher Fugitive Emissions
- (k) Material Processing Facility Building Openings
- (l) Dust Handling Equipment

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

- (a) Specifically regulated insignificant activities:
 - (1) Degreasing operations that do not exceed 145 gallons per 12 months, except if subject to 326 IAC 20-6. [326 IAC 8-3-5][326 IAC 8-3-6][326 IAC 8-9-1]
 - (2) Cleaners and solvents characterized as follows:
 - (A) Having a vapor pressure equal to or less than 2 kPa; 15 mm Hg; or 0.3 psi measured at 38°C (100°F) or;
 - (B) Having a vapor pressure equal to or less than 0.7 kPa; 5mm Hg; or 0.1 psi measured at 20°C (68°F); the use of which for all cleaners and solvents combined does not exceed 145 gallons per 12 months.[326 IAC 8-3-5][326 IAC 8-3-6][326 IAC 8-9-1]
 - (3) The following VOC and HAP storage containers:
 - (A) 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]
 - (B) Vessels storing lubricating oils, hydraulic oils, machining oils, and machining fluids. [326 IAC 8-9-1]
 - (4) The following equipment related to manufacturing activities not resulting in the emission of HAPs: brazing equipment, cutting torches, soldering equipment, welding equipment. [326 IAC 6.8-10-3]
 - (5) Any of the following structural steel and bridge fabrication activities:
 - (A) Cutting 200,000 linear feet or less of one inch (10) plate or equivalent.
 - (B) Using 80 tons or less of welding consumables. [326 IAC 6.8-10-3]
 - (6) Conveyors as follows:
 - (A) Covered conveyor for coal or coke conveying of less than or equal to 360 tons per day; [326 IAC 6.8-10-3]

- (B) Uncovered coal conveying of less than or equal to 120 tons per day. [326 IAC 6.8-10-3]
- (7) Coal bunker and coal scale exhausts and associated dust collector vents. [326 IAC 6.8-10-3]
- (8) 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 6.8-10-3]
- (9) Vents from ash transport systems not operated at positive pressure. [326 IAC 6.8-10-3]
- (10) Fuel dispensing activities, including the following:
 - (A) A gasoline fuel transfer dispensing operation handling less than or equal to one thousand three hundred (1,300) gallons per day and filling storage tanks having a capacity equal to or less than ten thousand five hundred (10,500) gallons. Such storage tanks may be in a fixed location or on mobile equipment. [326 IAC 8-9-1]
 - (B) A petroleum fuel other than gasoline dispensing facility, having a storage tank capacity less than or equal to ten thousand five hundred (10,500) gallons, and dispensing three thousand five hundred (3,500) gallons per day or less. A petroleum fuel, other than gasoline, dispensing facility having a storage capacity less than or equal to 10,500 gallons, dispensing less than or equal to 230,000 gallons per month. [326 IAC 8-9-1]
- (b) Specifically regulated insignificant activities (former Gary Coal Processing, LP):
 - (1) Degreasing operations that do not exceed 145 gallons per 12 months, except if subject to 326 IAC 20-6.[326 IAC 8-3-5][326 IAC 8-3-8]
 - (2) Cleaners and solvents characterized as follows:
 - (A) Having a vapor pressure equal to or less than 2 kPa; 15 mm Hg; or 0.3 psi measured at 38°C (100°F) or;
 - (B) Having a vapor pressure equal to or less than 0.7 kPa; 5mm Hg; or 0.1 psi measured at 20°C (68°F); the use of which for all cleaners and solvents combined does not exceed 145 gallons per 12 months. [326 IAC 8-3-2] [326 IAC 8-3-5] p326 IAC 8-3-8]
 - (3) One (1) 5, 000 gallon #2 diesel fuel tank - 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]
- (c) Other Insignificant Activities
 - (1) Space heaters, process heaters, or boilers using the following fuels:
 - (A) Natural gas-fired combustion sources with heat input equal to or less than ten million (10,000,000) Btu per hour.

- (B) Fuel oil-fired combustion sources with heat input equal to or less than two million (2,000,000) Btu per hour and firing fuel containing equal or less than five-tenths percent (0.5%) sulfur by weight.
- (2) Equipment powered by diesel fuel fired or natural gas fired internal combustion engines of capacity equal to or less than five hundred thousand (500,000) British thermal units per hour except where total capacity of equipment operated by one (1) stationary source as defined by subdivision (38) exceeds two million (2,000,000) British thermal units per hour.
- (3) Combustion source flame safety purging on startup.
- (4) Refractory storage not requiring air pollution control equipment.
- (5) Equipment used exclusively for the following:
 - (A) Packaging lubricants and greases.
 - (B) Filling drums, pails, or other packaging containers with the following: Lubricating oils, Waxes and Greases.
- (6) Application of: oils; greases; lubricants; and nonvolatile material; as temporary protective coatings.
- (7) Closed loop heating and cooling systems.
- (8) Rolling oil recovery systems.
- (9) Groundwater oil recovery wells.
- (10) Activities associated with the treatment of wastewater streams with an oil and grease content less than or equal to 1% by volume.
- (11) Water runoff ponds for petroleum coke-cutting and coke storage piles.
- (12) Any operation using aqueous solutions containing less than 1% by weight of VOCs, excluding HAPS.
- (13) Water based adhesives that are less than or equal to 5% by volume of VOCs excluding HAPS.
- (14) Noncontact cooling tower systems with forced or induced draft cooling tower system not regulated under a NESHAP.
- (15) Quenching operations used with heat treating operations.
- (16) Replacement or repair of electrostatic precipitators, bags in baghouses and filters in other air filtration equipment.
- (17) Heat exchanger cleaning and repair.
- (18) Process vessel degassing and cleaning to prepare for internal repairs.
- (19) Stockpiled soils from soil remediation activities that are covered and waiting transport for disposal.
- (20) Paved and unpaved roads and parking lots with public access.

- (21) Underground conveyors.
- (22) Asbestos abatement projects regulated by 326 IAC 14-10.
- (23) Purging of gas lines and vessels that is related to routing maintenance and repair of buildings, structures, or vehicles at the source where air emissions from those activities would not be associated with any production process.
- (24) Flue gas conditioning systems and associated chemicals, such as the following: sodium sulfate, ammonia and sulfur trioxide.
- (25) Equipment used to collect any material that might be released during a malfunction, process upset, or spill cleanup, including catch tanks, temporary liquid separators, tanks, and fluid handling equipment.
- (26) Blow down for any of the following: sight glass; boiler; compressors; pumps; and cooling tower.
- (27) Activities associated with emergencies, including the following:
 - (A) On-site fire training approved by the department.
 - (B) Emergency generators as follows: Gasoline generators not exceeding one hundred ten (110) horsepower, Diesel generators not exceeding one thousand six hundred (1,600) horsepower and natural gas turbines or reciprocating engines not exceeding one thousand six hundred (1,600) horsepower.
 - (C) Stationary fire pumps.
- (28) Purge double block and bleed valves.
- (29) A laboratory as defined in 326 IAC 2-7-1(21)(D).

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

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

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

SECTION B

GENERAL CONDITIONS

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

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

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

- (a) This permit, T089-7663-00121, is issued for a fixed term of five (5) years from the issuance date of this permit, as determined in accordance with IC 4-21.5-3-5(f) and IC 13-15-5-3. Subsequent revisions, modifications, or amendments of this permit do not affect the expiration date of this permit.
- (b) If IDEM, OAQ, upon receiving a timely and complete renewal permit application, fails to issue or deny the permit renewal prior to the expiration date of this permit, this existing permit shall not expire and all terms and conditions shall continue in effect, including any permit shield provided in 326 IAC 2-7-15, until the renewal permit has been issued or denied.

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

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

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

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

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

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

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)] [326 IAC 2-7-6(6)]

- (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 A 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 no later than April 15 of each year to:

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

and

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

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

The submittal by the Permittee does require the certification by the A 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
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251

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

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

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

- (a) An emergency, as defined in 326 IAC 2-7-1(12), is not an affirmative defense for an action brought for noncompliance with a federal or state health-based emission limitation.
- (b) An emergency, as defined in 326 IAC 2-7-1(12), constitutes an affirmative defense to an action brought for noncompliance with a technology-based emission limitation if the affirmative defense of an emergency is demonstrated through properly signed, contemporaneous operating logs or other relevant evidence that describe the following:
- (1) An emergency occurred and the Permittee can, to the extent possible, identify the causes of the emergency;
 - (2) The permitted facility was at the time being properly operated;
 - (3) During the period of an emergency, the Permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards or other requirements in this permit;

- (4) For each emergency lasting one (1) hour or more, the Permittee notified IDEM, OAQ, within four (4) daytime business hours after the beginning of the emergency, or after the emergency was discovered or reasonably should have been discovered;

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

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

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

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

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

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

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

- (6) The Permittee immediately took all reasonable steps to correct the emergency.
- (c) In any enforcement proceeding, the Permittee seeking to establish the occurrence of an emergency has the burden of proof.
- (d) This emergency provision supersedes 326 IAC 1-6 (Malfunctions). This permit condition is in addition to any emergency or upset provision contained in any applicable requirement.
- (e) The Permittee seeking to establish the occurrence of an emergency shall make records available upon request to ensure that failure to implement a PMP did not cause or contribute to an exceedance of any limitations on emissions. However, IDEM, OAQ, may require that the Preventive Maintenance Plans required under 326 IAC 2-7-4(c)(9) be revised in response to an emergency.
- (f) Failure to notify IDEM, OAQ, by telephone or facsimile of an emergency lasting more than one (1) hour in accordance with (b)(4) and (5) of this condition shall constitute a violation of 326 IAC 2-7 and any other applicable rules.
- (g) If the emergency situation causes a deviation from a technology-based limit, the Permittee may continue to operate the affected emitting facilities during the emergency

provided the Permittee immediately takes all reasonable steps to correct the emergency and minimize emissions.

- (h) The Permittee shall include all emergencies in the Quarterly Deviation and Compliance Monitoring Report.

B.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]] [326 IAC 2-7-10.5]

- (a) All terms and conditions of permits established prior to T089-7663-00121 and issued pursuant to permitting programs approved into the state implementation plan have been either:
- (1) incorporated as originally stated,
 - (2) revised under 326 IAC 2-7-10.5, or
 - (3) deleted under 326 IAC 2-7-10.5.
- (b) Provided that all terms and conditions are accurately reflected in this combined permit, all previous registrations and permits are superseded by this Part 70 operating permit.

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

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

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

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

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

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

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

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

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

- (a) This permit may be modified, reopened, revoked and reissued, or terminated for cause. The filing of a request by the Permittee for a Part 70 permit modification, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay any condition of this permit. [326 IAC 2-7-5(6)(C)] The notification by the Permittee does require the certification by the A 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, determines any of the following: to reopen and revise this permit shall follow the same procedures as apply to initial permit issuance and shall affect only those parts of this permit for which cause to reopen exists. Such reopening and revision shall be made as expeditiously as practicable. [326 IAC 2-7-9(b)]
- (d) The reopening and revision of this permit, under 326 IAC 2-7-9(a), shall not be initiated before notice of such intent is provided to the Permittee by IDEM, OAQ determines any of the following: at least thirty (30) days in advance of the date this permit is to be reopened, except that IDEM, OAQ determines any of the following: may provide a shorter time period in the case of an emergency. [326 IAC 2-7-9(c)]

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

- (a) The application for renewal shall be submitted using the application form or forms prescribed by IDEM, OAQ 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 A responsible official as defined by 326 IAC 2-7-1(34).

Request for renewal shall be submitted to:

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

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

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

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

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

Any such application shall be certified by the A responsible official as defined by 326 IAC 2-7-1(34).

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

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

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

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

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

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

and

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

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

- (5) The Permittee maintains records on-site, on a rolling five (5) year basis, all such which document all such changes and emissions trades that are subject to 326 IAC 2-7-20(b)(1), (c)(1), or (e). The Permittee shall make such records available, upon reasonable request, for public review.

Such records shall consist of all information required to be submitted to IDEM, OAQ in the notices specified in 326 IAC 2-7-20(b), (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 of the A responsible official as defined by 326 IAC 2-7-1(34).

- (c) Emission Trades [326 IAC 2-7-20(c)]
The Permittee may trade emissions increases and decreases at the source, where the applicable SIP provides for such emission trades without requiring a permit revision, subject to the constraints of Section (a) of this condition and those in 326 IAC 2-7-20(c).
- (d) Alternative Operating Scenarios [326 IAC 2-7-20(d)]
The Permittee may make changes at the source within the range of alternative operating scenarios that are described in the terms and conditions of this permit in accordance with 326 IAC 2-7-5(9). No prior notification of IDEM, OAQ, or U.S. EPA is required.
- (e) Backup fuel switches specifically addressed in, and limited under, Section D of this permit shall not be considered alternative operating scenarios. Therefore, the notification requirements of part (a) of this condition do not apply.
- (f) This condition does not apply to emission trades of SO₂ or NO_x under 326 IAC 21 or 326 IAC 10-4.

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

- (a) A modification, construction, or reconstruction is governed by the requirements of 326 IAC 2 and 326 IAC 2-7-10.5.
- (b) Any modification at an existing major source is governed by the requirements of 326 IAC 2-2-2 and/or 326 IAC 2-3-2.

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

Upon presentation of proper identification cards, credentials, and other documents as may be required by law, and subject to the Permittee's right under all applicable laws and regulations to

assert that the information collected by the agency is confidential and entitled to be treated as such, the Permittee shall allow IDEM, OAQ and the U.S. EPA, or an authorized representative to perform the following:

- (a) Enter upon the Permittee's premises where a Part 70 source is located, or emissions related activity is conducted, or where records must be kept under the conditions of this permit;
- (b) As authorized by the Clean Air Act IC 13-14-2-1, 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 13-14-2-1, 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 13-14-2-1, 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 13-14-2-1, IC 13-17-3-2, and IC 13-30-3-1 utilize any photographic, recording, testing, monitoring, or other equipment for the purpose of assuring compliance with this permit or applicable requirements.

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

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

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

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

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

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

- (a) The Permittee shall pay annual fees to IDEM, OAQ, within thirty (30) calendar days of receipt of a billing. In the event that the source is a sub-contractor and is combined with a larger Part 70 source, the larger Part 70 source may pay the Permittees' annual fees as part of the larger source billing and subject to the fee cap of the larger source. If, however, the larger Part 70 does not pay its annual Part permit fee, IDEM, OAQ will assess a separate fee in accordance with 326 IAC 2-7-19(c) to be paid by the Permittee. Pursuant to 326 IAC 2-7-19(b), if the Permittee does not receive a bill from IDEM, OAQ, the applicable fee is due April 1 of each year.

- (b) Except as provided in 326 IAC 2-7-19(e), failure to pay may result in administrative enforcement action or revocation of this permit.
- (c) The Permittee may call the following telephone numbers: 1-800-451-6027 or 317-233-4230 (ask for OAQ, Billing, Licensing and Training Section), to determine the appropriate permit fee.

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

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

SECTION C

SOURCE OPERATION CONDITIONS

Entire Source

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

C.1 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.

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.

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 6.8-10 and 326 IAC 6.8-11]

- (a) Pursuant to 326 IAC 6.8-10-3 (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 initial hopper of material processing facility as defined in 326 IAC 6.8-10-2 or material transfer for transportation within or outside the source property including but not limited to the following:
 - (A) Transfer of slag product for use in asphalt plant
 - (i) From a storage pile to a front end loader; and
 - (ii) From a front end loader to a truck.
 - (B) Transfer of sinter blend for use at the sinter plant:

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

Compliance with any operation lasting less than three (3) minutes shall be determined as an average of consecutive operations recorded at fifteen (15) second intervals for the duration of the operation.

- (4) 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 three (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(9).
- (5) 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.
- (6) 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 is 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 opacity limitation was not reasonable given prevailing wind conditions.
- (7) 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 in-plant transportation requirement.
- (8) The opacity of fugitive particulate emissions from the in plant transportation of material by front end loaders and skip hoists shall not exceed ten percent (10%).
- (9) 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.
- (10) 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.
- (11) The opacity of particulate emissions from dust handling equipment shall not exceed ten percent (10%).
- (12) Any facility or operation not specified in 326 IAC 6.8-10-3 shall meet a twenty percent (20%), three (3) minute average opacity standard.
- (13) PM10 emissions from each material processing stack shall not exceed 0.022 grains per dry standard cubic foot and ten percent (10%) opacity.

- (14) 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.
- (15) Fugitive particulate matter from a crusher in which a capture system is not used shall not exceed fifteen percent (15%) opacity.
- (b) The Permittee shall achieve these limits by controlling fugitive particulate matter emissions according to the Fugitive Dust Control Plan submitted on March 1, 2003. (See Attachment A)
- (c) The source is subject to 326 IAC 6.8-11 (Lake County Particulate Matter Contingency Measures), because it is subject to the requirements of 326 IAC 6.8-10. Pursuant to this rule, the source shall comply with 326 IAC 6.8-11-4 and 326 IAC 6.8-11-6.

C.6 Stack Height [326 IAC 1-7]

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

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

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

All required notifications shall be submitted to:

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

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

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

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

C.8 Performance Testing [326 IAC 3-6]

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

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

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

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

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

C.9 Sulfur Fuel Sampling and Analysis (Entire Source) [326 IAC 7-4.1-2]

Pursuant to 326 IAC 7-4.1-2 and in order to comply with sulfur dioxide limitations in the applicable D sections, the Permittee shall submit a sampling and analysis protocol to the Department by July 1, 2006.

- (a) The protocol shall contain a description of planned procedures for:
 - (1) sampling of sulfur-bearing fuels and materials;
 - (2) analysis of the sulfur content; and
 - (3) any planned direct measurement of sulfur dioxide emissions vented to the atmosphere; and
- (b) Specify the frequency of sampling, analysis, and measurement for each fuel and material and for each emissions unit.
- (c) The protocol may be revised as necessary with approval by IDEM-OAQ.
- (d) IDEM, OAQ may also require that a source conduct a stack test at any facility listed in this permit within sixty (60) days of written notification by the IDEM-OAQ.

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

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

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

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

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

- (a) The Permittee shall install, calibrate, maintain, and operate all necessary continuous opacity monitoring systems (COMS) and related equipment. For a boiler, the COMS shall be in operation at all times that the induced draft fan is in operation.
- (b) All COMS shall meet the performance specifications of 40 CFR 60, Appendix B, Performance Specification No. 1, and are subject to monitor system certification requirements pursuant to 326 IAC 3-5.
- (c) In the event that a breakdown of a COMS occurs, a record shall be made of the times and reasons of the breakdown and efforts made to correct the problem.
- (d) Whenever a COMS is malfunctioning or is down for maintenance or repairs for a period of twenty-four (24) hours or more and a backup COM is not online within twenty-four (24) hours of shutdown or malfunction of the primary COMS, the Permittee shall provide a certified opacity reader, who may be an employee of the Permittee or an independent contractor, to self-monitor the emissions from the emission unit stack.
 - (1) Visible emission readings shall be performed in accordance with 40 CFR 60, Appendix A, Method 9, for a minimum of five (5) consecutive six (6) minute averaging periods beginning not more than twenty-four (24) hours after the start of the malfunction or down time; provided, however, that if such 24-hour period ends during the period beginning two (2) hours before sunset and ending two (2) hours after sunrise, then such visible emissions readings shall begin within four (4) hours of sunrise on the day following the expiration of such 24-hour period.
 - (2) Method 9 opacity readings shall be repeated for a minimum of five (5) consecutive six (6) minute averaging periods at least twice per day during daylight operations, with at least four (4) hours between each set of readings, until a COMS is online.
 - (3) Method 9 readings may be discontinued once a COMS is online.
 - (4) Any opacity exceedances determined by Method 9 readings shall be reported with the Quarterly Opacity Exceedances Reports.
 - (5) If abnormal emissions are observed, the Permittee shall take reasonable response steps in accordance with Section C - Response to Excursions or Exceedances. 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 - Response to Excursions or Exceedances, 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, 40 CFR 60 and/or 40 CFR 63.

C.13 Continuous Compliance Plan (CCP) [326 IAC 6.8-8-1] [326 IAC 6.8-8-8]

- (a) Pursuant to 326 IAC 6.8-8-1, 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 6.8-8-5 through 326 IAC 6.8-8-7 or applicable procedures in the CCP.

- (b) Pursuant to 326 IAC 6.8-8-8, 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. If required by IDEM, OAQ, the Permittee shall submit the updated CCP to IDEM, OAQ within thirty (30) days of the update.
- (c) Pursuant to 326 IAC 6.8-8, failure to submit a CCP, maintain all information required by the CCP at the source, or submit updates, to a CCP is a violation of 326 IAC 6.8-8.

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

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

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

C.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 prepared and submitted written emergency reduction plans (ERPs) consistent with safe operating procedures on October 5, 1996 for initial approval by IDEM.
- (b) Upon direct notification by IDEM, OAQ, that a specific air pollution episode level is in effect, the Permittee shall immediately put into effect the actions stipulated in the latest IDEM approved version of the 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 Response to Excursions or Exceedances [326 IAC 2-7-5] [326 IAC 2-7-6]

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

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

**C.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 purpose of fee assessment.

The statement must be submitted to:

Indiana Department of Environmental Management
Technical Support and Modeling Section, Office of Air Quality
100 North Senate Avenue
MC 61-50 IGCN 1003
Indianapolis, Indiana 46204-2251

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

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

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

- (a) Records of all required monitoring data, reports and support information required by this permit shall be retained for a period of at least five (5) years from the date of monitoring sample, measurement, report, or application. These records shall be physically present or electronically accessible at the source location for a minimum of three (3) years. The records may be stored elsewhere for the remaining two (2) years as long as they are available upon request. If the Commissioner makes a request for records to the Permittee, the Permittee shall furnish the records to the Commissioner within a reasonable time.
- (b) Unless otherwise specified in this permit, all record keeping requirements not already legally required shall be implemented within ninety (90) days of permit issuance.
- (c) If there is a reasonable possibility that a “project” (as defined in 326 IAC 2-2-1 (qq) and/or 326 IAC 2-3-1 (ll)) at an existing emissions unit, other than projects at a Clean Unit, which is not part of a “major modification” (as defined in 326 IAC 2-2-1 (ee) and/or 326 IAC 2-3-1 (z)) may result in significant emissions increase and the Permittee elects to utilize the “projected actual emissions” (as defined in 326 IAC 2-2-1 (rr) and/or 326 IAC 2-3-1 (mm)), the Permittee shall comply with following:
 - (1) Prior to commencing the construction of the “project” (as defined in 326 IAC 2-2-1 (qq) and/or 326 IAC 2-3-1 (ll)) at an existing emissions unit, document and maintain the following records:
 - (A) A description of the project.
 - (B) Identification of any emissions unit whose emissions of a regulated new source review pollutant could be affected by the project.
 - (C) A description of the applicability test used to determine that the project is not a major modification for any regulated NSR pollutant, including:
 - (i) Baseline actual emissions;
 - (ii) Projected actual emissions;
 - (iii) Amount of emissions excluded under section 326 IAC 2-2-1(rr)(2)(A)(iii) and/or 326 IAC 2-3-1(mm)(2)(A)(iii) and
 - (iv) An explanation for why the amount was excluded, and any netting calculations, if applicable.

- (2) Monitor the emissions of any regulated NSR pollutant that could increase as a result of the project and that is emitted by any existing emissions unit identified in (1)(B) above; and
- (3) Calculate and maintain a record of the annual emissions, in tons per year on a calendar year basis, for a period of five (5) years following resumption of regular operations after the change, or for a period of ten (10) years following resumption of regular operations after the change if the project increases the design capacity of or the potential to emit that regulated NSR pollutant at the emissions unit.

C.22 Sulfur Record keeping Requirements (Entire Source) [326 IAC 7-4.1-20(c)(1)]

Pursuant to 326 IAC 7-4.1-20(c)(1), the Permittee shall record and make available to IDEM, upon request, process and fuel use information pertaining to each emissions unit, process, or combustion unit identified in this section, including the following:

- (a) Identification of the applicable limit.
- (b) The amount and type each fuel used for each facility for each calendar day of operation.
- (c) The operating scenario chosen for the US Steel – Gary Works.
- (d) The hourly sulfur dioxide emission rate in pounds of sulfur dioxide per hour calculated by dividing the total daily sulfur dioxide emissions in pounds of sulfur dioxide per day by twenty-four (24) hours.
- (e) The hourly sulfur dioxide emission rate in pounds of sulfur dioxide per MMBtu for those facilities with a pounds per MMBtu limit in this rule calculated by dividing the total daily sulfur dioxide emissions in pounds of sulfur dioxide per day by the total heat input per day in MMBtu.

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

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

Indiana Department of Environmental Management
Compliance Data Section, Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251
- (c) Unless otherwise specified in this permit, any notice, report, or other submission required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ, on or before the date it is due.
- (d) Unless otherwise specified in this permit, all reports required in Section D of this permit shall be submitted within thirty (30) days of the end of the reporting period. All reports do require the certification by the “responsible official” as defined by 326 IAC 2-7-1(34).

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

Reports required in this part shall be submitted to:

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

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

C.24 Sulfur Dioxide (SO₂) Reporting Requirements (Entire Source) [326 IAC 7-4.1-20(c)(2)]

Pursuant to 326 IAC 7-4.1-20(c)(2), the Permittee shall submit an exception report to IDEM, OAQ, within thirty (30) days of an exceedance of the limitations in this permit that included the following:

- (a) Identification of the applicable limit or limits being exceeded.
- (b) Identification of any emissions unit exceeding the applicable limit and the dates when the limits were exceeded.
- (c) The calculated sulfur dioxide emission rate in pounds per hour for each facility exceeding the limitations for the days that the pounds per hour limitations were exceeded.

- (d) The calculated sulfur dioxide emission rate in pounds per million Btu for each combustion unit, furnace, boiler, or process operation for each facility exceeding the pounds per million Btu limitation for the days that the limitations were exceeded.
- (e) The actual daily fuel usage for each combustion unit, furnace, boiler, or process operation for each facility exceeding the limitations for the days that the limitations were exceeded.

Stratospheric Ozone Protection

C.25 Compliance with 40 CFR 82 and 326 IAC 22-1

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

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

SECTION D.1

FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)]: One (1) Coal Handling Operation

- (a) One (1) coal car bottom thaw shed (holding yard), identified as CHY00071, constructed in 1959, combusting coke oven gas, with a maximum heat input capacity of 25 MMBtu per hour, with an open flame heater, with uncontrolled fugitive emissions.
- (b) One (1) coal car side thaw station, identified as CHT0001, constructed in 1959, combusting natural gas, with a maximum heat input capacity of 15 MMBtu per hour, with an open flame heater, with uncontrolled fugitive emissions.
- (c) One (1) No. 2 Coke Battery Precarbonization facility, consisting of three (3) lines, Line A, Line B and Line C identified as CH2A0020, CH2B0021 and CH2C0022, constructed prior to October 24, 1974, each with a maximum capacity of 153.5 tons per hour. Particulate matter emissions from the three lines are controlled by electrostatic precipitators (ESP), ESP A, ESP B and ESP C, identified as CH3029, CH3030 and CH3031, exhausting through stacks CH6034, CH6035 and CH6037, respectively.
- (d) One (1) No. 3 Coke Battery Precarbonization facility consisting of three (3) lines Line A, Line B and Line C identified as CH3A0017, CH3B0018 and CH3C0019, constructed prior to October 24, 1974, each with a maximum capacity of 153.5 tons per hour. Particulate matter emissions from the three lines are controlled by electrostatic precipitators (ESP), ESP A, ESP B and ESP C, CH3026, CH3027 and CH3028, exhausting through stacks CH6028, CH6029 and CH6031, respectively.
- (e) One (1) coal crusher: system consisting of three (3) enclosed hammer mills with a maximum capacity of 160 tons per hour, three (3) enclosed hammer mills with a maximum capacity of 150 tons per hour, and two (2) enclosed hammer mills with a maximum capacity of 100 tons per hour, with fugitive emissions contained within the coal blending building.
- (f) One (1) enclosed petroleum coke crusher with a maximum capacity of 400 tons per hour which also operates as a coal breaker with a maximum capacity of 1200 tons per hour. This unit is a totally enclosed hammer mill with fugitive emissions contained within the coal blending building.
- (g) Coal Handling Storage Facilities, identified as CHSQ0003.
- (h) One (1) frozen coal breaker, installed in 1959, with a maximum capacity of 1300 tons per hour, with fugitive emissions contained within the coal blending building.

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

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

D.1.1 Lake County PM₁₀ Emission Requirements [326 IAC 6.8-2-38] [326 IAC 11-3-2(a)]

Pursuant to 326 IAC 6.8-2-38 and 326 IAC 11-3-2(a), the PM₁₀ from the No. 2 Coke Battery Precarbonization Lines A, B, and C, ESP stacks CH6034, CH6035 and CH6037 and No. 3 Coke Battery Precarbonization Lines A, B, and C ESP stacks CH6028, CH6029 and CH6031 shall comply with the following:

- (a) The PM₁₀ emissions from the Coke Battery # 2 Precarbonization Lines A, B, and C electrostatic precipitator stacks CH6034, CH6035 and CH6037 shall not exceed a total of 62.5 pounds per hour.

- (b) The PM₁₀ emissions from the Coke Battery # 3 Precarbonization Lines A, B, and C electrostatic precipitator stacks CH6028, CH6029 and CH6031 shall not exceed a total of 62.5 pounds per hour.
- (c) Each emission limit applies to one (1) stack serving one (1) facility unless otherwise noted. The emissions limitations apply to one (1) stack serving the multiple units specified when the facility description notes stack serving, and to each stack of multiple stacks serving multiple facilities when the facility description notes each stack serving.

D.1.2 Fugitive Dust Emission Limitations [326 IAC 6-4-2][326 IAC 6.8-10-3]

(a) Pursuant to 326 IAC 6-4-2:

- (1) The coal car bottom thaw shed CHY00071, coal car side thaw station CHT00001 and pet coke crusher used as a second coal crusher generating fugitive dust shall be in violation of this rule (326 IAC 6-4) if any of the following criteria are violated:

- (A) A source or combination of sources which cause to exist fugitive dust concentrations greater than sixty-seven percent (67%) in excess of ambient upwind concentrations as determined by the following formula:

$$P = \frac{100(R - U)}{U}$$

Where

P = Percentage increase

R = Number of particles of fugitive dust measured at downward receptor site

U = Number of particles of fugitive dust measured at upwind or background site

- (B) The fugitive dust is comprised of fifty percent (50%) or more respirable dust, then the percent increase of dust concentration in subdivision (1) of this section shall be modified as follows:

$$PR = (1.5 \pm N) P$$

Where

N = Fraction of fugitive dust that is respirable dust;

PR = allowable percentage increase in dust concentration above background; and

P = no value greater than sixty-seven percent (67%).

- (C) The ground level ambient air concentrations exceed fifty (50) micrograms per cubic meter above background concentrations for a sixty (60) minute period.
 - (D) If fugitive dust is visible crossing the boundary or property line of a source. This subdivision may be refuted by factual data expressed in subdivisions (1), (2) or (3) of this section. 326 IAC 6-4-2(4) is not federally enforceable.
- (2) Pursuant to 326 IAC 6-4-6(6) (Exceptions), fugitive dust from a source caused by adverse meteorological conditions will be considered an exception to this rule (326 IAC 6-4) and therefore not in violation.
- (b) Pursuant to 326 IAC 6.8-10-3 Lake County Fugitive Particulate Matter Emissions Limitations, fugitive emissions from coal car bottom thaw shed CHY00071, coal car side

thaw station CHT00001 and pet coke crusher used as a second coal crusher generating fugitive dust shall comply with the emission limitations in Section C.5 - Fugitive Dust Emissions.

D.1.3 Coke Oven Batteries Emission Limitations - Precarbonization [326 IAC 6.8-9-3(a)(9)(A)] [326 IAC 11-3-2(a)(1)]

- (a) Pursuant to 326 IAC 6.8-9-3(a)(9)(A), Particulate emissions from the precarbonization towers shall be limited by the emission limitations contained in 326 IAC 6.8-2-38.
- (b) Pursuant to 326 IAC 11-3-2(a)(1), particulate emissions from precarbonization towers shall be limited by the emission limitations determined under 326 IAC 6.8-2-38.

D.1.4 Opacity Limitations [326 IAC 6.8-9-3(a)(9)(B)]

Pursuant to 326 IAC 6.8-9-3(a)(9)(B), the visible emissions from the precarbonization towers shall comply with the requirements set forth in 326 IAC 5.

D.1.5 Coke Oven Batteries Opacity Limitations [326 IAC 11-3-2(a)(2)]

Pursuant to 326 IAC 11-3-2(a)(2), the visible emissions from any precarbonization unit shall comply with the requirements set forth in 326 IAC 5-1.

D.1.6 General Provisions Relating to NSPS [326 IAC 12-1][40 CFR Part 60, Subpart A]

The provisions of 40 CFR Part 60, Subpart A - General Provisions, which are incorporated by reference in 326 IAC 12-1, apply to the petroleum coke crusher while in service as a coal breaker, except when otherwise specified in 40 CFR Part 60, Subpart Y.

D.1.7 New Source Performance Standards - Opacity Limitations Coal Preparation Plant [326 IAC 12-1][40 CFR 60 Subpart Y]

Pursuant to 40 CFR 60.250 through 60.254, Minor Source Modification 089-10551-00121, issued February 10, 1999, and A 089-11953-00121, issued April 15, 2000, the opacity from the petroleum coke crusher while in service as a coal breaker shall not exceed twenty percent (20%).

D.1.8 Sulfur Dioxide (SO₂) Limitations [326 IAC 7-4.1-20(c)(3)]

Pursuant to 326 IAC 7-4.1-20(c)(3), an emission unit shall burn natural gas only:

- (a) If it is not listed in this rule; or
- (b) under any operating condition not specifically listed in this rule.

D.1.9 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

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

Compliance Determination Requirements

D.1.10 Testing Requirements [326 IAC 2-7-6(1),(6)][326 IAC 2-1.1-11]

- (a) Pursuant to the COMS Waiver, issued by IDEM May 16, 1997, this performance test schedule is the alternative monitoring requirement for the Precarbonization Units, in lieu of installing and operating Continuous Opacity Monitors (COMs) on the six (6) Precarbon ESP stacks CH6034, CH6035, CH6037, CH6028, CH6029 and CH6031, as required by 326 IAC 6.8-5-1.
- (b) Pursuant to the protocol, incorporated as Exhibit C of the Agreed Order issued March 22, 1996 the Permittee shall conduct the performance test for Particulate Matter, to demonstrate compliance by measuring combined filterable and condensable emissions utilizing Method 5 and Method 202 of 40 CFR 60 Appendix A or other methods as approved by the Commissioner.

- (c) Pursuant to Revised Source Testing Protocol for Nos. 2 and 3 Precarbonization Lines for Coke Batteries No. 2 and 3, respectively, in a letter dated June 29, 1998 the Permittee shall conduct the operation of a single Precarbonization Line through two ESPs. In order for the testing to represent the worst case emissions, the Permittee shall operate a single precarbon line through its associated ESP line with the tie lines between ESPs closed during the test. The results of this testing will be considered in compliance if the average PM₁₀ (filterable plus condensable) are less than 31.25 pounds per hour.

This test protocol modification reflects the change in operations of ESPs immediately after the precarbonization line returns from the “stand by” mode which results in decreased ESP collection efficiency.

- (d) Pursuant to the COMS Waiver, dated May 16, 1997, the Permittee shall conduct performance tests on the Nos. 2 and 3 Precarbonization Lines for Coke Batteries No. 2 and 3, in accordance with (b) and (c) above for PM₁₀ emissions using the schedule and testing frequency established in the COMS Waiver. All tests shall be performed in accordance with Section C – Performance Testing.

D.1.11 Particulate Matter Control

- (a) The No. 2 Coke Battery Precarbonization ESPs CH3029, CH3030 and CH3031, shall be in operation for PM₁₀ control at all times the No. 2 Coke Battery Precarbonization lines A, B and/or C are in operation.
- (b) The No. 3 Coke Battery Precarbonization ESPs CH3026, CH3027 and CH3028 shall be in operation for PM₁₀ control at all times the No. 3 Coke Battery Precarbonization lines A, B and/or C are in operation.

Compliance Monitoring Requirements

D.1.12 Nos. 2 and 3 Precarbonization [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]

- (a) The ability of the ESPs CH3029, CH3030, and CH3031 to control particulate emissions shall be monitored, in accordance with the Compliance Monitoring Plan required under the COMS Waiver issued by IDEM May 16, 1997.
- (b) The ability of the ESPs, CH3026, CH3027 and CH3028 to control particulate emissions shall be monitored in accordance with the Compliance Monitoring Plan required under the COMS Waiver issued by IDEM May 16, 1997.
- (c) Reasonable response steps shall be taken in accordance with Section C - Response to Excursions or Exceedances or corrective actions shall be taken in accordance with the COMS Waiver Compliance Monitoring Plan whenever the parameters fall outside the normal operating range as set forth in the Compliance Monitoring Plan. An out of range parameter is not a deviation from this permit. Failure to take response steps in accordance with Section C - Response to an Excursions or Exceedances or the COMS Waiver Compliance Monitoring Plan shall be considered a deviation of this permit.

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

D.1.13 Record Keeping Requirements

- (a) To document compliance with Condition D.1.10, the Permittee shall maintain records of the stack tests conducted in accordance with COMS Waiver for Nos. 2 and 3 Precarbonization Lines for Coke Batteries No. 2 and 3.
- (b) To document compliance with the Condition D.1.12, the Permittee shall maintain records of the parametric monitoring required under the COMS Waiver Compliance Monitoring Plan for the Nos. 2 and 3 Precarbons.

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

D.1.14 Reporting Requirements

Pursuant to the COMS Waiver issued by IDEM May 16, 1997, the Permittee shall submit quarterly reports on relative parameters which are indicative of process and control device operation for the life of the Nos. 2 and 3 Coke Battery Precarbonization facilities. 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 OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)]: The Coke Battery Operations

- (a) No. 2 Coke Battery
- (1) One (1) six (6) meter tall vertical flue coke battery with 57 ovens, No. 2 Coke Battery, identified as CP2B0079, constructed in November 1975, with a maximum charging capacity of 217 tons per hour. Excessive coke oven gas back pressure is controlled by three (3) flares lit with internal flare igniters CP3060, CP3061 and CP3062, exhausting to Bypass/Bleeder Flare Stacks CP6105, CP6106 and CP6107.
 - (2) The No. 2 Coke Battery underfiring system has a maximum combustion heat input capacity of 250 MMBtu per hour, exhausting to stack CP6040 equipped with a continuous opacity monitor (COM).
 - (3) The No. 2 Coke Battery has a maximum pushing capacity of 161 tons of coke per hour, with particulate emissions controlled by a Mobile Scrubber Car 9119, 9120, 9121 or 9122, identified as CP3034, exhausting to Stack CP6041.
 - (4) Nos. 2 and 3 Quench Towers identified as CP1Q0080 and CP2Q0081, constructed in 1975, with a maximum combined capacity of 322 tons of coke per hour, and No. 1 Quench Tower identified as CPQ0087 constructed in 1975 with a capacity of 322 tons of coke per hour, each equipped with a quench water header and baffle system with sprays. Nos. 2 and 3 Quench Towers service Nos. 2 and 3 Coke Batteries. No.1 Quench Tower services Nos. 2, 3, 5 and 7 Coke Batteries.
 - (5) The No. 2 Coke Battery fugitive emissions are generated from charging operations, off take piping, door leaks, lid leaks and collector main leaks.
- (b) No. 3 Coke Battery
- (1) One (1) six (6) meter tall vertical flue coke battery with 57 ovens, No.3 Coke Battery, identified as CP3B0086, constructed in November 1974, with a maximum charging capacity of 217 tons per hour. Excessive coke oven gas back pressure is controlled by three (3) flares lit with internal flare igniters CP3063, CP3064 and CP3065, exhausting to Bypass/Bleeder Flare stacks CP6108, CP6109 and CP 6110.
 - (2) The No. 3 Coke Battery underfiring system has a maximum combustion heat input capacity of 250 MMBtu per hour, exhausting to stack CP6045, equipped with a continuous opacity monitor (COM).
 - (3) The No. 3 Coke Battery has a maximum pushing capacity of 161 tons of coke per hour, with particulate emissions controlled by a Mobile Scrubber Car 9119, 9120, 9121 or 9122, identified as CP3038, exhausting to stack CP6046.
 - (4) The No. 1 Quench Tower, identified as CP3Q0087, constructed in 1975, with a maximum capacity of 322 tons of coke per hour and Nos. 2 and 3 Quench Towers, identified as CP1Q0080 and CP2Q0081 constructed in 1975 with a maximum capacity of 322 tons of coke per hour, equipped with a quench water header and baffle system with sprays. Nos. 2 and 3 Quench Towers service Nos. 2 and 3 Coke Batteries. No. 1 Quench Tower services Nos. 2, 3, 5 and 7 Coke Batteries.
 - (5) The No. 3 Coke Battery fugitive emissions are generated from charging operations, offtake piping, door leaks, lid leaks and collector main leaks.

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

Facility Description [326 IAC 2-7-5(15)] The Coke Battery Operations (continued):

(c) No. 5 Coke Battery

- (1) One (1) three (3) meter short vertical flue coke oven battery with 77 ovens, No. 5 Coke Battery, identified as CP5B0090, constructed in 1954, with a maximum charging capacity of 84 tons per hour. Excessive coke oven gas back pressure is controlled by two (2) flares lit with internal flare igniters CP3066 and CP3067, exhausting to Bypass/Bleeder Flare stacks CP6111 and CP 6112.
- (2) The No. 5 Coke Battery underfiring system has a maximum combustion heat input capacity of 125 MMBtu per hour, exhausting to stack CP6049, equipped with a COM.
- (3) The No. 5 and No.7 Coke Batteries have a combined maximum pushing capacity of 103 tons of coke per hour, with particulate emissions controlled by a common baghouse, identified as CP3041, exhausting to stack CP6050.
- (4) Nos. 5 and 6 Quench Towers identified as CP5Q0091 and CP5Q0095, constructed in 1954, with a maximum combined capacity of 103 tons of coke per hour, equipped with a quench water header and baffle system with sprays. These towers service Nos. 5 and 7 Coke Batteries.
- (5) The No. 5 Coke Battery fugitive emissions are generated from charging operations, offtake piping, door leaks, lid leaks and collector main leaks.

(d) No. 7 Coke Battery

- (1) One (1) three (3) meter short vertical flue coke oven battery, with 77 ovens, No.7 Coke Battery, identified as CP7B0094, constructed in 1954, with a maximum charging capacity of 84 tons per hour. Excessive coke oven gas back pressure is controlled by two (2) flares lit with internal flare igniters CP3068 and CP3069, exhausting to Bypass/Bleeder Flare stacks CP6113 and CP6114.
- (2) The No. 7 Coke Battery underfiring system has a maximum combustion heat input capacity of 125 MMBtu per hour, exhausting to stack CP6053 equipped with a COM.
- (3) The No. 5 and No.7 Coke Batteries have a combined maximum pushing capacity of 103 tons of coke per hour, with particulate emissions controlled by a common baghouse, identified as CP3041, exhausting to stack CP6050.
- (4) Nos. 5 and 6 Quench Towers identified as CP5Q0091 and CP5Q0095, constructed in 1954, with a maximum combined capacity of 103 tons of coke per hour, equipped with a quench water header and baffle system with sprays. These towers service Nos. 5 and 7 Coke Batteries.
- (5) The No. 7 Coke Battery fugitive emissions are generated from charging operations, offtake piping, door leaks, lids leaks and collector main leaks.

(e) Natural Gas Underfiring Injection System Jets

Three (3) natural gas injection jets, identified as CPNGI001, CPNGI002 and CPNGI003, constructed in 2001, with heat input capacities of 22 MMBtu per hour, 43 MMBtu per hour and 122 MMBtu per hour, respectively. Natural gas injection provides Btu stabilization control, coke oven gas quality control and emergency gas supply to the battery underfiring system.

(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 National Emission Standards for Hazardous Air Pollutant (NESHAP) [326 IAC 20-3][40 CFR Part 63, Subpart A] [40 CFR 63 Subpart L] [Table 1 of 40 CFR 63 Subpart CCCCC]

- (a) The provisions of 40 CFR Part 63, Subpart A - General Provisions, which are incorporated by reference in 326 IAC 20-3, apply to Battery 2, Battery 3, Battery 5 and Battery 7, except when otherwise specified in 40 CFR Part 63, Subpart L.
- (b) The provisions of 40 CFR Part 63, Subpart A - General Provisions, which are incorporated by reference in 326 IAC 20-1-1, apply to Battery 2, Battery 3, Battery 5 and Battery 7, except when otherwise specified in Table 1 of 40 CFR Part 63, Subpart CCCCC.

D.2.2 National Emission Standards for Hazardous Air Pollutants (NESHAP)- Coke Oven Batteries [326 IAC 20-3] [40 CFR Part 63, Subpart L]

- (a) Pursuant to 40 CFR 63.304, the Permittee shall not cause to be discharged or allow to be discharged to the atmosphere coke oven emissions. Each coke oven battery CP2B0079, CP3B0086, CP5B0090 and CP7B0094 shall not exceed the following emission limitations or requirements:
 - (1) Four and three-tenths percent (4.3%) leaking coke oven doors for each tall 6 meter by-product coke oven battery, based on a 30-day rolling average in accordance with 40 CFR 63, Appendix A, Method 303.
 - (2) Three and eight-tenths percent (3.8%) leaking coke oven doors for each short 3 meter by-product coke oven based on a 30-day rolling average in accordance with 40 CFR 63, Appendix A, Method 303.
 - (3) Four-tenths percent (0.4%) leaking topside port lids, based on a 30-day rolling average in accordance with 40 CFR 63, Appendix A, Method 303.
 - (4) Two and five-tenths percent (2.5%) leaking off take systems, based on a 30-day rolling average in accordance with 40 CFR 63, Appendix A, Method 303.
 - (5) Twelve (12) seconds of visible emissions per charge, based on a 30-day rolling average in accordance with 40 CFR 63, Appendix A, Method 303.
 - (6) On or after January 1, 2010, unless the US EPA or IDEM, OAQ promulgates more stringent limits pursuant to section 112(i)(8)(C) of Clean Air Act (CAA); the limit for each tall 6-meter by-product coke oven battery, shall be four percent (4%) leaking coke oven doors and the limit for each short 3-meter coke oven battery shall be three and three-tenths (3.3%) leaking coke oven doors, based on a 30-day rolling average in accordance with 40 CFR 63, Appendix A, Method 303.
- (b) Pursuant to 40 CFR 63.306, Work Practice Standards, the Permittee shall maintain, a written emission control work practice plan for each coke oven battery. The plan shall be designed to achieve compliance with visible emission limitations for coke oven doors, topside port lids, off take systems, and charging operations under 40 CFR 63 Subpart L.
 - (1) The work practice plan must address each of the topics specified in paragraph (4) below in sufficient detail and with sufficient specificity to allow the IDEM, OAQ to evaluate the plan for completeness and enforceability.
 - (2) The IDEM, OAQ may require revisions to the initial plan only where the IDEM, OAQ finds either that the plan does not address each subject area listed in paragraph (4) of D.2.2(b) for each emission point subject to a visible emission

standard under 40 CFR 63 Subpart L or that the plan is unenforceable because it contains requirements that are unclear.

- (3) During any period of time that a Permittee is required to implement the provisions of a plan for a particular emission point, the failure to implement one or more obligations under the plan and/or any record keeping requirement(s) under 40 CFR 63.311(f)(4) for the emission point during a particular day is a single violation.
- (4) Plan components. The Permittee shall organize the work practice plan to indicate clearly which parts of the plan pertain to each emission point subject to visible emission standards under this subpart. Each of the following provisions, at a minimum, shall be addressed in the plan:
 - (A) An initial and refresher training program for all coke plant operating personnel with responsibilities that impact emissions, including contractors, in job requirements related to emission control and the requirements of this subpart, including work practice requirements. Contractors with responsibilities that impact emission control may be trained by The Permittee or by qualified contractor personnel; however, the Permittee shall ensure that the contractor training program complies with the requirements of this section. The training program in the plan must include:
 - (i) A list, by job title, of all personnel that are required to be trained and the emission point(s) associated with each job title;
 - (ii) An outline of the subjects to be covered in the initial and refresher training for each group of personnel;
 - (iii) A description of the training method(s) that will be used (e.g., lecture, video tape);
 - (iv) A statement of the duration of initial training and the duration and frequency of refresher training;
 - (v) A description of the methods to be used at the completion of initial or refresher training to demonstrate and document successful completion of the initial and refresher training; and
 - (vi) A description of the procedure to be used to document performance of plan requirements pertaining to daily operation of the coke oven battery and its emission control equipment, including a copy of the form to be used, if applicable, as required under the plan provisions implementing paragraph 40 CFR 63.306(b)(7).
 - (B) Procedures for controlling emissions from coke oven doors on by-product coke oven batteries, including:
 - (i) A program for the inspection, adjustment, repair, and replacement of coke oven doors and jambs, and any other equipment for controlling emissions from coke oven doors, including a defined frequency of inspections, the method to be used to evaluate conformance with operating specifications for each type of equipment, and the method to be used to audit the effectiveness of the inspection and repair program for preventing exceedances;

- (ii) Procedures for identifying leaks that indicate a failure of the emissions control equipment to function properly, including a clearly defined chain of command for communicating information on leaks and procedures for corrective action;
 - (iii) Procedures for cleaning all sealing surfaces of each door and jamb, including identification of the equipment that will be used and a specified schedule or frequency for the cleaning of sealing surfaces;
 - (iv) For batteries equipped with self-sealing doors, procedures for use of supplemental gasketing and luting materials, if the Permittee elects to use such procedures as part of the program;
 - (v) For batteries equipped with hand-luted doors, procedures for luting and reluting, as necessary to prevent exceedances;
 - (vi) Procedures for maintaining an adequate inventory of the number of spare coke oven doors and jambs located onsite; and
 - (vii) Procedures for monitoring and controlling collecting main back pressure, including corrective action if pressure control problems occur.
- (C) Procedures for controlling emissions from charging operations on by-product coke oven batteries, including:
- (i) Procedures for equipment inspection, including the frequency of inspections, and replacement or repair of equipment for controlling emissions from charging, the method to be used to evaluate conformance with operating specifications for each type of equipment, and the method to be used to audit the effectiveness of the inspection and repair program for preventing exceedances;
 - (ii) Procedures for ensuring that the larry car hoppers are filled properly with coal;
 - (iii) Procedures for the alignment of the larry car over the oven to be charged;
 - (iv) Procedures for filling the oven (e.g., procedures for staged or sequential charging);
 - (v) Procedures for ensuring that the coal is leveled properly in the oven; and
 - (vi) Procedures and schedules for inspection and cleaning of off-take systems (including standpipes, standpipe caps, goosenecks, dampers, and mains), oven roofs, charging holes, topside port lids, the steam supply system, and liquor sprays.
- (D) Procedures for controlling emissions from topside port lids on by-product coke oven batteries, including:
- (i) Procedures for equipment inspection and replacement or repair of topside port lids and port lid mating and sealing surfaces,

- including the frequency of inspections, the method to be used to evaluate conformance with operating specifications for each type of equipment, and the method to be used to audit the effectiveness of the inspection and repair program for preventing exceedances; and
- (ii) Procedures for sealing topside port lids after charging, for identifying topside port lids that leak, and procedures for resealing.
- (E) Procedures for controlling emissions from off take system(s) on by-product coke oven batteries, including:
- (i) Procedures for equipment inspection and replacement or repair of off take system components, including the frequency of inspections, the method to be used to evaluate conformance with operating specifications for each type of equipment, and the method to be used to audit the effectiveness of the inspection and repair program for preventing exceedances;
 - (ii) Procedures for identifying off take system components that leak and procedures for sealing leaks that are detected; and
- (F) Procedures for dampening off ovens prior to a push.
- (G) Procedures for maintaining, for each emission point subject to visible emission limitations under this subpart, a daily record of the performance of plan requirements pertaining to the daily operation of the coke oven battery and its emission control equipment, including:
- (i) Procedures for recording the performance of such plan requirements; and
 - (ii) Procedures for certifying the accuracy of such records by the Permittee.
- (H) Any additional work practices or requirements specified by the IDEM, OAQ, according to 40 CFR 63.306(d).
- (5) Implementation of work practice plans. The Permittee shall implement the provisions of the coke oven emission control work practice plan according to the following requirements:
- (A) The Permittee shall Implement the provisions of the work practice plan pertaining to a particular emission point following the second independent exceedance of the visible emission limitation for the emission point in any consecutive 6-month period, by no later than 3 days after receipt of written notification of the second such exceedance from the certified observer. For the purpose of this 40 CFR 63.306(c)(1)(i), the second exceedance is "independent" if either of the following criteria is met:
 - (i) The second exceedance occurs 30 days or more after the first exceedance;
 - (ii) In the case of coke oven doors, topside port lids, and off take systems, the 29-run average, calculated by excluding the highest

value in the 30-day period, exceeds the value of the applicable emission limitation; or

- (iii) In the case of charging emissions, the 29-day logarithmic average, calculated in accordance with Method 303 in appendix A to 40 CFR 63 by excluding the valid daily set of observations in the 30-day period that had the highest arithmetic average, exceeds the value of the applicable emission limitation.
 - (B) Continue to implement such plan provisions until the visible emission limitation for the emission point is achieved for 90 consecutive days if work practice requirements are implemented pursuant to 40 CFR 63.306(c)(1)(i). After the visible emission limitation for a particular emission point is achieved for 90 consecutive days, any exceedances prior to the beginning of the 90 days are not included in making a determination 40 CFR 63.306(c)(1)(i).
- (6) Revisions to the work practice emission control plan will be governed by the following provisions in 40 CFR 63.306(d) and (a)(2).
- (A) The IDEM, OAQ may request the Permittee to review and revise as needed the work practice emission control plan for a particular emission point if there are 2 exceedances of the applicable visible emission limitation in the 6-month period that starts 30 days after the Permittee is required to implement work practices under 40 CFR 63.306(c). In the case of a coke oven battery subject to visual emission limitations under this subpart, the second exceedance must be independent under the criteria in 40 CFR 63.306(c)(1)(i).
 - (B) The IDEM, OAQ may not request the Permittee to review and revise the plan more than twice in any 12 consecutive month period for any particular emission point unless the IDEM, OAQ disapprove the plan according to the provisions of 40 CFR 63.306(d)(6).
 - (C) If the certified observer calculates that a second exceedance (or, if applicable, a second independent exceedance) has occurred, the certified observer shall notify the Permittee. No later than 10 days after receipt of such a notification, the Permittee shall notify the IDEM, OAQ of any finding of whether work practices are related to the cause or the solution of the problem. This notification is subject to review by the IDEM, OAQ, according to the provisions in 40 CFR 63.306(d)(6).
 - (D) The Permittee shall submit a revised work practice plan within 60 days of notification from the IDEM, OAQ pursuant to 40 CFR 63.306(d)(1) unless IDEM, OAQ grants an extension of time to submit the revised plan.
 - (E) If the IDEM, OAQ require a plan revision, the IDEM, OAQ may require the plan to address a subject area or areas in addition to those in 40 CFR 63.306(b), if the IDEM, OAQ determine that without plan coverage of such an additional subject area, there is a reasonable probability of further exceedances of the visible emission limitation for the emission point for which a plan revision is required.
 - (F) The IDEM, OAQ may disapprove a plan revision required under 40 CFR 63.306(d) if the IDEM, OAQ determine that the revised plan is inadequate to prevent exceedances of the visible emission limitation under 40 CFR 63 Subpart L for the emission point for which a plan

revision is required. The IDEM, OAQ may also disapprove the finding that may be submitted pursuant to the 40 CFR 63.303(d)(3) if the IDEM, OAQ determine that a revised plan is needed to prevent exceedances of the applicable visible emission limitations.

- (c) Pursuant to 40 CFR 63.307 Standards for Bypass/Bleeder Stacks, the Permittee shall do the following:
- (1) Install a bypass/bleeder stack flare system that is capable of controlling 120 percent of the normal gas flow generated by the battery, which shall thereafter be operated and maintained.
 - (2) Coke oven emissions shall not be vented to the atmosphere through bypass/bleeder stacks, except through the flare system.
 - (3) Each flare shall be designed for a net heating value of 8.9 MJ/scm (240 Btu/scf) if a flare is steam-assisted or air-assisted, or a net value of 7.45 MJ/scm (200 Btu/scf) if the flare is non-assisted.
 - (4) Each flare shall have either a continuously operable pilot flame or an electronic igniter that meets the requirements of D.2.2 (c)(5) and (6) below.
 - (5) Each electronic igniter shall meet the following requirements:
 - (A) Each flare shall be equipped with at least two igniter plugs with redundant igniter transformers;
 - (B) The ignition units shall be designed failsafe with respect to flame detection thermocouples (i.e., any flame detection thermocouples are used only to indicate the presence of a flame, are not interlocked with the ignition unit, and cannot deactivate the ignition system); and
 - (C) Integral battery backup shall be provided to maintain active ignition operation for a minimum of 15 minutes during a power failure.
 - (D) Each electronic igniter shall be operated to initiate ignition when the bleeder valve is not fully closed as indicated by an "OPEN" limit switch.
 - (6) Each flare constructed that does not have an electronic igniter shall be operated with a pilot flame present at all times as determined by 40 CFR 63.309 (h)(2).
 - (7) Each flare constructed to meet the requirements of 40 CFR 63.307(b) shall be operated with no visible emissions, as determined by the methods specified in 40 CFR 63.309 (h)(1), except for periods not to exceed a total of 5 minutes during any 2 consecutive hours.
- (d) Pursuant to 40 CFR 63.308 Standards for collecting mains, the Permittee shall do the following:
- (1) Inspect the coke oven battery collecting main for leaks at least once daily in accordance with 40 CFR 63, Appendix A, Method 303.
 - (2) Record the time and date a leak is first observed, the time and date the leak is temporarily sealed, and the time and date of repair.
 - (3) Temporarily seal any leak in the collecting main as soon as possible after detection, but no later than 4 hours after detection of the leak.

- (4) Initiate a collecting main repair as expeditiously as possible, but no later than 5 calendar days after initial detection of the leak. The repair shall be completed within 15 calendar days after initial detection of the leak unless an alternative schedule is approved by the IDEM, OAQ.
- (e) Pursuant to 40 CFR 63.310, (Requirements for startups, shut downs and malfunctions) the Permittee shall do the following:
 - (1) Operate and maintain the coke oven batteries and their pollution control devices at all times including periods of startup, shut down and malfunction in a manner consistent with good air pollution control practices for minimizing emissions to the levels required by any applicable performance standards under 40 CFR 63, Subpart L. Failure to adhere to these requirements shall not constitute a separate violation, if a violation of an applicable performance or work practice standard has also occurred.
 - (2) Develop and implement a written startup, shut down and malfunction plan that describes procedures for operating the batteries, including associated control equipment, during a period of a startup, shutdown or malfunction in a manner consistent with good air pollution control practices for minimizing emissions, and procedures for correcting malfunctioning process and control equipment as quickly as practicable.
 - (3) During a period of startup, shutdown or malfunction the Permittee shall do the following:
 - (A) Operate the coke batteries and their control devices according to the procedures in the startup, shut down and malfunction plan.
 - (B) Malfunctions shall be corrected as soon as practicable after their occurrence, in accordance with the Startup Shutdown and Malfunction (SSM) plan.
 - (C) In order for the provisions of D.2.2(e)(3)(H) to apply with respect to the observation or set of observations for a particular day, notification of a startup, shutdown or malfunction shall be made by the Permittee as follows:
 - (i) If practicable, to the certified observer, if the observer is at the facility during the occurrence; or
 - (ii) To the enforcement agency, in writing, within 24 hours of the occurrence first being documented by a company employee, and if the certified observer is not notified, an explanation of why the certified observer was not notified.
 - (D) The Permittee shall submit a written report to the IDEM within 14 days of a startup, shutdown or malfunction that describes the following:
 - (i) The time and circumstances of the startup, shutdown or malfunction, and
 - (ii) Actions taken that might be considered inconsistent with the startup, shutdown or malfunction plan.
 - (E) Maintain a record of internal reports which form the basis of each malfunction notification.

- (F) The Permittee may use the standard operating procedures manual for the batteries, to satisfy the requirements to develop a startup, shutdown or malfunction plan provided the manual meets all the requirements for the SSM plan and is made available for inspection at reasonable times when requested by the IDEM, OAQ.
- (G) IDEM may require reasonable revisions of the startup, shutdown or malfunction plan if the plan:
 - (i) Does not address a startup, shutdown or malfunction event that has occurred;
 - (ii) Fails to provide for the operation of the source (including associated air pollution control equipment) during a startup, shutdown or malfunction event in a manner consistent with good air pollution control practices for minimizing emissions; or
 - (iii) Does not provide adequate procedures for correcting malfunctioning process and/or air pollution control equipment as quickly as practicable.
- (H) If the Permittee demonstrates to the satisfaction of the IDEM, OAQ that a startup, shutdown, or malfunction has occurred, then an observation occurring during such startup, shutdown, or malfunction shall not:
 - (i) Constitute a violation of relevant requirements of 40 CFR 63, Subpart L.
 - (ii) Be used in any compliance determination under 40 CFR 63.309; or
 - (iii) Be considered for purposes of 40 CFR 63.306, until the IDEM, OAQ have resolved the claim that a startup, shutdown, or malfunction has occurred. If the IDEM, OAQ determines that a startup, shutdown, or malfunction has not occurred, such observations may be used for purposes of 40 CFR 63.306, regardless of whether the Permittee further contests such determination. The Permittee's receipt of written notification from the IDEM, OAQ, that a startup, shutdown, or malfunction has not occurred will serve, where applicable under 40 CFR 63.306, as written notification from the certified observer that an exceedance has occurred.

D.2.3 Lake County PM₁₀ Emission Requirements [326 IAC 6.8-2-38] [326 IAC 6.8-9-3(a)(8)] [326 IAC 11-3-2(i)]

Pursuant to 326 IAC 6.8-2-38, 326 IAC 6.8-9-3(a)(8) and 326 IAC 11-3-2(i), the PM₁₀ emissions from the Nos. 2, 3, 5 and 7 Coke Battery underfiring stacks and Coke Batteries 5/7 baghouse stack CP6050 shall comply with the following:

- (a) The PM₁₀ emissions from the Coke Battery number 2 underfiring stack CP6040 shall not exceed 32.30 pounds per hour.
- (b) The PM₁₀ emissions from the Coke Battery number 3 underfiring stack CP6045 shall not exceed 25.50 pounds per hour.
- (c) The PM₁₀ emissions from the Coke Battery number 5 underfiring stack CP6049 shall not exceed 24.70 pounds per hour.

- (d) The PM₁₀ emissions from the Coke Battery number 7 underfiring stack CP6053 shall not exceed 21.30 pounds per hour.
- (e) The PM₁₀ emissions from the Coke Battery number 5/7 pushing emissions control baghouse shall not exceed 0.017 pound PM10 per ton coke produced and 1.28 pounds per hour.
- (f) Each emission limit applies to one (1) stack serving one (1) facility unless otherwise noted. The emissions limitations apply to one (1) stack serving the multiple units specified when the facility description 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 PM₁₀ Coke Battery Emission Requirements [326 IAC 6.8-9]

The Coke Batteries Nos. 2, 3, 5 and 7 shall comply with the following:

- (a) Pursuant to 326 IAC 6.8-9-3(a)(1), no visible emissions shall be permitted from more than ten percent (10%) of the observed coke oven doors on any coke oven battery.
- (b) Pursuant to 326 IAC 6.8-9-3(a)(2), the visible emissions from the charging operations shall comply with the following:
 - (1) No visible emissions shall be permitted from the charging system for more than cumulative total of one hundred twenty-five (125) seconds during five (5) consecutive charging periods.
 - (2) A “charging system” means the equipment required to add coal to a coke battery including a larry car, charge ports, jumper pipe and off take pipe.
- (c) Pursuant to 326 IAC 6.8-9-3(a)(3), the emissions from the pushing operations shall comply with the following:
 - (1) The opacity of emissions from the coke-side of an oven to be pushed, before the first movement of the coke from the oven to the coke car begins, shall not exceed twenty percent (20%).
 - (2) The opacity of emissions during the pushing operation shall not exceed twenty percent (20%). The pushing shall be considered to begin with the first movement of coke from the oven into the coke car and to end when the quench car enters the quench tower. The opacity shall be determined using 40 CFR 60, Appendix A, Method 9, except that the readings shall be taken at fifteen (15) second intervals. Six (6) consecutive readings shall be averaged to determine the opacity. The observer shall only use those backgrounds that are above the elevation of the battery surface. If this condition cannot be met for six (6) consecutive readings, then the opacity shall be determined using the lesser number of consecutive readings.
 - (3) The particulate emissions from the pushing control devices: No. 2 and No.3 Batteries Mobile scrubber cars Nos. 9119, 9120, 9121, and 9122 and No. 5 and No. 7 Coke Batteries Pushing Process Baghouse Stack CP6050 shall not exceed four-hundredths (0.04) pound per ton of coke pushed.
- (d) Pursuant to [326 IAC 6.8-9-3(a)(4), no visible emissions shall be permitted from more than three percent (3%) of the total charge port lids on operating ovens of a coke oven battery.
- (e) Pursuant to 326 IAC 6.8-9-3(a)(5), visible emissions from the Off take Piping shall comply with the following:

- (1) No visible emissions shall be permitted from more than five percent (5%) of the total off take piping on any coke oven battery.
 - (2) At no time, shall the visible emissions from any gooseneck cap opening exceed twenty percent (20%).
 - (3) An exclusion from the twenty percent (20%) gooseneck cap opacity limit shall be allowed for two (2) minutes after a gooseneck cap is opened.
- (f) Pursuant to 326 IAC 6.8-9-3(a)(6), emissions from gas collector mains shall comply with the following:
- (1) No visible emissions shall be permitted from the gas collector mains.
 - (2) Caps on the collector main shall be exempt from requirement during maintenance.
- (g) Pursuant to 326 IAC 6.8-9-3(a)(7)(A), the quench water as applied to the coke shall not exceed one thousand five hundred (1,500) milligrams per liter of total dissolved solids (TDS).
- (h) Pursuant to 326 IAC 6.8-9-3(a)(7)(B), the Permittee shall submit the following information regarding its quenching operation in a CCP required to be submitted by 326 IAC 6.8-8-1:
- (1) The source of quench water, for example, Lake Michigan water only, or a mixture of Lake Michigan water, spent quench water, process water and miscellaneous sources of non process water.
 - (2) The volume of quench water and proportion of each source of water.
- (i) Pursuant to 326 IAC 6.8-9-3(a)(7)(C), all coke oven towers shall be equipped with baffles. Baffles shall cover ninety-five percent (95%) or more of the cross-sectional area of the exhaust vent or stack for straight quench towers and must be maintained in operable condition. For offset quench towers numbers 2 and 3 at US Steel, the number and arrangement of baffles in the tower shall be maintained as designed. Compliance with the quench tower baffle requirement shall be determined by comparison of the number and arrangement of baffles with the submitted plans.

D.2.5 Emission Limitations for Coke Oven Batteries [326 IAC 11-3-2]

The Coke Batteries Nos. 2, 3, 5 and 7 shall each comply with the following requirements:

- (a) Pursuant to 326 IAC 11-3-2(b), the visible emissions from the charging system (including any open charge port, off take system, mobile jumper pipe or larry car) shall not be visible for more than a cumulative total of one hundred twenty-five (125) seconds during five (5) consecutive charging periods.
- (b) Pursuant to 326 IAC 11-3-2(c), visible emissions shall not be permitted from more than three percent (3%) of the total charge port lids.
- (c) Pursuant to 326 IAC 11-3-2(d), no visible emissions shall be permitted from more than five percent (5%) of the total off take piping on any coke oven battery.
- (d) Pursuant to 326 IAC 11-3-2(e), no visible emissions shall be permitted from gas collector main on any coke oven battery.
- (e) Pursuant to 326 IAC 11-3-2(f), visible emissions shall not be permitted from more than ten percent (10%) of the total coke oven doors on any coke oven battery.

- (f) Pursuant to 326 IAC 11-3-2(g), the coke oven batteries pushing emissions requirements shall be as follows:
 - (1) All coke oven batteries shall be equipped with a device capable of capturing and collecting coke-side particulate matter such that the effluent gas emissions contain no more than four-hundredths (0.04) gram per two (2.0) kilogram of coke pushed.
 - (2) Such devices shall be designed and operated in compliance with an operating permit to collect ninety percent (90%) of the pushing emissions. If the construction and design of the device have been approved by the commissioner by granting the permit, the device, if operated properly in compliance with the permit conditions, will be assumed to be collecting ninety percent (90%) of the pushing emissions.
- (g) Pursuant to 326 IAC 11-3-2(h)(1), the Nos. 1, 2, 3, 5 and 6 quench towers shall not have visible emissions from the quenching of coke with the direct application of water to hot coke unless quenching is conducted under a tower equipped with efficient baffles to impede the release of particulate into the atmosphere. Efficient baffles are baffles taking the form of slats, louvers, screens, or other impediments placed in a configuration within a quench tower to force a change of direction and reduction of velocity of the steam plume to aid in the reduction of particulate matter emitted.
- (h) Pursuant to 326 IAC 11-3-2(h)(2), the quench water makeup shall not contain a total dissolved solids content of more than one thousand five hundred (1,500) milligrams per liter.
- (i) Pursuant to 326 IAC 11-3-2(i), the visible emissions and particulate emissions from the underfire stacks shall comply with the requirements of Conditions C.1 and D.2.4 of this permit.

D.2.6 Coke Oven Identification [326 IAC 11-3-3]

Pursuant to 326 IAC 11-3-3, the Permittee shall maintain the identity of each coke oven in such a manner that it is easily and readily visible from the topside and on each coke and push-side on every coke oven battery.

D.2.7 Sulfur Dioxide (SO₂) Limitations [326 IAC 7-4.1-20] [326 IAC 11-3-2(i)]

Pursuant to 326 IAC 7-4.1-20(a)(1)(D), the SO₂ emissions from the Coke Battery underfiring stacks CP6040, CP6045, CP6049 and CP6043 for Nos. 2, 3, 5 and 7 coke batteries shall not exceed the following:

- (a) Pursuant to 326 IAC 7-4.1-20(a)(1)(D), during periods when the coke oven gas desulfurization unit is not operating:

Emission Unit	Emission Limit lb/MMBtu	Emission Limit Lb/hr
No. 2 and 3 Coke Oven Battery Underfiring stacks	1.270 lbs/MMBtu each	251.5 lbs/hr each
No. 5 and 7 Coke Oven Battery Underfiring stacks	1.270 lbs/MMBtu each	158.75 lbs/hr each

- (b) Pursuant to 326 IAC 7-4.1-20(b)(4), during periods when the coke oven gas desulfurization unit is operating:

Emission Unit	Emission Limit lb/MMBtu	Emission Limit Lb/hr
No. 2 and 3 Coke Oven Battery Underfiring stacks	0.260 lbs/MMBtu each	51.5 lbs/hr each
No. 5 Coke Oven Battery Underfiring stack	0.270 lbs/MMBtu each	22.8 lbs/hr each
No. 7 Coke Oven Battery Underfiring stack	0.260 lbs/MMBtu each	32.5 lbs/hr each

D.2.8 Nitrogen Oxide (NOx) Limitations PSD [326 IAC 2-2] and Emissions Offsets [326 IAC 2-3]

Pursuant to the Significant Source Modification 089-12880-00121, issued July 26, 2001, the Natural gas usage injected through the coke oven battery natural gas injection jets CPNGI001, CPNGI002 and CPNGI003 shall not exceed 178.7 million cubic feet (MMCF) per 12-consecutive month period, with compliance demonstrated at the end of each month. Compliance with this limit makes 326 IAC 2-2 PSD and 326 IAC 2-3 not applicable for the modification.

D.2.9 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

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

Compliance Determination Requirements

D.2.10 National Emission Standards for Hazardous Air Pollutants from Coke Oven Batteries - Visible Emissions Inspection Requirements [40 CFR 63.309][326 IAC 20]

- (a) Pursuant to 40 CFR Part 63.309, except as otherwise provided, the Permittee shall conduct a performance test each day, 7 days per week, for each coke oven battery. The test results shall be used in accordance with procedures specified in 40 CFR Part 63 Subpart L to determine compliance with each of the applicable visible emission limitations in Condition D.2.3. If a facility pushes and charges only at night, then the facility must at its option, change their schedule and charge during daylight hours or provide adequate lighting so that visible emission inspections can be made at night. "Adequate lighting" will be determined by the enforcement agency.
- (1) Each performance test is to be conducted according to the procedures and requirements 40 CFR 63.309 and in 40 CFR 63, Appendix A, Method 303, or 40 CFR Part 60, Appendix A, Methods 9 and 22 (where applicable).
 - (2) Each performance test is to be conducted by a certified observer.
 - (3) The certified observer shall complete any reasonable safety training program offered by the Permittee prior to conducting any performance test at a coke oven battery.
 - (4) Except as otherwise provided in paragraph (a)(5) of 40 CFR 63.309, the Permittee shall pay an inspection fee to the enforcement agency each calendar quarter to defray the costs of the daily performance tests required under paragraph (a) of 40 CFR 63.309.
 - (A) The inspection fee shall be determined according to the following formula:

$$F = H \times S \quad \text{where}$$

F = Fees to be paid by owner or operator.
 H = Total person hours for inspections: 4 hours for 1 coke oven battery, 6.25 hours for 2 coke oven batteries, 8.25 hours for 3 coke oven batteries. For more than 3 coke oven batteries, use these hours to calculate the appropriate estimate of person hours.

S = Current average hourly rate for private visible emission inspectors in the relevant market.

- (B) The Permittee shall not be required to pay an inspection fee (or any part thereof) under paragraph (a)(4) of 40 CFR 63.309, for any monitoring or inspection services required by paragraph (a) of 40 CFR 63.309 that the Permittee can demonstrate are covered by other fees collected by the enforcement agency.
- (C) Upon request, the enforcement agency shall provide the Permittee information concerning the inspection services covered by any other fees collected by the enforcement agency, and any information relied upon under paragraph (a)(4)(B) of 40 CFR 63.309.
- (5) The EPA shall be the enforcement agency during any period of time that a delegation of enforcement authority is not in effect or a withdrawal of enforcement authority under 40 CFR 63.313 is in effect, and the Administrator is responsible for performing the inspections required by this section, pursuant to 40 CFR 63.313(b).
- (b) Within thirty (30) days of receiving notification from the Administrator that the EPA is the enforcement agency for a coke oven battery, the Permittee shall enter into a contract providing for the inspections and performance tests required under this section to be performed by a Method 303 certified observer. The inspections and performance tests will be conducted at the expense of the Permittee, during the period that the EPA is the implementing agency.
- (c) The enforcement agency shall commence daily performance tests on the applicable date specified in 40 CFR 63.300 (a) or (c).
- (d) The certified observer shall conduct each performance test according to the requirements in this paragraph:
 - (1) The certified observer shall conduct one run each day to observe and record visible emissions from each coke oven door, topside port lid, and off take system on each coke oven battery. The certified observer also shall conduct five runs to observe and record the seconds of visible emissions per charge for five consecutive charges from each coke oven battery. The observer may perform additional runs as needed to obtain and record a visible emissions value (or set of values) for an emission point that is valid under Method 303 in appendix A 40 CFR Part 63. Observations from fewer than five consecutive charges shall constitute a valid set of charging observations only in accordance with the procedures and conditions specified in sections 3.8 and 3.9 of Method 303 in appendix A 40 CFR Part 63.
 - (2) If a valid visible emissions value (or set of values) is not obtained for a performance test, there is no compliance determination for that day. Compliance determinations will resume on the next day that a valid visible emissions value (or set of values) is obtained.
 - (3) After each performance test for a by-product coke oven battery, the certified observer shall check and record the collecting main pressure according to the procedures in section 6.3 of Method 303 in appendix A to 40 CFR Part 63.
 - (A) The Permittee shall demonstrate pursuant to Method 303 in appendix A to 40 CFR 63 the accuracy of the pressure measurement device upon request of the certified observer;
 - (B) The Permittee shall not adjust the pressure to a level below the range of normal operation during or prior to the inspection;

- (4) In no case shall the Permittee knowingly block a coke oven door, or any portion of a door for the purpose of concealing emissions or preventing observations by the certified observer.
- (e) Using the observations obtained from each performance test, the enforcement agency shall compute and record, in accordance with the procedures and requirements of Method 303 in appendix A to 40 CFR Part 63, for each day of operations on which a valid emissions value (or set of values) is obtained:
 - (1) The 30-run rolling average of the percent leaking coke oven doors, topside port lids, and off take systems on each coke oven battery, using the equations in sections 4.5.3.2, 5.6.5.2, and 5.6.6.2 of Method 303 in appendix A to 40 CFR Part 63;
 - (2) For by-product coke oven battery charging operations, the logarithmic 30-day rolling average of the seconds of visible emissions per charge for each battery, using the equation in section 3.9 of Method 303 in appendix A to 40 CFR Part 63;
 - (3) For a by-product coke oven battery subject to the small battery emission limitation for coke oven doors pursuant to 40 CFR 63.304(b)(7), the 30-run rolling average of the number of leaking coke oven doors;
- (f) The certified observer shall make available to the implementing agency as well as to The Permittee, a copy of the daily inspection results by the end of the day and shall make available the calculated rolling average for each emission point to The Permittee as soon as practicable following each performance test. The information provided by the certified observer is not a compliance determination. For the purpose of notifying an owner or operator of the results obtained by a certified observer, the person does not have to be certified.
- (g) Compliance shall not be determined more often than the schedule provided for performance tests under this section. If additional valid emissions observations are obtained (or in the case of charging, valid sets of emission observations), the arithmetic average of all valid values (or valid sets of values) obtained during the day shall be used in any computations performed to determine compliance under 40 CFR 63.309(d) or determinations under 40 CFR 63.306.
- (h) For a flare constructed to meet the requirements of 40 CFR 63.307(b):
 - (1) Compliance with the provisions in 40 CFR 63.307(c) (visible emissions from flares) shall be determined using Method 22 in appendix A to 40 CFR Part 60, with an observation period of 2 hours; and
 - (2) Compliance with the provisions in 40 CFR 63.307(b)(4) (flare pilot light) shall be determined using a thermocouple or any other equivalent device.
- (i) No observations obtained during any program for training or for certifying observers under this subpart shall be used to determine compliance with the requirements of this subpart or any other federally enforceable standard.

D.2.11 Visible Emission Inspections for Charging [326 IAC 11-3-4(a)]

- (a) Pursuant to 326 IAC 11-3-4(a) and in order to demonstrate compliance with Conditions D.2.5(a) and D.2.4(b), the observations shall be made and the identity recorded from any point or points on the topside of a coke oven battery such that the observer can obtain an unobstructed view of the charging operation. The observer shall keep cumulative time of the total number of seconds charging emissions are visible. Time is started when a visible emission appears and is stopped when the visible emission expires. This procedure shall continue throughout the entire charging period. Visible emissions occurring simultaneously from two (2) or more separate points shall be timed as one (1).

- (b) Visible emissions shall not be timed from:
 - (1) Burning coal spilled on the top of the oven or oven lids during charging.
 - (2) Any equipment other than the charging system or charge ports.
 - (3) Standpipes during charging.
 - (4) Charge port lids and the standpipe on the oven most recently charged.
 - (5) Coke oven doors which may be wind-blown across the topside of a coke oven battery.
 - (6) Steam from uncombined water.
- (c) The time retained is the total time visible emissions are observed during a charge and shall be recorded on a data sheet. If the observations of a consecutive set of five (5) charges are interrupted by an event not in the control of the observer, for example momentary interference by a passing quench car plume, then the data for the interrupted charge(s) shall be discarded and additional consecutive charges shall be observed. Five (5) charges observed as such shall be treated as consecutive charges.
- (d) The observer shall discard the data for the charge observed, during each set, which contains the greatest cumulative total number of seconds during which emissions are visible. A set shall consist of the total number of consecutive charges read by the observer during any one (1) observation period, but in no event shall a set exceed twenty (20) consecutive charges.

D.2.12 Charge Port Lids and Off take Piping - Emissions Testing [326 IAC 11-3-4(b)]

Pursuant to 326 IAC 11-3-4(b) and in order to determine compliance with conditions D.2.5(b) and (c) and D.2.4(d) and (e), the observer shall walk the length of the topside of a coke oven battery, on a line down the middle of the battery, or as close as safety permits, to record the identity of standpipes in a single traverse and charge port lids in a single traverse that have any visible emissions.

- (a) Visible emissions shall not be counted from:
 - (1) Burning coal spilled on the top of the oven or oven lids.
 - (2) Charge port lids and standpipe lids, from a maximum of three (3) ovens that are opened during a decarbonization period or charging period.
 - (3) The standpipe on an oven being charged.
 - (4) Resulting from maintenance work.
 - (5) Steam caused by the vaporization of wet luting material.
 - (6) Steam from uncombined water.
- (b) Visible emissions from charge port lids shall include all emissions from the charge port casting/lid interface.
- (c) Visible emissions from the off take piping assembly shall include any leaks from the following:
 - (1) Cracks and/or defects in the piping itself.

- (2) Flanged joints of any pipes, including the final joint with the collector main.
- (3) The standpipe base.
- (4) The standpipe lid or along its seal with the standpipe.
- (5) Off take piping assembly which is not contained in one (1) of the categories in this subdivision.

D.2.13 Visible Emissions for Oven Doors [326 IAC 11-3-4(c)]

- (a) Pursuant to 326 IAC 11-3-4(c) and in order to demonstrate compliance with Conditions D.2.5(e) and D.2.4(a), an observer shall record the starting time of the inspection, then shall move steadily along the push-side or coke-side of a coke oven battery, stopping only to record the identity of any doors of ovens not temporarily or permanently taken out of service that have visible emissions, but not including visible emissions due to steam from uncombined water. The inspector shall have any of the following options:
 - (1) To wait for any doors which are blocked from the inspector's view to become unobstructed.
 - (2) To continue the inspection and return when the view of the doors becomes unobstructed.
 - (3) To exclude the obstructed doors from the calculation of the total number of doors observed.
- (b) The finishing time of that inspection shall be recorded followed by the inspector repeating the same procedure on the opposite side of the same battery. The inspector shall be positioned either outside of the quench car tracks on the coke-side of the battery or outside of the push-side bench. After a brief scan of a coke oven door, the observer shall proceed in the inspection checking each succeeding door in a like manner.

D.2.14 Visible Emissions Inspections for Gas Collector Main [326 IAC 11-3-4(e)]

Pursuant to 326 IAC 11-3-4(e) and in order to determine compliance with conditions D.2.5(d) and D.2.4(f), the observer shall walk the length of the topside of the gas collector main, to record the number of points in a single traverse from which emissions are visible.

D.2.15 Visible Emissions Inspections Pushing [326 IAC 6.8-9-3(a)(3)]

- (a) Pursuant to 326 IAC 6.8-9-3(a)(3)(A) and in order to determine compliance with Condition D.2.4(c)(1), the opacity of emissions from the coke-side of an oven to be pushed, before the first movement of the coke from the oven to the coke car begins shall be determined on an instantaneous basis at the top of the battery. The observer shall be positioned outside of the quench car rails.
- (b) Pursuant to 326 IAC 6.8-9-3(a)(3)(B) and in order to determine compliance with Condition D.2.4(c)(2), the opacity of emissions from the pushing operations (begin with the first movement of coke from the oven into the coke car and to end when the quench car enters the quench tower), shall be determined using 40 CFR 60, Appendix A, Method 9, except the readings shall be taken at fifteen (15) second intervals. Six (6) consecutive readings shall be averaged to determine the opacity. The observer shall only use those backgrounds that are above the elevation of the battery surface. If this condition cannot be met for six (6) consecutive readings, then the opacity shall be determined using the lesser number of consecutive readings.

D.2.16 Testing Requirements [326 IAC 2-7-6(1),(6)] [326 IAC 2-1.1-11]

- (a) Within thirty (30) months after issuance of this permit or two and one half (2 ½) years from the date of the latest valid compliance demonstration, which ever is earlier, in order to demonstrate compliance with Condition D.2.3, the Permittee shall perform PM₁₀ testing on the No. 5 and 7 Coke Batteries Pushing Baghouse Stack CP6050, using the appropriate methods to measure PM₁₀ as listed in 326 IAC 6.8-4-1(1) or other methods approved by the Commissioner. This test shall be repeated at least once every two and one half (2 ½) years from the date of the last valid compliance demonstration. All tests shall be performed in accordance with Section C - Performance Testing.
- (b) Within thirty (30) months after issuance of this permit or five (5) years from the date of the latest valid compliance demonstration, which ever is earlier, in order to demonstrate compliance with Condition D.2.3, the Permittee shall perform PM₁₀ testing on the No. 2, No. 3, No.5 and No. 7 coke batteries underfire Stacks CP6040, CP6045, CP6049 and CP6053, using the appropriate methods to measure PM₁₀ as listed in 326 IAC 6.8-4-1(1) or other methods approved by the Commissioner. This test shall be repeated at least once every five (5) years from the date of this valid compliance demonstration. All tests shall be performed in accordance with Section C - Performance Testing.

D.2.17 Sulfur Fuel Sampling and Analysis [326 IAC 7-4.1-2]

To demonstrate compliance with condition D.2.7, the Permittee shall perform the Sulfur Fuel Sampling and Analysis in accordance with Section C - Sulfur Fuel Sampling and Analysis of this permit.

D.2.18 Particulate Matter Control [326 IAC 2-7-6(6)]

- (a) Except as otherwise provided by statute, rule, or this permit, PM control shall be as follows:
 - (1) The mobile scrubber cars 9119, 9120, 9121 and/or 9122 shall be in operation at all times, when the No. 2 and/or 3 Coke Batteries pushing processes are in operation to control particulate matter.
 - (2) The baghouse CP3041 shall be in operation at all times, when the No. 5 and/or 7 Coke Batteries pushing processes are in operation, to control particulate matter.
- (b) In the event that bag failure is observed in a multi-compartment baghouse, if operations will continue for ten (10) days or more after the failure is observed before the failed units will be repaired or replaced, the Permittee shall promptly notify the IDEM, OAQ of the expected date the failed units will be repaired or replaced. The notification shall also include the status of the applicable compliance monitoring parameters with respect to normal, and the results of any response actions taken up to the time of notification.

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

D.2.19 Visible Emissions Notations

- (a) Visible emission notations of the No. 2 and No.3 Coke Oven Battery: mobile scrubber cars 9119, 9120, 9121 and 9122 and the No. 5 and No. 7 Coke Oven Battery: pushing bag house stack CP6050 shall be performed once per day during normal daylight operations when exhausting to the atmosphere. A trained employee shall record whether emissions are normal or abnormal.
- (b) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.
- (c) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.

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

D.2.20 Parametric Monitoring

- (a) The Permittee shall record the pressure drop across the baghouse CP3041 used in conjunction with No. 5 and No. 7 coke oven batteries pushing operations at least once per day when pushing is occurring. When for any one reading, the pressure drop across each baghouse is outside the normal range of 3 to 15 inches of water or a range established during the latest stack test, the Permittee shall take reasonable response steps in accordance with Section C- Response to Excursions or Exceedances. A pressure reading that is outside the above mentioned range is not a deviation from this permit. Failure to take response steps in accordance with Section C - Response to Excursions or Exceedances, shall be considered a deviation of this permit.
- (b) The Permittee shall comply with the most current Continuous Compliance Plan for the baghouse operation, recording and maintenance, in accordance with Section C- Continuous Compliance Plan.
- (c) The instrument used for determining the pressure shall comply with Section C - Instrument Specifications of this permit, shall be subject to approval by IDEM, OAQ and shall be calibrated at least once every six (6) months.

D.2.21 Continuous Opacity Monitoring (COM) [326 IAC 3-5]

Pursuant to 326 IAC 3-5, the continuous monitoring system shall be calibrated, maintained and operated to measure the opacity of the exhaust from the Nos. 2, 3, 5 and 7 Coke Battery underfiring stacks CP6040, CP6045, CP6049 and CP6053. The continuous opacity monitoring system shall be certified in accordance with and meet the performance specifications of 326 IAC 3-5-2.

D.2.22 Maintenance of Continuous Opacity Monitoring Equipment [326 IAC 2-7-5(3)(A)(iii)]

- (a) The Permittee shall install, calibrate, maintain, and operate all necessary continuous opacity monitoring systems (COMS) and related equipment.
- (b) All COMS shall meet the performance specifications of 40 CFR 60, Appendix B, Performance Specification No. 1, and are subject to monitor system certification requirements pursuant to 326 IAC 3-5.
- (c) In the event that a breakdown of a COMS occurs, a record shall be made of the times and reasons of the breakdown and efforts made to correct the problem.
- (d) Whenever a COMS is malfunctioning or is down for maintenance, or repairs for a period of twenty four (24) hours or more, and a backup COMS is not on line within twenty-four (24) hours of shutdown or malfunction of the primary COMS, the Permittee shall provide a certified opacity reader, who may be an employee of the Permittee or an independent contractor, to self-monitor the emissions from the emission unit stack.

- (1) Visible emission readings shall be performed in accordance with 40 CFR 60, Appendix A, Method 9, for a minimum of five (5) consecutive six (6) minute averaging periods beginning not more than twenty-four (24) hours after the start of the malfunction or down time.
 - (2) Method 9 opacity readings shall be repeated for a minimum of five (5) consecutive six (6) minute averaging periods at least twice per day during daylight operations, with at least four (4) hours between each set of readings until a COMS is on line.
 - (3) Method 9 readings may be discontinued once a COM is online.
 - (4) Any opacity exceedances determined by Method 9 readings shall be reported with the Quarterly Opacity Exceedances Reports.
 - (5) If abnormal emissions are observed, the Permittee shall take reasonable response steps in accordance with Section C - Response to Excursions and Exceedances. 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 - Response to Excursions and Exceedances, 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, (and 40 CFR 63).

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

D.2.23 National Emission Standards for Hazardous Air Pollutants from Coke Oven Batteries -Record Keeping and Reporting Requirements [40 CFR 63.311][326 IAC 20]

- (a) To document compliance with Condition D.2.2, the Permittee shall maintain the following records:
- (1) A copy of the work practice plan for each emission point, any revisions and the following:
 - (A) All audiovisual and written training materials,
 - (B) Dates of each training class,
 - (C) Names of participants in each class; and
 - (D) Documentation that all appropriate personnel have successfully completed the training required in condition D.2.2(b)(4)(A).
 - (2) Records required to be maintained by the work practice plan provisions implemented under 40 CFR 63.306 (b)(7);
 - (3) Records resulting from audits of the effectiveness of the work practice plan for the particular emission point;
 - (4) Records of the inventory of coke oven doors and jamps;
 - (5) The design drawings and engineering specifications for the bypass/bleeder stack flare system; and
 - (6) Records specified in 40 CFR Part 63.310(f) regarding the basis of each malfunction.

- (b) The Permittee shall include the following information in the semi-annual compliance certification:
 - (1) Certification, signed by the responsible official, that no coke oven gas was vented, except through the bypass/bleeder stack flare system of a by-product coke oven battery during the reporting period or that venting report has been submitted in accordance with 40 CFR 63.311(e).
 - (2) Certification, signed by the responsible official, that a startup, shutdown, or malfunction event did not occur for a coke oven battery during the reporting period or that a startup, shutdown, or malfunction event did occur and a report was submitted in accordance with 40 CFR 63.310(e).
 - (3) Certification, signed by the responsible official, that work practices were implemented if applicable under 40 CFR 63.306.

D.2.24 Record Keeping Requirements

- (a) To document compliance with Condition D.2.21, the Permittee shall maintain records of the continuous opacity monitoring (COM) data in accordance with 326 IAC 3-5. Records shall be complete and sufficient to establish compliance with the limits established in this section. When the COM system is not functioning, the Permittee shall maintain records sufficient to demonstrate compliance D.2.22.
- (b) To document compliance with Condition D.2.7, the Permittee shall maintain records in accordance with Section C- Sulfur Dioxide (SO₂) Record Keeping Requirements (Entire Source).
- (c) To document compliance with Condition D.2.8, the Permittee shall maintain records of the natural gas usage for 12 month consecutive periods, with compliance demonstrated at the end of each month.
- (d) To document compliance with Condition D.2.19, the Permittee shall maintain records of the once per day visible emissions notations of the stack exhausts.
- (e) To document compliance with Condition D.2.20, the Permittee shall maintain records of the once per day pressure drop during normal operation.
- (f) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

D.2.25 Reporting Requirements

- (a) A quarterly report of opacity exceedances 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.
- (b) A quarterly summary report to document compliance with condition D.2.7 shall be submitted to IDEM accordance with Section C – Sulfur Dioxide SO₂ Reporting Requirements (Entire Source).
- (c) A quarterly summary of the natural gas usage to document compliance with Condition D.2.8, shall be submitted in accordance with Section C - General Reporting Requirements, of this permit, using the reporting form located at the end of this permit, within thirty (30) days after the end of the quarter being reported.
- (d) The reports submitted by the Permittee do require the certification by the “responsible official” as defined by 326 IAC 2-7-1(34).

National Emission Standards for Hazardous Air Pollutants (NESHAP) for Coke Ovens: Pushing, Quenching and Battery Stacks 40 CFR 63, Subpart CCCCC]

D.2.26 National Emission Standards for Hazardous Air Pollutants (NESHAP) for Coke Ovens: Pushing, Quenching and Battery Stacks 40 CFR 63, Subpart CCCCC]

Title 40: Protection of Environment

PART 63—NATIONAL EMISSION STANDARDS FOR HAZARDOUS AIR POLLUTANTS FOR SOURCE CATEGORIES

Subpart CCCCC—National Emission Standards for Hazardous Air Pollutants for Coke Ovens: Pushing, Quenching, and Battery Stacks

Source: 68 FR 18025, Apr. 14, 2003, unless otherwise noted.

What This Subpart Covers

§63.7280 What is the purpose of this subpart?

This subpart establishes national emission standards for hazardous air pollutants (NESHAP) for pushing, soaking, quenching, and battery stacks at coke oven batteries. This subpart also establishes requirements to demonstrate initial and continuous compliance with all applicable emission limitations, work practice standards, and operation and maintenance requirements in this subpart.

§63.7281 Am I subject to this subpart?

You are subject to this subpart if you own or operate a coke oven battery at a coke plant that is (or is part of) a major source of hazardous air pollutant (HAP) emissions. A major source of HAP is a plant site that emits or has the potential to emit any single HAP at a rate of 10 tons or more per year or any combination of HAP at a rate of 25 tons or more per year.

§63.7282 What parts of my plant does this subpart cover?

- (a) This subpart applies to each new or existing affected source at your coke plant. The affected source is each coke oven battery.
- (b) This subpart covers emissions from pushing, soaking, quenching, and battery stacks from each affected source.
- (c) An affected source at your coke plant is existing if you commenced construction or reconstruction of the affected source before July 3, 2001.
- (d) An affected source at your coke plant is new if you commenced construction or reconstruction of the affected source on or after July 3, 2001. An affected source is reconstructed if it meets the definition of “reconstruction” in §63.2.

§63.7283 When do I have to comply with this subpart?

- (a) If you have an existing affected source, you must comply with each emission limitation, work practice standard, and operation and maintenance requirement in this subpart that applies to you no later than April 14, 2006.
- (d) You must meet the notification and schedule requirements in §63.7340. Several of these notifications must be submitted before the compliance date for your affected source.

[68 FR 18025, Apr. 14, 2003; 68 FR 19885, Apr. 22, 2003]

Emission Limitations and Work Practice Standards

§63.7290 What emission limitations must I meet for capture systems and control devices applied to pushing emissions?

(a) You must not discharge to the atmosphere emissions of particulate matter from a control device applied to pushing emissions from a new or existing coke oven battery that exceed the applicable limit in paragraphs (a)(2) through (3) of this section:

(2) 0.02 pound per ton (lb/ton) of coke if a moveable hood vented to a stationary control device is used to capture emissions;

(3) If a mobile scrubber car that does not capture emissions during travel is used:

0.01 lb/ton of coke for a control device applied to pushing emissions from a tall battery.

(b) You must meet each operating limit in paragraphs (b)(1) through (4) of this section that applies to you for a new or existing coke oven battery.

(1) For each venturi scrubber applied to pushing emissions, you must maintain the daily average pressure drop and scrubber water flow rate at or above the minimum levels established during the initial performance test.

(3) (i) For each capture system that uses an electric motor to drive the fan, you must maintain the daily average fan motor amperes at or above the minimum level established during the initial performance test; and

(ii) For each capture system that does not use a fan driven by an electric motor, you must maintain the daily average static pressure at the inlet to the control device at an equal or greater vacuum than the level established during the initial performance test or maintain the daily average fan revolutions per minute (RPM) at or above the minimum level established during the initial performance test.

[68 FR 18025, Apr. 14, 2003, as amended at 69 FR 60818, Oct. 13, 2004]

§63.7291 What work practice standards must I meet for fugitive pushing emissions if I have a by-product coke oven battery with vertical flues?

(a) You must meet each requirement in paragraphs (a)(1) through (7) of this section for each new or existing by-product coke oven battery with vertical flues.

(1) Observe and record the opacity of fugitive pushing emissions from each oven at least once every 90 days. If an oven cannot be observed during a 90-day period due to circumstances that were not reasonably avoidable, you must observe the opacity of the first push of that oven following the close of the 90-day period that is capable of being observed in accordance with the procedures in §63.7334(a), and you must document why the oven was not observed within a 90-day period. All opacity observations of fugitive pushing emissions for batteries with vertical flues must be made using the procedures in §63.7334(a).

(2) If two or more batteries are served by the same pushing equipment and total no more than 90 ovens, the batteries as a unit can be considered a single battery.

(3) Observe and record the opacity of fugitive pushing emissions for at least four consecutive pushes per battery each day. Exclude any push during which the observer's view is obstructed or obscured by interferences and observe the next available push to complete the set of four pushes. If necessary due to circumstances that were not reasonably avoidable, you may observe fewer than four consecutive pushes in a day; however, you must observe and record as many consecutive pushes as possible and document why four consecutive pushes could not be observed. You may observe and record one or more non-consecutive pushes in addition to any consecutive pushes observed in a day.

(4) Do not alter the pushing schedule to change the sequence of consecutive pushes to be observed on any day. Keep records indicating the legitimate operational reason for any change in your pushing schedule which results in a change in the sequence of consecutive pushes observed on any day.

(5) If the average opacity for any individual push exceeds 30 percent opacity for any short battery or 35 percent opacity for any tall battery, you must take corrective action and/or increase coking time for that oven. You must complete corrective action or increase coking time within either 10 calendar days or the number of days determined using Equation 1 of this section, whichever is greater:

$$X = 0.55 * Y(\text{Eq. 1})$$

Where:

X = Number of calendar days allowed to complete corrective action or increase coking time; and

Y = Current coking time for the oven, hours.

For the purpose of determining the number of calendar days allowed under Equation 1 of this section, day one is the first day following the day you observed an opacity in excess of 30 percent for any short battery or 35 percent for any tall battery. Any fraction produced by Equation 1 of this section must be counted as a whole day. Days during which the oven is removed from service are not included in the number of days allowed to complete corrective action.

(6)(i) You must demonstrate that the corrective action and/or increased coking time was successful. After a period of time no longer than the number of days allowed in paragraph (a)(5) of this section, observe and record the opacity of the first two pushes for the oven capable of being observed using the procedures in §63.7334(a). The corrective action and/or increased coking time was successful if the average opacity for each of the two pushes is 30 percent or less for a short battery or 35 percent or less for a tall battery. If the corrective action and/or increased coking time was successful, you may return the oven to the 90-day reading rotation described in paragraph (a)(1) of this section. If the average opacity of either push exceeds 30 percent for a short battery or 35 percent for a tall battery, the corrective action and/or increased coking time was unsuccessful, and you must complete additional corrective action and/or increase coking time for that oven within the number of days allowed in paragraph (a)(5) of this section.

(ii) After implementing any additional corrective action and/or increased coking time required under paragraph (a)(6)(i) or (a)(7)(ii) of this section, you must demonstrate that corrective action and/or increased coking time was successful. After a period of time no longer than the number of days allowed in paragraph (a)(5) of this section, you must observe and record the opacity of the first two pushes for the oven capable of being observed using the procedures in §63.7334(a). The corrective action and/or increased coking time was successful if the average opacity for each of the two pushes is 30 percent or less for a short battery or 35 percent or less for a tall battery. If the corrective action and/or increased coking time was successful, you may return the oven to the 90-day reading rotation described in paragraph (a)(1) of this section. If the average opacity of either push exceeds 30 percent for a short battery or 35 percent for a tall battery, the corrective action and/or increased coking time was unsuccessful, and you must follow the procedures in paragraph (a)(6)(iii) of this section.

(iii) If the corrective action and/or increased coking time was unsuccessful as described in paragraph (a)(6)(ii) of this section, you must repeat the procedures in paragraph (a)(6)(ii) of this section until the corrective action and/or increased coking time is successful. You must report to the permitting authority as a deviation each unsuccessful attempt at corrective action and/or increased coking time under paragraph (a)(6)(ii) of this section.

(7)(i) If at any time you place an oven on increased coking time as a result of fugitive pushing emissions that exceed 30 percent for a short battery or 35 percent for a tall battery, you must keep the oven on the increased coking time until the oven qualifies for decreased coking time using the procedures in paragraph (a)(7)(ii) or (a)(7)(iii) of this section.

(ii) To qualify for a decreased coking time for an oven placed on increased coking time in accordance with paragraph (a)(5) or (6) of this section, you must operate the oven on the decreased coking time. After no more than two coking cycles on the decreased coking time, you must observe and record the opacity of the first two pushes that are capable of being observed using the procedures in §63.7334(a). If the average opacity for each of the two pushes is 30 percent or less for a short battery or 35 percent or less for a tall battery, you may keep the oven on the decreased coking time and return the oven to the 90-day reading rotation described in paragraph (a)(1) of this section. If the average opacity of either push exceeds 30 percent for a short battery or 35 percent for a tall battery, the attempt to qualify for a decreased coking time was unsuccessful. You must then return the oven to the previously established increased coking time, or implement other corrective action(s) and/or increased coking time. If you implement other corrective action and/or a coking time that is shorter than the previously established increased coking time, you must follow the procedures in paragraph (a)(6)(ii) of this section to confirm that the corrective action(s) and/or increased coking time was successful.

(iii) If the attempt to qualify for decreased coking time was unsuccessful as described in paragraph (a)(7)(ii) of this section, you may again attempt to qualify for decreased coking time for the oven. To do this, you must operate the oven on the decreased coking time. After no more than two coking cycles on the decreased coking time, you must observe and record the opacity of the first two pushes that are capable of being observed using the procedures in §63.7334(a). If the average opacity for each of the two pushes is 30 percent or less for a short battery or 35 percent or less for a tall battery, you may keep the oven on the decreased coking time and return the oven to the 90-day reading rotation described in paragraph (a)(1) of this section. If the average opacity of either push exceeds 30 percent for a short battery or 35 percent for a tall battery, the attempt to qualify for a decreased coking time was unsuccessful. You must then return the oven to the previously established increased coking time, or implement other corrective action(s) and/or increased coking time. If you implement other corrective action and/or a coking time that is shorter than the previously established increased coking time, you must follow the procedures in paragraph (a)(6)(ii) of this section to confirm that the corrective action(s) and/or increased coking time was successful.

(iv) You must report to the permitting authority as a deviation the second and any subsequent consecutive unsuccessful attempts on the same oven to qualify for decreased coking time as described in paragraph (a)(7)(iii) of this section.

(b) As provided in §63.6(g), you may request to use an alternative to the work practice standards in paragraph (a) of this section.

§63.7294 What work practice standard must I meet for soaking?

(a) For each new and existing by-product coke oven battery, you must prepare and operate at all times according to a written work practice plan for soaking. Each plan must include measures and procedures to:

(1) Train topside workers to identify soaking emissions that require corrective actions.

(2) Damper the oven off the collecting main prior to opening the standpipe cap.

(3) Determine the cause of soaking emissions that do not ignite automatically, including emissions that result from raw coke oven gas leaking from the collecting main through the damper, and emissions that result from incomplete coking.

(4) If soaking emissions are caused by leaks from the collecting main, take corrective actions to eliminate the soaking emissions. Corrective actions may include, but are not limited to, reseating the damper, cleaning the flushing liquor piping, using aspiration, putting the oven back on the collecting main, or igniting the emissions.

(5) If soaking emissions are not caused by leaks from the collecting main, notify a designated responsible party. The responsible party must determine whether the soaking emissions are due to incomplete coking. If incomplete coking is the cause of the soaking emissions, you must put the oven back on the collecting main until it is completely coked or you must ignite the emissions.

(b) As provided in §63.6(g), you may request to use an alternative to the work practice standard in paragraph (a) of this section.

§63.7295 What requirements must I meet for quenching?

(a) You must meet the requirements in paragraphs (a)(1) and (2) of this section for each quench tower and backup quench station at a new or existing coke oven battery.

(1) For the quenching of hot coke, you must meet the requirements in paragraph (a)(1)(i) or (ii) of this section.

(i) The concentration of total dissolved solids (TDS) in the water used for quenching must not exceed 1,100 milligrams per liter (mg/L); or

(ii) The sum of the concentrations of benzene, benzo(a)pyrene, and naphthalene in the water used for quenching must not exceed the applicable site-specific limit approved by the permitting authority.

(2) You must use acceptable makeup water, as defined in §63.7352, as makeup water for quenching.

(b) For each quench tower at a new or existing coke oven battery and each backup quench station at a new coke oven battery, you must meet each of the requirements in paragraphs (b)(1) through (4) of this section.

(1) You must equip each quench tower with baffles such that no more than 5 percent of the cross sectional area of the tower may be uncovered or open to the sky.

(2) You must wash the baffles in each quench tower once each day that the tower is used to quench coke, except as specified in paragraphs (b)(2)(i) and (ii) of this section.

(i) You are not required to wash the baffles in a quench tower if the highest measured ambient temperature remains less than 30 degrees Fahrenheit throughout that day (24-hour period). If the measured ambient temperature rises to 30 degrees Fahrenheit or more during the day, you must resume daily washing according to the schedule in your operation and maintenance plan.

(ii) You must continuously record the ambient temperature on days that the baffles were not washed.

(3) You must inspect each quench tower monthly for damaged or missing baffles and blockage.

(4) You must initiate repair or replacement of damaged or missing baffles within 30 days and complete as soon as practicable.

(c) As provided in §63.6(g), you may request to use an alternative to the work practice standards in paragraph (b) of this section.

§63.7296 What emission limitations must I meet for battery stacks?

You must not discharge to the atmosphere any emissions from any battery stack at a new or existing by-product coke oven battery that exhibit an opacity greater than the applicable limit in paragraphs (a) and (b) of this section.

(a) Daily average of 15 percent opacity for a battery on a normal coking cycle.

(b) Daily average of 20 percent opacity for a battery on batterywide extended coking.

Operation and Maintenance Requirements

§63.7300 What are my operation and maintenance requirements?

(a) As required by §63.6(e)(1)(i), you must always operate and maintain your affected source, including air pollution control and monitoring equipment, in a manner consistent with good air pollution control practices for minimizing emissions at least to the levels required by this subpart.

(b) You must prepare and operate at all times according to a written operation and maintenance plan for the general operation and maintenance of new or existing by-product coke oven batteries. Each plan must address, at a minimum, the elements listed in paragraphs (b)(1) through (6) of this section.

(1) Frequency and method of recording underfiring gas parameters.

(2) Frequency and method of recording battery operating temperature, including measurement of individual flue and cross-wall temperatures.

(3) Procedures to prevent pushing an oven before it is fully coked.

(4) Procedures to prevent overcharging and undercharging of ovens, including measurement of coal moisture, coal bulk density, and procedures for determining volume of coal charged.

(5) Frequency and procedures for inspecting flues, burners, and nozzles.

(6) Schedule and procedures for the daily washing of baffles.

(c) You must prepare and operate at all times according to a written operation and maintenance plan for each capture system and control device applied to pushing emissions from a new or existing coke oven battery. Each plan must address at a minimum the elements in paragraphs (c)(1) through (3) of this section.

(1) Monthly inspections of the equipment that are important to the performance of the total capture system (*e.g.*, pressure sensors, dampers, and damper switches). This inspection must include observations of the physical appearance of the equipment (*e.g.*, presence of holes in ductwork or hoods, flow constrictions caused by dents or accumulated dust in ductwork, and fan erosion). In the event a defect or deficiency is found in the capture system (during a monthly inspection or between inspections), you must complete repairs within 30 days after the date that the defect or deficiency is discovered. If you determine that the repairs cannot be completed within 30 days, you must submit a written request for an extension of time to complete the repairs that must be received by the permitting authority not more than 20 days after the date that the defect or deficiency is discovered. The request must contain a description of the defect or deficiency, the steps needed and taken to correct the problem, the interim steps being taken to mitigate the emissions impact of the defect or deficiency, and a proposed schedule for completing the repairs. The request shall be deemed approved unless and until such time as the permitting authority notifies you that it objects to the request. The permitting authority may consider all relevant factors in deciding whether to approve or deny the request (including feasibility and safety). Each approved schedule must provide for completion of repairs as expeditiously as practicable, and the permitting authority may request modifications to the proposed schedule as part of the approval process.

(2) Preventative maintenance for each control device, including a preventative maintenance schedule that is consistent with the manufacturer's instructions for routine and long-term maintenance.

(3) Corrective action for all baghouses applied to pushing emissions. In the event a bag leak detection system alarm is triggered, you must initiate corrective action to determine the cause of the alarm within 1 hour of the alarm, initiate corrective action to correct the cause of the problem within 24 hours of the alarm, and complete the corrective action as soon as practicable. Actions may include, but are not limited to:

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

- (ii) Sealing off defective bags or filter media.
- (iii) Replacing defective bags or filter media or otherwise repairing the control device.
- (iv) Sealing off a defective baghouse compartment.
- (v) Cleaning the bag leak detection system probe, or otherwise repairing the bag leak detection system.
- (vi) Shutting down the process producing the particulate emissions.

[68 FR 18025, Apr. 14, 2003, as amended at 70 FR 44289, Aug. 2, 2005]

General Compliance Requirements

§63.7310 What are my general requirements for complying with this subpart?

- (a) You must be in compliance with the emission limitations, work practice standards, and operation and maintenance requirements in this subpart at all times, except during periods of startup, shutdown, and malfunction as defined in §63.2.
- (b) During the period between the compliance date specified for your affected source in §63.7283 and the date upon which continuous monitoring systems have been installed and certified and any applicable operating limits have been set, you must maintain a log detailing the operation and maintenance of the process and emissions control equipment.
- (c) You must develop a written startup, shutdown, and malfunction plan according to the provisions in §63.6(e)(3).

[68 FR 18025, Apr. 14, 2003, as amended at 71 FR 20467, Apr. 20, 2006]

Initial Compliance Requirements

§63.7320 By what date must I conduct performance tests or other initial compliance demonstrations?

- (a) As required in §63.7(a)(2), you must conduct a performance test to demonstrate compliance with each limit in §63.7290(a) for emissions of particulate matter from a control device applied to pushing emissions that applies to you within 180 calendar days after the compliance date that is specified in §63.7283.
- (b) You must conduct performance tests to demonstrate compliance with the TDS limit or constituent limit for quench water in §63.7295(a)(1) and each opacity limit in §63.7297(a) for a by-product coke oven battery stack by the compliance date that is specified in §63.7283.
- (c) For each work practice standard and operation and maintenance requirement that applies to you, you must demonstrate initial compliance within 30 calendar days after the compliance date that is specified in §63.7283.

§63.7321 When must I conduct subsequent performance tests?

For each control device subject to an emission limit for particulate matter in §63.7290(a), you must conduct subsequent performance tests no less frequently than twice (at mid-term and renewal) during each term of your title V operating permit.

§63.7322 What test methods and other procedures must I use to demonstrate initial compliance with the emission limits for particulate matter?

(a) You must conduct each performance test that applies to your affected source according to the requirements in paragraph (b) of this section.

(b) To determine compliance with a process-weighted mass rate of particulate matter (lb/ton of coke) from a control device applied to pushing emissions where a cokeside shed is not used, follow the test methods and procedures in paragraphs (b)(1) through (4) of this section.

(1) Determine the concentration of particulate matter according to the following test methods in appendix A to 40 CFR part 60.

(i) Method 1 to select sampling port locations and the number of traverse points. Sampling sites must be located at the outlet of the control device and prior to any releases to the atmosphere.

(ii) Method 2, 2F, or 2G to determine the volumetric flow rate of the stack gas.

(iii) Method 3, 3A, or 3B to determine the dry molecular weight of the stack gas.

(iv) Method 4 to determine the moisture content of the stack gas.

(v) Method 5 or 5D, as applicable, to determine the concentration of front half particulate matter in the stack gas.

(2) During each particulate matter test run, sample only during periods of actual pushing when the capture system fan and control device are engaged. Collect a minimum sample volume of 30 dry standard cubic feet of gas during each test run. Three valid test runs are needed to comprise a performance test. Each run must start at the beginning of a push and finish at the end of a push (*i.e.*, sample for an integral number of pushes).

(3) Determine the total combined weight in tons of coke pushed during the duration of each test run according to the procedures in your source test plan for calculating coke yield from the quantity of coal charged to an individual oven.

(4) Compute the process-weighted mass emissions (E_p) for each test run using Equation 1 of this section as follows:

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

Where:

E_p = Process weighted mass emissions of particulate matter, lb/ton;

C = Concentration of particulate matter, gr/dscf;

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

T = Total time during a run that a sample is withdrawn from the stack during pushing, hr;

P = Total amount of coke pushed during the test run, tons; and

K = Conversion factor, 7,000 gr/lb.

[68 FR 18025, Apr. 14, 2003, as amended at 70 FR 44289, Aug. 2, 2005]

§63.7323 What procedures must I use to establish operating limits?

(a) For a venturi scrubber applied to pushing emissions from a coke oven battery, you must establish site-specific operating limits for pressure drop and scrubber water flow rate according to the procedures in paragraphs (a)(1) and (2) of this section.

(1) Using the continuous parameter monitoring systems (CPMS) required in §63.7330(b), measure and record the pressure drop and scrubber water flow rate for each particulate matter test run during periods of pushing. A minimum of one pressure drop measurement and one scrubber water flow rate measurement must be obtained for each push.

(2) Compute and record the average pressure drop and scrubber water flow rate for each test run. Your operating limits are the lowest average pressure drop and scrubber water flow rate values recorded during any of the three runs that meet the applicable emission limit.

(c) For a capture system applied to pushing emissions from a coke oven battery, you must establish a site-specific operating limit according to the procedures in paragraphs (c)(1), (2), or (3) of this section.

(2) If you elect the operating limit in §63.7290(b)(3)(i) for fan motor amperes, measure and record the fan motor amperes during each push sampled for each particulate matter test run. Your operating limit is the lowest fan motor amperes recorded during any of the three runs that meet the emission limit.

(3) If you elect the operating limit in §63.7290(b)(3)(ii) for static pressure or fan RPM, measure and record the static pressure at the inlet of the control device or fan RPM during each push sampled for each particulate matter test run. Your operating limit for static pressure is the minimum vacuum recorded during any of the three runs that meets the emission limit. Your operating limit for fan RPM is the lowest fan RPM recorded during any of the three runs that meets the emission limit.

(e) You may change the operating limit for a venturi scrubber, capture system, or mobile control device that captures emissions during pushing if you meet the requirements in paragraphs (e)(1) through (3) of this section.

(1) Submit a written notification to the Administrator of your request to conduct a new performance test to revise the operating limit.

(2) Conduct a performance test to demonstrate that emissions of particulate matter from the control device do not exceed the applicable limit in §63.7290(a).

(3) Establish revised operating limits according to the applicable procedures in paragraphs (a) through (d) of this section.

[68 FR 18025, Apr. 14, 2003, as amended at 69 FR 60818, Oct. 13, 2004]

§63.7324 What procedures must I use to demonstrate initial compliance with the opacity limits?

(a) You must conduct each performance test that applies to your affected source according to the requirements in paragraph (b) of this section.

(b) To determine compliance with the daily average opacity limit for stacks of 15 percent for a by-product coke oven battery on a normal coking cycle or 20 percent for a by-product coke oven battery on batterywide extended coking, follow the test methods and procedures in paragraphs (b)(1) through (3) of this section.

(1) Using the continuous opacity monitoring system (COMS) required in §63.7330(e), measure and record the opacity of emissions from each battery stack for a 24-hour period.

(2) Reduce the monitoring data to hourly averages as specified in §63.8(g)(2).

(3) Compute and record the 24-hour (daily) average of the COMS data.

§63.7325 What test methods and other procedures must I use to demonstrate initial compliance with the TDS or constituent limits for quench water?

Need to know which option USS has elected to do (a), (b) or (c)?

(a) If you elect the TDS limit for quench water in §63.7295(a)(1)(i), you must conduct each performance test that applies to your affected source according to the conditions in paragraphs (a)(1) and (2) of this section.

(1) Take the quench water sample from a location that provides a representative sample of the quench water as applied to the coke (e.g., from the header that feeds water to the quench tower reservoirs). Conduct sampling under normal and representative operating conditions.

(2) Determine the TDS concentration of the sample using Method 160.1 in 40 CFR part 136.3 (see “residue—filterable”), except that you must dry the total filterable residue at 103 to 105 °C (degrees Centigrade) instead of 180 °C.

(b) If at any time you elect to meet the alternative requirements for quench water in §63.7295(a)(1)(ii), you must establish a site-specific constituent limit according to the procedures in paragraphs (b)(1) through (4) of this section.

(1) Take a minimum of nine quench water samples from a location that provides a representative sample of the quench water as applied to the coke (e.g., from the header that feeds water to the quench tower reservoirs). Conduct sampling under normal and representative operating conditions.

(2) For each sample, determine the TDS concentration according to the requirements in paragraph (a)(2) of this section and the concentration of benzene, benzo(a)pyrene, and naphthalene using the applicable methods in 40 CFR part 136 or an approved alternative method.

(3) Determine and record the highest sum of the concentrations of benzene, benzo(a)pyrene, and naphthalene in any sample that has a TDS concentration less than or equal to the TDS limit of 1,100 mg/L. This concentration is the site-specific constituent limit.

(4) Submit the site-specific limit, sampling results, and all supporting data and calculations to your permitting authority for review and approval.

§63.7326 How do I demonstrate initial compliance with the emission limitations that apply to me?

(a) For each coke oven battery subject to the emission limit for particulate matter from a control device applied to pushing emissions, you have demonstrated initial compliance if you meet the requirements in paragraphs (a)(1) through (4) of this section that apply to you.

(1) The process-weighted mass rate of particulate matter (lb/ton of coke), measured in accordance with the performance test procedures in §63.7322(b)(1) through (4), did not exceed:

(i) 0.02 lb/ton of coke if a moveable hood vented to a stationary control device is used to capture emissions;

(ii) If a mobile scrubber car that does not capture emissions during travel is used, 0.01 lb/ton of coke from a control device applied to pushing emissions from a tall coke oven battery;

(2) For each venturi scrubber applied to pushing emissions, you have established appropriate site-specific operating limits and have a record of the pressure drop and scrubber water flow rate measured during the performance test in accordance with §63.7323(a).

(4) For each capture system applied to pushing emissions, you have established an appropriate site-specific operating limit, and:

(ii) If you elect the operating limit in §63.7290(b)(3)(i) for fan motor amperes, you have a record of the fan motor amperes during the performance test in accordance with §63.7323(c)(2); or

(iii) If you elect the operating limit in §63.7290(b)(3)(ii) for static pressure or fan RPM, you have a record of the static pressure at the inlet of the control device or fan RPM measured during the performance test in accordance with §63.7323(c)(3).

(b) For each new or existing by-product coke oven battery subject to the opacity limit for stacks in §63.7296(a), you have demonstrated initial compliance if the daily average opacity, as measured according to the performance test procedures in §63.7324(b), is no more than 15 percent for a battery on a normal coking cycle or 20 percent for a battery on batterywide extended coking.

(c) For each new or existing by-product coke oven battery subject to the TDS limit or constituent limits for quench water in §63.7295(a)(1),

(1) You have demonstrated initial compliance with the TDS limit in §63.7295(a)(1)(i) if the TDS concentration, as measured according to the performance test procedures in §63.7325(a), does not exceed 1,100 mg/L.

(2) You have demonstrated initial compliance with the constituent limit in §63.7295(a)(1)(ii) if:

(i) You have established a site-specific constituent limit according to the procedures in §63.7325(b); and

(ii) The sum of the constituent concentrations, as measured according to the performance test procedures in §63.7325(c), is less than or equal to the site-specific limit.

(d) For each by-product coke oven battery stack subject to an opacity limit in §63.7296(a) and each by-product coke oven battery subject to the requirements for quench water in §63.7295(a)(1), you must submit a notification of compliance status containing the results of the COMS performance test for battery stacks and the quench water performance test (TDS or constituent limit) according to §63.7340(e)(1). For each particulate matter emission limitation that applies to you, you must submit a notification of compliance status containing the results of the performance test according to §63.7340(e)(2).

[68 FR 18025, Apr. 14, 2003, as amended at 69 FR 60819, Oct. 13, 2004]

§63.7327 How do I demonstrate initial compliance with the work practice standards that apply to me?

(a) For each by-product coke oven battery with vertical flues subject to the work practice standards for fugitive pushing emissions in §63.7291(a), you have demonstrated initial compliance if you certify in your notification of compliance status that you will meet each of the work practice requirements beginning no later than the compliance date that is specified in §63.7283.

(d) For each by-product coke oven battery subject to the work practice standards for soaking in §63.7294, you have demonstrated initial compliance if you have met the requirements of paragraphs (d)(1) and (2) of this section:

(1) You have prepared and submitted a written work practice plan in accordance with §63.7294(a); and

(2) You certify in your notification of compliance status that you will meet each of the work practice requirements beginning no later than the compliance date that is specified in §63.7283.

(e) For each coke oven battery, you have demonstrated initial compliance with the work practice standards for quenching in §63.7295(b) if you certify in your notification of compliance status that you have met the requirements of paragraphs (e)(1) and (2) of this section:

- (1) You have installed the required equipment in each quench tower; and
 - (2) You will meet each of the work practice requirements beginning no later than the compliance date that is specified in §63.7283.
- (f) For each work practice standard that applies to you, you must submit a notification of compliance status according to the requirements in §63.7340(e)(1).

§63.7328 How do I demonstrate initial compliance with the operation and maintenance requirements that apply to me?

You have demonstrated initial compliance if you certify in your notification of compliance status that you have met the requirements of paragraphs (a) through (d) of this section:

- (a) You have prepared the operation and maintenance plans according to the requirements in §63.7300(b) and (c);
- (b) You will operate each by-product coke oven battery and each capture system and control device applied to pushing emissions from a coke oven battery according to the procedures in the plans beginning no later than the compliance date that is specified in §63.7283;
- (c) You have prepared a site-specific monitoring plan according to the requirements in §63.7331(b); and
- (d) You submit a notification of compliance status according to the requirements in §63.7340(e).

Continuous Compliance Requirements

§63.7330 What are my monitoring requirements?

(a) For each baghouse applied to pushing emissions from a coke oven battery, you must at all times monitor the relative change in particulate matter loadings using a bag leak detection system according to the requirements in §63.7331(a) and conduct inspections at their specified frequency according to the requirements in paragraphs (a)(1) through (8) of this section.

- (1) Monitor the pressure drop across each baghouse cell each day to ensure pressure drop is within the normal operating range identified in the manual;
- (2) Confirm that dust is being removed from hoppers through weekly visual inspections or equivalent means of ensuring the proper functioning of removal mechanisms;
- (3) Check the compressed air supply for pulse-jet baghouses each day;
- (4) Monitor cleaning cycles to ensure proper operation using an appropriate methodology;
- (5) Check bag cleaning mechanisms for proper functioning through monthly visual inspection or equivalent means;
- (6) Make monthly visual checks of bag tension on reverse air and shaker-type baghouses to ensure that bags are not kinked (kneed or bent) or laying on their sides. You do not have to make this check for shaker-type baghouses using self-tensioning (spring-loaded) devices;

(7) Confirm the physical integrity of the baghouse through quarterly visual inspections of the baghouse interior for air leaks; and

(8) Inspect fans for wear, material buildup, and corrosion through quarterly visual inspections, vibration detectors, or equivalent means.

(b) For each venturi scrubber applied to pushing emissions, you must at all times monitor the pressure drop and water flow rate using a CPMS according to the requirements in §63.7331(e).

(d) For each capture system applied to pushing emissions, you must at all times monitor the volumetric flow rate according to the requirements in §63.7331(g), the fan motor amperes according to the requirements in §63.7331(h), or the static pressure or the fan RPM according to the requirements in §63.7331(i).

(e) For each by-product coke oven battery, you must monitor at all times the opacity of emissions exiting each stack using a COMS according to the requirements in §63.7331(j).

[68 FR 18025, Apr. 14, 2003, as amended at 69 FR 60819, Oct. 13, 2004]

§63.7331 What are the installation, operation, and maintenance requirements for my monitors?

(a) For each baghouse applied to pushing emissions, you must install, operate, and maintain each bag leak detection system according to the requirements in paragraphs (a)(1) through (7) of this section.

(1) The system must be certified by the manufacturer to be capable of detecting emissions of particulate matter at concentrations of 10 milligrams per actual cubic meter (0.0044 grains per actual cubic foot) or less;

(2) The system must provide output of relative changes in particulate matter loadings;

(3) The system must be equipped with an alarm that will sound when an increase in relative particulate loadings is detected over a preset level. The alarm must be located such that it can be heard by the appropriate plant personnel;

(4) Each system that works based on the triboelectric effect must be installed, operated, and maintained in a manner consistent with the guidance document, "Fabric Filter Bag Leak Detection Guidance" (EPA-454/R-98-015, September 1997). You may install, operate, and maintain other types of bag leak detection systems in a manner consistent with the manufacturer's written specifications and recommendations;

(5) To make the initial adjustment of the system, establish the baseline output by adjusting the sensitivity (range) and the averaging period of the device. Then, establish the alarm set points and the alarm delay time;

(6) Following the initial adjustment, do not adjust the sensitivity or range, averaging period, alarm set points, or alarm delay time, except as detailed in your operation and maintenance plan. Do not increase the sensitivity by more than 100 percent or decrease the sensitivity by more than 50 percent over a 365-day period unless a responsible official certifies, in writing, that the baghouse has been inspected and found to be in good operating condition; and

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

(e) For each venturi scrubber applied to pushing emissions, you must install, operate, and maintain CPMS to measure and record the pressure drop across the scrubber and scrubber water flow rate during each push according to the requirements in paragraphs (b) through (d) of this section except as specified in paragraphs (e)(1) through (3) of this section.

(1) Each CPMS must complete a measurement at least once per push;

- (2) Each CPMS must produce valid data for all pushes; and
- (3) Each CPMS must determine and record the daily (24-hour) average of all recorded readings.
- (h) If you elect the operating limit in §63.7290(b)(3)(i) for a capture system applied to pushing emissions, you must install, operate, and maintain a device to measure the fan motor amperes.
- (i) If you elect the operating limit in §63.7290(b)(3)(ii) for a capture system applied to pushing emissions, you must install, operate and maintain a device to measure static pressure at the inlet of the control device or the fan RPM.
- (j) For each by-product coke oven battery, you must install, operate, and maintain a COMS to measure and record the opacity of emissions exiting each stack according to the requirements in paragraphs (j)(1) through (5) of this section.
- (1) You must install, operate, and maintain each COMS according to the requirements in §63.8(e) and Performance Specification 1 in 40 CFR part 60, appendix B. Identify periods the COMS is out-of-control, including any periods that the COMS fails to pass a daily calibration drift assessment, quarterly performance audit, or annual zero alignment audit.
- (2) You must conduct a performance evaluation of each COMS according to the requirements in §63.8 and Performance Specification 1 in appendix B to 40 CFR part 60;
- (3) You must develop and implement a quality control program for operating and maintaining each COMS according to the requirements in §63.8(d). At minimum, the quality control program must include a daily calibration drift assessment, quarterly performance audit, and an annual zero alignment audit of each COMS;
- (4) Each COMS must complete a minimum of one cycle of sampling and analyzing for each successive 10-second period and one cycle of data recording for each successive 6-minute period. You must reduce the COMS data as specified in §63.8(g)(2).
- (5) You must determine and record the hourly and daily (24-hour) average opacity according to the procedures in §63.7324(b) using all the 6-minute averages collected for periods during which the COMS is not out-of-control.

[68 FR 18025, Apr. 14, 2003, as amended at 69 FR 60819, Oct. 13, 2004]

§63.7332 How do I monitor and collect data to demonstrate continuous compliance?

- (a) Except for monitor malfunctions, associated repairs, and required quality assurance or control activities (including as applicable, calibration checks and required zero and span adjustments), you must monitor continuously (or collect data at all required intervals) at all times the affected source is operating.
- (b) You may not use data recorded during monitoring malfunctions, associated repairs, and required quality assurance or control activities in data averages and calculations used to report emission or operating levels, or in fulfilling a minimum data availability requirement, if applicable. You must use all the data collected during all other periods in assessing compliance. A monitoring malfunction is any sudden, infrequent, not reasonably preventable failure of the monitor to provide valid data. Monitoring failures that are caused in part by poor maintenance or careless operation are not malfunctions.

§63.7333 How do I demonstrate continuous compliance with the emission limitations that apply to me?

- (a) For each control device applied to pushing emissions and subject to the emission limit in §63.7290(a), you must demonstrate continuous compliance by meeting the requirements in paragraphs (a)(1) and (2) of this section:
- (1) Maintaining emissions of particulate matter at or below the applicable limits in paragraphs §63.7290(a)(1) through (4); and

(2) Conducting subsequent performance tests to demonstrate continuous compliance no less frequently than twice during each term of your title V operating permit (at mid-term and renewal).

(b) For each venturi scrubber applied to pushing emissions and subject to the operating limits in §63.7290(b)(1), you must demonstrate continuous compliance by meeting the requirements in paragraphs (b)(1) through (3) of this section.

(1) Maintaining the daily average pressure drop and scrubber water flow rate at levels no lower than those established during the initial or subsequent performance test.

(2) Operating and maintaining each CPMS according to §63.7331(b) and recording all information needed to document conformance with these requirements.

(3) Collecting and reducing monitoring data for pressure drop and scrubber water flow rate according to §63.7331(e)(1) through (3).

(d) For each capture system applied to pushing emissions and subject to the operating limit in §63.7290(b)(3), you must demonstrate continuous compliance by meeting the requirements in paragraph (d)(1), (2), or (3) of this section:

(2) If you elect the operating limit for fan motor amperes in §63.7290(b)(3)(i):

(i) Maintaining the daily average fan motor amperages at or above the minimum level established during the initial or subsequent performance test; and

(ii) Checking the fan motor amperage at least every 8 hours to verify the daily average is at or above the minimum level established during the initial or subsequent performance test and recording the results of each check.

(3) If you elect the operating limit for static pressure or fan RPM in §63.7290(b)(3)(ii):

(i) Maintaining the daily average static pressure at the inlet to the control device at an equal or greater vacuum than established during the initial or subsequent performance test or the daily average fan RPM at or above the minimum level established during the initial or subsequent performance test; and

(ii) Checking the static pressure or fan RPM at least every 8 hours to verify the daily average static pressure at the inlet to the control device is at an equal or greater vacuum than established during the initial or subsequent performance test or the daily average fan RPM is at or above the minimum level established during the initial or subsequent performance test and recording the results of each check.

(e) Beginning on the first day compliance is required under §63.7283, you must demonstrate continuous compliance for each by-product coke oven battery subject to the opacity limit for stacks in §63.7296(a) by meeting the requirements in paragraphs (e)(1) and (2) of this section:

(1) Maintaining the daily average opacity at or below 15 percent for a battery on a normal coking cycle or 20 percent for a battery on batterywide extended coking; and

(2) Operating and maintaining a COMS and collecting and reducing the COMS data according to §63.7331(j).

(f) Beginning on the first day compliance is required under §63.7283, you must demonstrate continuous compliance with the TDS limit for quenching in §63.7295(a)(1)(i) by meeting the requirements in paragraphs (f)(1) and (2) of this section:

(1) Maintaining the TDS content of the water used to quench hot coke at 1,100 mg/L or less; and

(2) Determining the TDS content of the quench water at least weekly according to the requirements in §63.7325(a) and recording the sample results.

(g) Beginning on the first day compliance is required under §63.7283, you must demonstrate continuous compliance with the constituent limit for quenching in §63.7295(a)(1)(ii) by meeting the requirements in paragraphs (g)(1) and (2) of this section:

(1) Maintaining the sum of the concentrations of benzene, benzo(a)pyrene, and naphthalene in the water used to quench hot coke at levels less than or equal to the site-specific limit approved by the permitting authority; and

(2) Determining the sum of the constituent concentrations at least monthly according to the requirements in §63.7325(c) and recording the sample results.

[68 FR 18025, Apr. 14, 2003, as amended at 69 FR 60819, Oct. 13, 2004]

§63.7334 How do I demonstrate continuous compliance with the work practice standards that apply to me?

(a) For each by-product coke oven battery with vertical flues subject to the work practice standards for fugitive pushing emissions in §63.7291(a), you must demonstrate continuous compliance according to the requirements of paragraphs (a)(1) through (8) of this section:

(1) Observe and record the opacity of fugitive emissions for four consecutive pushes per operating day, except you may make fewer or non-consecutive observations as permitted by §63.7291(a)(3). Maintain records of the pushing schedule for each oven and records indicating the legitimate operational reason for any change in the pushing schedule according to §63.7291(a)(4).

(2) Observe and record the opacity of fugitive emissions from each oven in a battery at least once every 90 days. If an oven cannot be observed during a 90-day period, observe and record the opacity of the first push of that oven following the close of the 90-day period that can be read in accordance with the procedures in paragraphs (a)(1) through (8) of this section.

(3) Make all observations and calculations for opacity observations of fugitive pushing emissions in accordance with Method 9 in appendix A to 40 CFR part 60 using a Method 9 certified observer unless you have an approved alternative procedure under paragraph (a)(7) of this section.

(4) Record pushing opacity observations at 15-second intervals as required in section 2.4 of Method 9 (appendix A to 40 CFR part 60). The requirement in section 2.4 of Method 9 for a minimum of 24 observations does not apply, and the data reduction requirements in section 2.5 of Method 9 do not apply. The requirement in §63.6(h)(5)(ii)(B) for obtaining at least 3 hours of observations (thirty 6-minute averages) to demonstrate initial compliance does not apply.

(5) If fewer than six but at least four 15-second observations can be made, use the average of the total number of observations to calculate average opacity for the push. Missing one or more observations during the push (e.g., as the quench car passes behind a building) does not invalidate the observations before or after the interference for that push. However, a minimum of four 15-second readings must be made for a valid observation.

(6) Begin observations for a push at the first detectable movement of the coke mass. End observations of a push when the quench car enters the quench tower.

(i) For a battery without a cokeside shed, observe fugitive pushing emissions from a position at least 10 meters from the quench car that provides an unobstructed view and avoids interferences from the topside of the battery. This may require the observer to be positioned at an angle to the quench car rather than perpendicular to it. Typical interferences to avoid include emissions from open standpipes and charging. Observe the opacity of emissions above the battery top with the sky as the background where possible. Record the oven number of any push not observed because of obstructions or interferences.

(iii) You may reposition after the push to observe emissions during travel if necessary.

(7) If it is infeasible to implement the procedures in paragraphs (a)(1) through (6) of this section for an oven due to physical obstructions, nighttime pushes, or other reasons, you may apply to your permitting authority for permission to use an alternative procedure. The application must provide a detailed explanation of why it is infeasible to use the procedures in paragraphs (a)(1) through (6) of this section, identify the oven and battery numbers, and describe the alternative procedure. An alternative procedure must identify whether the coke in that oven is not completely coked, either before, during, or after an oven is pushed.

(8) For each oven observed that exceeds an opacity of 30 percent for any short battery or 35 percent for any tall battery, you must take corrective action and/or increase the coking time in accordance with §63.7291(a). Maintain records documenting conformance with the requirements in §63.7291(a).

(d) For each by-product coke oven battery subject to the work practice standard for soaking in §63.7294(a), you must demonstrate continuous compliance by maintaining records that document conformance with requirements in §63.7294(a)(1) through (5).

(e) For each coke oven battery subject to the work practice standard for quenching in §63.7295(b), you must demonstrate continuous compliance according to the requirements of paragraphs (e)(1) through (3) of this section:

(1) Maintaining baffles in each quench tower such that no more than 5 percent of the cross-sectional area of the tower is uncovered or open to the sky as required in §63.7295(b)(1);

(2) Maintaining records that document conformance with the washing, inspection, and repair requirements in §63.7295(b)(2), including records of the ambient temperature on any day that the baffles were not washed; and

(3) Maintaining records of the source of makeup water to document conformance with the requirement for acceptable makeup water in §63.7295(a)(2).

§63.7335 How do I demonstrate continuous compliance with the operation and maintenance requirements that apply to me?

(a) For each by-product coke oven battery, you must demonstrate continuous compliance with the operation and maintenance requirements in §63.7300(b) by adhering at all times to the plan requirements and recording all information needed to document conformance.

(b) For each coke oven battery with a capture system or control device applied to pushing emissions, you must demonstrate continuous compliance with the operation and maintenance requirements in §63.7300(c) by meeting the requirements of paragraphs (b)(1) through (3) of this section:

(1) Making monthly inspections of capture systems according to §63.7300(c)(1) and recording all information needed to document conformance with these requirements;

(2) Performing preventative maintenance for each control device according to §63.7300(c)(2) and recording all information needed to document conformance with these requirements; and

(3) Initiating and completing corrective action for a bag leak detection system alarm according to §63.7300(c)(3) and recording all information needed to document conformance with these requirements. This includes records of the times the bag leak detection system alarm sounds, and for each valid alarm, the time you initiated corrective action, the corrective action(s) taken, and the date on which corrective action is completed.

(c) To demonstrate continuous compliance with the operation and maintenance requirements for a baghouse applied to pushing emissions from a coke oven battery in §63.7331(a), you must inspect and maintain each baghouse according to the requirements in §63.7331(a)(1) through (8) and record all information needed to document conformance with these requirements. If you increase or decrease the sensitivity of the bag leak detection system beyond the limits specified in §63.7331(a)(6), you must include a copy of the required written certification by a responsible official in the next semiannual compliance report.

(d) You must maintain a current copy of the operation and maintenance plans required in §63.7300(b) and (c) onsite and available for inspection upon request. You must keep the plans for the life of the affected source or until the affected source is no longer subject to the requirements of this subpart.

§63.7336 What other requirements must I meet to demonstrate continuous compliance?

(a) *Deviations.* You must report each instance in which you did not meet each emission limitation in this subpart that applies to you. This includes periods of startup, shutdown, and malfunction. You must also report each instance in which you did not meet each work practice standard or operation and maintenance requirement in this subpart that applies to you. These instances are deviations from the emission limitations (including operating limits), work practice standards, and operation and maintenance requirements in this subpart. These deviations must be reported according to the requirements in §63.7341.

(b) *Startup, shutdowns, and malfunctions.* (1) Consistent with §§63.6(e) and 63.7(e)(1), deviations that occur during a period of startup, shutdown, or malfunction are not violations if you demonstrate to the Administrator's satisfaction that you were operating in accordance with §63.6(e)(1).

(2) The Administrator will determine whether deviations that occur during a period of startup, shutdown, or malfunction are violations, according to the provisions in §63.6(e).

[68 FR 18025, Apr. 14, 2003, as amended at 71 FR 20467, Apr. 20, 2006]

Notification, Reports, and Records

§63.7340 What notifications must I submit and when?

(a) You must submit all of the notifications in §§63.6(h)(4) and (5), 63.7(b) and (c), 63.8(e) and (f)(4), and 63.9(b) through (h) that apply to you by the specified dates.

(b) As specified in §63.9(b)(2), if you startup your affected source before April 14, 2003, you must submit your initial notification no later than August 12, 2003.

(c) As specified in §63.9(b)(3), if you startup your new affected source on or after April 14, 2003, you must submit your initial notification no later than 120 calendar days after you become subject to this subpart.

(d) If you are required to conduct a performance test, you must submit a notification of intent to conduct a performance test at least 60 calendar days before the performance test is scheduled to begin as required in §63.7(b)(1).

(e) If you are required to conduct a performance test, opacity observation, or other initial compliance demonstration, you must submit a notification of compliance status according to §63.9(h)(2)(ii).

(1) For each initial compliance demonstration that does not include a performance test, you must submit the notification of compliance status before the close of business on the 30th calendar day following the completion of the initial compliance demonstration.

(2) For each initial compliance demonstration that does include a performance test, you must submit the notification of compliance status, including the performance test results, before the close of business on the 60th calendar day following completion of the performance test according to §63.10(d)(2).

§63.7341 What reports must I submit and when?

(a) *Compliance report due dates.* Unless the Administrator has approved a different schedule, you must submit quarterly compliance reports for battery stacks and semiannual compliance reports for all other affected sources to your permitting authority according to the requirements in paragraphs (a)(1) through (4) of this section.

(1) The first quarterly compliance report for battery stacks must cover the period beginning on the compliance date that is specified for your affected source in §63.7283 and ending on the last date of the third calendar month. Each subsequent compliance report must cover the next calendar quarter.

(2) The first semiannual compliance report must cover the period beginning on the compliance date that is specified for your affected source in §63.7283 and ending on June 30 or December 31, whichever date comes first after the compliance date that is specified for your affected source. Each subsequent compliance report must cover the semiannual reporting period from January 1 through June 30 or the semiannual reporting period from July 1 through December 31.

(3) All quarterly compliance reports for battery stacks must be postmarked or delivered no later than one calendar month following the end of the quarterly reporting period. All semiannual compliance reports must be postmarked or delivered no later than July 31 or January 31, whichever date is the first date following the end of the semiannual reporting period.

(4) For each affected source that is subject to permitting regulations pursuant to 40 CFR part 70 or 40 CFR part 71, and if the permitting authority has established dates for submitting semiannual reports pursuant to 40 CFR 70.6(a)(3)(iii)(A) or 40 CFR 71.6(a)(3)(iii)(A), you may submit the first and subsequent compliance reports according to the dates the permitting authority has established instead of according to the dates in paragraphs (a)(1) through (3) of this section.

(b) *Quarterly compliance report contents.* Each quarterly report must provide information on compliance with the emission limitations for battery stacks in §63.7296. The reports must include the information in paragraphs (c)(1) through (3), and as applicable, paragraphs (c)(4) through (8) of this section.

(c) *Semiannual compliance report contents.* Each compliance report must provide information on compliance with the emission limitations, work practice standards, and operation and maintenance requirements for all affected sources except battery stacks. The reports must include the information in paragraphs (c)(1) through (3) of this section, and as applicable, paragraphs (c)(4) through (8) of this section.

(1) Company name and address.

(2) Statement by a responsible official, with the official's name, title, and signature, certifying the truth, accuracy, and completeness of the content of the report.

(3) Date of report and beginning and ending dates of the reporting period.

(4) If you had a startup, shutdown, or malfunction during the reporting period and you took actions consistent with your startup, shutdown, and malfunction plan, the compliance report must include the information in §63.10(d)(5)(i).

(5) If there were no deviations from the continuous compliance requirements in §63.7333(e) for battery stacks, a statement that there were no deviations from the emission limitations during the reporting period. If there were no deviations from the continuous compliance requirements in §§63.7333 through 63.7335 that apply to you (for all affected sources other than battery stacks), a statement that there were no deviations from the emission limitations, work practice standards, or operation and maintenance requirements during the reporting period.

(6) If there were no periods during which a continuous monitoring system (including COMS, continuous emission monitoring system (CEMS), or CPMS) was out-of-control as specified in §63.8(c)(7), a statement that there were no periods during which a continuous monitoring system was out-of-control during the reporting period.

(7) For each deviation from an emission limitation in this subpart (including quench water limits) and for each deviation from the requirements for work practice standards in this subpart that occurs at an affected source where you are not using a continuous monitoring system (including a COMS, CEMS, or CPMS) to comply with the emission limitations in this subpart, the compliance report must contain the information in paragraphs (c)(4) and (7)(i) and (ii) of this section. This includes periods of startup, shutdown, and malfunction.

- (i) The total operating time of each affected source during the reporting period.
 - (ii) Information on the number, duration, and cause of deviations (including unknown cause, if applicable) as applicable and the corrective action taken.
- (8) For each deviation from an emission limitation occurring at an affected source where you are using a continuous monitoring system (including COMS, CEMS, or CPMS) to comply with the emission limitation in this subpart, you must include the information in paragraphs (c)(4) and (8)(i) through (xii) of this section. This includes periods of startup, shutdown, and malfunction.
- (i) The date and time that each malfunction started and stopped.
 - (ii) The date and time that each continuous monitoring system (including COMS, CEMS, or CPMS) was inoperative, except for zero (low-level) and high-level checks.
 - (iii) The date, time, and duration that each continuous monitoring system (including COMS, CEMS, or CPMS) was out-of-control, including the information in §63.8(c)(8).
 - (iv) The date and time that each deviation started and stopped, and whether each deviation occurred during a period of startup, shutdown, or malfunction or during another period.
 - (v) A summary of the total duration of the deviation during the reporting period and the total duration as a percent of the total source operating time during that reporting period.
 - (vi) A breakdown of the total duration of the deviations during the reporting period into those that are due to startup, shutdown, control equipment problems, process problems, other known causes, and other unknown causes.
 - (vii) A summary of the total duration of continuous monitoring system downtime during the reporting period and the total duration of continuous monitoring system downtime as a percent of the total source operating time during the reporting period.
 - (viii) An identification of each HAP that was monitored at the affected source.
 - (ix) A brief description of the process units.
 - (x) A brief description of the continuous monitoring system.
 - (xi) The date of the latest continuous monitoring system certification or audit.
 - (xii) A description of any changes in continuous monitoring systems, processes, or controls since the last reporting period.
- (d) *Immediate startup, shutdown, and malfunction report.* If you had a startup, shutdown, or malfunction during the semiannual reporting period that was not consistent with your startup, shutdown, and malfunction plan, you must submit an immediate startup, shutdown, and malfunction report according to the requirements in §63.10(d)(5)(ii).
- (e) *Part 70 monitoring report.* If you have obtained a title V operating permit for an affected source pursuant to 40 CFR part 70 or 40 CFR part 71, you must report all deviations as defined in this subpart in the semiannual monitoring report required by 40 CFR 70.6(a)(3)(iii)(A) or 40 CFR 71.6(a)(3)(iii)(A). If you submit a compliance report for an affected source along with, or as part of, the semiannual monitoring report required by 40 CFR 70.6(a)(3)(iii)(A) or 40 CFR 71.6(a)(3)(iii)(A), and the compliance report includes all the required information concerning deviations from any emission limitation or work practice standard in this subpart, submission of the compliance report satisfies any obligation to report the same deviations in the semiannual monitoring report. However, submission of a compliance report does not otherwise affect any obligation you may have to report deviations from permit requirements to your permitting authority.

§63.7342 What records must I keep?

(a) You must keep the records specified in paragraphs (a)(1) through (3) of this section.

(1) A copy of each notification and report that you submitted to comply with this subpart, including all documentation supporting any initial notification or notification of compliance status that you submitted, according to the requirements in §63.10(b)(2)(xiv).

(2) The records in §63.6(e)(3)(iii) through (v) related to startup, shutdown, and malfunction.

(3) Records of performance tests, performance evaluations, and opacity observations as required in §63.10(b)(2)(viii).

(b) For each COMS or CEMS, you must keep the records specified in paragraphs (b)(1) through (4) of this section.

(1) Records described in §63.10(b)(2)(vi) through (xi).

(2) Monitoring data for COMS during a performance evaluation as required in §63.6(h)(7)(i) and (ii).

(3) Previous (that is, superceded) versions of the performance evaluation plan as required in §63.8(d)(3).

(4) Records of the date and time that each deviation started and stopped, and whether the deviation occurred during a period of startup, shutdown, or malfunction or during another period.

(c) You must keep the records in §63.6(h)(6) for visual observations.

(d) You must keep the records required in §§63.7333 through 63.7335 to show continuous compliance with each emission limitation, work practice standard, and operation and maintenance requirement that applies to you.

§63.7343 In what form and how long must I keep my records?

(a) You must keep your records in a form suitable and readily available for expeditious review, according to §63.10(b)(1).

(b) As specified in §63.10(b)(1), you must keep each record for 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record.

(c) You must keep each record on site for at least 2 years after the date of each occurrence, measurement, maintenance, corrective action, report, or record, according to §63.10(b)(1). You can keep the records offsite for the remaining 3 years.

Other Requirements and Information

§63.7350 What parts of the General Provisions apply to me?

Table 1 to this subpart shows which parts of the General Provisions in §§63.1 through 63.15 apply to you.

§63.7351 Who implements and enforces this subpart?

(a) This subpart can be implemented and enforced by us, the United States Environmental Protection Agency (U.S. EPA), or a delegated authority such as your State, local, or tribal agency. If the U.S. EPA Administrator has delegated authority to your State, local, or tribal agency, then that agency has the authority to implement and enforce this subpart. You should contact your U.S. EPA Regional Office to find out if this subpart is delegated to your State, local, or tribal agency.

(b) In delegating implementation and enforcement authority of this subpart to a State, local, or tribal agency under subpart E of this part, the authorities contained in paragraph (c) of this section are retained by the Administrator of the U.S. EPA and are not transferred to the State, local, or tribal agency.

(c) The authorities in paragraphs (c)(1) through (6) of this section will not be delegated to State, local, or tribal agencies.

(1) Approval of alternatives to work practice standards for fugitive pushing emissions in §63.7291(a) for a by-product coke oven battery with vertical flues, soaking for a by-product coke oven battery in §63.7294(a), and quenching for a coke oven battery in §63.7295(b) under §63.6(g).

(2) Approval of alternative opacity emission limitations for a by-product coke oven battery under §63.6(h)(9).

(3) Approval of major alternatives to test methods under §63.7(e)(2)(ii) and (f) and as defined in §63.90, except for alternative procedures in §63.7334(a)(7).

(4) Approval of major alternatives to monitoring under §63.8(f) and as defined in §63.90.

(5) Approval of major alternatives to recordkeeping and reporting under §63.10(f) and as defined in §63.90.

§63.7352 t definitions apply to this subpart?

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

Acceptable makeup water means surface water from a river, lake, or stream; water meeting drinking water standards; storm water runoff and production area clean up water except for water from the by-product recovery plant area; process wastewater treated to meet effluent limitations guidelines in 40 CFR part 420; water from any of these sources that has been used only for non-contact cooling or in water seals; or water from scrubbers used to control pushing emissions.

Backup quench station means a quenching device that is used for less than 5 percent of the quenches from any single coke oven battery in the 12-month period from July 1 to June 30.

Baffles means an apparatus comprised of obstructions for checking or deflecting the flow of gases. Baffles are installed in a quench tower to remove droplets of water and particles from the rising vapors by providing a point of impact. Baffles may be installed either inside or on top of quench towers and are typically constructed of treated wood, steel, or plastic.

Battery stack means the stack that is the point of discharge to the atmosphere of the combustion gases from a battery's underfiring system.

Batterywide extended coking means increasing the average coking time for all ovens in the coke oven battery by 25 percent or more over the manufacturer's specified design rate.

By-product coke oven battery means a group of ovens connected by common walls, where coal undergoes destructive distillation under positive pressure to produce coke and coke oven gas from which by-products are recovered.

By-product recovery plant area means that area of the coke plant where process units subject to subpart L in part 61 are located.

Coke oven battery means a group of ovens connected by common walls, where coal undergoes destructive distillation to produce coke. A coke oven battery includes by-product and non-recovery processes.

Coke plant means a facility that produces coke from coal in either a by-product coke oven battery or a non-recovery coke oven battery.

Cokeside shed means a structure used to capture pushing emissions that encloses the cokeside of the battery and ventilates the emissions to a control device.

Coking time means the time interval that starts when an oven is charged with coal and ends when the oven is pushed.

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

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

Emission limitation means any emission limit, opacity limit, or operating limit.

Four consecutive pushes means four pushes observed successively.

Fugitive pushing emissions means emissions from pushing that are not collected by a capture system.

Horizontal flue means a type of coke oven heating system used on Semet-Solvay batteries where the heating flues run horizontally from one end of the oven to the other end, and the flues are not shared with adjacent ovens.

Hot water scrubber means a mobile scrubber used to control pushing emissions through the creation of an induced draft formed by the expansion of pressurized hot water through a nozzle.

Increased coking time means increasing the charge-to-push time for an individual oven.

Non-recovery coke oven battery means a group of ovens connected by common walls and operated as a unit, where coal undergoes destructive distillation under negative pressure to produce coke, and which is designed for the combustion of the coke oven gas from which by-products are not recovered.

Oven means a chamber in the coke oven battery in which coal undergoes destructive distillation to produce coke.

Pushing means the process of removing the coke from the oven. Pushing begins with the first detectable movement of the coke mass and ends when the quench car enters the quench tower.

Quenching means the wet process of cooling (wet quenching) the hot incandescent coke by direct contact with water that begins when the quench car enters the quench tower and ends when the quench car exits the quench tower.

Quench tower means the structure in which hot incandescent coke in the quench car is deluged or quenched with water.

Remove from service means that an oven is not charged with coal and is not used for coking. When removed from service, the oven may remain at the operating temperature or it may be cooled down for repairs.

Responsible official means responsible official as defined in §63.2.

Short battery means a by-product coke oven battery with ovens less than five meters in height.

Soaking means that period in the coking cycle that starts when an oven is dampered off the collecting main and vented to the atmosphere through an open standpipe prior to pushing and ends when the coke begins to be pushed from the oven.

Soaking emissions means the discharge from an open standpipe during soaking of visible emissions due to either incomplete coking or leakage into the standpipe from the collecting main.

Standpipe means an apparatus on the oven that provides a passage for gases from an oven to the atmosphere when the oven is dampered off the collecting main and the standpipe cap is opened. This includes mini-standpipes that are not connected to the collecting main.

Tall battery means a by-product coke oven battery with ovens five meters or more in height.

Vertical flue means a type of coke oven heating system in which the heating flues run vertically from the bottom to the top of the oven, and flues are shared between adjacent ovens.

Work practice standard means any design, equipment, work practice, or operational standard, or combination thereof, that is promulgated pursuant to section 112(h) of the CAA.

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

As required in §63.7350, you must comply with each applicable requirement of the NESHAP General Provisions (40 CFR part 63, subpart A) as shown in the following table:

Citation	Subject	Applies to Subpart CCCCC?	Explanation
§ 63.1	Applicability	Yes	
§ 63.2	Definitions	Yes	
§ 63.3	Units and Abbreviations	Yes	
§ 63.4	Prohibited Activities	Yes	
§ 63.5	Construction/Reconstruction	Yes	
§ 63.6(a), (b), (c), (d), (e), (f), (g), (h)(2)-(8).	Compliance with Standards and Maintenance Requirements.	Yes	
§ 63.6(h)(9)	Adjustment to an Opacity Emission Standard.	Yes.	
§ 63.7(a)(3), (b), (c)-(h).	Performance Testing Requirements.	Yes..	
§ 63.7(a)(1)-(2).	Applicability and Performance Test Dates	No	Subpart CCCCC specifies applicability and dates.
§ 63.8(a)(1)-(3), (b), (c)(1)- (3), (c)(4)(i)-(ii), (c)(5)-(8), (d), (e), (f)(1)-(5), (g)(1)-(4).	Monitoring Requirements	Yes	CMS requirements in §63.8(c)(4) (i)-(ii), (c)(5), and (c)(6) apply only to COMS for battery stacks.
§ 63.8(a)(4)	Additional Monitoring Requirements for Control Devices in § 63.11.	No	Flares are not a control device for Subpart CCCCC affected sources.
§ 63.8(c)(4)	Continuous Monitoring System (CMS) Requirements.	No	Subpart CCCCC specifies requirements

			for operation of CMS.
§ 63.8(e)(4)-(5)	Performance Evaluations	Yes.	Except COMS performance evaluation must be conducted before the compliance date.
§ 63.8(f)(6).	RATA Alternative	NO	Subpart CCCCC does not require CEMS.
§ 63.8(g)(5)	Data Reduction	NO	Subpart CCCCC specifies data that can't be used in computing averages for COMS.
§ 63.9	Notification Requirements.	Yes.	Additional notifications for CMS in § 63.9(g) apply only to COMS for battery stacks.
§ 63.10(a), (b)(1)-(b)(2)(xii), (b)(2)(xiv), (b)(3), (c)(1)-(6), (c)(9)-(15), (d), (e)(1)-(2), (e)(4), (f).	Recordkeeping and Reporting Requirements	Yes.	Additional records for CMS in §63.10(c)(1)-(6), (9)-(15), and reports in §63.10(d)(1)-(2) apply only to COMS for battery stacks.
§ 63.10(b)(2) (xi)-(xii)	CMS Records for RATA Alternative	No	Subpart CCCCC doesn't require CEMS.
§ 63.10(c)(7)-(8)	Records of Excess Emissions and Parameter Monitoring Exceedances for CMS.	No.	Subpart CCCCC specifies record requirements.
§ 63.10(e)(3).	Excess Emission Reports	No	Subpart CCCCC specifies reporting requirements.
§ 63.11	Control Device Requirements.	No	Subpart CCCCC does not require flares.
§ 63.12	State Authority and Delegations	Yes	
§§ 63.13-63.15	Addresses, Incorporation by Reference, Availability of Information.	Yes	

SECTION D.3

FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)]: One (1) Coke Plant By-Product Recovery Plant

(a) Control Station No. 1

- (1) Four (4) Predecanters D-101A, D-101B, D-101C and D-101D, identified as CBP10100, CBP20101, CBP30102 and CBP30103, constructed in 1975, with vapors directed by a natural gas blanketing system CB3080 to Control Station No.1 and into the 72- inch Suction Main.
- (2) Two (2) Still Decanters D-102B and D-102A, identified as CBD00104 and CBD00105, constructed in 1975, with vapors directed by a natural gas blanketing system CB3080 to Control Station No.1 and into the 72-inch Suction Main.
- (3) Two (2) Gary Decanters D-5 and D-4, identified as CBD20107 and CBD30108, constructed in 1975, with vapors directed by a natural gas blanket system CB3080 to Control Station No.1 and into the 72-inch Suction Main.
- (4) One (1) Bleed-Off Tank B101, identified as CBB10106, constructed in 1975, with vapors directed by a natural gas blanketing system CB3080 to Control Station No.1 and into the 72-inch Suction Main.
- (5) One (1) Liquor Storage Tank T-7, identified as CBL10109, constructed in 1975, with vapors directed by a natural gas blanketing system CB3080 to Control Station No.1 into the 72-inch Suction Main.
- (6) Two (2) Tar Storage Tanks T-2 and T-3, identified as CBT00110 and CBT00111, constructed in 1968, with vapors, directed by a natural gas blanketing system CB3080 to Control Station No.1 and into the 72-inch Suction Main.
- (7) One (1) Storage Tank T-6, identified as CBT20112, constructed in 1968, with vapors, directed by a natural gas blanketing system CB3080 to Control Station No.1 and into the 72-inch Suction Main.
- (8) Two (2) PC Tar Storage Tanks T-363D and T-363A, identified as CBT30113 and CB40114, constructed in 1975, with vapors directed by a natural gas blanketing system CB3080 to Control Station No.1 into the 72-inch Suction Main.
- (9) One (1) Dry Tar Storage Tank T-9, identified as CBT50115, constructed in 1975, with vapors directed by a natural gas blanketing system CB3080 to Control Station No.1 and into the 72-inch Suction Main.
- (10) One (1) Sump S-9 serving Dry Tar Storage Tank ST-9, identified as CBS10116, constructed in 1991, with vapors, directed by a natural gas blanketing system CB3080 to Control Station No.1 and into the 72-inch Suction Main.

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

Facility Description [326 IAC 2-7-5(15)]: One (1) Coke By-Product Recovery Plant (continued)

(b) Control Station No. 2

- (1) Three (3) Tar Tanks T-304C, T-304B and T-304A , identified as CBT60118, CBT70119, and CBT80121, constructed in 1990, 1953 and 1953, respectively, with vapors directed by a natural gas blanketing system CB3081 to Control Station No.2 and into the 72-inch Suction Main.
- (2) One (1) Tar Feed Tank T-306C, identified as CBTF0164, constructed in 1953, with vapors directed by a natural gas blanketing system CB3081 to Control Station No.2 and into the 72-inch Suction Main.
- (3) One (1) Wash Oil Tank T-331AN, identified as CBO10123, constructed in 1961, with vapors directed by a natural gas blanketing system CB3081 to Control Station No. 2 into the 72-inch Suction Main.
- (4) Two (2) Light Oil Storage Tanks T-312 and T-311, identified as CBO20124 and CBO30125, constructed in 1953, with vapors directed by a natural gas blanketing system CB3081 to Control Station No. 2 and into the 72-inch Suction Main.
- (5) One (1) sump S-304/306, constructed in 1996, with vapors directed by a natural gas blanketing system CB3081 to Control Station No. 2 and into the 72-inch Suction Main.

(c) Control Station No. 3

- (1) Four (4) Predecanters D-105A, D-105B, D-105C and D-105D, identified as CBP70137, CBP80138, CBP50139 and CBP60140, constructed in 1976, with vapors directed by a natural gas blanketing system CB3082 to Control Station No. 3 and into the 72-inch Suction Main.
- (2) Two (2) Still Decanters D-106A and D-106B, identified as CBD60134 and CBD70136, constructed in 1976, with vapors directed by a natural gas blanketing system CB3082 to Control Station No. 3 and into the 72-inch Suction Main.
- (3) Two (2) Gary Decanters D-6 and D-7, identified as CBD40132 and CBD50133, constructed in 1976, with vapors directed by a natural gas blanketing system CB3082 to Control Station No. 3 and into the 72-inch Suction Main.
- (4) Two (2) Tar Decanters D-5/7N and D-5/7S, identified as CBD80141 and CBD90142, constructed in 1953, with vapors directed by a natural gas blanketing system CB3082 to Control Station No. 3 and into the 72-inch Suction Main.
- (5) One (1) Bleed-Off Tank B-104, identified as CBB20135, constructed in 1976 with vapors directed by a natural gas blanketing system CB3082 to Control Station No. 3 and into the 72-inch Suction Main.
- (6) One (1) Liquor Surge Tank T-11, identified as CBL60131, constructed in 1975, with vapors directed by a natural gas blanketing system CB3082 to Control Station No. 3 and into the 72-inch Suction Main.

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

Facility Description [326 IAC 2-7-5(15)]: One (1) Coke Plant By-Product Recovery Plant (continued):

(d) Control Station No. 4

- (1) Four (4) Circulating Liquor Decanters L-100B, L-100C, L-100D and L-100E, identified as CBC30127, CBC40128, CBC50129 and CBL80145, constructed in 1975, with vapors directed by a natural gas blanketing system CB3083 to Control Station No. 4 and into the 72-inch Suction Main.
- (2) Two (2) Liquor Surge Tanks T-340A and T-340B, identified as CBC20126 and CBL70143, constructed in 1995, with vapors directed by a natural gas blanketing system CB3083 to Control Station No. 4 and into the 72-inch Suction Main.
- (3) One (1) Primary Cooler Tank T-345A, identified as CBTF0130, constructed in 1995, with vapors directed by a natural gas blanketing system CB3083 to Control Station No. 4 and into the 72-inch Suction Main.

(e) Control Station No. 5

- (1) One (1) Sump of Circulating Liquor Ls-100E, identified as CBS40144, constructed in 1991, with vapors directed by a natural gas blanketing system CB3051 to Control Station No. 5 and into the 72-inch Suction Main.
- (2) Three (3) Tar Storage Tanks T-301, T-302A, T-302B, identified as CBTA0146, CBTB0147 and CBTC0148, constructed in 1948, 1930 and 1930, respectively, with vapors directed by a natural gas blanketing system CB3051 to Control Station No. 5 and into the 72-inch Suction Main.
- (3) Two (2) Storage Tanks T-7100, T7110 and T-7120, constructed and refurbished in 1997, with vapors directed by a natural gas blanketing system CB3051 to Control Station No. 5 and into the 72-inch Suction Main.
- (4) Two (2) Oil/Tar Separator Tanks, T-7000 and T-7010, constructed in 1997, with vapors directed by a natural gas blanketing system CB3051 to Control Station No. 5 and into the 72-inch Suction Main.
- (5) Two (2) Oil and Tar Receiver Tanks, T-7020 and T-7030, constructed in 1997, with vapors directed by a natural gas blanketing system CB3051 to Control Station No. 5 and into the 72-inch Suction Main.

(f) One (1) Surge Tank T-7800, constructed in 1997, with vapors directed to a nitrogen gas blanketing system.

(g) Distillation Sump Emission Control

One (1) Distillation Sump Emission Control System, identified as CBS80151, constructed in 1989, with vapors directed to a nitrogen gas blanketing system.

(h) Coke Oven Gas (COG) High Pressure Control System, constructed in 1991, contains instrumentation and control valves designed to limit the maximum pressure in the COG distribution system. Excess COG pressure is directed to and combusted in a bleeder flare with emissions exhausting to Stack CG6077.

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

Facility Description [326 IAC 2-7-5(15)]: One (1) Coke Plant By-Product Recovery Plant (continued):

- (i) Equipment in Benzene Service consists of several hundred components: pumps, exhausters, valves, flanges and pressure relief devices in benzene service within the byproducts plant.

(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 Emission Standards for Hazardous Air Pollutants (NESHAP) [326 IAC 14] [40 CFR Part 61 Subpart A]

The provisions of 40 CFR Part 61, Subpart A (General Provisions), which are incorporated by reference in 326 IAC 14, apply to the process vessels, tar storage tank, light oil sump, naphthalene processing, final coolers and cooler towers and equipment in benzene service except when otherwise specified in 40 CFR Part 61, Subpart L, 40 CFR Part 61, Subpart V, and 40 CFR Part 61, Subpart FF.

D.3.2 National Emission Standard for Hazardous Air Pollutants (NESHAP)-Benzene Limitations from Coke Byproduct Recovery Plants [40 CFR 61 Subpart L] [326 IAC 14]

(a) Pursuant to 40 CFR 61.132, the Permittee shall:

- (1) Enclose and seal all openings on each process vessel, tar storage tank, and tar-intercepting sump.
- (2) Duct gases from each process vessel, tar storage tank, and tar-intercepting sump to the gas collection system, gas distribution system, or other enclosed point in the by-product recovery process where the benzene in the gas will be recovered or destroyed. This control system shall be designed and operated for no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background and visual inspections, as determined by the methods specified in 40 CFR 61.245(c). This system can be designed as a closed, positive pressure, gas blanketing system.
 - (A) The Permittee may elect to install, operate, and maintain a pressure relief device, vacuum relief device, an access hatch, and a sampling port on each process vessel, tar storage tank, and tar-intercepting sump. Each access hatch and sampling port must be equipped with a gasket and a cover, seal, or lid that must be kept in a closed position at all times, unless in actual use.
 - (B) The Permittee may elect to leave open to the atmosphere the portion of the liquid surface in each tar decanter necessary to permit operation of a sludge conveyor. If the Permittee elects to maintain an opening on part of the liquid surface of the tar decanter, the Permittee shall install, operate, and maintain a water leg seal on the tar decanter roof near the sludge discharge chute to ensure enclosure of the major portion of liquid surface not necessary or the operation of the sludge conveyor.
- (3) Monitor the connections and seals on each control system to determine if it is operating with no detectable emissions, using Method 21 (40 CFR part 60, appendix A) and procedures specified in 40 CFR 61.245(c), and shall visually inspect each source (including sealing materials) and the ductwork of the control system for evidence of visible defects such as gaps or tears. This monitoring and inspection shall be conducted on a semiannual basis and at any other time after

the control system is repressurized with blanketing gas following removal of the cover or opening of the access hatch.

- (A) If an instrument reading indicates an organic chemical concentration more than 500 ppm above a background concentration, as measured by Method 21, a leak is detected.
 - (B) If visible defects such as gaps in sealing materials are observed during a visual inspection, a leak is detected.
 - (C) When a leak is detected, it shall be repaired as soon as practicable, but not later than 15 calendar days after it is detected.
 - (D) A first attempt at repair of any leak or visible defect shall be made no later than 5 calendar days after each leak is detected.
- (4) Conduct a maintenance inspection of the control system following the installation of control equipment used to meet the requirements of 40 CFR 61.132(a) on an annual basis for evidence of system abnormalities, such as blocked or plugged lines, sticking valves, plugged condensate traps, and other maintenance defects that could result in abnormal system operation. The Permittee shall make a first attempt at repair within 5 days, with repair within 15 days of detection.
- (5) Comply with the requirements of 40 CFR 61.132(a) through (c) for each benzene storage tank, BTX storage tank, light-oil storage tank, and excess ammonia liquor storage tank.
- (b) Pursuant to 40 CFR 61.133 and 326 IAC 14-9, the Permittee of a light oil sump shall:
- (1) Enclose and seal the liquid surface in the sump to form a closed system to contain the emissions.
 - (2) The Permittee may elect to install, operate, and maintain a vent on the light-oil sump cover. Each vent pipe must be equipped with a water leg seal, a pressure relief device, or vacuum relief device.
 - (3) The Permittee may elect to install, operate, and maintain an access hatch on each light-oil sump cover. Each access hatch must be equipped with a gasket and a cover, seal or lid that must be kept in a closed position at all times, unless in actual use.
 - (4) Replace the light-oil sump cover when removed for periodic maintenance with a seal at completion of the maintenance operation.
 - (5) Not vent steam or other gases from the by-product process to the light-oil sump.
 - (6) Monitor semiannually the connections and seals on each control system following the installation of control equipment to meet the requirements of 40 CFR 61.132(a) to determine if it is operating with no detectable emissions, using 40 CFR Part 60, Appendix A, Method 21, and the procedures specified in 40 CFR Part 61, Subpart V, Section 61.245(c) and 326 IAC 14-8-3(b). The Permittee also shall conduct on a semiannual basis a visual inspection of each source including sealing materials for evidence of visible defects such as gaps or tears.
 - (A) If an instrument reading indicates an organic chemical concentration of more than 500 ppm above a background concentration, as measured by 40 CFR Part 60, Appendix A, Method 21, a leak is detected.

- (B) If visible defects such as gaps in sealing materials are observed during visual inspection, a leak is detected.
 - (C) A first attempt at repair of any leak or visible defect shall be made no later than five (5) calendar days after each leak is detected.
 - (D) When a leak is detected, it shall be repaired as soon as practicable, but not later than fifteen (15) calendar days after it is detected.
- (c) Pursuant to 40 CFR 61.134, the Permittee of naphthalene processing, final coolers, and final-cooler cooling towers shall allow “zero” emissions from these facilities.
- (d) Pursuant to 40 CFR 61.135 and 326 IAC 14-9-5, each Permittee of equipment in benzene service shall comply with the requirements of 40 CFR 61, Subpart V and 326 IAC 14-9-5, except as provided in 40 CFR 61.135.
 - (1) The provisions of 40 CFR 61, Subpart V, Sections 61.242-3 and 61.242-9, do not apply to 40 CFR 61.135 and 326 IAC 14-9-5.
 - (2) Each piece of equipment in benzene service to which 40 CFR 61.135 and 326 IAC 14-9-5 apply, shall be marked in such a manner that it can be distinguished readily from other pieces of equipment in benzene service.
 - (3) Each exhauster shall be monitored quarterly to detect leaks by the methods specified in 40 CFR 61, Subpart V, Section 61.245(b) and 326 IAC 14-8-3(a), except as provided in subsections 40 CFR 61.136(d), 40 CFR 61.135 (e) - (g), 326 IAC 14-9-5 (e), (f) and (g) and in 326 IAC 14-9-6(c).
 - (A) If an instrument reading of ten thousand (10,000) ppm or greater is measured, a leak is detected.
 - (B) When a leak is detected, it shall be repaired as soon as practicable, but no later than fifteen (15) calendar days after it is detected, except as provided in 40 CFR 61, Subpart V, Section 61.242-10(a) and (b). A first attempt at repair shall be made no later than five (5) calendar days after each leak is detected.
 - (4) Each exhauster equipped with a seal system that includes a barrier fluid system and that prevents leakage of process fluids to the atmosphere is exempt from the requirements of subsection 40 CFR 61.135 (d) and 326 IAC 14-9-5 (d) provided the following requirements are met:
 - (A) Each exhauster seal system is:
 - (i) operated with the barrier fluid at a pressure that is greater than the exhauster stuffing box pressure; or
 - (ii) equipped with a barrier fluid system that is connected by a closed vent system to a control device that complies with the requirements of 40 CFR 61, Subpart V, Section 61.242-11; or
 - (iii) equipped with a system that purges the barrier fluid into a process stream with zero (0) benzene emissions to the atmosphere.
 - (B) The barrier fluid is not in benzene service.

- (C) Each barrier fluid system shall be equipped with a sensor that will detect failure of the seal system, barrier fluid system, or both.
 - (D) Each sensor as described in 40 CFR 61.135(e)(3) shall be checked daily or shall be equipped with an audible alarm.
 - (E) The Permittee shall determine, based on design consideration and operating experience, a criterion that indicates failure of the seal system, the barrier fluid system, or both.
 - (F) If the sensor indicates failure of the seal system, the barrier system, or both based on the criterion determined under 40 CFR 61.135(e)(4)(ii), a leak is detected.
 - (G) When a leak is detected, it shall be repaired as soon as practicable, but not later than fifteen (15) calendar days after it is detected, except as provided in 40 CFR 61, Subpart V, Section 61.242-10.
 - (H) A first attempt at repair shall be made no later than five (5) calendar days after each leak is detected.
- (5) An exhauster is exempt from the requirements of subsection 40 CFR 61.135(d) if it is equipped with a closed vent system capable of capturing and transporting any leakage from the seals to a control device that complies with the requirements of 40 CFR 61, Subpart V, Section 61.242-11 except as provided in 40 CFR 61.135 (g).
 - (6) Any exhauster that is designated, as described in 40 CFR 61, Subpart V, Section 61.246(e) and in 326 IAC 14-8-4(d), (e), (f), and (g) for no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background, is exempt from the requirements of 40 CFR 61.135(d) if,
 - (A) The exhauster is demonstrated to be operating with no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background, as measured by the methods specified in 40 CFR 61, Subpart V, Section 61.245(c) and in 326 IAC 14-8-3(b); and
 - (B) The exhauster is tested for compliance with 40 CFR 61.135(g)(1) initially upon designation, annually, and at other times requested by the commissioner.
 - (7) Any exhauster that is in vacuum service is excluded from the requirements of 40 CFR 61, Subpart L and 326 IAC 14-9-5, if it is identified as required in 40 CFR 61, Subpart V, Section 61.246(e)(5) and 326 IAC 14-8-4(d).

D.3.3 National Emission Standard for Hazardous Air Pollutants (NESHAP) - Coke Byproduct Recovery Plants Equipment Leaks [326 IAC 14] [40 CFR 61 Subpart V]

Pursuant to 40 CFR 61 Subpart V, and 326 IAC 14, the Permittee shall control the HAPs emitted from equipment leaks in accordance with 40 CFR 61, Subpart V - National Emission Standard for Equipment Leaks (Fugitive Emission Sources), Sections 61.242-1 through 61.242-11, where applicable. The provisions apply to equipment in benzene service at the coke byproducts plant.

- (a) Pursuant to 40 CFR 61.242-1(d), each piece of equipment to subject to the requirements of 40 CFR 61 Subpart V shall be marked in such a manner that it can be distinguished readily from other pieces of equipment.

- (b) Pursuant to 40 CFR 242-1(e), equipment in vacuum service is excluded from the requirements of 40 CFR 61.242-2 through 61.242-11, if it is identified as required in 40 CFR 61.246(e)(5).
- (c) Pursuant to 40 CFR 61.242-4 (Standards: Pressure relief devices in gas/vapor service), the standards listed below apply to pressure relief devices in gas/vapor service:
 - (1) Except during pressure releases, each pressure relief device in gas/vapor service shall be operated with no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background, as measured by the method specified in 40 CFR 61.245(c).
 - (2) The following requirements apply regarding pressure releases:
 - (A) After each pressure release, the pressure relief device shall be returned to a condition of no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background, as soon as practicable, but no later than 5 calendar days after each pressure release, except as provided in 40 CFR 61.242-10 and,
 - (B) No later than 5 calendar days after the pressure release, the pressure relief device shall be monitored to confirm the condition of no detectable emissions as indicated by an instrument reading of less than 500 ppm above background as measured by the method in 40 CFR 61.245(c).
 - (3) Any pressure relief device that is routed to a process or fuel gas system or equipped with a closed-vent system capable of capturing and transporting leakage from the pressure relief device to a control device as described in 40 CFR 61.242-11 is exempt from the requirements of 40 CFR 61.242-4 (a) and (b).
 - (4) The following applies regarding pressure release devices with rupture disks:
 - (A) Any pressure relief device that is equipped with a rupture disk upstream of a pressure relief device is exempted from the requirement of 40 CFR 61.242-4 (a) and (b) provided the Permittee complies with the requirements in 40 CFR 61.242-4(d)(2).
 - (B) A new rupture disk shall be installed upstream of the pressure relief device as soon as practicable, but no later than 5 calendar days after each pressure release, except as provided in 40 CFR 61.242-10.
- (d) Pursuant to 40 CFR 61.242-5 (Standards: Sampling connecting systems), the standards listed below apply to sampling connecting systems:
 - (1) Each sampling connection system shall be equipped with a closed-purge system or closed vent system, except as provided in 40 CFR 242-1(c).
 - (2) Each closed-purge system or closed-vent system as required in paragraph D.3.3(c)(1) shall do the following:
 - (A) Return the purged process fluid to the process line, or
 - (B) Collect and recycle the purged process fluid or,
 - (C) Be designed and operated to capture and transport all the purged process fluid to a control device that complies with the requirements 40 CFR 61.242-11.

- (3) In-situ sampling systems are exempt from the requirements of items (1) and (2) above.
- (e) Pursuant to 40 CFR 61.242-6 (Standards: Open-ended valves or lines), the standards listed below apply to open-ended valves or lines:
 - (1) Each open-ended valve or line shall be equipped with a cap, blind flange, plug, or a second valve, except as provided in paragraph (d)(4) of this condition.
 - (2) The cap, blind flange, plug, or second valve shall seal the open end at all times except during operations requiring process fluid flow through the open-ended valve or line.
 - (3) Each open-ended valve or line equipped with a second valve shall be operated in a manner such that the valve on the process fluid end is closed before the second valve is closed.
 - (4) When a double block and bleed system is being used, the bleed valve or line may remain open during operations that require venting the line between the block valves but shall comply with paragraph (d)(1) of this condition at all other times.
- (f) Pursuant to 40 CFR 61.242-9 (Standards: Surge control vessels and bottoms receivers), each surge control vessels and bottoms receiver that is not routed back to the process, located at existing sources with a capacity less than or equal to 75 cubic meters and less than 151 cubic meters and a vapor pressure greater than or equal to 13.1 KPa; or with a capacity less than or equal to 151 cubic meters and a vapor pressure greater than or equal to 5.2 KPa shall be equipped with a closed-vent system capable of capturing and transporting any leakage from the vessel back to the process or to a control device as described in 40 CFR 61.242-11.
- (g) Pursuant to 40 CFR 61.242-11 (Standards: Closed-vent systems and control devices), the Permittee shall comply with the provisions of this paragraph the closed-vent systems and control devices.
 - (1) Vapor recovery systems shall be designed and operated to recover the organic vapors vented to them with an efficiency of 95 percent or greater or to an exit concentration of 20 parts per million by volume, whichever is less stringent.
 - (2) Closed-vent systems shall be designed for and operated with no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background and by visual inspections, as determined by the methods specified in 40 CFR 61.245(c).
 - (3) The closed-vent system and control devices shall be operated at all times when emissions may be vented to them.

D.3.4 National Emission Standard for Hazardous Air Pollutants (NESHAP) - Benzene Waste Operations [40 CFR Part 61, Subpart FF] [326 IAC 14]

Pursuant to 40 CFR 61.342(a), the Permittee of a coke byproduct recovery plant at which the total annual benzene quantity from facility waste is less than 10 megagrams per year (Mg/yr) (11 ton/yr) shall be exempt from the requirements of 40 CFR 61.342(b) and (c).

- (a) The total annual benzene quantity from facility waste is the sum of the annual benzene quantity for each waste stream at the facility that has a flow-weighted annual average water content greater than 10 percent or that is mixed with water, or other wastes, at any time and the mixture has an annual average water content greater than 10 percent.

- (b) The benzene quantity in a waste stream is to be counted only once without multiple counting if other waste streams are mixed with or generated from the original waste stream.
- (c) Wastes that are exempted from control under 40 CFR 61.342(c)(2) and 61.342(c)(3) are included in the calculation of the total annual benzene quantity if they have an annual average water content greater than 10 percent, or if they are mixed with water or other wastes at any time and the mixture has an annual average water content greater than 10 percent.
- (d) The benzene in a material subject to this subpart that is sold is included in the calculation of the total annual benzene quantity if the material has an annual average water content greater than 10 percent.
- (e) Benzene in wastes generated by remediation activities conducted at the facility, such as the excavation of contaminated soil, pumping and treatment of groundwater and the recovery of product from soil or groundwater, are not included in the calculation of total annual benzene quantity for that facility.
- (f) The total annual benzene quantity is determined based upon the quantity of benzene in the waste before any waste treatment occurs to remove the benzene except as specified in 40 CFR 61.355(c)(1)(i) (A) through (C).

D.3.5 Particulate Emissions Limitations [326 IAC 6.8-1-2(a)]

Pursuant to 326 IAC 6.8-1-2(a), the Permittee shall not allow or permit discharge to the atmosphere any gases which contain particulate matter in excess of 0.03 grain per dry standard cubic foot (dscf) from the Coke Oven Gas High Pressure Control System Stack CG6077.

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

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

Compliance Determination Requirements

D.3.7 National Emission Standards for Hazardous Air Pollutants (NESHAP) - Coke By-product Recovery Plant: Benzene Compliance Requirements [40 CFR 61, Subpart L][326 IAC 14]

- (a) Pursuant to 40 CFR 61.136(b), the Permittee shall determine compliance with 40 CFR 61.132 through 61.135 by reviewing records, performance test results, inspections or any combination thereof, using the methods and procedures specified in 40 CFR 61.137.
- (b) Pursuant to 40 CFR 61.137(a), the Permittee subject to the provisions of 40 CFR 61 Subpart L shall comply with the requirements in 40 CFR 61.245 of 40 CFR 61, Subpart V.
- (c) Pursuant to 40 CFR 61.137(b), to determine whether or not a piece of equipment is in benzene service, the methods in 40 CFR 61.245(d) shall be used, except that, for exhausters, the percent benzene shall be 1 percent by weight rather than the ten percent by weight described in 40 CFR 61.245(d).

D.3.8 National Emission Standards for Hazardous Air Pollutants (NESHAP) - Coke By-product Recovery Plant: Monitoring Procedures for Equipment Leaks [40 CFR 61, Subpart V] [326 IAC 14]

Pursuant to 40 CFR 61, Subpart V, the Permittee must conduct monitoring in accordance with the paragraphs listed below to comply with leak detection requirements:

- (a) Pursuant to 40 CFR 61.242-2, the following standards apply to pumps:

- (1) Each pump shall be monitored monthly to detect leaks by the methods specified in 40 CFR 61.245(b), except as provided in 40 CFR 242-2(d)–(f).
 - (2) Each pump shall be checked by visual inspection each calendar week for indications of liquids dripping from the pump seal.
 - (3) If an instrument reading of 10,000 ppm or greater is measured, a leak is detected.
 - (4) If there are indications of liquids dripping from the pump seal, a leak is detected.
 - (5) When a leak is detected, it shall be repaired as soon as practicable, but not later than 15 calendar days after each leak is detected, except as provided in 40 CFR 61.242-10 and paragraph (e) of this condition.
 - (6) A first attempt at repair shall be made no later than 5 calendar days after each leak is detected.
 - (7) Any pump that is located within the boundary of an unmanned plant site is exempt from the weekly visual inspection requirement of item (2) of this condition and 40 CFR 61.242-2(d), provided that each pump is visually inspected as often as practical and at least monthly.
- (b) Pursuant to 40 CFR 61.242-4(b)(2), no later than 5 calendar days after a pressure release, the pressure relief device in gas/vapor service shall be monitored to confirm the condition of no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background, as measured by the method specified in 40 CFR 61.245(c).
- (c) Pursuant to 40 CFR 61.242-7, the standards listed below apply to valves:
- (1) Each valve shall be monitored monthly to detect leaks by the method specified in 40 CFR 61.245(b), except as provided in 40 CFR 61.242-7(f), (g) and (h), 40 CFR 61.243-1 or 40 CFR 61.243-2 and 40 CFR 242-1(c).
 - (2) If an instrument reading of 10,000 ppm or greater is measured, a leak is detected.
 - (3) Any valve for which a leak is not detected for 2 successive months may be monitored the first month of every quarter, beginning with the next quarter, until a leak is detected.
 - (4) If a leak is detected, the valve shall be monitored monthly until a leak is not detected for 2 successive months.
 - (5) When a leak is detected it shall be repaired as soon as practicable, but not later than 15 calendar days after the leak is detected, except as provided in 40 CFR 61.242-10 and paragraph (e) of this condition.
 - (6) A first attempt at repair shall be made no later than 5 calendar days after each leak is detected.
 - (7) First attempts at repair include, but are not limited to, the following best practices where practicable:
 - (A) Tightening of bonnet bolts;
 - (B) Replacement of bonnet bolts;

- (C) Tightening of packing gland nuts; and,
 - (D) Injection of lubricant into lubricated packing.
- (8) Any valve that is designated, as described in 40 CFR 61.246(e)(2), for no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background, is exempt from the requirements of 40 CFR 61.242-7(a) if the valve:
- (A) Has no external actuating mechanism in contact with the process fluid;
 - (B) Is operated with emissions less than 500 ppm above background, as measured by the method specified in 40 CFR 61.245(c), and
 - (C) Is tested for compliance with item (8)(B) of this condition initially upon designation, annually, and at other times requested by the IDEM.
- (9) Any valve that is designated, as described in 40 CFR 61.246(f)(1), as an unsafe-to-monitor valve is exempt from the requirements of 40 CFR 61.242-7(a) if:
- (A) The Permittee of the valve demonstrates that the valve is unsafe to monitor because monitoring personnel would be exposed to an immediate danger as a consequence of complying with 40 CFR 61.242-7(a) and
 - (B) The Permittee of the valve has a written plan that requires monitoring of the valve as frequent as practicable during safe-to-monitor times.
- (10) Any valve that designated as described in 40 CFR 61.246(f)(2), as a difficult-to-monitor valve is exempt from the requirements of 40 CFR 61.242-7(a) if:
- (A) The Permittee of the valve demonstrates that the valve cannot be monitored without elevating the monitoring personnel more than 2 meters above a support surface,
 - (B) The process unit within which the valve is located is an existing process unit and,
 - (C) The Permittee of the valve follows a written plan that requires monitoring of the valve at least once per calendar year.
- (d) Pursuant to 40 CFR 61.242-8, pressure relief devices in liquid service and flanges and other connectors shall be monitored within 5 days by the method specified in 40 CFR 61.245(b) if evidence of a potential leak is found by visual, audible, olfactory, or any other detection method.
- (1) If an instrument reading of 10,000 ppm or greater is measured, a leak is detected.
 - (2) When a leak is detected, it shall be repaired as soon as practicable, but not later than 15 calendar days after it is detected, except as provided in 40 CFR 61.242-10 and paragraph (e) of this condition.
 - (3) The first attempt at repair shall be made no later than 5 calendar days after each leak is detected.
 - (4) First attempts at repair include, but are not limited to, the best practices described under 40 CFR 61.242-7(e).

- (e) Pursuant to 40 CFR 61.242-10 (Standards: Delay of Repair), the standards listed below apply to delay of repair of equipment:
- (1) Delay of repair of equipment for which leaks have been detected will be allowed if the repair is technically infeasible without a process unit shutdown. Repair of this equipment shall occur before the end of the next process unit shutdown.
 - (2) Delay of repair of equipment for which leaks have been detected will be allowed for equipment that is isolated from the process that does not remain in benzene service.
 - (3) Delay of repair for valves will be allowed if:
 - (A) The Permittee demonstrates that emissions of purged material resulting from immediate repair are greater than the fugitive emissions likely to result from delay of repair; and
 - (B) When repair procedures are affected, the purged material is collected and destroyed or recovered in the control device complying with 40 CFR 61.242-11.
 - (4) Delay of repair for pumps will be allowed if:
 - (A) Repair requires the use of a dual mechanical seal system that includes a barrier fluid system; and
 - (B) Repair is completed as soon as practicable, but not later than 6 months after the leak was detected.
 - (5) Delay of repair beyond a process unit shutdown will be allowed for a valve if valve assembly replacement is necessary during the process unit shutdown, valve assembly supplies have been depleted, and valve assembly supplies had been sufficiently stocked before the supplies were depleted. Delay of repair beyond the next process unit shutdown will not be allowed unless the next process unit shutdown occurs sooner than 6 months after the first process unit shutdown.
- (f) Pursuant to 40 CFR 61.242-11(e), the Permittee shall monitor control devices to ensure they are operated and maintained in conformance with its design.
- (g) Pursuant to 40 CFR 61.242-11(f), the monitoring requirements listed below apply to closed-vent systems.
- (1) Closed-vent systems shall be monitored to determine compliance with 40 CFR 61.242-11 initially in accordance with 40 CFR 61.05, annually, and at other times requested by the US EPA or IDEM, OAQ.
 - (2) Leaks, as indicated by an instrument reading greater than 500 ppm and visual inspections, shall be repaired as soon as practicable, but not later than 15 calendar days after the leak is detected.
 - (3) A first attempt at repair shall be made no later than 5 calendar days after the leak is detected.

D.3.9 National Emission Standards for Hazardous Air Pollutants (NESHAP) - Coke By-product Recovery Plant Leak Detection Testing Requirements [40 CFR 61, Subpart V] [326 IAC 14]

- (a) Monitoring required under 40 CFR 61, Subpart V and 40 CFR 61.135 of Subpart L shall comply with the following requirements in accordance with 40 CFR 61.245:
- (1) Monitoring shall comply with reference Method 21 of Appendix A of 40 CFR Part 60 procedures and performance criteria.
 - (A) The detection instrumentation shall meet the Performance criteria of Method 21.
 - (B) Instrument shall be calibrated before use on each day of its use;
 - (C) Calibration gases shall be:
 - (i) Zero air (less than 10 ppm of hydrocarbon in air); and
 - (ii) A mixture of methane or n-hexane and air at a concentration of approximately, but less than 10,000 ppm methane or n-hexane.
 - (D) The instrument probe shall be traversed around all potential leak interfacings.
 - (E) When equipment is tested for compliance with or monitored for no detectable emissions, the background level shall be determined in accordance with Method 21. The arithmetic difference between the maximum concentration indicated by the instrument and the background level is compared with 500 ppm for determining compliance.
 - (2) Each piece of equipment within a process unit that can conceivably contain equipment in VHAP service is presumed to be in VHAP service unless the Permittee demonstrates that the piece of equipment is not in VHAP service in accordance with 40 CFR 61.245(d)(1) or (2). For a piece of equipment to be considered not in VHAP service, it must be determined that the percent VHAP content can be reasonable expected never to exceed 10 percent by weight.
 - (3) Samples used to determine the percent VHAP content shall be representative of the process fluid that is contained in or contacts the equipment or the gas being combusted in the flare.
- (b) Pursuant to 40 CFR 61.242-1(b), compliance with 40 CFR 61, Subpart V, will be determined by a review of records, review of performance test results, and inspection using the methods and procedures specified in 40 CFR 61.245.

D.3.10 National Emission Standards for Hazardous Air Pollutants (NESHAP)- Benzene Waste Operations Methods, Procedures and Compliance [40 CFR 61, Subpart FF] [326 IAC 14]

Pursuant to 40 CFR 61.355, the Permittee shall determine the total annual benzene quantity from facility waste by the following procedure:

- (a) For each waste stream subject to 40 CFR 61, Subpart FF with a flow-weighted annual average water content greater than 10 percent water, on a volume basis as total water, or is mixed with water or other wastes at any time and the resulting mixture has an annual average water content greater than 10 percent as specified in 40 CFR 61.342(a), the Permittee shall:
- (1) Determine the annual waste quantity for each waste stream using the procedures specified in 40 CFR 61.355.

- (2) Determine the flow-weighted annual average benzene concentration for each waste stream using the procedures specified in 40 CFR 61.355.
 - (3) Calculate the annual benzene quantity for each waste stream by multiplying the annual waste quantity of the waste stream times the flow-weighted annual average benzene concentration.
- (b) Total annual benzene quantity from facility waste is calculated by adding together the annual benzene quantity for each waste stream generated during the year and the annual benzene quantity for each process unit turnaround waste annualized according to 40 CFR 61.355.
- (c) If the total annual benzene quantity from facility waste is equal to or greater than 10 Mg/yr (11 ton/yr), then the Permittee shall comply with the requirements of 40 CFR 61.342 (c), (d), or (e).
- (d) If the total annual benzene quantity from facility waste is less than 10 Mg/yr (11 ton/yr) but is equal to or greater than 1 Mg/yr (1.1 ton/yr), then the Permittee shall:
 - (1) Comply with the record keeping requirements of 40 CFR 61.356 and reporting requirements of 40 CFR 61.357 of this subpart; and
 - (2) Repeat the determination of total annual benzene quantity from facility waste at least once per year and whenever there is a change in the process generating the waste that could cause the total annual benzene quantity from facility waste to increase to 10 Mg/yr (11 ton/yr) or more.
- (e) If the total annual benzene quantity from facility waste is less than 1 Mg/yr (1.1 ton/yr) the Permittee shall:
 - (1) Comply with the record keeping requirements of 40 CFR 61.356 and reporting requirements of 40 CFR 61.357 of this subpart, and
 - (2) Repeat the determination of total annual benzene quantity from facility waste whenever there is a change in the process generating the waste that could cause the total annual benzene quantity facility waste to increase to 1 Mg/yr (1.1 ton/yr) or more.
- (f) The determination of annual waste quantity for wastes at coke by-product plants subject to and complying with the control requirements of 40 CFR 61.132, 61.133, 61.134, or 61.139 of Subpart L shall be made at the location that the waste stream exits the process unit component or waste management unit controlled by that subpart or at the exit of the ammonia still, provided that the following conditions are met:
 - (1) The transfer of wastes between units complying with the control requirements of 40 CFR 61 Subpart L, process units, and the ammonia still is made through hard piping or other enclosed system.
 - (2) The ammonia still meets the definition of a sour water stripper in 40 CFR 61.341.
- (g) Pursuant to 40 CFR 61.355(b), the calculation required to determine the total annual benzene quantity at the point of waste generation shall be determined by one of the following methods:
 - (1) Select the highest annual quantity of waste managed from historical records representing the most recent 5 years of operation or, if the facility has been in

service for less than 5 years but at least 1 year, from historical records representing the total operating life of the facility;

- (2) Use the maximum design capacity of the waste management unit; or
 - (3) Use measurements that are representative of maximum waste generation rates.
- (h) Pursuant to 40 CFR 61.342(g), compliance with 40 CFR 61, Subpart FF will be determined by review of facility records and results from tests and inspections using methods and procedures specified in 40 CFR 61.355.

Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19][40 CFR 61]

D.3.11 National Emission Standards for Hazardous Air Pollutants (NESHAP) - Coke By-product Recovery Plant –Benzene Record Keeping Requirements [40 CFR 61 Subpart L] [326 IAC 14]

Pursuant to 40 CFR 61.138, the Permittee shall comply with the following record keeping requirements:

- (a) The following information pertaining to the design of control equipment installed to comply with 40 CFR 61.132 through 61.134 shall be recorded and kept in a readily accessible location:
 - (1) Detailed schematics, design specifications, and piping and instrumentation diagrams.
 - (2) The dates and descriptions of any changes in the design specifications.
- (b) The following information pertaining to sources subject to 40 CFR 61.132 and sources subject to 40 CFR 61.133 shall be recorded and maintained for 2 years following each semiannual (and other) inspection and each annual maintenance inspection:
 - (1) The date of the inspection and the name of the inspector.
 - (2) A brief description of each visible defect in the source or control equipment and the method and date of repair of the defect.
 - (3) The presence of a leak, as measured using the method described in 40 CFR 61.245(c). The record shall include the date of attempted and actual repair and method of repair of leak.
 - (4) A brief description of any system abnormalities found during the annual maintenance inspection, the repairs made and the date of attempted repair, and the date of actual repair.

D.3.12 National Emission Standards for Hazardous Air Pollutants (NESHAP)- Coke Byproduct Recovery Plant Record Keeping Requirements for- Equipment Leaks [40 CFR 61, Subpart V] [326 IAC 14]

Pursuant to 40 CFR 61.246, the Permittee shall comply with the following record keeping requirements:

- (a) The Permittee may comply with the record keeping requirements for the process units in one record keeping system if the system identifies each record by each process unit.
- (b) When each leak is detected as specified in 40 CFR 61.242-2, 242-7, 242-8 and 61.135 the following requirements apply:
 - (1) A weatherproof and readily visible identification, marked with the equipment identification number, shall be attached to the leaking equipment.

- (2) The identification on a valve may be removed after it has been monitored for 2 successive months as specified in 40 CFR 61.242-7(c) and no leak has been detected during those 2 months.
 - (3) The identification on equipment, except on a valve, may be removed after it has been repaired.
- (c) When each leak is detected as specified in 40 CFR 61, Sections 242-2, 242-7, and 242-8 the following information shall be recorded in a log and shall be kept for 2 years in a readily accessible location:
 - (1) The instrument and operator identification numbers and the equipment identification number;
 - (2) The date the leak was detected and the dates of each attempt to repair the leak;
 - (3) Repair methods applied in each attempt to repair the leak;
 - (4) "Above 10,000" if the maximum instrument reading measured by the methods specified in 40 CFR 61.245(a) after each repair attempt is equal to or greater than 10,000 ppm.
 - (5) "Repair delayed" and the reason for the delay if a leak is not repaired within 15 calendar days after discovery of the leak;
 - (6) The signature of the Permittee (or designate) whose decision it was that the repair could not be effected without a process shutdown;
 - (7) The expected date of successful repair of the leak if a leak is not repaired within 15 calendar days;
 - (8) Dates of process unit shutdowns that occur while the equipment is unrepaired; and
 - (9) The date of successful repair of the leak.
- (d) The following information pertaining to the design requirements for the closed-vent system and control devices shall be recorded and kept in a readily accessible location:
 - (1) Detailed schematics, design specifications, and piping and instrumentation diagrams;
 - (2) The dates and descriptions of any changes in the design specifications;
 - (3) A description of the parameter or parameters monitored, as required in 40 CFR 61.242-11(e), to ensure that the control devices are operated and maintained in conformance with its design and an explanation of why that parameter (or parameters) was selected for the monitoring;
 - (4) Periods when the closed-vent system and control devices are not operated as designed; and
 - (5) Dates of startups and shutdowns of the closed-vent system and control devices.
- (e) The following information pertaining to all equipment to which a standard applies shall be recorded in a log that is kept in a readily accessible location:

- (1) A list of identification numbers for equipment (except welded fittings) subject to the requirements of 40 CFR 61, Subpart V;
- (2) A list of identification numbers for equipment that the Permittee elects to designate for no detectable emissions as indicated by an instrument reading of less than 500 ppm above background. The designation of this equipment for no detectable emissions shall be signed by the Permittee;
- (3) A list of equipment identification numbers for pressure relief devices required to comply with 40 CFR 61.242-4(a); and
- (4) The following information for each compliance test required in 40 CFR 61.242-4:
 - (A) The dates of each compliance test.
 - (B) The background level measured during each compliance test; and
 - (C) The maximum instrument reading measured at the equipment during each compliance test.
- (f) The following information pertaining to valves that are designated as unsafe to monitor or difficult to monitor shall be recorded in a log that is kept in a readily accessible location:
 - (1) A list of the identification numbers for the valves.
 - (2) An explanation for each valve, stating why the valve is unsafe or difficult to monitor.
 - (3) The plan for monitoring each valve that is unsafe to monitor.
 - (4) The planned schedule for monitoring each valve that is difficult to monitor.
- (g) Information and data used to demonstrate that a piece of equipment is not in VHAP service shall be recorded in a log that is kept in a readily accessible location.

D.3.13 National Emission Standards for Hazardous Air Pollutants (NESHAP) -Benzene Waste Operations -Record Keeping Requirements [40 CFR 61, Subpart FF] [326 IAC 14]

- (a) Pursuant to 40 CFR 61.356(b), the Permittee shall maintain records that identify each waste stream at the facility subject to 40 CFR 61, Subpart FF, and indicate whether or not the waste stream is controlled for benzene emissions in accordance with 40 CFR 61, Subpart FF.
- (b) Pursuant to 40 CFR 61.356(b)(1), for each waste stream not controlled for benzene emissions in accordance with 40 CFR 61, Subpart FF, the Permittee shall keep records that include all test results, measurements, calculations, and other documentation used to determine the following information for the waste stream: waste stream identification, water content, whether or not the waste stream is a process wastewater stream, annual waste quantity, range of benzene concentrations, annual average flow-weighted benzene concentration, and annual benzene quantity.
- (c) Pursuant to 40 CFR 61.356(a), the Permittee shall maintain each record in a readily accessible location at the facility site for a period not less than two years from the date the information is recorded, unless otherwise specified. Records shall also be kept in accordance with Section C- General Record Keeping Requirements.

D.3.14 National Emission Standards for Hazardous Air Pollutants (NESHAP) -Coke Byproduct Recovery Plant - Benzene Reporting Requirements [40 CFR 61 Subpart L][326 IAC 14]

Pursuant to 40 CFR 61.138, the Permittee shall comply with the following reporting requirements:

- (a) A report shall be submitted to IDEM, OAQ semiannually starting 6 months after the initial reports required in 40 CFR 61.138(e) and 40 CFR 61.10, which includes the following information:
 - (1) For sources subject to 40 CFR 61.132 and sources subject to 40 CFR 61.133,
 - (A) A brief description of any visible defect in the source or ductwork,
 - (B) The number of leaks detected and repaired, and
 - (C) A brief description of any system abnormalities found during each annual maintenance inspection that occurred in the reporting period and the repairs made.
 - (2) For equipment in benzene service subject to 40 CFR 61.135(a), information required by 40 CFR 61.247(b).
 - (3) For each exhauster subject to 40 CFR 61.135 for each quarter during the semiannual reporting period,
 - (A) The number of exhausters for which leaks were detected as described in 40 CFR 61.135 (d) and (e)(5),
 - (B) The number of exhausters for which leaks were repaired as required in 40 CFR 61.135 (d) and (e)(6),
 - (C) The results of performance tests to determine compliance with 40 CFR 61.135(g) conducted within the semiannual reporting period.
 - (4) A statement signed by the Permittee stating whether all provisions of 40 CFR Part 61, subpart L, have been fulfilled during the semiannual reporting period.
 - (5) Revisions to items reported according to 40 CFR 61.139(e), if changes have occurred since the initial report or subsequent revisions to the initial report.

NOTE: Compliance with the requirements of 40 CFR 61.10(c) is not required for revisions documented under this paragraph.

- (b) In the first report submitted as required in 40 CFR 61.138(e), the report shall include a reporting schedule stating the months that semiannual reports shall be submitted. Subsequent reports shall be submitted according to that schedule unless a revised schedule has been submitted in a previous semiannual report.
- (c) A Permittee electing to comply with the provisions of 40 CFR 61.243–1 and 61.243–2 shall notify IDEM, OAQ of the alternative standard selected 90 days before implementing either of the provisions.
- (d) An application for approval of construction or modification, as required under 40 CFR 61.05(a) and 61.07, will not be required for sources subject to 40 CFR 61.135 if:
 - (1) The new source complies with 40 CFR 61.135, and
 - (2) In the next semiannual report required by 40 CFR 61.138(f), the information described in 40 CFR 61.138(e)(4) is reported.

D.3.15 National Emission Standards for Hazardous Air Pollutants (NESHAP) Coke Byproduct Recovery Plant - Equipment Leaks Reporting Requirements [40 CFR 61, Subpart V] [326 IAC 14]

Pursuant to 40 CFR 61.247, the Permittee shall comply with the reporting requirements of this paragraph. A report shall be submitted to the US EPA and IDEM, OAQ semi-annually that includes the following information:

- (a) Process unit identification;
- (b) For each month during the semi-annual reporting period:
 - (1) Number of valves for which leaks were detected as described in 40 CFR 61.242-7(b) and condition D.3.8(c)(2);
 - (2) Number of valves for which leaks were not repaired as required in 40 CFR 61.242-7(d) and condition D.3.8(c)(5);
 - (3) Number of pumps for which leaks were detected as described in 40 CFR 61.242-2(b) and (d)(6) and condition D.3.8(a)(3) and (4);
 - (4) Number of pumps for which leaks were not repaired as required in 40 CFR 61.242-2(c) and (d)(6) and condition D.3.8(a)(5) and (6);
 - (5) The facts that explain any delay of repairs and, where appropriate, why a process unit shutdown was technically infeasible;
 - (6) Dates of process unit shutdowns which occurred within the semi-annual reporting period; and
 - (7) Revisions to items reported according to the initial report required by 40 CFR 61.247(a)(1) if changes have occurred since the initial report or subsequent revisions to the initial report.

NOTE: Compliance with the requirements of 40 CFR 61.10 is not required for revisions documented under this condition.

- (8) The results of all performance tests and monitoring to determine compliance with no detectable emissions conducted within the semi-annual reporting period.

D.3.16 National Emission Standards for Hazardous Air Pollutants (NESHAP) Benzene Waste Operations Reporting Requirements [40 CFR 61, Subpart FF] [326 IAC 14]

- (a) Pursuant to 40 CFR 61.357(c), the Permittee shall submit to the US EPA and IDEM, OAQ, the following information if the total annual benzene quantity from facility waste is less than 10 Mg/yr (11 tons/yr), but is equal to or greater than 1 Mg/yr (1.1 tons/yr):
 - (1) A report annually containing information to update the report originally submitted pursuant to 40 CFR 61.357 (a)(1) through (a)(3), and
 - (2) A report whenever there is a change in the process generating the waste stream that could cause the total annual benzene quantity from facility waste to increase to 10 Mg/yr or more.
 - (3) If the information in the annual report has not changed from the following year as specified in 40 CFR 61.357(c) a statement to that effect.

SECTION D.4 FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)]: One (1) coke oven gas (COG) desulfurization facility

- (a) One (1) amine unit, constructed in 1997, removes hydrogen sulfide and other organic sulfur compounds from the coke oven gas (COG) stream.
- (b) One (1) reflux unit, constructed in 1997, recycles ammonia and acid gas into the COG stream.
- (c) One (1) hydrogen cyanide (HCN) destruction unit, constructed in 1997 converts HCN in the acid gas stream to ammonia to minimize corrosion to the Sulfur Recovery Unit.
- (d) One (1) sulfur recovery unit, constructed in 1997, converts sulfur compounds in the acid gas stream to elemental sulfur. This sulfur is sold as a product.
- (e) One (1) incineration unit, constructed in 1997, converts remaining sulfur compounds not removed by the sulfur recovery unit into sulfur dioxide.

(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 Lake County PM₁₀ Emission Requirements [326 IAC 6.8-2-38]

- (a) Pursuant to 326 IAC 6.8-2-38, the PM₁₀ emissions from the Coke Plant Desulfurization Facility Tail Gas Incinerator shall not exceed 0.13 pound per hour.
- (b) Each emission limit applies to one (1) stack serving one (1) facility unless otherwise noted. The emissions limitations apply to one (1) stack serving the multiple units specified when the facility description 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) Emissions Limitations [326 IAC 7-4.1-20]

Pursuant to 326 IAC 7-4.1-20 the sulfur dioxide emissions from the desulfurization plant shall be as follows:

- (a) Pursuant to 326 IAC 7-4.1-20(a)(1)(H), when the coke oven gas desulfurization facility is not operating, sulfur dioxide from the Coke Oven Gas Tail Gas Incinerator stack shall not exceed 22.0 pounds per hour.
- (b) Pursuant to 326 IAC 7-4.1-20(b)(8), when the coke oven gas desulfurization facility is operating sulfur dioxide emissions from the Coke Oven Gas Tail Gas Incinerator stack shall not exceed 295 pounds per hour.
- (c) Pursuant to 326 IAC 7-4.1-20(c)(4), the Coke Oven Gas Desulfurization Plant's down time shall not exceed nine hundred and fifty (950) hours per year.

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 these facilities and associated control devices.

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

D.4.4 Record Keeping Requirements

- (a) To document compliance with Condition D.4.2, the Permittee shall maintain records of the downtime hours of the Coke Oven Gas Desulfurization Plant.

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

D.4.5 Reporting Requirements

A quarterly summery report to document compliance with Condition D.4.2 shall be submitted to IDEM accordance with Section C-Sulfur Dioxide SO₂ Reporting Requirements (Entire Source). The report submitted by the Permittee does require the certification by the “responsible official” as defined by 326 IAC 2-7-1(34).

SECTION D.5 FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)]: One (1) No. 2 Coke Plant Boiler House

- (a) Two (2) Boilers, Nos. 1 and 2, identified as CSS10155 and CSS20156, constructed prior to 1970, with a maximum heat input capacity of 160 MMBtu per hour each, exhausting to stack CS6061. These boilers are equipped to combust natural gas.
- (b) One (1) Boiler, No. 3, identified as CSS30157, constructed in 1943, with a maximum heat input capacity of 160 MMBtu per hour, exhausting to stack CS6062. This boiler is equipped to combust natural gas and coke oven gas.
- (c) Two (2) Boilers, Nos. 4 and 5, identified as CSS40158 and CSS50159, constructed prior to 1955, with a maximum heat input of 170 MMBtu per hour each, exhausting to stack CS6063. These boilers are equipped to combust natural gas and coke oven gas.
- (d) One (1) Boiler No. 6, identified as CSS60160, constructed in 1955, with a maximum heat input capacity of 170 MMBtu per hour, exhausting to stack CS6064. This boiler is equipped to combust natural gas and coke oven gas.
- (e) One (1) Boiler, No. 7, identified as CS70161, constructed in 1976, with a maximum heat input capacity of 170 MMBtu per hour, exhausting to stack CS6065. This boiler is equipped to combust natural gas and coke oven gas.
- (f) One (1) Boiler, No. 8, identified as CSS80162, constructed in 1981, with a maximum heat input capacity of 249 MMBtu per hour, exhausting to stack CS6066. This boiler is equipped to combust natural gas and coke oven gas.
- (g) One (1) natural gas fired boiler at the coke plant boiler house, identified as the temporary rental boiler CSS80163, constructed in 2004 with a maximum heat input capacity of 235 MMBtu/hr and equipped with a low NOx burner, exhausting to the existing stack CS6066.
- (h) Two (2) boilers at the coke plant boiler house, identified as Boilers No. 9 CSS80164 and No. 10 CSS 80165, constructed in 2004, each with a maximum heat input capacity of 235 MMBtu/hr, exhausting to stacks CS6067 and CS6068, respectively. These boilers are equipped to burn natural gas and coke oven gas.
- (i) One (1) lime storage silo with a maximum capacity of 20 tons per hour and emissions controlled by a baghouse LRS-1, constructed in 2001, exhausting inside the building.

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

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

D.5.1 Lake County PM₁₀ Emission Requirements [326 IAC 6.8-2-38] [326 IAC 6.8-1-2(b)]

Pursuant to 326 IAC 6.8-2-38 the PM₁₀ emissions from the Boilers Nos.1 and 2, CSS10155 and CSS20156, Boiler No. 3, CSS60157, Boiler No. 4, CSS40158, Boiler No. 5, CSS50159, Boiler No. 6, CSS60160, Boiler No. 7, CSS70161 and Boiler No. 8, CSS80162 shall comply with the following:

- (a) The PM₁₀ emissions from the Coke Plant Boiler House Boilers Nos.1 and 2 stacks CS6060 and CS6061 shall not exceed 0.003 pounds per MMBtu heat input each and a total of 0.75 pound per hour.
- (b) The PM₁₀ emissions from the Coke Plant Boiler House Boiler No. 3 stack CS6062 shall not exceed 0.012 pound per MMBtu of heat input and 1.8 pounds per hour.

- (c) The PM₁₀ emissions from the Coke Plant Boiler House Boilers No.4 and No.5 stack CS6063 shall not exceed 0.012 pound per MMBtu of heat input each and a total of 3.9 pounds per hour.
- (d) The PM₁₀ emissions from the Coke Plant Boiler House Boiler No.6 stack CS6064 shall not exceed 0.012 pound per MMBtu of heat input and 2.0 pounds per hour.
- (e) The PM₁₀ emissions from the Coke Plant Boiler House Boiler No. 7 Stack CS6065 shall not exceed 0.012 pound per MMBtu of heat input and 1.9 pounds per hour.
- (f) The PM₁₀ emissions from the Coke Plant Boiler House Boiler No. 8 Stack CS6066 shall not exceed 0.012 pound per MMBtu of heat input and 2.9 pounds per hour.
- (g) The PM₁₀ emissions from the Coke Plant Boiler House Lime Storage Silo Baghouse LRS-1 shall not exceed 0.030 grain per dry standard cubic foot and 0.28 pound per hour.
- (h) Each emission limit applies to one (1) stack serving one (1) facility unless otherwise noted. The emissions limitations apply to one (1) stack serving the multiple units specified when the facility description notes stack serving, and to each stack of multiple stacks serving multiple facilities when the facility description notes each stack serving.
- (i) Pursuant to Significant Source Modification 089-19678-00121, issued October 29, 2004 and 326 IAC 6.8-1-2(b) (Particulate Matter Limitations for Lake County), particulate matter (PM) from each of the boilers No. 9, No. 10 and the temporary rental boiler shall not exceed 0.01 grains per dry standard cubic foot (gr/dscf) of exhaust air.

D.5.2 Sulfur Dioxide (SO₂) Limitations [326 IAC 7-4.1-20]

Pursuant to 326 IAC 7-4-1-20, the SO₂ emissions from the Boilers: Boiler No. 1 CSS10155, Boiler No. 2 CSS20156, Boiler No. 3 Stack CS6062, Boiler No. 4 and 5 Stack CS6063, Boiler No. 6 Stack CS6064, Boiler No. 7 Stack CS6065 and Boiler No. 8 Stack CS6066 shall comply with the following limitations:

- (a) Pursuant to 326 IAC 7-4.1-20(a)(1)(C), (a)(2)(B) and (a)(2)(C), when the coke oven gas desulfurization facility is not operating during the following periods,

Months	Boilers	Emission Limit (lbs/MMBtu)	Emission Limit (lbs/hr)
Jan - Dec	Boiler No. 8	1.27	316.2
Jan - Dec	Boiler No.9	1.27	298.45
Jan - Dec	Boiler No.10	1.27	298.45
Jan - Apr	Boiler Nos. 4 & 5.	0.444	150.0 total
May - Oct	Boiler Nos. 4 & 5.	0.385	130.0 total
Nov - Dec	Boiler Nos. 4 & 5.	0.000	0.0 total
Jan - Apr	Boiler No.6	1.27	214.6
May - Oct	Boiler No.6	1.27	214.6
Nov - Dec	Boiler No.6	1.18	200.0

- (b) Pursuant to 326 IAC 7-4.1-20(b)(3), when the coke oven gas desulfurization facility is operating.

Boiler	Emission Limit Lbs/MMBtu	Emission Limit Lbs/hr
Boiler No. 3	0.260	40.6
Boilers Nos. 4 and 5	0.260	87.9 total
Boiler No. 6	0.260	44.0
Boiler No. 7	0.260	42.1
Boiler No. 8	0.260	64.7
Boiler No. 9	0.260	61.10
Boiler No. 10	0.260	61.10

D.5.3 Nonattainment NSR Minor Limits [326 IAC 2-1.1-5]

Pursuant to Significant Source Modification 089-19678-00121, issued October 29, 2004 and in order to make the requirements of 326 IAC 2-1.1-5 Nonattainment NSR not applicable, the Permittee shall comply with the following:

- (a) The NO_x emissions from each boiler No. 1 through 8 shall not exceed 280 pounds per million cubic feet (MMCF) of natural gas. (This is the NO_x emission factor in AP-42, Table 1.4-1 for uncontrolled boilers.)
- (b) The NO_x emissions from the temporary rental boiler shall not exceed 36.0 pounds per million cubic feet (MMCF) for natural gas,
- (c) The NO_x emissions from each of the boilers No. 9 and No. 10 shall not exceed 129 pounds per million cubic feet (MMCF) of natural gas.
- (d) The total NO_x emissions from boilers No. 1 through No. 10 and the temporary rental boiler at the coke plant boiler house (CPBH) shall be limited to less than 64.6 tons per twelve (12) consecutive month period with compliance determined at the end of each month. The monthly NO_x emissions shall be calculated using the following equation:

$$\text{NO}_x \text{ Emissions (tons/month)} = (280 X + 36 Y + 129 Z) / 2,000$$

Where:

X = total monthly natural gas usage in boilers No. 1 through No. 8 (MMCF/month)

Y = monthly natural gas usage in the temporary rental boiler (MMCF/month)

Z = total monthly natural gas usage in boilers No. 9 and No. 10 (MMCF/month)

This limitation ensures the net NO_x emission increase from the modification to add Boilers No. 9 and No. 10 shall be less than 40 tons/yr and the requirements of 326 IAC 2-1.1-5 (Nonattainment NSR) are not applicable.

D.5.4 PSD Minor Limits [326 IAC 2-2]

Pursuant to Significant Source Modification 089-19678-00121, issued October 29, 2004 and in order to make the requirements of 326 IAC 2-2 (PSD) not applicable, the Permittee shall limit the total natural gas usage from boilers No. 1 through No. 10 and the temporary rental boiler to less than 2,550 MMCF per twelve (12) consecutive month period with compliance determined at the end of each month.

This is equivalent to 9.69 tons/yr of PM₁₀ emissions and 107 tons/yr of CO emissions from boilers No. 1 through No. 10 and the temporary rental boiler. The net emission increases from this modification are limited to less than 15 tons/yr for PM₁₀ and less than 100 tons/yr for CO. Therefore, the requirements of 326 IAC 2-2 (PSD) is not applicable.

D.5.5 General Provisions Relating to NSPS [326 IAC 12-1] [40 CFR Part 60, Subpart A]

The provisions of 40 CFR Part 60, Subpart A - General Provisions, which are incorporated by reference in 326 IAC 12-1, apply to boilers No. 9, No. 10, and the temporary rental boiler at the coke plant boiler house, except when otherwise specified in 40 CFR Part 60, Subpart Db.

D.5.6 NOx Emissions [326 IAC 12-1][40 CFR 60, Subpart Db]

Pursuant to 40 CFR 60.44b(a), the NOx emissions from each of the boilers No. 9, No. 10, and the temporary rental boiler at the coke plant boiler house shall not exceed 0.2 lbs/MMBtu when combusting natural gas.

D.5.7 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

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

Compliance Determination Requirements

D.5.8 Testing Requirements [326 IAC 2-7-6(1),(6)] [326 IAC 2-1.1-11] [326 IAC 2-1.1-5] [40 CFR 60, Subpart Db]

Pursuant to Significant Source Modification 089-19678-0012, issued October 29, 2004 and in order to demonstrate compliance with Conditions D.5.3 and D.5.86, the Permittee shall perform NOx testing for boilers No. 9, No. 10, and the temporary rental boiler within 60 days after achieving the maximum production, but not later than 180 days after initial startup, utilizing methods as approved by the Commissioner. Testing shall be conducted in accordance with Section C - Performance Testing. Pursuant to 40 CFR 60.46b(e), the performance test requirements may be satisfied by using 30-day average emission rate data from NOx CEMs.

D.5.9 Sulfur Fuel Sampling and Analysis [326 IAC 7-4.1-2]

To demonstrate compliance with condition D.5.4, the Permittee shall perform the Sulfur Sampling and Analysis in accordance with Section C - Sulfur Fuel Sampling and Analysis of this permit.

D.5.10 Particulate Matter Control

The lime storage silo baghouse shall be in operation and control particulate emissions at all times the silo is pneumatically loaded.

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

D.5.11 Continuous Emissions Monitoring [326 IAC 3-5] [326 IAC 12] [40 CFR 60, Subpart Db] [326 IAC 2-7-6(1),(6)]

In order to demonstrate compliance with condition D.5.6, the Permittee shall install, calibrate, maintain and operate a continuous monitoring system for Boilers No. 9 No. 10 and the temporary rental boiler for measuring NOx emissions discharged to the atmosphere. The continuous monitoring system shall meet the performance specifications of 326 IAC 3-5-2 and 40 CFR 60.48b, and 40 CFR 60.13(h). 326 IAC 3-5 is not federally enforceable.

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

D.5.12 Record Keeping Requirements

- (a) To document compliance with Condition D.5.3(b), D.5.3(c) and D.5.6, the Permittee shall maintain records of the NOx emissions from boilers No. 9, No. 10, and the temporary rental boiler in accordance with 40 CFR 60.49b.
- (b) To document compliance with Condition D.5.3(d), the Permittee shall maintain monthly records of the following:
 - (1) total natural gas usage for boilers No. 1 through No. 8;
 - (2) natural gas usage for the temporary rental boiler;

- (3) total natural gas usage for boilers No. 9 and No. 10; and
- (4) calculated NOx emissions using the equation listed in Condition D.5.3(d).
- (c) To document compliance with Condition D.5.4, the Permittee shall maintain monthly records of the total natural gas usage for boilers No. 1 through No. 10 and the temporary rental boiler.
- (d) To document compliance with Condition D.5.2, the Permittee shall maintain records in accordance with Section C- Sulfur Dioxide (SO₂) Record Keeping Requirements (Entire Source).
- (e) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

D.5.13 Reporting Requirements

- (a) A quarterly summary report to document compliance with condition D.5.2 shall be submitted to IDEM, in accordance with Section C – Sulfur Dioxide Reporting Requirements (Entire Source). The report submitted by the Permittee does require the certification by the “responsible official” as defined by 326 IAC 2-7-1(34).
- (b) A quarterly summary of the information to document compliance with Conditions D.5.3(d) and D.5.4 shall be submitted to the address listed in Section C - General Reporting Requirements, of this permit, using the reporting forms located at the end of this permit, or their equivalent, within thirty (30) days after the end of the quarter being reported. The report submitted by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

D.5.14 Natural Gas Fired Boiler Certification

A semi-annual certification shall be submitted to the address listed in Section C - General Reporting Requirements, of this permit, using the Natural Gas Fired Boiler Certification form located at the end of this permit, or its equivalent for the Number 2 Coke Plant Boiler House Boilers Nos. 3, through 10 and the rental natural gas fired boilers. The report submitted by the Permittee does require the certification by the “responsible official” as defined by 326 IAC 2-7-1(34).

SECTION D.6

FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15): One (1) Number 3 Sinter Plant

- (a) Three (3) Sinter Strands, constructed in 1958, identified as ISS10379, ISS20380 and ISS30381, each with a 50 MMBtu per hour reheat burners identified as ISB001, ISB002 and ISB003 and a maximum capacity of 225 tons of sinter per hour each, controlled by two (2) Windbox Gas Cleaning Systems IS3203 and IS3204, installed in 1996, each comprised of a Quench Reactor, Dry Venturi Scrubber, a baghouse operated in series, exhausting to Windbox stacks IS6198 and IS6199 which are equipped with VOC CEMS.
- (b) One (1) Cold Screen Station, identified as ISR00389, constructed in 1958, with a maximum capacity of 450 tons per hour, using a Baghouse IS3209 as a control device and exhausting to stack IS6207.
- (c) One (1) S1/S2 Conveyer System, identified as ISY00388, constructed in 1979, with a maximum capacity of 450 tons per hour, that transfers sinter from the sinter coolers to the cold screening station, using a baghouse IS3208 as a control device and exhausting to stack IS6206.
- (d) Three (3) Sinter Coolers, identified as ISC10385, ISC20386, and ISC30387, constructed in 1958, with a maximum capacity of 225 ton per hour each, with emissions exhausting to stacks IS6203, IS6204, and IS6205 respectively.
- (e) Three (3) Sinter Strand Discharge End Areas, identified as ISS10379, ISS20380 and ISS0381, constructed in 1958, using three (3) baghouses as control devices, designated as IS3205, IS3206, and IS3207, exhausting to stacks IS6200, IS6201, and IS6202 respectively.
- (f) Blended Material Storage Bin Building, identified as ISB00377, constructed in 1979, including bins, feeders and conveyors, with a maximum capacity of 1,000 tons per hour, using a Baghouse IS3196 as a control device and exhausting to stack IS6197.
- (g) Storage and Blending Piles, identified as ISBP0376, with fugitive emissions.

(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-National Emission Standards for Hazardous Air Pollutants (HAPs): [326 IAC 20-1][40 CFR 63, Subpart A] [Table 4 to 40 CFR 63, Subpart FFFFF]

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 Sinter Plant Windbox exhaust, discharge end and sinter coolers, except when otherwise specified by Table 4 in 40 CFR 63, Subpart FFFFF.

D.6.2 Particulate Emissions Offset [326 IAC 2-3]

Pursuant to the significant source modification 089-12880-00121, issued July 26, 2001, the natural gas usage shall be less than 95.5 million standard cubic feet (MMSCF) or the coke oven gas usage shall be less than 1,637.4 MMSCF in the No. 3 Sinter Plant Sinter Strand Windbox reheat burners ISB001, ISB002 and ISB003 per 12-consecutive month period, with compliance demonstrated at the end of each month. Compliance with this limit makes 326 IAC 2-3 (Emissions Offset) not applicable.

D.6.3 Lake County PM₁₀ Emission Requirements [326 IAC 6.8-2-38]

Pursuant to 326 IAC 6.8-2-38, PM₁₀ emissions from the No. 3 Sinter Plant shall comply with the following:

- (a) The PM₁₀ emissions from the No. 3 Sinter Plant Strand Windbox gas cleaning system stacks IS6198 and IS6199 emissions shall not exceed 0.020 grains per dry standard cubic foot and a total of 200.0 pounds per hour.
- (b) The PM₁₀ emissions from the No. 3 Sinter Plant Cold Screen Station Baghouse Stack IS6207 shall not exceed 0.0100 grains per dry standard cubic foot and 10.89 pounds per hour.
- (c) The PM₁₀ emissions from the No. 3 Sinter Plant S1/S2 Conveyor System Baghouse Stack IS6206 shall not exceed 0.0100 grains per dry standard cubic foot and 1.29 pounds per hour.
- (d) The PM₁₀ emissions from the No. 3 Sinter Plant Sinter Coolers Stacks IS6203, IS6204 and IS6205 shall not exceed 0.0300 grains per dry standard cubic foot and a total of 272.57 pounds per hour.
- (e) The PM₁₀ emissions from the No. 3 Sinter Plant Discharge Ends Area Baghouse Stacks IS6200, IS6201 and IS6202 shall not exceed 0.0100 grain per dry standard cubic foot and total of 20.57 pounds per hour.
- (f) The PM₁₀ emissions from the No. 3 Sinter Plant Blended Material Storage Bins Building Baghouse Stack IS6197 shall not exceed 0.0100 grain per dry standard cubic foot and 0.43 pounds per hour.
- (g) Each emission limit applies to one (1) stack serving one (1) facility unless otherwise noted. The emissions limitations apply to one (1) stack serving the multiple units specified when the facility description notes stack serving, and to each stack of multiple stacks serving multiple facilities when the facility description notes each stack serving.

D.6.4 Sulfur Dioxide (SO₂) Limitations [326 IAC 7-4.1-20]

Pursuant to 326 IAC 7-4.1-20 the SO₂ emissions from the Sinter Plant Windbox gas cleaning systems stacks IS6198 and IS6199 shall not exceed the following:

- (a) Pursuant to 326 IAC 7-4.1-20(a)(1)(G), the SO₂ emissions from the Sinter Plant Windbox gas cleaning systems stacks IS6198 and IS6199 shall not exceed a total of 260.0 pounds per hour when the coke oven gas desulfurization plant is not in operation.
- (b) Pursuant to 326 IAC 7-4.1-20(b)(7), the SO₂ emissions from the Sinter Plant Windbox gas cleaning systems stacks IS6198 and IS6199 shall not exceed a total of 200.0 pounds per hour when the coke oven gas desulfurization plant is in operation.

D.6.5 Volatile Organic Compounds (VOC) Limitations [326 IAC 8-13-3]

Pursuant to 326 IAC 8-13-3(b) and (c), the No. 3 Sinter Plant windbox gas cleaning system stacks (IS6198 and IS6199) shall not exceed the VOC emission limits as follows:

- (a) During the period May 1 through September 30, the total VOC emissions (the seasonal cap) shall not exceed 256,948 pounds of VOC emissions. This is based on the following equation:

VOC (pounds) = 0.25 lb of VOC per ton of sinter produced x average daily sinter production rate of 6717.59 tons per day x 153 days

- (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) shall not exceed 2,096 pounds of VOC emissions. This is based on the following equation:

VOC (pounds per day) = 0.25 lb of VOC per ton of sinter produced x maximum actual daily sinter production rate 8384 tons 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 (either one (1) hour or eight (8) hour), the sinter plant windbox exhaust VOC emissions (the lower daily limit) shall not exceed 1,679 pounds of VOC emissions. This is based on the following equation:
- $$\text{VOC (pounds per day)} = 0.25 \text{ lb of VOC per ton of sinter produced} \times \text{maximum actual daily sinter production rate of 6716 tons per day}$$
- A high ozone level day shall be predicted in accordance with item (g)(4) of this condition.
- (d) The maximum actual daily sinter production (tons per day) is equal to the maximum actual sinter produced on an operating day during the period from 1990 to 1997.
- (e) The average daily sinter production equals either of the following:
- (1) The annual average sinter production in tons divided by the annual average number of operating days in the period 1990 through 1994.
 - (2) In the event sinter production in 1990 to 1994 is not representative of the current sinter production due to factors, such as, but not limited to, routine repair, maintenance, or replacement, a source may elect to use the average actual sinter production in tons per day during a calendar year up to the year 1997, which represents current sinter production. The averaging period must include and not be less than the ozone season (May 1 through September 30).
- (f) From October 1 through April 30, sinter plant windbox exhaust gas VOC emissions shall be limited to thirty-six hundredths (0.36) pound per ton of sinter produced. The limit shall be complied with on an operating day average basis.
- (g) Pursuant to 326 IAC 8-13-4(b)(8) and an Ozone Action Plan dated August 2, 1999, the Permittee shall do the following:
- (1) Control the sinter burden oil and grease content by regulating the amount of mill scale in the sinter burden.
 - (2) Use a continuous emissions monitoring system to ensure compliance with the applicable limits.
 - (3) Implement the following sequence of events upon discovery and initial internal notification of an actual or projected VOC emission limit, exceedance.
 - (A) Verify the exceedance.
 - (B) Determine the exceedance status: ceased or on-going.
 - (C) Implement corrective measures if a verified on-going exceedance condition exists. The feed rate of mill scale to the sinter burden from the dedicated mill scale bin is reduced or terminated. Incremental reductions in the mill scale feed rate may be utilized.
 - (4) To predict high ozone days: the Permittee is a participant in IDEM's Partners for Clean Air Program and receives notification of Ozone Action Days from IDEM - OAQ. The Permittee will initiate the ozone action plan. A high ozone level day shall be predicted by the Permittee by using notification from IDEM, OAQ of an ozone action day.

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

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, is required for these facilities and any associated emission control devices.

Compliance Determination Requirements

D.6.7 Testing Requirements [326 IAC 2-7-6(1),(6)][326 IAC 2-1.1-11]

- (a) Within thirty (30) months after issuance of this permit or two and one half (2 ½) years from the date of the last compliance test which ever is earlier, in order to demonstrate compliance with Condition D.6.3, the Permittee shall perform simultaneous sampling and analysis of both non-condensable (front half) and condensable (back half) PM₁₀ on Sinter Plant Windbox Gas Cleaning Systems Stacks IS6198 and IS6199, using methods as listed in 326 IAC 6.8-4-1(5) or a testing method approved by the Commissioner. This test shall be repeated at least once every five (5) years from the date of the last valid compliance demonstration. All tests shall be performed in accordance with Section C - Performance Testing.
- (b) Within thirty (30) months after issuance of this permit or two and one half (2 ½) years from the date of the last compliance test which ever is earlier, in order to demonstrate compliance with Condition D.6.3, the Permittee shall perform PM₁₀ testing on the Discharge Ends Area Baghouse Stacks IS6200, IS6201 and IS6202, using the appropriate methods to measure PM₁₀ as listed in 326 IAC 6.8-4-1(1) or other methods approved by the Commissioner. This test shall be repeated at least once every five (5) years from the date of this valid compliance demonstration. All tests shall be performed in accordance with Section C - Performance Testing.
- (c) Within thirty (30) months after issuance of this permit or five (5) years from the date of the last compliance test which ever is earlier, in order to demonstrate compliance with Condition D.6.3, the Permittee shall perform PM₁₀ testing of the three (3) Sinter Coolers Stacks IS6203, IS6204 and IS6205, using the appropriate methods to measure PM₁₀ as listed in 326 IAC 6.8-4-1(1) or other methods approved by the Commissioner. This test shall be repeated at least once every five (5) years from the date of this valid compliance demonstration. All tests shall be performed in accordance with Section C - Performance Testing.
- (d) Within thirty (30) months after issuance of this permit or five (5) years from the date of the last compliance test which ever is earlier, in order to demonstrate compliance with Condition D.6.4, the Permittee shall perform SO₂ testing on Sinter Windbox Gas Cleaning Systems Stacks IS6198 and IS6199, using methods as approved by the Commissioner. This test shall be repeated at least once every five (5) years from the date of the last valid compliance demonstration. All tests shall be performed in accordance with Section C - Performance Testing.

D.6.8 Particulate Matter Control

- (a) Except as otherwise provided by statute, rule or this permit the control devices as listed in (1) through (5) below shall be in operation at all times the associated processes are in operation to control particulate emissions.
 - (1) Sinter Plant Windbox Gas Cleaning System each comprised of a Quench Reactor, Dry Venturi Scrubber, and a Baghouse in series, identified as emission units IS3203 and IS3204, shall be in operation at all times when the No. 3 Sinter Plant Sinter Windbox is in operation.
 - (2) The Cold Screen Station Baghouse, identified as control device IS3209, shall be in operation at all times when the No. 3 Sinter Plant Cold Screen Station is in operation.

- (3) The S1/S2 Conveyor System Baghouse, identified as control device IS3208, shall be in operation at all times material is conveyed by the No. 3 Sinter Plant S1/S2 conveyor system.
 - (4) The Sinter Strand Discharge Ends Area Baghouses, identified as control devices IS3205, IS3206, IS3207, shall be in operation at all times when the associated No. 3 Sinter Plant Sinter Strand Discharge Ends Area and Sinter Coolers are in operation.
 - (5) The Blended Material Storage Bins Baghouse, identified as control device IS3196, shall be in operation at all times when material is being transferred in the building.
- (b) In the event that bag failure is observed in a multi-compartment baghouse, if operations will continue for ten (10) days or more after the failure is observed before the failed units will be repaired or replaced, the Permittee shall promptly notify the IDEM, OAQ of the expected date the failed units will be repaired or replaced. The notification shall also include the status of the applicable compliance monitoring parameters with respect to normal, and the results of any response actions taken up to the time of notification.

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

D.6.9 Visible Emissions Notations

- (a) Visible emission notations of the Sinter Strand Windbox Gas Cleaning System stacks IS6198 and IS6199, Cold Screen Station Stack IS6207, Sinter Cooler Stacks IS6203, IS6204 and IS6205 and Discharge Ends Area Stacks IS6200, IS6201 and IS6202, shall be performed once per day during normal daylight operations when the No. 3 Sinter Plant Sinter Strand Windbox Gas Cleaning System, Cold Screen Station, Sinter Coolers and Discharge Ends Area are in operation. A trained employee shall record whether emissions are normal or abnormal.
- (b) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.
- (c) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.
- (d) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.
- (e) If abnormal emissions are observed, the Permittee shall take reasonable response steps in accordance with Section C - Response to Excursions or Exceedances. Failure to take response steps in accordance with Section C - Response to Excursions or Exceedances shall be considered a deviation of this permit.
- (f) The Permittee shall comply with the most current Continuous Compliance Plan visible emission evaluation program, in accordance with Section C- Continuous Compliance Plan.

D.6.10 Parametric Monitoring

- (a) The Permittee shall record the pressure drop and liquid reagent flow rate of the dry venturi scrubbers used in conjunction with the No. 3 Sinter Plant Sinter Strand Windbox Gas Cleaning Systems at least once per day when the No. 3 Sinter Plant Sinter Strand Windbox units are in operation. When for any one reading, the pressure drop across the scrubbers is outside the range of 3 to 8 inches of water and the flow rate of the scrubber is outside the range of 400 to 600 gallons per minute (gpm) or a range established during the latest stack test, the Permittee shall take reasonable response steps in accordance with Section C- Response to Excursions or Exceedances. A pressure drop or flow rate that is outside the above mentioned ranges is not a deviation from this permit. Failure to take response steps in accordance with Section C - Response to Excursions or Exceedances, shall be considered a deviation of this permit.
- (b) The Permittee shall record the pressure drop of the baghouse used in conjunction with the No. 3 Sinter Plant Discharge Ends Area at least once per day when the No. 3 Sinter Plant Discharge Ends Area is in operation. When for any one reading, the pressure drop across the baghouse is outside the range of 3 to 8 inches of water or a range established during the latest stack test, the Permittee shall take reasonable response steps in accordance with Section C- Response to Excursions or Exceedances. A pressure reading that is outside the above mentioned range is not a deviation from this permit. Failure to take response steps in accordance with Section C - Response to Excursions or Exceedances, shall be considered a deviation of this permit.
- (c) The Permittee shall record the pressure drop of the baghouse used in conjunction with the No. 3 Sinter Plant Cold Screen Station at least once per day when the No. 3 Sinter Plant Cold Screen Station is in operation. When for any one reading, the pressure drop across the baghouse is outside the range of 3 to 8 inches of water or a range established during the latest stack test, the Permittee shall take reasonable response steps in accordance with Section C- Response to Excursions or Exceedances. A pressure reading that is outside the above mentioned range is not a deviation from this permit. Failure to take response steps in accordance with Section C - Response to Excursions or Exceedances, shall be considered a deviation of this permit.
- (d) The Permittee shall comply with the most current Continuous Compliance Plan for the baghouse operation, recording and maintenance, in accordance with Section C- Continuous Compliance Plan.
- (e) The instruments used for determining the pressure drop and flow rate shall comply with Section C - Instrument Specifications, of this permit, shall be subject to approval by IDEM, OAQ and shall be calibrated at least once every six (6) months.

D.6.11 Scrubber Failure Detection

In the event, a scrubber failure has been observed:

Failed units and the associated process will be shut down immediately until the failed units have been repaired 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.6.12 Continuous Emissions Monitoring (VOC)[326 IAC 8-13-8][326 IAC 3-5]

The Permittee shall operate the continuous emissions monitoring system (CEMS) for the measurement of VOC emissions discharged into the atmosphere from the No. 3 Sinter Plant Sinter Windbox gas cleaning system stacks IS6198 and IS6199, in accordance with 326 IAC 8-13-8, and 326 IAC 3-5.

- (a) The continuous emissions monitoring system (CEMS) shall measure VOC emission rate in pounds per hour.

- (b) The Permittee shall demonstrate compliance with Condition D.6.6 utilizing data from the VOC CEMS and 326 IAC 8-13-3(b) calculations.
- (c) The Permittee shall follow the maintenance, operating procedures, quality assurance procedures and performance specifications for the VOC CEMs in 326 IAC 3-5.
- (c) In the event of an exceedance of VOC emissions, the Permittee shall implement the corrective action plan requirements in 326 IAC 8-13-4(b)(5).

D.6.13 VOC Monitoring Downtime [326 IAC 2-7-6] [326 IAC 2-7-5(3)]

Whenever the VOC continuous emission monitoring system is malfunctioning or down for repairs or adjustments for more than four (4) hours, the following method shall be used to provide information related to VOC emissions:

- (a) The Permittee shall not include oily scale in the sinter plant burden raw materials, and
- (b) Sample and analyze the sinter burden for oil and grease utilizing the methods and calculations in 326 IAC 8-13-5(d).

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

D.6.14 General Record Keeping Requirements

- (a) To document compliance with Condition D.6.2 and pursuant to Significant Source Modification 089-12880-00121, issued on July 26, 2001, the Permittee shall maintain records of the Coke oven gas and natural gas usage in the No. 3 Sinter Plant Strand Windbox gas reheat burners ISB001, ISB002 and ISB003.
- (b) To document compliance with Condition D.6.4, the Permittee shall maintain records in accordance with Section C – Sulfur Dioxide (SO₂) Record Keeping (Entire Source).
- (c) To document compliance with Condition D.6.5, the Permittee shall maintain the following records:
 - (1) Records of the VOC emissions monitoring data for the period May 1 through September 30, as follows:
 - (A) The VOC emitted each day.
 - (B) The cumulative total of VOC emitted.
 - (C) The sinter produced each operating day.
 - (2) Maintain records of the VOC continuous emissions monitor system (CEMS) as required in 326 IAC 3-5.
- (d) To document compliance with Condition D.6.9 the Permittee shall maintain records of once per day visible emission notations of the Sinter Cooler Stacks IS6203, IS6204 and IS6205 exhausts.
- (e) To document compliance with Condition D.6.10, the Permittee shall maintain the records of the Sinter Plant Windbox Gas Cleaning system pressure drop across the baghouse; pressure drop and flow rate of the Sinter Plant Windbox Gas Cleaning Scrubbers; pressure drop across the Cold Screen Station Baghouse and pressure drop across the Discharge Ends Area baghouse during normal operation on at least a once per day basis.

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

D.6.15 General Reporting Requirements

- (a) Pursuant to Significant Source modification 089-12880-00121, a quarterly summary of the natural gas and coke oven gas usage at the No. 3 Sinter Plant Sinter Strands Windbox recirculating burners per 12-consecutive month period with compliance demonstrated at the end of each month to document compliance with Conditions D.6.2, shall be submitted to the address listed in Section C - General Reporting Requirements, of this permit, using the reporting forms located at the end of this permit, or their equivalent, within thirty (30) days after the end of the quarter being reported.
- (b) Pursuant to 326 IAC 8-13-8(a)(3), reports to document compliance with Condition D.6.5, shall be as follows:
- (1) For VOC Continuous Emissions Monitoring System (CEMS), the following reports shall be submitted:
- (A) A report shall be submitted within thirty (30) days of an exceedance of VOC emission limits in D.6.6 containing the following information:
- (i) The name and location of the source.
- (ii) The nature of the exceedance.
- (iii) The date of the occurrence.
- (iv) The cause of the exceedance, such as, but not limited to, production rates or characteristics of the sinter burden.
- (v) The corrective action taken according to the corrective action plan in 326 IAC 8-13-4(b)(5).
- (B) Submit the CEM certification reports according to the procedures and schedule in 326 IAC 3-5.
- (c) A quarterly summary report to document compliance with condition D.6.4 shall be submitted to IDEM, in accordance with Section C – Sulfur Dioxide (SO₂) Reporting Requirements (Entire Source).
- (d) The reports submitted by the Permittee do require the certification by the “responsible official” as defined by 326 IAC 2-7-1(34).

D.6.16 National Emission Standards for Hazardous Air Pollutants (HAPs): Integrated Iron and Steel Manufacturing – Sinter Plants [40 CFR 63, Subpart FFFFF]

Title 40: Protection of Environment

[PART 63—NATIONAL EMISSION STANDARDS FOR HAZARDOUS AIR POLLUTANTS FOR SOURCE CATEGORIES](#)

Subpart FFFFF—National Emission Standards for Hazardous Air Pollutants for Integrated Iron and Steel Manufacturing Facilities

Source: 68 FR 27663, May 20, 2003, unless otherwise noted.

What This Subpart Covers

§63.7780 What is the purpose of this subpart?

This subpart establishes national emission standards for hazardous air pollutants (NESHAP) for integrated iron and steel manufacturing facilities. This subpart also establishes requirements to demonstrate initial and continuous compliance with all applicable emission limitations and operation and maintenance requirements in this subpart.

§63.7781 Am I subject to this subpart?

You are subject to this subpart if you own or operate an integrated iron and steel manufacturing facility that is (or is part of) a major source of hazardous air pollutants (HAP) emissions. Your integrated iron and steel manufacturing facility is a major source of HAP if it emits or has the potential to emit any single HAP at a rate of 10 tons or more per year or any combination of HAP at a rate of 25 tons or more per year.

§63.7782 What parts of my plant does this subpart cover?

(a) This subpart applies to each new and existing affected source at your integrated iron and steel manufacturing facility.

(b) The affected sources are each new or existing sinter plant at your integrated iron and steel manufacturing facility.

(c) This subpart covers emissions from the sinter plant windbox exhaust, discharge end, and sinter cooler.

(d) A sinter plant at your integrated iron and steel manufacturing facility is existing if you commenced construction or reconstruction of the affected source before July 13, 2001.

(e) A sinter plant at your integrated iron and steel manufacturing facility is new if you commence construction or reconstruction of the affected source on or after July 13, 2001. An affected source is reconstructed if it meets the definition of reconstruction in §63.2.

§63.7783 When do I have to comply with this subpart?

(a) If you have an existing affected source, you must comply with each emission limitation and operation and maintenance requirement in this subpart that applies to you by the dates specified in paragraphs (a)(1) and (2) of this section.

(1) No later than May 22, 2006 for all emission sources at an existing affected source except for a sinter cooler at an existing sinter plant.

(2) No later than January 13, 2007 for a sinter cooler at an existing sinter plant.

(b) If you have a new affected source and its initial startup date is on or before May 20, 2003, then you must comply with each emission limitation and operation and maintenance requirement in this subpart that applies to you by May 20, 2003.

(c) If you have a new affected source and its initial startup date is after May 20, 2003, you must comply with each emission limitation and operation and maintenance requirement in this subpart that applies to you upon initial startup.

(d) If your integrated iron and steel manufacturing facility is not a major source and becomes a major source of HAP, the following compliance dates apply to you.

(1) Any portion of the existing integrated iron and steel manufacturing facility that becomes a new affected source or a new reconstructed source must be in compliance with this subpart upon startup.

(2) All other parts of the integrated iron and steel manufacturing facility must be in compliance with this subpart no later than 2 years after it becomes a major source.

(e) You must meet the notification and schedule requirements in §63.7840. Several of these notifications must be submitted before the compliance date for your affected source.

Emission Limitations

§63.7790 What emission limitations must I meet?

(a) You must meet each emission limit and opacity limit in Table 1 to this subpart that applies to you.

(b) You must meet each operating limit for capture systems and control devices in paragraphs (b)(1) and (2) of this section that applies to you.

(1) You must operate each capture system applied to emissions from a sinter plant discharge end at or above the lowest value or settings established for the operating limits in your operation and maintenance plan;

(2) For each venturi scrubber applied to meet any particulate emission limit in Table 1 to this subpart, you must maintain the hourly average pressure drop and scrubber water flow rate at or above the minimum levels established during the initial performance test.

(c) An owner or operator who uses an air pollution control device other than a baghouse, venturi scrubber, or electrostatic precipitator must submit a description of the device; test results collected in accordance with §63.7822 verifying the performance of the device for reducing emissions of particulate matter to the atmosphere to the levels required by this subpart; a copy of the operation and maintenance plan required in §63.7800(b); and appropriate operating parameters that will be monitored to maintain continuous compliance with the applicable emission limitation(s). The monitoring plan identifying the operating parameters to be monitored is subject to approval by the Administrator.

(d) For each sinter plant, you must either:

(1) Maintain the 30-day rolling average oil content of the feedstock at or below 0.02 percent; or

(2) Maintain the 30-day rolling average of volatile organic compound emissions from the windbox exhaust stream at or below 0.2 lb/ton of sinter.

Operation and Maintenance Requirements

§63.7800 What are my operation and maintenance requirements?

(a) As required by §63.6(e)(1)(i), you must always operate and maintain your affected source, including air pollution control and monitoring equipment, in a manner consistent with good air pollution control practices for minimizing emissions at least to the levels required by this subpart.

(b) You must prepare and operate at all times according to a written operation and maintenance plan for each capture system or control device subject to an operating limit in §63.7790(b). Each plan must address the elements in paragraphs (b)(1) through (5) of this section.

(1) Monthly inspections of the equipment that is important to the performance of the total capture system (e.g., pressure sensors, dampers, and damper switches). This inspection must include observations of the physical appearance of the equipment (e.g., presence of holes in ductwork or hoods, flow constrictions caused by dents or accumulated dust in the ductwork, and fan erosion). The operation and maintenance plan also must include requirements to repair any defect or deficiency in the capture system before the next scheduled inspection.

(2) Preventative maintenance for each control device, including a preventative maintenance schedule that is consistent with the manufacturer's instructions for routine and long-term maintenance.

(3) Operating limits for each capture system applied to emissions from a sinter plant discharge end. You must establish the operating limits according to the requirements in paragraphs (b)(3)(i) through (iii) of this section.

(i) Select operating limit parameters appropriate for the capture system design that are representative and reliable indicators of the performance of the capture system. At a minimum, you must use appropriate operating limit parameters that indicate the level of the ventilation draft and the damper position settings for the capture system when operating to collect emissions, including revised settings for seasonal variations. Appropriate operating limit parameters for ventilation draft include, but are not limited to, volumetric flow rate through each separately ducted hood, total volumetric flow rate at the inlet to the control device to which the capture system is vented, fan motor amperage, or static pressure.

(ii) For each operating limit parameter selected in paragraph (b)(3)(i) of this section, designate the value or setting for the parameter at which the capture system operates during the process operation. If your operation allows for more than one process to be operating simultaneously, designate the value or setting for the parameter at which the capture system operates during each possible configuration that you may operate.

(iii) Include documentation in your plan to support your selection of the operating limits established for the capture system. This documentation must include a description of the capture system design, a description of the capture system operating during production, a description of each selected operating limit parameter, a rationale for why you chose the parameter, a description of the method used to monitor the parameter according to the requirements of §63.7830(a), and the data used to set the value or setting for the parameter for each of your process configurations.

(4) Corrective action procedures for bag leak detection systems. In the event a bag leak detection system alarm is triggered, you must initiate corrective action to determine the cause of the alarm within 1 hour of the alarm, initiate corrective action to correct the cause of the problem within 24 hours of the alarm, and complete the corrective action as soon as practicable. Corrective actions may include, but are not limited to:

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

(ii) Sealing off defective bags or filter media.

(iii) Replacing defective bags or filter media or otherwise repairing the control device.

(iv) Sealing off a defective baghouse compartment.

(v) Cleaning the bag leak detection system probe, or otherwise repair the bag leak detection system.

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

(5) Corrective actions procedures for venture scrubbers equipped with continuous parametric monitoring systems (CPMS) . In the event a venture scrubber exceeds the operating limit in §63.7790(b)(2), you must take corrective actions consistent with your site-specific monitoring plan in accordance with §63.7831(a).

(7) Procedures for determining and recording the daily sinter plant production rate in tons per hour.

General Compliance Requirements

§63.7810 What are my general requirements for complying with this subpart?

(a) You must be in compliance with the emission limitations and operation and maintenance requirements in this subpart at all times, except during periods of startup, shutdown, and malfunction as defined in §63.2.

(b) During the period between the compliance date specified for your affected source in §63.7783 and the date upon which continuous monitoring systems have been installed and certified and any applicable operating limits have been set, you must maintain a log detailing the operation and maintenance of the process and emissions control equipment.

(c) You must develop a written startup, shutdown, and malfunction plan according to the provisions in §63.6(e)(3).

[68 FR 27663, May 20, 2003, as amended at 71 FR 20468, Apr. 20, 2006]

Initial Compliance Requirements

§63.7820 By what date must I conduct performance tests or other initial compliance demonstrations?

(a) You must conduct a performance test to demonstrate initial compliance with each emission and opacity limit in Table 1 to this subpart that applies to you. You must also conduct a performance test to demonstrate initial compliance with the 30-day rolling average operating limit for the oil content of the sinter plant feedstock in §63.7790(d)(1) or alternative limit for volatile organic compound emissions from the sinter plant windbox exhaust stream in §63.7790(d)(2). You must conduct the performance tests within 180 calendar days after the compliance date that is specified in §63.7783 for your affected source and report the results in your notification of compliance status.

(b) For each operation and maintenance requirement that applies to you where initial compliance is not demonstrated using a performance test or opacity observation, you must demonstrate initial compliance within 30 calendar days after the compliance date that is specified for your affected source in §63.7783.

(c) If you commenced construction or reconstruction between July 13, 2001 and May 20, 2003, you must demonstrate initial compliance with either the proposed emission limit or the promulgated emission limit no later than November 17, 2003 or no later than 180 days after startup of the source, whichever is later, according to §63.7(a)(2)(ix).

(d) If you commenced construction or reconstruction between July 13, 2001 and May 20, 2003, and you chose to comply with the proposed emission limit when demonstrating initial compliance, you must conduct a second performance test to demonstrate compliance with the promulgated emission limit by November 17, 2006, or no later than 180 days after startup of the source, whichever is later, according to §63.7(a)(2)(ix).

§63.7821 When must I conduct subsequent performance tests?

You must conduct subsequent performance tests to demonstrate compliance with all applicable PM and opacity limits in Table 1 to this subpart at the frequencies specified in paragraphs (b) through (d) of this section.

(b) For each sinter cooler at an existing sinter plant and each emissions unit equipped with a control device other than a baghouse, you must conduct subsequent performance tests no less frequently than twice (at mid-term and renewal) during each term of your title V operating permit.

(c) For each emissions unit equipped with a baghouse, you must conduct subsequent performance tests no less frequently than once during each term of your title V operating permit.

(d) For sources without a title V operating permit, you must conduct subsequent performance tests every 2.5 years.

§63.7822 What test methods and other procedures must I use to demonstrate initial compliance with the emission limits for particulate matter?

(a) You must conduct each performance test that applies to your affected source according to the requirements in §63.7(e)(1) and the conditions detailed in paragraphs (b) through (i) of this section.

(b) To determine compliance with the applicable emission limit for particulate matter in Table 1 to this subpart, follow the test methods and procedures in paragraphs (b)(1) and (2) of this section.

(1) Determine the concentration of particulate matter according to the following test methods in appendix A to part 60 of this chapter:

(i) Method 1 to select sampling port locations and the number of traverse points. Sampling ports must be located at the outlet of the control device and prior to any releases to the atmosphere.

(ii) Method 2, 2F, or 2G to determine the volumetric flow rate of the stack gas.

(iii) Method 3, 3A, or 3B to determine the dry molecular weight of the stack gas.

(iv) Method 4 to determine the moisture content of the stack gas.

(v) Method 5, 5D, or 17, as applicable, to determine the concentration of particulate matter (front half filterable catch only).

(2) Collect a minimum sample volume of 60 dry standard cubic feet (dscf) of gas during each particulate matter test run. Three valid test runs are needed to comprise a performance test.

(c) For each sinter plant windbox exhaust stream, you must complete the requirements of paragraphs (c)(1) and (2) of this section:

(1) Follow the procedures in your operation and maintenance plan for measuring and recording the sinter production rate for each test run in tons per hour; and

(2) Compute the process-weighted mass emissions (E_p) for each test run using Equation 1 of this section as follows:

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

Where:

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

C = Concentration of particulate matter, grains per dry standard cubic foot (gr/dscf);

Q = Volumetric flow rate of stack gas, dry standard cubic foot per hour (dscf/hr);

P = Production rate of sinter during the test run, tons/hr; and

K = Conversion factor, 7,000 grains per pound (gr/lb).

(d) If you apply two or more control devices in parallel to emissions from a sinter plant discharge end, compute the average flow-weighted concentration for each test run using Equation 2 of this section as follows:

$$C_w = \frac{\sum_{i=1}^n C_i Q_i}{\sum_{i=1}^n Q_i} \quad (\text{Eq. 2})$$

Where:

C_w = Flow-weighted concentration, gr/dscf;

C_i = Concentration of particulate matter from exhaust stream "i", gr/dscf; and

Q_i = Volumetric flow rate of effluent gas from exhaust stream "i", dry standard cubic foot per minute (dscfm).

(i) Subject to approval by the permitting authority, you may conduct representative sampling of stacks when there are more than three stacks associated with a process.

§63.7823 What test methods and other procedures must I use to demonstrate initial compliance with the opacity limits?

(a) You must conduct each performance test that applies to your affected source according to the requirements in §63.7(h)(5) and the conditions detailed in paragraphs (b) through (d) of this section.

(b) You must conduct each visible emissions performance test such that the opacity observations overlap with the performance test for particulate matter.

(c) To determine compliance with the applicable opacity limit in Table 1 to this subpart for a sinter plant discharge end:

(1) Using a certified observer, determine the opacity of emissions according to Method 9 in appendix A to part 60 of this chapter.

(2) Obtain a minimum of 30 6-minute block averages.

(e) To determine compliance with the applicable opacity limit in Table 1 to this subpart for a sinter cooler at an existing sinter plant:

(1) Using a certified observer, determine the opacity of emissions according to Method 9 in appendix A to part 60 of this chapter.

(2) Obtain a minimum of 30 6-minute block averages.

(3) Make visible emission observations of uncovered portions of sinter plant coolers with the observer's line of sight generally in the direction of the center of the cooler.

§63.7824 What test methods and other procedures must I use to establish and demonstrate initial compliance with operating limits?

(a) For each capture system subject to an operating limit in §63.7790(b)(1), you must certify that the system operated during the performance test at the site-specific operating limits established in your operation and maintenance plan using the procedures in paragraphs (a)(1) through (4) of this section.

(1) Concurrent with all opacity observations, measure and record values for each of the operating limit parameters in your capture system operation and maintenance plan according to the monitoring requirements specified in §63.7830(a).

(2) For any dampers that are manually set and remain at the same position at all times the capture system is operating, the damper position must be visually checked and recorded at the beginning and end of each opacity observation period segment.

(3) Review and record the monitoring data. Identify and explain any times the capture system operated outside the applicable operating limits.

(4) Certify in your performance test report that during all observation period segments, the capture system was operating at the values or settings established in your capture system operation and maintenance plan.

(b) For a venturi scrubber subject to operating limits for pressure drop and scrubber water flow rate in §63.7790(b)(2), you must establish site-specific operating limits according to the procedures in paragraphs (b)(1) and (2) of this section. You may establish the parametric monitoring limit during the initial performance test or during any other performance test run that meets the emission limit.

(1) Using the CPMS required in §63.7830(c), measure and record the pressure drop and scrubber water flow rate during each run of the particulate matter performance test.

(2) Compute and record the hourly average pressure drop and scrubber water flow rate for each individual test run. Your operating limits are the lowest average pressure drop and scrubber water flow rate value in any of the three runs that meet the applicable emission limit.

(c) You may change the operating limits for a capture system, venturi scrubber, if you meet the requirements in paragraphs (c) (1) through (3) of this section.

(1) Submit a written notification to the Administrator of your request to conduct a new performance test to revise the operating limit.

(2) Conduct a performance test to demonstrate compliance with the applicable emission limitation in Table 1 to this subpart.

(3) Establish revised operating limits according to the applicable procedures in paragraphs (a) through (c) of this section for a control device or capture system.

(d) For each sinter plant subject to the operating limit for the oil content of the sinter plant feedstock in §63.7790(d)(1), you must demonstrate initial compliance according to the procedures in paragraphs (d)(1) through (3) of this section.

(1) Sample the feedstock at least three times a day (once every 8 hours), composite the three samples each day, and analyze the composited samples using Method 9071B, "n-Hexane Extractable Material (HEM) for Sludge, Sediment, and Solid Samples," (Revision 2, April 1998). Method 9071B is incorporated by reference (see §63.14) and is published in EPA Publication SW-846 "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods." Record the sampling date and time, oil content values, and sinter produced (tons/day).

(2) Continue the sampling and analysis procedure for 30 consecutive days.

(3) Each day, compute and record the 30-day rolling average using that day's value and the 29 previous daily values.

(f) To demonstrate initial compliance with the alternative operating limit for volatile organic compound emissions from the sinter plant windbox exhaust stream in §63.7790(d)(2), follow the test methods and procedures in paragraphs (f)(1) through (5) of this section.

(1) Determine the volatile organic compound emissions according to the following test methods in appendix A to part 60 of this chapter:

(i) Method 1 to select sampling port locations and the number of traverse points. Sampling ports must be located at the outlet of the control device and prior to any releases to the atmosphere.

(ii) Method 2, 2F, or 2G to determine the volumetric flow rate of the stack gas.

(iii) Method 3, 3A, or 3B to determine the dry molecular weight of the stack gas.

(iv) Method 4 to determine the moisture content of the stack gas.

(v) Method 25 to determine the mass concentration of volatile organic compound emissions (total gaseous nonmethane organics as carbon) from the sinter plant windbox exhaust stream stack.

(2) Determine volatile organic compound (VOC) emissions every 24 hours (from at least three samples taken at 8-hour intervals) using Method 25 in 40 CFR part 60, appendix A. Record the sampling date and time, sampling results, and sinter produced (tons/day).

(3) Compute the process-weighted mass emissions (E_v) each day using Equation 1 of this section as follows:

$$E_v = \frac{M_c \times Q}{35.31 \times 454,000 \times K} \quad (\text{Eq. 1})$$

Where:

E_v = Process-weighted mass emissions of volatile organic compounds, lb/ton;

M_c = Average concentration of total gaseous nonmethane organics as carbon by Method 25 (40 CFR part 60, appendix A), milligrams per dry standard cubic meters (mg/dscm) for each day;

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

35.31 = Conversion factor (dscf/dscm);

454,000 = Conversion factor (mg/lb); and

K = Daily production rate of sinter, tons/hr.

(4) Continue the sampling and analysis procedure in paragraphs (f)(1) through (3) of this section for 30 consecutive days.

(5) Compute and record the 30-day rolling average of VOC emissions for each operating day.

(g) You may use an alternative test method to determine the oil content of the sinter plant feedstock or the volatile organic compound emissions from the sinter plant windbox exhaust stack if you have already demonstrated the equivalency of the alternative method for a specific plant and have received previous approval from the applicable permitting authority.

§63.7825 How do I demonstrate initial compliance with the emission limitations that apply to me?

(a) For each affected source subject to an emission or opacity limit in Table 1 to this subpart, you have demonstrated initial compliance if:

(1) You meet the conditions in Table 2 to this subpart; and

(2) For each capture system subject to the operating limit in §63.7790(b)(1), you have established appropriate site-specific operating limit(s) and have a record of the operating parameter data measured during the performance test in accordance with §63.7824(a)(1).

(3) For each venturi scrubber subject to the operating limits for pressure drop and scrubber water flow rate in §63.7790(b)(2), you have established appropriate site-specific operating limits and have a record of the pressure drop and scrubber water flow rate measured during the performance test in accordance with §63.7824(b).

(b) For each existing or new sinter plant subject to the operating limit in §63.7790(d)(1), you have demonstrated initial compliance if the 30-day rolling average of the oil content of the feedstock,

measured during the initial performance test in accordance with §63.7824(e) is no more than 0.02 percent. For each existing or new sinter plant subject to the alternative operating limit in §63.7790(d)(2), you have demonstrated initial compliance if the 30-day rolling average of the volatile organic compound emissions from the sinter plant windbox exhaust stream, measured during the initial performance test in accordance with §63.7824(e) is no more than 0.2 lb/ton of sinter produced.

(c) For each emission limitation that applies to you, you must submit a notification of compliance status according to §63.7840(e).

§63.7826 How do I demonstrate initial compliance with the operation and maintenance requirements that apply to me?

(a) For a capture system applied to emissions from a sinter plant discharge end you have demonstrated initial compliance if you meet all of the conditions in paragraphs (a)(1) through (4) of this section.

(1) Prepared the capture system operation and maintenance plan according to the requirements of §63.7800(b), including monthly inspection procedures and detailed descriptions of the operating parameter(s) selected to monitor the capture system;

(2) Certified in your performance test report that the system operated during the test at the operating limits established in your operation and maintenance plan;

(3) Submitted a notification of compliance status according to the requirements in §63.7840(e), including a copy of the capture system operation and maintenance plan and your certification that you will operate the capture system at the values or settings established for the operating limits in that plan; and

(4) Prepared a site-specific monitoring plan according to the requirements in §63.7831(a).

(b) For each control device subject to operating limits in §63.7790(b)(2) or (3), you have demonstrated initial compliance if you meet all the conditions in paragraphs (b)(1) through (3) of this section.

(1) Prepared the control device operation and maintenance plan according to the requirements of §63.7800(b), including a preventative maintenance schedule and, as applicable, detailed descriptions of the corrective action procedures for baghouses and or control devices;

(2) Submitted a notification of compliance status according to the requirements in §63.7840(e), including a copy of the operation and maintenance plan; and

(3) Prepared a site-specific monitoring plan according to the requirements in §63.7831(a).

Continuous Compliance Requirements

§63.7830 What are my monitoring requirements?

(a) For each capture system subject to an operating limit in §63.7790(b)(1) established in your capture system operation and maintenance plan, you must install, operate, and maintain a CPMS according to the requirements in §63.7831(e) and the requirements in paragraphs (a)(1) through (3) of this section.

(1) Dampers that are manually set and remain in the same position are exempt from the requirement to install and operate a CPMS. If dampers are not manually set and remain in the same position, you must make a visual check at least once every 24 hours to verify that each damper for the capture system is in the same position as during the initial performance test.

(2) If you use a flow measurement device to monitor the operating limit parameter for a sinter plant discharge end, you must monitor the hourly average rate (e.g., the hourly average actual volumetric flow rate through each separately ducted hood, the average hourly total volumetric flow rate at the inlet to the control device) according to the requirements in §63.7832.

(b) Except as provided in paragraph (b)(3) of this section, you must meet the requirements in paragraph (b)(1) or (2) of this section for each baghouse applied to meet any particulate emission limit in Table 1 to this subpart. You must conduct inspections of each baghouse according to the requirements in paragraph (b)(4) of this section.

(1) Install, operate, and maintain a bag leak detection system according to §63.7831(f) and monitor the relative change in particulate matter loadings according to the requirements in §63.7832; or

(2) If you do not install and operate a bag leak detection system, you must install, operate, and maintain a COMS according to the requirements in §63.7831(h) and monitor the hourly average opacity of emissions exiting each control device stack according to the requirements in §63.7832.

(3) A bag leak detection system and COMS are not required for a baghouse that meets the requirements in paragraphs (b)(3)(i) and (ii) of this section.

(i) The baghouse is a positive pressure baghouse and is not equipped with exhaust gas stacks; and

(ii) The baghouse was installed before August 30, 2005.

(4) You must conduct inspections of each baghouse at the specified frequencies according to the requirements in paragraphs (b)(4)(i) through (viii) of this section.

(i) Monitor the pressure drop across each baghouse cell each day to ensure pressure drop is within the normal operating range identified in the manual.

(ii) Confirm that dust is being removed from hoppers through weekly visual inspections or other means of ensuring the proper functioning of removal mechanisms.

(iii) Check the compressed air supply for pulse-jet baghouses each day.

(iv) Monitor cleaning cycles to ensure proper operation using an appropriate methodology.

(v) Check bag cleaning mechanisms for proper functioning through monthly visual inspection or equivalent means.

(vi) Make monthly visual checks of bag tension on reverse air and shaker-type baghouses to ensure that bags are not kinked (knead or bent) or laying on their sides. You do not have to make this check for shaker-type baghouses using self-tensioning (spring-loaded) devices.

(vii) Confirm the physical integrity of the baghouse through quarterly visual inspections of the baghouse interior for air leaks.

(viii) Inspect fans for wear, material buildup, and corrosion through quarterly visual inspections, vibration detectors, or equivalent means.

(c) For each venturi scrubber subject to the operating limits for pressure drop and scrubber water flow rate in §63.7790(b)(2), you must install, operate, and maintain CPMS according to the requirements in §63.7831(g) and monitor the hourly average pressure drop and water flow rate according to the requirements in §63.7832.

(d) For each electrostatic precipitator subject to the opacity operating limit in §63.7790(b)(3), you must install, operate, and maintain a COMS according to the requirements in §63.7831(h) and monitor the 6-minute average opacity of emissions exiting each control device stack according to the requirements in §63.7832.

(e) For each sinter plant subject to the operating limit in §63.7790(d), you must either:

(1) Compute and record the 30-day rolling average of the oil content of the feedstock for each operating day using the procedures in §63.7824(e); or

(2) Compute and record the 30-day rolling average of volatile organic compound emissions (lbs/ton of sinter) for each operating day using the procedures in §63.7824(f).

§63.7831 What are the installation, operation, and maintenance requirements for my monitors?

(a) For each CPMS required in §63.7830, you must develop and make available for inspection upon request by the permitting authority a site-specific monitoring plan that addresses the requirements in paragraphs (a)(1) through ~~(6)~~ (8) of this section.

(1) Installation of the CPMS sampling probe or other interface at a measurement location relative to each affected process unit such that the measurement is representative of control of the exhaust emissions (e.g., on or downstream of the last control device);

(2) Performance and equipment specifications for the sample interface, the parametric signal analyzer, and the data collection and reduction system;

(3) Performance evaluation procedures and acceptance criteria (e.g., calibrations);

(4) Ongoing operation and maintenance procedures in accordance with the general requirements of §§63.8(c)(1), (c)(3), (c)(4)(ii), (c)(7), and (c)(8);

(5) Ongoing data quality assurance procedures in accordance with the general requirements of §63.8(d); and

(6) Ongoing recordkeeping and reporting procedures in accordance the general requirements of §§63.10(c), (e)(1), and (e)(2)(i).

(7) Corrective action procedures you will follow in the event a venturi scrubber exceeds the operating limit in §63.7790(b)(2); and

(8) Corrective action procedures you will follow in the event an electrostatic precipitator exceeds the operating limit in §63.7790(b)(3).

(b) Unless otherwise specified, each CPMS must:

(1) Complete a minimum of one cycle of operation for each successive 15-minute period and collect a minimum of three of the required four data points to constitute a valid hour of data;

(2) Provide valid hourly data for at least 95 percent of every averaging period; and

(3) Determine and record the hourly average of all recorded readings.

(c) You must conduct a performance evaluation of each CPMS in accordance with your site-specific monitoring plan.

(d) You must operate and maintain the CPMS in continuous operation according to the site-specific monitoring plan.

(e) For each capture system subject to an operating limit in §63.7790(b)(1), you must install, operate, and maintain each CPMS according to the requirements in paragraphs (a) through (d) of this section.

(f) For each baghouse applied to meet any particulate emission limit in Table 1 of this subpart, you must install, operate, and maintain a bag leak detection system according to the requirements in paragraphs (f)(1) through (7) of this section.

(1) The system must be certified by the manufacturer to be capable of detecting emissions of particulate matter at concentrations of 10 milligrams per actual cubic meter (0.0044 grains per actual cubic foot) or less.

(2) The system must provide output of relative changes in particulate matter loadings.

(3) The system must be equipped with an alarm that will sound when an increase in relative particulate loadings is detected over a preset level. The alarm must be located such that it can be heard by the appropriate plant personnel.

(4) Each system that works based on the triboelectric effect must be installed, operated, and maintained in a manner consistent with the guidance document, "Fabric Filter Bag Leak Detection Guidance," EPA-454/R-98-015, September 1997. You may install, operate, and maintain other types of bag leak detection systems in a manner consistent with the manufacturer's written specifications and recommendations.

(5) To make the initial adjustment of the system, establish the baseline output by adjusting the sensitivity (range) and the averaging period of the device. Then, establish the alarm set points and the alarm delay time.

(6) Following the initial adjustment, do not adjust the sensitivity or range, averaging period, alarm set points, or alarm delay time, except as detailed in your operation and maintenance plan. Do not increase the sensitivity by more than 100 percent or decrease the sensitivity by more than 50 percent over a 365-day period unless a responsible official certifies, in writing, that the baghouse has been inspected and found to be in good operating condition.

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

(g) For each venturi scrubber subject to operating limits in §63.7790(b)(2) for pressure drop and scrubber water flow rate, you must install, operate, and maintain each CPMS according to the requirements in paragraphs (a) through (d) of this section.

(h) For each electrostatic precipitator subject to the opacity operating limit in §63.7790(b)(3), you must install, operate, and maintain each COMS according to the requirements in paragraphs (h)(1) through (4) of this section.

(1) You must install, operate, and maintain each COMS according to Performance Specification 1 in 40 CFR part 60, appendix B.

(2) You must conduct a performance evaluation of each COMS according to §63.8 and Performance Specification 1 in appendix B to 40 CFR part 60.

(3) Each COMS must complete a minimum of one cycle of sampling and analyzing for each successive 10-second period and one cycle of data recording for each successive 6-minute period.

(4) COMS data must be reduced to 6-minute averages as specified in §63.8(g)(2) and to hourly averages where required by this subpart..

§63.7832 How do I monitor and collect data to demonstrate continuous compliance?

(a) Except for monitoring malfunctions, out-of-control periods as specified in §63.8(c)(7), associated repairs, and required quality assurance or control activities (including as applicable, calibration checks and required zero and span adjustments), you must monitor continuously (or collect data at all required intervals) at all times an affected source is operating.

(b) You may not use data recorded during monitoring malfunctions, associated repairs, and required quality assurance or control activities in data averages and calculations used to report emission or operating levels or to fulfill a minimum data availability requirement, if applicable. You must use all the data collected during all other periods in assessing compliance.

(c) A monitoring malfunction is any sudden, infrequent, not reasonably preventable failure of the monitoring to provide valid data. Monitoring failures that are caused in part by poor maintenance or careless operation are not malfunctions.

§63.7833 How do I demonstrate continuous compliance with the emission limitations that apply to me?

(a) You must demonstrate continuous compliance for each affected source subject to an emission or opacity limit in §63.7790(a) by meeting the requirements in Table 3 to this subpart.

(b) You must demonstrate continuous compliance for each capture system subject to an operating limit in §63.7790(b)(1) by meeting the requirements in paragraphs (b)(1) and (2) of this section.

(1) Operate the capture system at or above the lowest values or settings established for the operating limits in your operation and maintenance plan; and

(2) Monitor the capture system according to the requirements in §63.7830(a) and collect, reduce, and record the monitoring data for each of the operating limit parameters according to the applicable requirements of this subpart;

(c) For each baghouse applied to meet any particulate emission limit in Table 1 to this subpart, you must demonstrate continuous compliance by completing the requirements in paragraphs (c)(1) or (2) of this section as applicable, and paragraphs (c)(3) and (4) of this section:

(1) For a baghouse equipped with a bag leak detection system, operating and maintaining each bag leak detection system according to §63.7831(f) and recording all information needed to document conformance with these requirements. If you increase or decrease the sensitivity of the bag leak

detection system beyond the limits specified in §63.7831(f)(6), you must include a copy of the required written certification by a responsible official in the next semiannual compliance report.

(2) For a baghouse equipped with a COMS, operating and maintaining each COMS and reducing the COMS data according to §63.7831(h).

(3) Inspecting each baghouse according to the requirements in §63.7830(b)(4) and maintaining all records needed to document conformance with these requirements.

(4) Maintaining records of the time you initiated corrective action in the event of a bag leak detection system alarm or when the hourly average opacity exceeded 5 percent, the corrective action(s) taken, and the date on which corrective action was completed.

(d) For each venturi scrubber subject to the operating limits for pressure drop and scrubber water flow rate in §63.7790(b)(2), you must demonstrate continuous compliance by meeting the requirements of paragraphs (d)(1) through (4) of this section:

(1) Maintaining the hourly average pressure drop and scrubber water flow rate at levels no lower than those established during the initial or subsequent performance test;

(2) Operating and maintaining each venturi scrubber CPMS according to §63.7831(g) and recording all information needed to document conformance with these requirements; and

(3) Collecting and reducing monitoring data for pressure drop and scrubber water flow rate according to §63.7831(b) and recording all information needed to document conformance with these requirements.

(4) If the hourly average pressure drop or scrubber water flow rate is below the operating limits, you must follow the corrective action procedures in paragraph (g) of this section.

(e) For each electrostatic precipitator subject to the opacity operating limit in §63.7790(b)(3), you must demonstrate continuous compliance by meeting the requirements of paragraphs (e)(1) and (3) of this section:

(1) Maintaining the hourly average opacity of emissions no higher than 10 percent; and

(2) Operating and maintaining each COMS and reducing the COMS data according to §63.7831(h).

(3) If the hourly average opacity of emissions exceeds 10 percent, you must follow the corrective action procedures in paragraph (g) of this section.

(f) For each new or existing sinter plant subject to the operating limit in §63.7790(d), you must demonstrate continuous compliance by either:

(1) For the sinter plant feedstock oil content operating limit in §63.7790(d)(1),

(i) Computing and recording the 30-day rolling average of the percent oil content for each operating day according to the performance test procedures in §63.7824(d),

(ii) Recording the sampling date and time, oil content values, and sinter produced (tons/day); and

(iii) Maintaining the 30-day rolling average oil content of the feedstock no higher than 0.02 percent.

(2) For the volatile organic compound operating limit in §63.7790(d)(2),

- (i) Computing and recording the 30-day rolling average of volatile organic compound emissions for each operating day according to the performance test procedures in §63.7824(e);
 - (ii) Recording the sampling date and time, sampling values, and sinter produced (tons/day); and
 - (iii) Maintaining the 30-day rolling average of volatile organic compound emissions no higher than 0.2 lb/ton of sinter produced.
- (g) If the hourly average pressure drop or water flow rate for a venturi scrubber or hourly average opacity for an electrostatic precipitator exceeds the operating limit, you must follow the procedures in paragraphs (g)(1) through (4) of this section.
- (1) You must initiate corrective action to determine the cause of the exceedance within 1 hour. During any period of corrective action, you must continue to monitor and record all required operating parameters for equipment that remains in operation. Within 24 hours of the exceedance, you must measure and record the hourly average operating parameter value for the emission unit on which corrective action was taken. If the hourly average parameter value meets the applicable operating limit, then the corrective action was successful and the emission unit is in compliance with the applicable operating limit.
- (2) If the initial corrective action required in paragraph (g)(1) of this section was not successful, you must complete additional corrective action within the next 24 hours (48 hours from the time of the exceedance). During any period of corrective action, you must continue to monitor and record all required operating parameters for equipment that remains in operation. After this second 24-hour period, you must again measure and record the hourly average operating parameter value for the emission unit on which corrective action was taken. If the hourly average parameter value meets the applicable operating limit, then the corrective action was successful and the emission unit is in compliance with the applicable operating limit.
- (3) For purposes of paragraphs (g)(1) and (2) of this section, in the case of an exceedance of the hourly average opacity operating limit for an electrostatic precipitator, measurements of the hourly average opacity based on visible emission observations in accordance with Method 9 (40 CFR part 60, appendix A) may be taken to evaluate the effectiveness of corrective action.
- (4) If the second attempt at corrective action required in paragraph (g)(2) of this section was not successful, you must report the exceedance as a deviation in your next semiannual compliance report according to §63.7841(b).

§63.7834 How do I demonstrate continuous compliance with the operation and maintenance requirements that apply to me?

- (a) For each capture system and control device subject to an operating limit in §63.7790(b), you must demonstrate continuous compliance with the operation and maintenance requirements in §63.7800(b) by meeting the requirements of paragraphs (a)(1) through (4) of this section:
- (1) Making monthly inspections of capture systems and initiating corrective action according to §63.7800(b)(1) and recording all information needed to document conformance with these requirements;
 - (2) Performing preventative maintenance according to §63.7800(b)(2) and recording all information needed to document conformance with these requirements; and
 - (3) Initiating and completing corrective action for a baghouse equipped with a bag leak detection system or COMS according to §63.7800(b)(4) and recording all information needed to document conformance with these requirements, including the time you initiated corrective action, the corrective action(s) taken, and date on which corrective action was completed.

(4) Initiating and completing corrective action for a venturi scrubber equipped with a CPMS or an electrostatic precipitator equipped with a COMS according to §63.7833(g) and recording all information needed to document conformance with these requirements, including the time you initiated corrective action, the corrective action(s) taken within the first 24 hours according to §63.7833(g)(1) and whether they were successful, the corrective action(s) taken within the second 24 hours according to §63.7833(g)(2) and whether they were successful, and the date on which corrective action was completed.

(b) You must maintain a current copy of the operation and maintenance plan required in §63.7800(b) onsite and available for inspection upon request. You must keep the plans for the life of the affected source or until the affected source is no longer subject to the requirements of this subpart.

§63.7835 What other requirements must I meet to demonstrate continuous compliance?

(a) *Deviations.* Except as provided in §63.7833(g), you must report each instance in which you did not meet each emission limitation in §63.7790 that applies to you. This includes periods of startup, shutdown, and malfunction. You also must report each instance in which you did not meet each operation and maintenance requirement in §63.7800 that applies to you. These instances are deviations from the emission limitations and operation and maintenance requirements in this subpart. These deviations must be reported according to the requirements in §63.7841.

(b) *Startups, shutdowns, and malfunctions.* (1) Consistent with §§63.6(e) and 63.7(e)(1), deviations that occur during a period of startup, shutdown, or malfunction are not violations if you demonstrate to the Administrator's satisfaction that you were operating in accordance with §63.6(e)(1).

(2) The Administrator will determine whether deviations that occur during a period of startup, shutdown, or malfunction are violations, according to the provisions in §63.6(e).

[68 FR 27663, May 20, 2003, as amended at 71 FR 20468, Apr. 20, 2006]

Notifications, Reports, and Records

§63.7840 What notifications must I submit and when?

(a) You must submit all of the notifications in §§63.6(h)(4) and (5), 63.7(b) and (c), 63.8(e) and (f)(4), and 63.9(b) through (h) that apply to you by the specified dates.

(b) As specified in §63.9(b)(2), if you startup your affected source before May 20, 2003, you must submit your initial notification no later than September 17, 2003.

(c) As specified in §63.9(b)(3), if you start your new affected source on or after May 20, 2003, you must submit your initial notification no later than 120 calendar days after you become subject to this subpart.

(d) If you are required to conduct a performance test, you must submit a notification of intent to conduct a performance test at least 60 calendar days before the performance test is scheduled to begin as required in §63.7(b)(1).

(e) If you are required to conduct a performance test, opacity observation, or other initial compliance demonstration, you must submit a notification of compliance status according to §63.9(h)(2)(ii).

(1) For each initial compliance demonstration that does not include a performance test, you must 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, you must 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 §63.10(d)(2).

§63.7841 What reports must I submit and when?

(a) *Compliance report due dates.* Unless the Administrator has approved a different schedule, you must submit a semiannual compliance report to your permitting authority according to the requirements in paragraphs (a)(1) through (5) of this section.

(1) The first compliance report must cover the period beginning on the compliance date that is specified for your affected source in §63.7783 and ending on June 30 or December 31, whichever date comes first after the compliance date that is specified for your source in §63.7783.

(2) The first compliance report must be postmarked or delivered no later than July 31 or January 31, whichever date comes first after your first compliance report is due.

(3) Each subsequent compliance report must cover the semiannual reporting period from January 1 through June 30 or the semiannual reporting period from July 1 through December 31.

(4) Each subsequent compliance report must be postmarked or delivered no later than July 31 or January 31, whichever date comes first after the end of the semiannual reporting period.

(5) For each affected source that is subject to permitting regulations pursuant to 40 CFR part 70 or 71, and if the permitting authority has established dates for submitting semiannual reports pursuant to 40 CFR 70.6(a)(3)(iii)(A) or 40 CFR 71.6(a)(3)(iii)(A), you may submit the first and subsequent compliance reports according to the dates the permitting authority has established instead of according to the dates in paragraphs (a)(1) through (4) of this section.

(b) *Compliance report contents.* Each compliance report must include the information in paragraphs (b)(1) through (3) of this section and, as applicable, paragraphs (b)(4) through (8) of this section.

(1) Company name and address.

(2) Statement by a responsible official, with that official's name, title, and signature, certifying the truth, accuracy, and completeness of the content of the report.

(3) Date of report and beginning and ending dates of the reporting period.

(4) If you had a startup, shutdown, or malfunction during the reporting period and you took actions consistent with your startup, shutdown, and malfunction plan, the compliance report must include the information in §63.10(d)(5)(i).

(5) If there were no deviations from the continuous compliance requirements in §§63.7833 and 63.7834 that apply to you, a statement that there were no deviations from the emission limitations or operation and maintenance requirements during the reporting period.

(6) If there were no periods during which a continuous monitoring system (including a CPMS, COMS, or continuous emission monitoring system (CEMS) was out-of-control as specified in §63.8(c)(7), a statement that there were no periods during which the CPMS was out-of-control during the reporting period.

(7) For each deviation from an emission limitation in §63.7790 that occurs at an affected source where you are not using a continuous monitoring system (including a CPMS, COMS, or CEMS) to comply with an emission limitation in this subpart, the compliance report must contain the information in paragraphs (b)(1) through (4) of this section and the information in paragraphs (b)(7)(i) and (ii) of this section. This includes periods of startup, shutdown, and malfunction.

(i) The total operating time of each affected source during the reporting period.

(ii) Information on the number, duration, and cause of deviations (including unknown cause, if applicable) as applicable and the corrective action taken.

(8) For each deviation from an emission limitation occurring at an affected source where you are using a continuous monitoring system (including a CPMS or COMS) to comply with the emission limitation in this subpart, you must include the information in paragraphs (b)(1) through (4) of this section and the information in paragraphs (b)(8)(i) through (xi) of this section. This includes periods of startup, shutdown, and malfunction.

(i) The date and time that each malfunction started and stopped.

(ii) The date and time that each continuous monitoring was inoperative, except for zero (low-level) and high-level checks.

(iii) The date, time, and duration that each continuous monitoring system was out-of-control as specified in §63.8(c)(7), including the information in §63.8(c)(8).

(iv) The date and time that each deviation started and stopped, and whether each deviation occurred during a period of startup, shutdown, or malfunction or during another period.

(v) A summary of the total duration of the deviation during the reporting period and the total duration as a percent of the total source operating time during that reporting period.

(vi) A breakdown of the total duration of the deviations during the reporting period including those that are due to startup, shutdown, control equipment problems, process problems, other known causes, and other unknown causes.

(vii) A summary of the total duration of continuous monitoring system downtime during the reporting period and the total duration of continuous monitoring system downtime as a percent of the total source operating time during the reporting period.

(viii) A brief description of the process units.

(ix) A brief description of the continuous monitoring system.

(x) The date of the latest continuous monitoring system certification or audit.

(xi) A description of any changes in continuous monitoring systems, processes, or controls since the last reporting period.

(c) *Immediate startup, shutdown, and malfunction report.* If you had a startup, shutdown, or malfunction during the semiannual reporting period that was not consistent with your startup, shutdown, and malfunction plan, you must submit an immediate startup, shutdown, and malfunction report according to the requirements in §63.10(d)(5)(ii).

(d) *Part 70 monitoring report.* If you have obtained a title V operating permit for an affected source pursuant to 40 CFR part 70 or 71, you must report all deviations as defined in this subpart in the semiannual monitoring report required by 40 CFR 70.6(a)(3)(iii)(A) or 40 CFR 71.6(a)(3)(iii)(A). If you submit a compliance report for an affected source along with, or as part of, the semiannual monitoring report required by 40 CFR 70.6(a)(3)(iii)(A) or 40 CFR 71.6(a)(3)(iii)(A), and the compliance report includes all the required information concerning deviations from any emission limitation or operation and maintenance requirement in this subpart, submission of the compliance report satisfies any obligation to report the same deviations in the semiannual monitoring report. However, submission of a compliance report does not otherwise affect any obligation you may have to report deviations from permit requirements for an affected source to your permitting authority.

§63.7842 What records must I keep?

(a) You must keep the following records:

(1) A copy of each notification and report that you submitted to comply with this subpart, including all documentation supporting any initial notification or notification of compliance status that you submitted, according to the requirements in §63.10(b)(2)(xiv).

(2) The records in §63.6(e)(3)(iii) through (v) related to startup, shutdown, and malfunction.

(3) Records of performance tests, performance evaluations, and opacity observations as required in §63.10(b)(2)(viii).

(b) For each COMS, you must keep the records specified in paragraphs (b)(1) through (4) of this section.

(1) Records described in §63.10(b)(2)(vi) through (xi).

(2) Monitoring data for a performance evaluation as required in §63.6(h)(7)(i) and (ii).

(3) Previous (that is, superceded) versions of the performance evaluation plan as required in §63.8(d)(3).

(4) Records of the date and time that each deviation started and stopped, and whether the deviation occurred during a period of startup, shutdown, or malfunction or during another period.

(c) You must keep the records required in §63.6(h)(6) for visual observations.

(d) You must keep the records required in §§63.7833 and 63.7834 to show continuous compliance with each emission limitation and operation and maintenance requirement that applies to you.

§63.7843 In what form and how long must I keep my records?

(a) Your records must be in a form suitable and readily available for expeditious review, according to §63.10(b)(1).

(b) As specified in §63.10(b)(1), you must keep each record for 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record.

(c) You must keep each record on site for at least 2 years after the date of each occurrence, measurement, maintenance, corrective action, report, or record according to §63.10(b)(1). You can keep the records offsite for the remaining 3 years.

Other Requirements and Information

§63.7850 What parts of the General Provisions apply to me?

Table 4 to this subpart shows which parts of the General Provisions in §§63.1 through 63.15 apply to you.

§63.7851 Who implements and enforces this subpart?

(a) This subpart can be implemented and enforced by us, the United States Environmental Protection Agency (U.S. EPA), or a delegated authority such as your State, local, or tribal agency. If the U.S. EPA Administrator has delegated authority to your State, local, or tribal agency, then that agency has the authority to implement and enforce this subpart. You should contact your U.S. EPA Regional Office to find out if this subpart is delegated to your State, local, or tribal agency.

(b) In delegating implementation and enforcement authority of this subpart to a State, local, or tribal agency under subpart E of this part, the authorities contained in paragraph (c) of this section are retained by the Administrator of the U.S. EPA and are not transferred to the State, local, or tribal agency.

(c) The authorities that will not be delegated to State, local, or tribal agencies are specified in paragraphs (c)(1) through (4) of this section.

(1) Approval of alternative opacity emission limits in Table 1 to this subpart under §63.6(h)(9).

(2) Approval of major alternatives to test methods under §63.7(e)(2)(ii) and (f) and as defined in §63.90, except for approval of an alternative method for the oil content of the sinter plant feedstock or volatile organic compound measurements for the sinter plant windbox exhaust stream stack as provided in §63.7824(f).

(3) Approval of major alternatives to monitoring under §63.8(f) and as defined in §63.90.

(4) Approval of major alternatives to recordkeeping and reporting under §63.10(f) and as defined in §63.90.

§63.7852 What definitions apply to this subpart?

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

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

Basic oxygen process furnace means any refractory-lined vessel in which high-purity oxygen is blown under pressure through a bath of molten iron, scrap metal, and fluxes to produce steel. This definition includes both top and bottom blown furnaces, but does not include argon oxygen decarburization furnaces.

Basic oxygen process furnace shop means the place where steelmaking operations that begin with the transfer of molten iron (hot metal) from the torpedo car and end prior to casting the molten steel, including hot metal transfer, desulfurization, slag skimming, refining in a basic oxygen process furnace, and ladle metallurgy occur.

Basic oxygen process furnace shop ancillary operations means the processes where hot metal transfer, hot metal desulfurization, slag skimming, and ladle metallurgy occur.

Blast furnace means a furnace used for the production of molten iron from iron ore and other iron bearing materials.

Bottom-blown furnace means any basic oxygen process furnace in which oxygen and other combustion gases are introduced into the bath of molten iron through tuyeres in the bottom of the vessel or through tuyeres in the bottom and sides of the vessel.

Casthouse means the building or structure that encloses the bottom portion of a blast furnace where the hot metal and slag are tapped from the furnace.

Certified observer means a visible emission observer certified to perform EPA Method 9 opacity observations.

Desulfurization means the process in which reagents such as magnesium, soda ash, and lime are injected into the hot metal, usually with dry air or nitrogen, to remove sulfur.

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

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

Discharge end means the place where those operations conducted within the sinter plant starting at the discharge of the sintering machine's traveling grate including (but not limited to) hot sinter crushing, screening, and transfer operations occur.

Emission limitation means any emission limit, opacity limit, or operating limit.

Hot metal transfer station means the location in a basic oxygen process furnace shop where molten iron (hot metal) is transferred from a torpedo car or hot metal car used to transport hot metal from the blast furnace casthouse to a holding vessel or ladle in the basic oxygen process furnace shop. This location also is known as the reladling station or ladle transfer station.

Integrated iron and steel manufacturing facility means an establishment engaged in the production of steel from iron ore.

Ladle metallurgy means a secondary steelmaking process that is performed typically in a ladle after initial refining in a basic oxygen process furnace to adjust or amend the chemical and/or mechanical properties of steel.

Primary emissions means particulate matter emissions from the basic oxygen process furnace generated during the steel production cycle which are captured and treated in the furnace's primary emission control system.

Primary emission control system means the combination of equipment used for the capture and collection of primary emissions (e.g., an open hood capture system used in conjunction with an electrostatic precipitator or a closed hood system used in conjunction with a scrubber).

Primary oxygen blow means the period in the steel production cycle of a basic oxygen process furnace during which oxygen is blown through the molten iron bath by means of a lance inserted from the top of the vessel (top-blown) or through tuyeres in the bottom and/or sides of the vessel (bottom-blown).

Responsible official means responsible official as defined in §63.2.

Secondary emissions means particulate matter emissions that are not controlled by a primary emission control system, including emissions that escape from open and closed hoods, lance hole openings, and gaps or tears in ductwork to the primary emission control system.

Secondary emission control system means the combination of equipment used for the capture and collection of secondary emissions from a basic oxygen process furnace.

Sinter cooler means the apparatus used to cool the hot sinter product that is transferred from the discharge end through contact with large volumes of induced or forced draft air.

Sinter plant means the machine used to produce a fused clinker-like aggregate or sinter of fine iron-bearing materials suited for use in a blast furnace. The machine is composed of a continuous traveling grate that conveys a bed of ore fines and other finely divided iron-bearing material and fuel (typically coke breeze), a burner at the feed end of the grate for ignition, and a series of downdraft windboxes along the length of the strand to support downdraft combustion and heat sufficient to produce a fused sinter product.

Skimming station means the locations inside a basic oxygen process furnace shop where slag is removed from the top of the molten metal bath.

Steel production cycle means the operations conducted within the basic oxygen process furnace shop that are required to produce each batch of steel. The following operations are included: scrap charging, preheating (when done), hot metal charging, primary oxygen blowing, sampling, (vessel turn-down and turn-up), additional oxygen blowing (when done), tapping, and deslagging. The steel production cycle begins when the scrap is charged to the furnace and ends after the slag is emptied from the vessel into the slag pot.

Top-blown furnace means any basic oxygen process furnace in which oxygen is introduced into the bath of molten iron by means of an oxygen lance inserted from the top of the vessel.

Windboxes means the compartments that provide for a controlled distribution of downdraft combustion air as it is drawn through the sinter bed of a sinter plant to make the fused sinter product.

Table 1 to Subpart FFFFF of Part 63—Emission and Opacity Limits

As required in §63.7790(a), you must comply with each applicable emission and opacity limit in the following table:

For .	You must comply with each of the following
1. Each windbox exhaust stream at an existing sinter plant.	You must not cause to be discharged to the atmosphere any gases that contain particulate matter in excess of 0.4 lb/ton of product sinter.
3. Each discharge end at an existing sinter plant	<p>a. You must not cause to be discharged to the atmosphere any gases that exit from one or more control devices that contain, on a flow-weighted basis, particulate matter in excess of 0.02 gr/dscf ^{\1\;}\2\ and</p> <p>b. You must not cause to be discharged to the atmosphere any secondary emissions that exit any opening in the building or structure housing the discharge end that exhibit opacity greater than 20 percent (6-minute average).</p>
5. Each sinter cooler stack at an existing sinter plant	You must not cause to be discharged to the atmosphere any gases that exhibit opacity greater than 10 percent (6-minute average).

\1\ This limit applies if the cooler is vented to the same control device as the discharge end.
 \2\ This concentration limit (gr/dscf) for a control device does not apply to discharges inside a building or structure housing the discharge end at an existing sinter plant if the control device was installed before August 30, 2005.

Table 2 to Subpart FFFFF of Part 63—Initial Compliance with Emission and Opacity Limits

As required in §63.7825(a)(1), you must demonstrate initial compliance with the emission and opacity limits according to the following table:

For	You have demonstrated initial compliance if
1. Each windbox exhaust stream at an existing sinter plant	The process-weighted mass rate of particulate matter from a windbox exhaust stream, measured according to the performance test procedures in § 63.7822(c), did not exceed 0.4 lb/ton of product sinter.
3. Each discharge end at an existing sinter plant	<p>a. The flow-weighted average concentration of particulate matter from one or more control devices applied to emissions from a discharge end, measured according to the performance test procedures in § 63.7822(d), did not exceed 0.02 gr/dscf; and</p> <p>b. The opacity of secondary emissions from each discharge end, determined according to the performance test procedures in §63.7823(c), did not exceed 20 percent (6-minute average).</p>
5. Each sinter cooler stack at an existing sinter plant.	The opacity of emissions determined according to the performance test procedures in §63.7823(e), did not exceed 10 percent (6-minute average).

Table 3 to Subpart FFFFF of Part 63—Continuous Compliance with Emission and Opacity Limits

As required in §63.7833(a), you must demonstrate continuous compliance with the emission and opacity limits according to the following table:

For .	You must demonstrate continuous compliance by .
1. Each windbox exhaust stream at an existing sinter plant	a. Maintaining emissions of particulate matter at or below 0.4lb/ton of product sinter; and b. Conducting subsequent performance tests at the frequencies specified in § 63.7821.
3. Each discharge end at an existing sinter plant.	a. Maintaining emissions of particulate matter from one or more control devices at or below 0.02 gr/dscf; and b. Maintaining the opacity of secondary emissions that exit any opening in the building or structure housing the discharge end at or below 20 percent (6-minute average); and c. Conducting subsequent performance tests at the frequencies specified in § 63.7821.
5. Each sinter cooler stack at an existing sinter plant	a. Maintaining emissions of particulate matter at or below 0.03 gr/dscf; and b. Conducting subsequent performance sinter plant tests at the frequencies specified in §63.7821.

Table 4 to Subpart FFFFF of Part 63—Applicability of General Provisions to Subpart FFFFF

As required in §63.7850, you must comply with the requirements of the NESHAP General Provisions (40 CFR part 63, subpart A) shown in the following table:

Citation	Subject	Applies to Subpart FFFFF	Explanation
§ 63.1	Applicability.	Yes.	
§ 63.2	Definitions	Yes.	
§ 63.3.	Units and Abbreviations	Yes	
§ 63.4	Prohibited Activities	Yes.	
§ 63.5	Construction/Reconstruction	Yes.	
§ 63.6(a), (b), (c), (d), (e) (f), (g), (h)(2)(ii)-(h)(9)	Compliance with Standards and Maintenance Requirements.	Yes.	
§ 63.6(h)(2)(i).	Determining Compliance with Opacity and VE Standards	No.	Subpart FFFFF specifies methods and procedures for determining compliance with opacity emission and operating limits
§ 63.6(i)	Extension of Compliance with Emission Standards.	Yes.	

§ 63.6(j).	Exemption from compliance with Emission Standards	Yes.	
§ 63.7(a)(1)-(2)	Applicability and Performance Test Dates	No	Subpart FFFFF and specifies performance test applicability and dates.
§ 63.7(a)(3), (b), (c)-(h).	Performance Testing Requirements.	Yes	
§ 63.8(a)(1)-(3), (b), (c)(1)-(3), (c)(4)(i)-(ii), (c)(5) and (6), (c)(7)- (8), (f)(1)-(5), (g)(1)-(4).	Monitoring Requirements	Yes	CMS requirements in § 63.8(c)(4) (i)-(ii), (c) (5)-(6), (d), and (e) apply only to COMS.
§ 63.8(a)(4).	Additional Monitoring Requirements for Control Devices in § 63.11.	No	Subpart FFFFF does not require flares.
§ 63.8(c)(4)	Continuous Monitoring System Requirements.	No.	Subpart FFFFF specifies requirements for operation of CMS.
§ 63.8(f)(6).	RATA Alternative	No.	
§ 63.8(g)(5)	Data Reduction	No	Subpart FFFFF specifies data reduction requirements.
§ 63.9	Notification Requirements.	Yes.	Additional notifications for CMS in § 63.9(g) apply to COMS.
§ 63.10(a), (b)(1)-(2)(xii), (b)(2)(xiv), (b)(3), (c)(1)-(6) (c)(9)-(15), (d), (e)(1)-(2), (e)(4), (f).	Recordkeeping and Reporting Requirements.	Yes	Additional records for CMS in § 63.10(c)(1)-(6), (9)-(15), and reports in §63.10(d)(1)-(2) apply only to COMS
§ 63.10(b)(2)(xiii)	CMS Records for RATA Alternative	No.	
§ 63.10(c)(7)-(8)	Records of Excess Emissions and Parameter Monitoring Exceedances for CMS	No.	Subpart FFFFF specifies record requirements.
§ 63.10(e)(3)	Excess Emission Reports	No	Subpart FFFFF specifies reporting requirements
§ 63.11	Control Device Requirements.	No	Subpart FFFFF does not require flares.
§ 63.12.	State Authority and Delegations	Yes	
§ 63.13-§ 63.15	Addresses, Incorporation by Reference, Availability of Information.	Yes	

Section D.7 Facility Operation Conditions

Facility Description [326 IAC 2-7-5(15)]: Four (4) Blast Furnaces, designated as Blast Furnace No.4, Blast Furnace No. 6, Blast Furnace No. 8 and Blast Furnace No. 14

- (a) Raw materials shipped to the ore yard identified as IAOYO366, are transferred to the Highline, identified as IAHL0307, from which raw material shipments and coke are sent through the Stockhouse.
- (b) The No. 14 Blast Furnace Stockhouse, constructed in 1979, identified as IDSH0367, controlled by dust suppression, services Blast Furnace 14. The No 4 Blast Furnace Stockhouse constructed in 1979, controlled by dust suppression, services Blast Furnace No. 4. The No 6 Blast Furnace Stockhouse constructed in 1979, controlled by dust suppression, services Blast Furnace No. 6. The No. 8 Blast Furnace Stockhouse constructed in 1979, controlled by dust suppression, services Blast Furnace No. 8.
- (c) No. 4 Blast Furnace, constructed in 1917, with a maximum capacity of 200 tons per hour, identified as IABF0308, using a Blast Furnace Gas Distribution System to collect the blast furnace gas and using pulverized coal at a rate of 26 tons per hour, oil (from on-site contractor when it meets specifications) at a rate of 70 gallons per minute and/or coal tar (when the on-site contractor tar centrifuge is not operating) at a rate of 70 gallons per minute.
 - (1) Three (3) No. 4 Blast Furnace Stoves identified as IAST0360, replaced in 1947, with a maximum heat input capacity of 350 MMBtu per hour total combusting blast furnace gas (BFG) and natural gas, exhausting to the combustion stack IA6160.
 - (2) No. 4 Blast Furnace Casthouse, identified as IABF0308, constructed in 1917, with emissions from tapping and runners controlled by a natural gas iron oxide fume suppression system IA3177, exhausting to casthouse roof monitor IA6010.
 - (3) One (1) Slag Pit, identified as IASP0311, with fugitive emissions.
- (d) No. 6 Blast Furnace, constructed in 1910, with a maximum capacity of 200 tons per hour, identified as IBBF0341, using a Blast Furnace Gas Distribution System to collect the blast furnace gas and using pulverized coal injected at a rate of 26 tons per hour, oil at a rate of 70 gallons per minute and/or coal tar at a rate of 70 gallons per minute.
 - (1) Four (4) No. 6 Blast Furnace Stoves identified as IBST0361, replaced in 1997, with a maximum heat input capacity of 350 MMBtu per hour total, combusting Blast Furnace Gas (BFG) and natural gas exhausting to the combustion stack IB6168.
 - (2) No. 6 Blast Furnace Casthouse, identified as IBBF0341, constructed in 1910, with emissions from tapping and runners controlled by a natural gas iron oxide fume suppression system IB3178, exhausting to casthouse roof monitor IB6011.
 - (3) One (1) Slag Pit, identified as IBSP0335, with fugitive emissions.
- (e) No. 8 Blast Furnace, constructed in 1909, with a maximum capacity of 183 tons per hour, identified as ICBFO354, using a Blast Furnace Gas Distribution System to collect the blast furnace gas and using pulverized coal injected at a rate of 26 ton per hour, oil at a rate of 70 gallons per minute and /or coal tar at a rate of 70 gallons per minute.
 - (1) Four (4) No. 8 Blast Furnace Stoves, identified as ICST0362, replaced in 1999, with a maximum heat input capacity of 325 MMBtu per hour total, combusting Blast Furnace Gas and natural gas, exhausting to the combustion stack IC6175.

- (2) No. 8 Blast Furnace Casthouse, identified as ICBF0354, constructed in 1909, with emissions from tapping and runners controlled by a natural gas iron oxide fume suppression system IC3179, exhausting to cast house roof monitor IC6012.
- (3) One (1) Slag Pit, identified as ICSP0363, with fugitive emissions.
- (f) No. 14 Blast Furnace, constructed in 1974, with a maximum capacity of 450 tons per hour, identified as IDBF0369, using a Blast Furnace Gas Distribution System to collect the blast furnace gas and using pulverized coal injected at a rate of 80 tons per hour, oil at a rate of 150 gallons per minute and/or coal tar at a rate of 150 gallons per minute.
 - (1) Three (3) No. 14 Blast Furnace Stoves identified as IDST0359, constructed in 1974, with a maximum heat input capacity of 700 MMBtu per hour total, combusting blast furnace gas and natural gas, exhausting to the combustion stack ID6184.
 - (2) No. 14 Blast Furnace Casthouse, identified as IDBF0369, constructed in 1974 with emissions controlled by a baghouse, identified as ID3185, exhausting to stack ID6187 and fugitive emissions exhausting through the casthouse roof monitor ID6013;
 - (3) One (1) Slag Pit, identified as IDSP0371, with fugitive emissions.
 - (4) Pursuant to Significant Source Modification 089-20118-00121, issued October 20, 2005, the following activities involved in the No. 14 Blast Furnace Reline Project were approved for construction:
 - (A) Replacement of furnace refractory lining with new and thinner refractory brick.
 - (B) Replacement of furnace shell.
 - (C) Removal and replacement of the top charging system with a new “bell-less” charging system.
 - (D) Placement of new copper staves in the mantle area of the furnace.
 - (E) Installation of copper cooling plates and a new bustle pipe.
 - (F) Repair of the checker work brick in the stoves and various structural, mechanical and electrical repairs.
 - (G) Enlargement of the slag granulator and addition of a stack.
 - (H) Changes to the casthouse and casthouse emissions control system to improve capture efficiency of hoods at the tap holes, iron troughs and runners.
 - (I) Removal and replacement of the existing system for cleaning blast furnace gas with a more efficient scrubbing system.
- (g) One (1) No. 14 Blast Furnace Slag Granulation Plant owned by US Steel -Gary Works and operated by US Steel - Gary Works as part of the slag processing operation. The granulation plant has a maximum capacity of 1,704,000 tons of steel mill slag per year, consisting of the following:
 - (1) One (1) hot slag quenching operation, constructed in 1991, directed to a hooded exhaust stack.
 - (2) Two (2) silos, constructed in 1991, for temporary slag storage.

- (3) Two (2) belt conveyers, constructed in January 1995.
 - (4) One (1) storage silo and loadout bay, constructed in May 1995, with a capacity of 400,000 tons per year.
 - (h) One (1) blast furnace gas distribution system consisting of instrumentation and valves designed to limit the maximum pressure through the distribution system by venting excess blast furnace gas to the three (3) bleeder stacks equipped with Flare No. 1 identified as BG6073, constructed before 1920, Flare No. 2, identified as BG6074 constructed before 1920 and Flare No. 4 identified as BG6075, constructed in 1974.
 - (i) One (1) iron beaching process, constructed prior to 1965, identified as IMIB0378.
 - (j) One (1) transfer ladle maintenance operation, constructed prior to 1965, identified as, IMVM0375.
- (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 Emission Offset Minor Limitation [326 IAC 2-3]

Pursuant to Construction Permit 089-2936-00133, issued July 2, 1993 and 326 IAC 2-3 (Emission Offset), the total granulation plant throughput shall not exceed 1,704,000 tons per 12 consecutive month period with compliance demonstrated at the end of each month. Therefore, the emission offset rule 326 IAC 2-3 does not apply.

D.7.2 Particulate Emission Limitation [326 IAC 6.8-1-2(a)]

Pursuant to Construction Permit 089-1953-00133, issued March 18, 1991 and 326 IAC 6.8-1-2(a) (Particulate Matter Limitations for Lake County), the particulate matter emissions from the slag granulation process quenching hooded exhaust stack shall not exceed 0.03 grain per dry standard cubic foot (dscf).

D.7.3 General Provisions Relating to Hazardous Air Pollutants (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, the No. 4 Blast Furnace casthouse, No. 6 Blast Furnace casthouse, No. 8 Blast Furnace casthouse and No. 14 Blast Furnace casthouse, except when otherwise specified by Table 4 to 40 CFR 63, Subpart FFFFF.

D.7.4 Lake County PM₁₀ Emission Requirements [326 IAC 6.8-2-38]

Pursuant to 326 IAC 6.8-2-38, PM₁₀ emissions shall comply with the following:

- (a) The PM₁₀ emissions from the Blast Furnace No. 4 stoves Stack IA6160 shall not exceed 0.033 pound per MMBtu of heat input and a total of 11.70 pounds per hour.
- (b) The PM₁₀ emissions from the Blast Furnace No. 6 stoves Stack IB6168 shall not exceed 0.033 pound per MMBtu of heat input and a total of 11.70 pounds per hour.
- (c) The PM₁₀ emissions from the Blast Furnace No. 8 stoves Stack IC6175 shall not exceed 0.033 pound per MMBtu of heat input and a total of 11.70 pounds per hour.
- (d) The PM₁₀ emissions from the Blast Furnace No. 14 stoves Stack ID6184 shall not exceed 0.029 pound per MMBtu of heat input and a total of 20.40 pounds per hour.

- (e) The PM₁₀ emissions from the Number 14 Blast Furnace Casthouse Baghouse Stack ID6187 shall not exceed 0.0090 grains per dry standard cubic feet and 38.57 pounds per hour.
- (f) Each emission limit applies to one (1) stack serving one (1) facility unless otherwise noted. The emissions limitations apply to one (1) stack serving the multiple units specified when the facility description notes stack serving, and to each stack of multiple stacks serving multiple facilities when the facility description notes each stack serving.

D.7.5 Fugitive Dust Emission Limitations [326 IAC 6-4-2][326 IAC 6.8-10-3]

(a) Pursuant to 326 IAC 6-4-2:

- (1) The iron beaching and ladle maintenance generating fugitive dust shall be in violation of this rule (326 IAC 6-4) if any of the following criteria are violated:
 - (A) A source or combination of sources which cause to exist fugitive dust concentrations greater than sixty-seven percent (67%) in excess of ambient upwind concentrations as determined by the following formula:

$$P = \frac{100(R - U)}{U}$$

Where

P = Percentage increase

R = Number of particles of fugitive dust measured at downward receptor site

U = Number of particles of fugitive dust measured at upwind or background site

- (B) The fugitive dust is comprised of fifty percent (50%) or more respirable dust, then the percent increase of dust concentration in subdivision (1) of this section shall be modified as follows:

$$PR = (1.5 \pm N) P$$

Where

N = Fraction of fugitive dust that is respirable dust;

PR = allowable percentage increase in dust concentration above background; and

P = no value greater than sixty-seven percent (67%).

- (C) The ground level ambient air concentrations exceed fifty (50) micrograms per cubic meter above background concentrations for a sixty (60) minute period.
 - (D) If fugitive dust is visible crossing the boundary or property line of a source. This subdivision may be refuted by factual data expressed in subdivisions (1), (2) or (3) of this section. 326 IAC 6-4-2(4) is not federally enforceable.
- (2) Pursuant to 326 IAC 6-4-6(6) (Exceptions), fugitive dust from a source caused by adverse meteorological conditions will be considered an exception to this rule (326 IAC 6-4) and therefore not in violation.
- (b) Pursuant to 326 IAC 6.8-10-3 Lake County Fugitive Particulate Matter Emissions Limitations, fugitive emissions from iron beaching and ladle maintenance generating fugitive emissions shall comply with the emissions limitations in Section C.5 - Fugitive Dust Emissions.

D.7.6 Sulfur Dioxide (SO₂) Limitations [326 IAC 7-4.1-20(a)(1)(I)(J) and (K)]

- (a) Pursuant to 326 IAC 7-4.1-20(a)(1)(I)(J), and (K), the SO₂ emissions from the No.4 Blast Furnace Stoves IAST0360, No.6 Blast Furnace Stoves IBST0361, No.8 Blast Furnace Stoves ICST0362 and No.14 Blast Furnace Stoves IDST0359 shall comply with the following when the coke oven gas desulfurization unit is not operating:

Furnace	Emission Limit lbs/MMBtu	Emission Limit lbs/hr
Blast Furnace No. 4 Stove Stack	0.115	40.25 total
Blast Furnace No. 6 Stove Stack	0.115	40.25 total
Blast Furnace No. 8 Stove Stack	0.115	37.38 total
Blast Furnace No.14 Stove Stack during periods when combusting blast furnace gas	0.134	93.50 total
Blast Furnace No. 14 Casthouse Baghouse Stack during periods when Blast Furnace No. 14 Stoves are combusting blast furnace gas.	---	115.0

- (b) Pursuant to 326 IAC 7-4.1-20(b)(5) and (9), the SO₂ emissions from the No.4 Blast Furnace Stoves IAST0360, No.6 Blast Furnace Stoves IBST0361, No.8 Blast Furnace Stoves ICST0362 and No.14 Blast Furnace Stoves IDST0359 shall comply with the following when the coke oven gas desulfurization unit is operating:

Furnace	Emission Limit lbs/MMBtu	Emission Limit lbs/hr
Blast Furnace No. 4 Stove Stack	0.115	40.25 total
Blast Furnace No. 6 Stove Stack	0.115	40.25 total
Blast Furnace No. 8 Stove Stack	0.115	37.38 total
Blast Furnace No.14 Stove Stack	0.134	93.50 total
Blast Furnace No. 14 Casthouse Baghouse Stack	---	115.0

D.7.7 Carbon Monoxide (CO) Limitations [326 IAC 9-1-2(2)]

Pursuant to 326 IAC 9-1-2(2), no carbon monoxide shall be discharged from the No. 14 Blast Furnace IDBF0369, waste gas stream, unless the gas stream is burned in one of the following: a direct-flame afterburner, boiler or recuperative incinerator. In instances where carbon monoxide destruction is not required, carbon monoxide emissions shall be released at such elevation that the maximum ground level concentration from a single source shall not exceed twenty percent (20%) of the maximum ground one hour Indiana ambient air quality value for carbon monoxide.

D.7.8 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

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

Compliance Determination Requirements

D.7.9 Testing Requirements [326 IAC 2-7-6(1),(6)][326 IAC 2-1.1-11]

Within thirty (30) months after issuance of this permit or two and one half (2 ½) years from the date of the last valid compliance demonstration which ever is earlier, in order to demonstrate compliance with Condition D.7.35, the Permittee shall perform PM₁₀ testing on the No. 14 Blast Furnace Casthouse Baghouse Stack ID6187 using the appropriate methods to measure PM₁₀ as listed in 326 IAC 6.8-4-1(1) or other methods approved by the Commissioner. This test shall be repeated at least once every two and one half (2 ½) years from the date of this valid compliance demonstration. All tests shall be performed in accordance with Section C - Performance Testing.

D.7.10 Sulfur Fuel Sampling and Analysis [326 IAC 7-4-1.1(d)]

To demonstrate compliance with condition D.7.57, the Permittee shall perform the Sulfur Fuel Sampling and Analysis in accordance with Section C - Sulfur Fuel Sampling and Analysis of this permit.

D.7.11 Particulate Matter and CO Control [326 IAC 2-7-6(6)]

- (a) Except as otherwise provided by statute, rule or this permit, the baghouses for PM control shall be in operation and control emissions at all times the associated coal processing or drop point conveyors are in operation.
- (1) Nos. 4, 6 and 8 Blast Furnace natural gas iron oxide fume suppression systems IA3177, IB3178, IC3179, shall be in operation in order minimize particulate matter emissions as follows:
- (A) The iron and slag runners at the No. 4 Blast Furnace shall be equipped with a natural gas fired lance for fume suppression during the cast to minimize particulate matter emissions.
- (B) The iron and slag runners at the No. 6 Blast Furnace shall be equipped with a natural gas fired lance for fume suppression during the cast to minimize particulate matter emissions.
- (C) The iron and slag runners at the No. 8 Blast Furnace shall be equipped with a natural gas fired lance for fume suppression during the cast to minimize particulate matter emissions.
- (2) The No. 14 blast furnace Casthouse Baghouse ID3185 shall be in operation at all times during casting operations at the No. 14 Blast Furnace Casthouse is in operation.
- (3) In the event that bag failure is observed in a multi-compartment baghouse, if operations will continue for ten (10) days or more after the failure is observed before the failed units will be repaired or replaced, the Permittee shall promptly notify the IDEM, OAQ of the expected date the failed units will be repaired or replaced. The notification shall also include the status of the applicable compliance monitoring parameters with respect to normal, and the results of any response actions taken up to the time of notification.
- (b) Carbon Monoxide Emissions Control

The Blast Furnace Gas Distribution System Flare controls GC3629, GC3628 and GC3627 and bleeder stack Flare No. 1 BG6073, Flare No. 2 BG6074 and Flare No. 4 BG6075 shall be in operation and the pilot flame shall be present at all times when the No. 14 Blast Furnace, No. 4 Blast Furnace, No. 6 Blast Furnace and No. 8 Blast Furnace are in operation in order to minimize CO emissions.

D.7.12 Fugitive Dust Control

The dust suppression used as control for the fugitive particulate emissions from the granulation plant shall be applied as often as necessary to control fugitive dust.

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

D.7.13 Visible Emissions Notations

- (a) Visible emission notations of the No. 14 Blast Furnace Casthouse Baghouse Stack ID6187, iron beaching, quenching hooded exhaust, transferring, conveying operations, and loadout bay shall be performed once per day during normal daylight operations when

- exhausting to the atmosphere. A trained employee shall record whether emissions are normal or abnormal.
- (b) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.
 - (c) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.
 - (d) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.
 - (e) If abnormal emissions are observed, the Permittee shall take reasonable response steps in accordance with Section C - Response to Excursions or Exceedances. Failure to take response steps in accordance with Section C - Response to Excursions or Exceedances shall be considered a deviation of this permit.
 - (f) The Permittee shall comply with the most current Continuous Compliance Plan visible emission evaluation program, in accordance with Section C- Continuous Compliance Plan.

D.7.14 Parametric Monitoring

- (a) The Permittee shall record the pressure drop across the No. 14 Blast Furnace Cast house baghouse ID3185, at least once per day when the No.14 Blast Furnace Casthouse is in operation. When for any one reading, the pressure drop across the baghouses is outside the normal range of 3 to 9 inches of water or a range established during the latest stack test, the Permittee shall take reasonable response steps in accordance with Section C- Response to Excursions and Exceedances. A pressure reading that is outside the above mentioned range is not a deviation from this permit. Failure to take response steps in accordance with Section C - Response to Excursions and Exceedances, shall be considered a deviation of this permit.
- (b) The Permittee shall comply with the most current Continuous Compliance Plan for the baghouse operation, recording and maintenance, in accordance with Section C- Continuous Compliance Plan.
- (c) The instrument used for determining the pressure shall comply with Section C - Instrument Specifications, of this permit, shall be subject to approval by IDEM, OAQ, and shall be calibrated at least once every six (6) months.

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

D.7.15 General Record Keeping Requirements

- (a) To document compliance with Condition D.7.1, the Permittee shall maintain records at the plant of the total tons of slag processed in the granulation plant per twelve (12) consecutive month period.
- (b) To document compliance with Condition D.7.6, the Permittee shall maintain records in accordance with Section C – Sulfur Dioxide SO₂ Record Keeping (Entire Source).
- (c) To document compliance with Condition D.7.13, the Permittee shall maintain records of once per day visible emission notations of the No. 14 Casthouse Baghouse Stack (ID6187), the iron beaching facility, quenching hooded exhaust, transferring, conveying operations, and loadout bay when in operation.

- (d) To document compliance with Condition D.7.14, the Permittee shall maintain the records of the once per day pressure drop of the No. 14 Casthouse Baghouse during normal operation.
- (e) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

D.7.16 General Reporting Requirements

A quarterly summary report to document compliance with condition D.7.1 and D.7.6 shall be submitted to IDEM in accordance with Section C – General Reporting Requirements and Sulfur Dioxide SO₂ Reporting Requirements (Entire Source), of this permit, using the reporting forms located at the end of this permit, or their equivalent, within thirty (30) days after the end of the quarter being reported. The report submitted by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

D.7.17 Actual to Projected Actual Applicability Test [326 IAC 2-2-2(d)] [326 IAC 2-2-3(c)]

- (a) Pursuant to SSM 089-20118-00121, issued October 20, 2005, 326 IAC 2-2-2(d) and 326 IAC 2-3-2(c), the No. 14 Blast Furnace Reline Project shall not cause a significant net emission increase for any of the pollutants listed in 326 IAC 2-2-1(xx) and 326 IAC 2-3-1(qq).

The significant net emission increase shall be determined using the Actual to Projected Actual Applicability Test.

Therefore, the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration) and 326 IAC 2-3 (Emission Offset) are not applicable.

- (b) Unless otherwise specified in this permit, all record keeping requirements not already legally required shall be implemented when the new or modified equipment begins normal operation.
- (c) If there is a reasonable possibility that the No. 14 Blast Furnace Reline Project may result in a significant emission increase and the Permittee elects to utilize the "projected actual emissions" (as defined in 326 IAC 2-2-1(rr) and 326 IAC 2-3-1 (mm)), the Permittee shall comply with the following:
 - (1) Before beginning actual construction of the "project" (as defined in 326 IAC 2-2-1(qq) and 326 IAC 2-3-1(ll)) at an existing emission unit, document and maintain the following records:
 - (A) A description of the project;
 - (B) Identification of any emission unit whose emissions of a regulated new source review (NSR) pollutant could be affected by the project;
 - (C) A description of the applicability test used to determine that the project is not a major modification for any regulated NSR pollutant, including:
 - (i) Baseline actual emissions;
 - (ii) Projected actual emissions;
 - (iii) Amount of emissions excluded under section 326 IAC 2-2-1(rr)(2)(A)(iii); and
 - (iv) An explanation for why the amount was excluded, and any netting calculations, if applicable.

- (2) Monitor the emissions of any regulated NSR pollutant that could increase as a result of the project and that is emitted by any existing emission unit identified in (1)(B) above; and
- (3) Calculate and maintain a record of the annual emissions, in tons per year on a calendar year basis, for a period of five (5) years following resumption of regular operations after the change, or for a period of ten (10) years following resumption of regular operations after the change if the project increases the design capacity or the potential to emit that regulated NSR pollutant at the emission unit.

D.7.18 Volatile Organic Compounds (VOC) De Minimis [326 IAC 2-3-2(b)]

Pursuant to SSM 089-20118-00121, issued October 20, 2005 and 326 IAC 2-3-2(b), the VOC emissions increases for the five (5) calendar year period January 2000 to December 2005 plus the net emission increase from the No. 14 Blast Furnace Reline Project resulted in an emission increase less than the VOC de minimis level (25 tons per year).

D.7.19 National Emissions Standards for Hazardous Air Pollutants (NESHAP) from Integrated Iron and Steel Manufacturing - Blast Furnaces [40 CFR 63, Subpart FFFFF]

Title 40: Protection of Environment

[PART 63—NATIONAL EMISSION STANDARDS FOR HAZARDOUS AIR POLLUTANTS FOR SOURCE CATEGORIES](#)

Subpart FFFFF—National Emission Standards for Hazardous Air Pollutants for Integrated Iron and Steel Manufacturing Facilities

Source: 68 FR 27663, May 20, 2003, unless otherwise noted.

What This Subpart Covers

§63.7780 What is the purpose of this subpart?

This subpart establishes national emission standards for hazardous air pollutants (NESHAP) for integrated iron and steel manufacturing facilities. This subpart also establishes requirements to demonstrate initial and continuous compliance with all applicable emission limitations and operation and maintenance requirements in this subpart.

§63.7781 Am I subject to this subpart?

You are subject to this subpart if you own or operate an integrated iron and steel manufacturing facility that is (or is part of) a major source of hazardous air pollutants (HAP) emissions. Your integrated iron and steel manufacturing facility is a major source of HAP if it emits or has the potential to emit any single HAP at a rate of 10 tons or more per year or any combination of HAP at a rate of 25 tons or more per year.

§63.7782 What parts of my plant does this subpart cover?

(a) This subpart applies to each new and existing affected source at your integrated iron and steel manufacturing facility.

(b) The affected sources are each new or existing blast furnace at your integrated iron and steel manufacturing facility.

(c) This subpart covers emissions from the blast furnace casthouse.

(d) A blast furnace at your integrated iron and steel manufacturing facility is existing if you commenced construction or reconstruction of the affected source before July 13, 2001.

(e) A blast furnace at your integrated iron and steel manufacturing facility is new if you commence construction or reconstruction of the affected source on or after July 13, 2001. An affected source is reconstructed if it meets the definition of reconstruction in §63.2.

§63.7783 When do I have to comply with this subpart?

(a) If you have an existing affected source, you must comply with each emission limitation and operation and maintenance requirement in this subpart that applies to you by the dates specified in paragraphs (a)(1) and (2) of this section.

(1) No later than May 22, 2006 for all emission sources at an existing affected source except for a sinter cooler at an existing sinter plant.

(2) No later than January 13, 2007 for a sinter cooler at an existing sinter plant.

(b) If you have a new affected source and its initial startup date is on or before May 20, 2003, then you must comply with each emission limitation and operation and maintenance requirement in this subpart that applies to you by May 20, 2003.

(c) If you have a new affected source and its initial startup date is after May 20, 2003, you must comply with each emission limitation and operation and maintenance requirement in this subpart that applies to you upon initial startup.

(d) If your integrated iron and steel manufacturing facility is not a major source and becomes a major source of HAP, the following compliance dates apply to you.

(1) Any portion of the existing integrated iron and steel manufacturing facility that becomes a new affected source or a new reconstructed source must be in compliance with this subpart upon startup.

(2) All other parts of the integrated iron and steel manufacturing facility must be in compliance with this subpart no later than 2 years after it becomes a major source.

(e) You must meet the notification and schedule requirements in §63.7840. Several of these notifications must be submitted before the compliance date for your affected source.

Emission Limitations

§ 63.7790 What emission limitations must I meet?

(a) You must meet each emission limit and opacity limit in Table 1 to this subpart that applies to you.

(b) You must meet each operating limit for capture systems and control devices in paragraph (b)(1) of this section that applies to you.

(1) You must operate each capture system applied to emissions from a blast furnace casthouse at or above the lowest value or settings established for the operating limits in your operation and maintenance plan;

(c) An owner or operator who uses an air pollution control device other than a baghouse, venturi scrubber, or electrostatic precipitator must submit a description of the device; test results collected in accordance with §63.7822 verifying the performance of the device for reducing emissions of

particulate matter to the atmosphere to the levels required by this subpart; a copy of the operation and maintenance plan required in §63.7800(b); and appropriate operating parameters that will be monitored to maintain continuous compliance with the applicable emission limitation(s). The monitoring plan identifying the operating parameters to be monitored is subject to approval by the Administrator.

Operation and Maintenance Requirements

§63.7800 What are my operation and maintenance requirements?

(a) As required by §63.6(e)(1)(i), you must always operate and maintain your affected source, including air pollution control and monitoring equipment, in a manner consistent with good air pollution control practices for minimizing emissions at least to the levels required by this subpart.

(b) You must prepare and operate at all times according to a written operation and maintenance plan for each capture system or control device subject to an operating limit in §63.7790(b). Each plan must address the elements in paragraphs (b)(1) through (5) of this section.

(1) Monthly inspections of the equipment that is important to the performance of the total capture system (e.g., pressure sensors, dampers, and damper switches). This inspection must include observations of the physical appearance of the equipment (e.g., presence of holes in ductwork or hoods, flow constrictions caused by dents or accumulated dust in the ductwork, and fan erosion). The operation and maintenance plan also must include requirements to repair any defect or deficiency in the capture system before the next scheduled inspection.

(2) Preventative maintenance for each control device, including a preventative maintenance schedule that is consistent with the manufacturer's instructions for routine and long-term maintenance.

(3) Operating limits for each capture system applied to emissions from a sinter plant discharge end or blast furnace casthouse, or to secondary emissions from a BOPF. You must establish the operating limits according to the requirements in paragraphs (b)(3)(i) through (iii) of this section.

(i) Select operating limit parameters appropriate for the capture system design that are representative and reliable indicators of the performance of the capture system. At a minimum, you must use appropriate operating limit parameters that indicate the level of the ventilation draft and the damper position settings for the capture system when operating to collect emissions, including revised settings for seasonal variations. Appropriate operating limit parameters for ventilation draft include, but are not limited to, volumetric flow rate through each separately ducted hood, total volumetric flow rate at the inlet to the control device to which the capture system is vented, fan motor amperage, or static pressure.

(ii) For each operating limit parameter selected in paragraph (b)(3)(i) of this section, designate the value or setting for the parameter at which the capture system operates during the process operation. If your operation allows for more than one process to be operating simultaneously, designate the value or setting for the parameter at which the capture system operates during each possible configuration that you may operate.

(iii) Include documentation in your plan to support your selection of the operating limits established for the capture system. This documentation must include a description of the capture system design, a description of the capture system operating during production, a description of each selected operating limit parameter, a rationale for why you chose the parameter, a description of the method used to monitor the parameter according to the requirements of §63.7830(a), and the data used to set the value or setting for the parameter for each of your process configurations.

(4) Corrective action procedures for bag leak detection systems. In the event a bag leak detection system alarm is triggered, you must initiate corrective action to determine the cause of the alarm within 1 hour of the alarm, initiate corrective action to correct the cause of the problem within 24 hours of the alarm, and complete the corrective action as soon as practicable. Corrective actions may include, but are not limited to:

- (i) Inspecting the baghouse for air leaks, torn or broken bags or filter media, or any other condition that may cause an increase in emissions.
- (ii) Sealing off defective bags or filter media.
- (iii) Replacing defective bags or filter media or otherwise repairing the control device.
- (iv) Sealing off a defective baghouse compartment.
- (v) Cleaning the bag leak detection system probe, or otherwise repair the bag leak detection system.
- (vi) Shutting down the process producing the particulate emissions; and

(5) Corrective actions procedures for venture scrubbers equipped with continuous parametric monitoring systems (CPMS) . In the event a venture scrubber exceeds the operating limit in §63.7790(b)(2), you must take corrective actions consistent with your site-specific monitoring plan in accordance with §63.7831(a).

(6) Corrective action procedures for electrostatic precipitators equipped with COMS. In the event an electrostatic precipitator exceeds the operating limit in §63.7790(b)(3), you must take corrective actions consistent with your site-specific monitoring plan in accordance with §63.7831(a).

(7) Procedures for determining and recording the daily sinter plant production rate in tons per hour.

General Compliance Requirements

§63.7810 What are my general requirements for complying with this subpart?

- (a) You must be in compliance with the emission limitations and operation and maintenance requirements in this subpart at all times, except during periods of startup, shutdown, and malfunction as defined in §63.2.
- (b) During the period between the compliance date specified for your affected source in §63.7783 and the date upon which continuous monitoring systems have been installed and certified and any applicable operating limits have been set, you must maintain a log detailing the operation and maintenance of the process and emissions control equipment.
- (c) You must develop a written startup, shutdown, and malfunction plan according to the provisions in §63.6(e)(3).

[68 FR 27663, May 20, 2003, as amended at 71 FR 20468, Apr. 20, 2006]

Initial Compliance Requirements

§63.7820 By what date must I conduct performance tests or other initial compliance demonstrations?

(a) You must conduct a performance test to demonstrate initial compliance with each emission and opacity limit in Table 1 to this subpart that applies to you. You must conduct the performance tests within 180 calendar days after the compliance date that is specified in §63.7783 for your affected source and report the results in your notification of compliance status.

(b) For each operation and maintenance requirement that applies to you where initial compliance is not demonstrated using a performance test or opacity observation, you must demonstrate initial compliance within 30 calendar days after the compliance date that is specified for your affected source in §63.7783.

(c) If you commenced construction or reconstruction between July 13, 2001 and May 20, 2003, you must demonstrate initial compliance with either the proposed emission limit or the promulgated emission limit no later than November 17, 2003 or no later than 180 days after startup of the source, whichever is later, according to §63.7(a)(2)(ix).

(d) If you commenced construction or reconstruction between July 13, 2001 and May 20, 2003, and you chose to comply with the proposed emission limit when demonstrating initial compliance, you must conduct a second performance test to demonstrate compliance with the promulgated emission limit by November 17, 2006, or no later than 180 days after startup of the source, whichever is later, according to §63.7(a)(2)(ix).

§63.7821 When must I conduct subsequent performance tests?

You must conduct subsequent performance tests to demonstrate compliance with all applicable PM and opacity limits in Table 1 to this at the frequencies specified in paragraphs (b) through (d) of this section.

(b) For each sinter cooler at an existing sinter plant and each emissions unit equipped with a control device other than a baghouse, you must conduct subsequent performance tests no less frequently than twice (at mid-term and renewal) during each term of your title V operating permit.

(c) For each emissions unit equipped with a baghouse, you must conduct subsequent performance tests no less frequently than once during each term of your title V operating permit.

(d) For sources without a title V operating permit, you must conduct subsequent performance tests every 2.5 years.

§63.7822 What test methods and other procedures must I use to demonstrate initial compliance with the emission limits for particulate matter?

(a) You must conduct each performance test that applies to your affected source according to the requirements in §63.7(e)(1) and the conditions detailed in paragraphs (b) through (i) of this section.

(b) To determine compliance with the applicable emission limit for particulate matter in Table 1 to this subpart, follow the test methods and procedures in paragraphs (b)(1) and (2) of this section.

(1) Determine the concentration of particulate matter according to the following test methods in appendix A to part 60 of this chapter:

(i) Method 1 to select sampling port locations and the number of traverse points. Sampling ports must be located at the outlet of the control device and prior to any releases to the atmosphere.

(ii) Method 2, 2F, or 2G to determine the volumetric flow rate of the stack gas.

- (iii) Method 3, 3A, or 3B to determine the dry molecular weight of the stack gas.
 - (iv) Method 4 to determine the moisture content of the stack gas.
 - (v) Method 5, 5D, or 17, as applicable, to determine the concentration of particulate matter (front half filterable catch only).
- (2) Collect a minimum sample volume of 60 dry standard cubic feet (dscf) of gas during each particulate matter test run. Three valid test runs are needed to comprise a performance test.
- (e) For a control device applied to emissions from a blast furnace casthouse, sample for an integral number of furnace tapping operations sufficient to obtain at least 1 hour of sampling for each test run.
- (i) Subject to approval by the permitting authority, you may conduct representative sampling of stacks when there are more than three stacks associated with a process.

§63.7823 What test methods and other procedures must I use to demonstrate initial compliance with the opacity limits?

- (a) You must conduct each performance test that applies to your affected source according to the requirements in §63.7(h)(5) and the conditions detailed in paragraphs (b) through (d) of this section.
- (b) You must conduct each visible emissions performance test such that the opacity observations overlap with the performance test for particulate matter.
- (c) To determine compliance with the applicable opacity limit in Table 1 to this subpart for a blast furnace casthouse:
- (1) Using a certified observer, determine the opacity of emissions according to Method 9 in appendix A to part 60 of this chapter.
 - (2) Obtain a minimum of 30 6-minute block averages. For a blast furnace casthouse, make observations during tapping of the furnace. Tapping begins when the furnace is opened, usually by creating a hole near the bottom of the furnace, and ends when the hole is plugged.

§63.7824 What test methods and other procedures must I use to establish and demonstrate initial compliance with operating limits?

- (a) For each capture system subject to an operating limit in §63.7790(b)(1), you must certify that the system operated during the performance test at the site-specific operating limits established in your operation and maintenance plan using the procedures in paragraphs (a)(1) through (4) of this section.
- (1) Concurrent with all opacity observations, measure and record values for each of the operating limit parameters in your capture system operation and maintenance plan according to the monitoring requirements specified in §63.7830(a).
- (2) For any dampers that are manually set and remain at the same position at all times the capture system is operating, the damper position must be visually checked and recorded at the beginning and end of each opacity observation period segment.
- (3) Review and record the monitoring data. Identify and explain any times the capture system operated outside the applicable operating limits.

(4) Certify in your performance test report that during all observation period segments, the capture system was operating at the values or settings established in your capture system operation and maintenance plan.

(c) You may change the operating limits for a capture system or venture scrubber if you meet the requirements in paragraphs (c)(1) through (3) of this section.

(1) Submit a written notification to the Administrator of your request to conduct a new performance test to revise the operating limit.

(2) Conduct a performance test to demonstrate compliance with the applicable emission limitation in Table 1 to this subpart.

(3) Establish revised operating limits according to the applicable procedures in paragraphs (a) through (c) of this section for a control device or capture system.

§63.7825 How do I demonstrate initial compliance with the emission limitations that apply to me?

(a) For each affected source subject to an emission or opacity limit in Table 1 to this subpart, you have demonstrated initial compliance if:

(1) You meet the conditions in Table 2 to this subpart; and

(2) For each capture system subject to the operating limit in §63.7790(b)(1), you have established appropriate site-specific operating limit(s) and have a record of the operating parameter data measured during the performance test in accordance with §63.7824(a)(1).

(c) For each emission limitation that applies to you, you must submit a notification of compliance status according to §63.7840(e).

§63.7826 How do I demonstrate initial compliance with the operation and maintenance requirements that apply to me?

(a) For a capture system applied to emissions from a blast furnace casthouse, you have demonstrated initial compliance if you meet all of the conditions in paragraphs (a)(1) through (4) of this section.

(1) Prepared the capture system operation and maintenance plan according to the requirements of §63.7800(b), including monthly inspection procedures and detailed descriptions of the operating parameter(s) selected to monitor the capture system;

(2) Certified in your performance test report that the system operated during the test at the operating limits established in your operation and maintenance plan;

(3) Submitted a notification of compliance status according to the requirements in §63.7840(e), including a copy of the capture system operation and maintenance plan and your certification that you will operate the capture system at the values or settings established for the operating limits in that plan; and

(4) Prepared a site-specific monitoring plan according to the requirements in §63.7831(a).

(b) For each control device subject to operating limits in §63.7790(b)(2) or (3), you have demonstrated initial compliance if you meet all the conditions in paragraphs (b)(1) through (3) of this section.

(1) Prepared the control device operation and maintenance plan according to the requirements of §63.7800(b), including a preventative maintenance schedule and, as applicable, detailed descriptions of the corrective action procedures for baghouses and or control devices;

(2) Submitted a notification of compliance status according to the requirements in §63.7840(e), including a copy of the operation and maintenance plan; and

(3) Prepared a site-specific monitoring plan according to the requirements in §63.7831(a).

Continuous Compliance Requirements

§63.7830 What are my monitoring requirements?

(a) For each capture system subject to an operating limit in §63.7790(b)(1) established in your capture system operation and maintenance plan, you must install, operate, and maintain a CPMS according to the requirements in §63.7831(e) and the requirements in paragraph (a)(1) of this section.

(1) Dampers that are manually set and remain in the same position are exempt from the requirement to install and operate a CPMS. If dampers are not manually set and remain in the same position, you must make a visual check at least once every 24 hours to verify that each damper for the capture system is in the same position as during the initial performance test.

(b) Except as provided in paragraph (b)(3) of this section, you must meet the requirements in paragraph (b)(1) or (2) of this section for each baghouse applied to meet any particulate emission limit in Table 1 to this subpart. You must conduct inspections of each baghouse according to the requirements in paragraph (b)(4) of this section.

(1) Install, operate, and maintain a bag leak detection system according to §63.7831(f) and monitor the relative change in particulate matter loadings according to the requirements in §63.7832; or

(2) If you do not install and operate a bag leak detection system, you must install, operate, and maintain a COMS according to the requirements in §63.7831(h) and monitor the hourly average opacity of emissions exiting each control device stack according to the requirements in §63.7832.

(3) A bag leak detection system and COMS are not required for a baghouse that meets the requirements in paragraphs (b)(3)(i) and (ii) of this section.

(i) The baghouse is a positive pressure baghouse and is not equipped with exhaust gas stacks; and

(ii) The baghouse was installed before August 30, 2005.

(4) You must conduct inspections of each baghouse at the specified frequencies according to the requirements in paragraphs (b)(4)(i) through (viii) of this section.

(i) Monitor the pressure drop across each baghouse cell each day to ensure pressure drop is within the normal operating range identified in the manual.

(ii) Confirm that dust is being removed from hoppers through weekly visual inspections or other means of ensuring the proper functioning of removal mechanisms.

(iii) Check the compressed air supply for pulse-jet baghouses each day.

- (iv) Monitor cleaning cycles to ensure proper operation using an appropriate methodology.
- (v) Check bag cleaning mechanisms for proper functioning through monthly visual inspection or equivalent means.
- (vi) Make monthly visual checks of bag tension on reverse air and shaker-type baghouses to ensure that bags are not kinked (knead or bent) or laying on their sides. You do not have to make this check for shaker-type baghouses using self-tensioning (spring-loaded) devices.
- (vii) Confirm the physical integrity of the baghouse through quarterly visual inspections of the baghouse interior for air leaks.
- (viii) Inspect fans for wear, material buildup, and corrosion through quarterly visual inspections, vibration detectors, or equivalent means.

§63.7831 What are the installation, operation, and maintenance requirements for my monitors?

(a) For each CPMS required in §63.7830, you must develop and make available for inspection upon request by the permitting authority a site-specific monitoring plan that addresses the requirements in paragraphs (a)(1) through (8) of this section.

(1) Installation of the CPMS sampling probe or other interface at a measurement location relative to each affected process unit such that the measurement is representative of control of the exhaust emissions (e.g., on or downstream of the last control device);

(2) Performance and equipment specifications for the sample interface, the parametric signal analyzer, and the data collection and reduction system;

(3) Performance evaluation procedures and acceptance criteria (e.g., calibrations);

(4) Ongoing operation and maintenance procedures in accordance with the general requirements of §§63.8(c)(1), (c)(3), (c)(4)(ii), (c)(7), and (c)(8);

(5) Ongoing data quality assurance procedures in accordance with the general requirements of §63.8(d); and

(6) Ongoing recordkeeping and reporting procedures in accordance the general requirements of §§63.10(c), (e)(1), and (e)(2)(i).

(b) Unless otherwise specified, each CPMS must:

(1) Complete a minimum of one cycle of operation for each successive 15-minute period and collect a minimum of three of the required four data points to constitute a valid hour of data;

(2) Provide valid hourly data for at least 95 percent of every averaging period; and

(3) Determine and record the hourly average of all recorded readings.

(c) You must conduct a performance evaluation of each CPMS in accordance with your site-specific monitoring plan.

(d) You must operate and maintain the CPMS in continuous operation according to the site-specific monitoring plan.

(e) For each capture system subject to an operating limit in §63.7790(b)(1), you must install, operate, and maintain each CPMS according to the requirements in paragraphs (a) through (d) of this section.

(f) For each baghouse applied to meet any particulate emission limit in Table 1 of this subpart, you must install, operate, and maintain a bag leak detection system according to the requirements in paragraphs (f)(1) through (7) of this section.

(1) The system must be certified by the manufacturer to be capable of detecting emissions of particulate matter at concentrations of 10 milligrams per actual cubic meter (0.0044 grains per actual cubic foot) or less.

(2) The system must provide output of relative changes in particulate matter loadings.

(3) The system must be equipped with an alarm that will sound when an increase in relative particulate loadings is detected over a preset level. The alarm must be located such that it can be heard by the appropriate plant personnel.

(4) Each system that works based on the triboelectric effect must be installed, operated, and maintained in a manner consistent with the guidance document, "Fabric Filter Bag Leak Detection Guidance," EPA-454/R-98-015, September 1997. You may install, operate, and maintain other types of bag leak detection systems in a manner consistent with the manufacturer's written specifications and recommendations.

(5) To make the initial adjustment of the system, establish the baseline output by adjusting the sensitivity (range) and the averaging period of the device. Then, establish the alarm set points and the alarm delay time.

(6) Following the initial adjustment, do not adjust the sensitivity or range, averaging period, alarm set points, or alarm delay time, except as detailed in your operation and maintenance plan. Do not increase the sensitivity by more than 100 percent or decrease the sensitivity by more than 50 percent over a 365-day period unless a responsible official certifies, in writing, that the baghouse has been inspected and found to be in good operating condition.

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

§63.7832 How do I monitor and collect data to demonstrate continuous compliance?

(a) Except for monitoring malfunctions, out-of-control periods as specified in §63.8(c)(7), associated repairs, and required quality assurance or control activities (including as applicable, calibration checks and required zero and span adjustments), you must monitor continuously (or collect data at all required intervals) at all times an affected source is operating.

(b) You may not use data recorded during monitoring malfunctions, associated repairs, and required quality assurance or control activities in data averages and calculations used to report emission or operating levels or to fulfill a minimum data availability requirement, if applicable. You must use all the data collected during all other periods in assessing compliance.

(c) A monitoring malfunction is any sudden, infrequent, not reasonably preventable failure of the monitoring to provide valid data. Monitoring failures that are caused in part by poor maintenance or careless operation are not malfunctions.

§63.7833 How do I demonstrate continuous compliance with the emission limitations that apply to me?

(a) You must demonstrate continuous compliance for each affected source subject to an emission or opacity limit in §63.7790(a) by meeting the requirements in Table 3 to this subpart.

(b) You must demonstrate continuous compliance for each capture system subject to an operating limit in §63.7790(b)(1) by meeting the requirements in paragraphs (b)(1) and (2) of this section.

(1) Operate the capture system at or above the lowest values or settings established for the operating limits in your operation and maintenance plan; and

(2) Monitor the capture system according to the requirements in §63.7830(a) and collect, reduce, and record the monitoring data for each of the operating limit parameters according to the applicable requirements of this subpart;

(c) For each baghouse applied to meet any particulate emission limit in Table 1 to this subpart, you must demonstrate continuous compliance by completing the requirements in paragraphs (c)(1) or (2) of this section as applicable, and paragraphs (c)(3) and (4) of this section:

(1) For a baghouse equipped with a bag leak detection system, operating and maintaining each bag leak detection system according to §63.7831(f) and recording all information needed to document conformance with these requirements. If you increase or decrease the sensitivity of the bag leak detection system beyond the limits specified in §63.7831(f)(6), you must include a copy of the required written certification by a responsible official in the next semiannual compliance report.

(2) For a baghouse equipped with a COMS, operating and maintaining each COMS and reducing the COMS data according to §63.7831(h).

(3) Inspecting each baghouse according to the requirements in §63.7830(b)(4) and maintaining all records needed to document conformance with these requirements.

(4) Maintaining records of the time you initiated corrective action in the event of a bag leak detection system alarm or when the hourly average opacity exceeded 5 percent, the corrective action(s) taken, and the date on which corrective action was completed.

§63.7834 How do I demonstrate continuous compliance with the operation and maintenance requirements that apply to me?

(a) For each capture system and control device subject to an operating limit in §63.7790(b), you must demonstrate continuous compliance with the operation and maintenance requirements in §63.7800(b) by meeting the requirements of paragraphs (a)(1) through ~~(3)~~ (4) of this section:

(1) Making monthly inspections of capture systems and initiating corrective action according to §63.7800(b)(1) and recording all information needed to document conformance with these requirements;

(2) Performing preventative maintenance according to §63.7800(b)(2) and recording all information needed to document conformance with these requirements; and

(3) Initiating and completing corrective action for a baghouse equipped with a bag leak detection system or COMS according to §63.7800(b)(4) and recording all information needed to document conformance with these requirements, including the time you initiated corrective action, the corrective action(s) taken, and date on which corrective action was completed.

(4) Initiating and completing corrective action for a venturi scrubber equipped with a CPMS or an electrostatic precipitator equipped with a COMS according to §63.7833(g) and recording all information needed to document conformance with these requirements, including the time you initiated corrective action, the corrective action(s) taken within the first 24 hours according to §63.7833(g)(1) and whether they were successful, the corrective action(s) taken within the second 24 hours according to §63.7833(g)(2) and whether they were successful, and the date on which corrective action was completed.

(b) You must maintain a current copy of the operation and maintenance plan required in §63.7800(b) onsite and available for inspection upon request. You must keep the plans for the life of the affected source or until the affected source is no longer subject to the requirements of this subpart.

§63.7835 What other requirements must I meet to demonstrate continuous compliance?

(a) *Deviations.* Except as provided in §63.7833(g), you must report each instance in which you did not meet each emission limitation in §63.7790 that applies to you. This includes periods of startup, shutdown, and malfunction. You also must report each instance in which you did not meet each operation and maintenance requirement in §63.7800 that applies to you. These instances are deviations from the emission limitations and operation and maintenance requirements in this subpart. These deviations must be reported according to the requirements in §63.7841.

(b) *Startups, shutdowns, and malfunctions.* (1) Consistent with §§63.6(e) and 63.7(e)(1), deviations that occur during a period of startup, shutdown, or malfunction are not violations if you demonstrate to the Administrator's satisfaction that you were operating in accordance with §63.6(e)(1).

(2) The Administrator will determine whether deviations that occur during a period of startup, shutdown, or malfunction are violations, according to the provisions in §63.6(e).

[68 FR 27663, May 20, 2003, as amended at 71 FR 20468, Apr. 20, 2006]

Notifications, Reports, and Records

§63.7840 What notifications must I submit and when?

(a) You must submit all of the notifications in §§63.6(h)(4) and (5), 63.7(b) and (c), 63.8(e) and (f)(4), and 63.9(b) through (h) that apply to you by the specified dates.

(b) As specified in §63.9(b)(2), if you startup your affected source before May 20, 2003, you must submit your initial notification no later than September 17, 2003.

(c) As specified in §63.9(b)(3), if you start your new affected source on or after May 20, 2003, you must submit your initial notification no later than 120 calendar days after you become subject to this subpart.

(d) If you are required to conduct a performance test, you must submit a notification of intent to conduct a performance test at least 60 calendar days before the performance test is scheduled to begin as required in §63.7(b)(1).

(e) If you are required to conduct a performance test, opacity observation, or other initial compliance demonstration, you must submit a notification of compliance status according to §63.9(h)(2)(ii).

(1) For each initial compliance demonstration that does not include a performance test, you must 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, you must 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 §63.10(d)(2).

§ 63.7841 What reports must I submit and when?

(a) *Compliance report due dates.* Unless the Administrator has approved a different schedule, you must submit a semiannual compliance report to your permitting authority according to the requirements in paragraphs (a)(1) through (5) of this section.

(1) The first compliance report must cover the period beginning on the compliance date that is specified for your affected source in §63.7783 and ending on June 30 or December 31, whichever date comes first after the compliance date that is specified for your source in §63.7783.

(2) The first compliance report must be postmarked or delivered no later than July 31 or January 31, whichever date comes first after your first compliance report is due.

(3) Each subsequent compliance report must cover the semiannual reporting period from January 1 through June 30 or the semiannual reporting period from July 1 through December 31.

(4) Each subsequent compliance report must be postmarked or delivered no later than July 31 or January 31, whichever date comes first after the end of the semiannual reporting period.

(5) For each affected source that is subject to permitting regulations pursuant to 40 CFR part 70 or 71, and if the permitting authority has established dates for submitting semiannual reports pursuant to 40 CFR 70.6(a)(3)(iii)(A) or 40 CFR 71.6(a)(3)(iii)(A), you may submit the first and subsequent compliance reports according to the dates the permitting authority has established instead of according to the dates in paragraphs (a)(1) through (4) of this section.

(b) *Compliance report contents.* Each compliance report must include the information in paragraphs (b)(1) through (3) of this section and, as applicable, paragraphs (b)(4) through (8) of this section.

(1) Company name and address.

(2) Statement by a responsible official, with that official's name, title, and signature, certifying the truth, accuracy, and completeness of the content of the report.

(3) Date of report and beginning and ending dates of the reporting period.

(4) If you had a startup, shutdown, or malfunction during the reporting period and you took actions consistent with your startup, shutdown, and malfunction plan, the compliance report must include the information in §63.10(d)(5)(i).

(5) If there were no deviations from the continuous compliance requirements in §§63.7833 and 63.7834 that apply to you, a statement that there were no deviations from the emission limitations or operation and maintenance requirements during the reporting period.

(6) If there were no periods during which a continuous monitoring system (including a CPMS, COMS, or continuous emission monitoring system (CEMS)) was out-of-control as specified in §63.8(c)(7), a statement that there were no periods during which the CPMS was out-of-control during the reporting period.

(7) For each deviation from an emission limitation in §63.7790 that occurs at an affected source where you are not using a continuous monitoring system (including a CPMS, COMS, or CEMS) to comply

with an emission limitation in this subpart, the compliance report must contain the information in paragraphs (b)(1) through (4) of this section and the information in paragraphs (b)(7)(i) and (ii) of this section. This includes periods of startup, shutdown, and malfunction.

(i) The total operating time of each affected source during the reporting period.

(ii) Information on the number, duration, and cause of deviations (including unknown cause, if applicable) as applicable and the corrective action taken.

(8) For each deviation from an emission limitation occurring at an affected source where you are using a continuous monitoring system (including a CPMS or COMS) to comply with the emission limitation in this subpart, you must include the information in paragraphs (b)(1) through (4) of this section and the information in paragraphs (b)(8)(i) through (xi) of this section. This includes periods of startup, shutdown, and malfunction.

(i) The date and time that each malfunction started and stopped.

(ii) The date and time that each continuous monitoring was inoperative, except for zero (low-level) and high-level checks.

(iii) The date, time, and duration that each continuous monitoring system was out-of-control as specified in §63.8(c)(7), including the information in §63.8(c)(8).

(iv) The date and time that each deviation started and stopped, and whether each deviation occurred during a period of startup, shutdown, or malfunction or during another period.

(v) A summary of the total duration of the deviation during the reporting period and the total duration as a percent of the total source operating time during that reporting period.

(vi) A breakdown of the total duration of the deviations during the reporting period including those that are due to startup, shutdown, control equipment problems, process problems, other known causes, and other unknown causes.

(vii) A summary of the total duration of continuous monitoring system downtime during the reporting period and the total duration of continuous monitoring system downtime as a percent of the total source operating time during the reporting period.

(viii) A brief description of the process units.

(ix) A brief description of the continuous monitoring system.

(x) The date of the latest continuous monitoring system certification or audit.

(xi) A description of any changes in continuous monitoring systems, processes, or controls since the last reporting period.

(c) *Immediate startup, shutdown, and malfunction report.* If you had a startup, shutdown, or malfunction during the semiannual reporting period that was not consistent with your startup, shutdown, and malfunction plan, you must submit an immediate startup, shutdown, and malfunction report according to the requirements in §63.10(d)(5)(ii).

(d) *Part 70 monitoring report.* If you have obtained a title V operating permit for an affected source pursuant to 40 CFR part 70 or 71, you must report all deviations as defined in this subpart in the semiannual monitoring report required by 40 CFR 70.6(a)(3)(iii)(A) or 40 CFR 71.6(a)(3)(iii)(A). If you submit a compliance report for an affected source along with, or as part of, the semiannual monitoring report required by 40 CFR 70.6(a)(3)(iii)(A) or 40 CFR 71.6(a)(3)(iii)(A), and the compliance report includes all the required information concerning deviations from any emission limitation or operation

and maintenance requirement in this subpart, submission of the compliance report satisfies any obligation to report the same deviations in the semiannual monitoring report. However, submission of a compliance report does not otherwise affect any obligation you may have to report deviations from permit requirements for an affected source to your permitting authority.

§63.7842 What records must I keep?

(a) You must keep the following records:

(1) A copy of each notification and report that you submitted to comply with this subpart, including all documentation supporting any initial notification or notification of compliance status that you submitted, according to the requirements in §63.10(b)(2)(xiv).

(2) The records in §63.6(e)(3)(iii) through (v) related to startup, shutdown, and malfunction.

(3) Records of performance tests, performance evaluations, and opacity observations as required in §63.10(b)(2)(viii).

(b) For each COMS, you must keep the records specified in paragraphs (b)(1) through (4) of this section.

(1) Records described in §63.10(b)(2)(vi) through (xi).

(2) Monitoring data for a performance evaluation as required in §63.6(h)(7)(i) and (ii).

(3) Previous (that is, superseded) versions of the performance evaluation plan as required in §63.8(d)(3).

(4) Records of the date and time that each deviation started and stopped, and whether the deviation occurred during a period of startup, shutdown, or malfunction or during another period.

(c) You must keep the records required in §63.6(h)(6) for visual observations.

(d) You must keep the records required in §§63.7833 and 63.7834 to show continuous compliance with each emission limitation and operation and maintenance requirement that applies to you.

§63.7843 In what form and how long must I keep my records?

(a) Your records must be in a form suitable and readily available for expeditious review, according to §63.10(b)(1).

(b) As specified in §63.10(b)(1), you must keep each record for 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record.

(c) You must keep each record on site for at least 2 years after the date of each occurrence, measurement, maintenance, corrective action, report, or record according to §63.10(b)(1). You can keep the records offsite for the remaining 3 years.

Other Requirements and Information

§ 63.7850 What parts of the General Provisions apply to me?

Table 4 to this subpart shows which parts of the General Provisions in §§63.1 through 63.15 apply to you.

§ 63.7851 Who implements and enforces this subpart?

(a) This subpart can be implemented and enforced by us, the United States Environmental Protection Agency (U.S. EPA), or a delegated authority such as your State, local, or tribal agency. If the U.S. EPA Administrator has delegated authority to your State, local, or tribal agency, then that agency has the authority to implement and enforce this subpart. You should contact your U.S. EPA Regional Office to find out if this subpart is delegated to your State, local, or tribal agency.

(b) In delegating implementation and enforcement authority of this subpart to a State, local, or tribal agency under subpart E of this part, the authorities contained in paragraph (c) of this section are retained by the Administrator of the U.S. EPA and are not transferred to the State, local, or tribal agency.

(c) The authorities that will not be delegated to State, local, or tribal agencies are specified in paragraphs (c)(1) through (4) of this section.

(1) Approval of alternative opacity emission limits in Table 1 to this subpart under §63.6(h)(9).

(3) Approval of major alternatives to monitoring under §63.8(f) and as defined in §63.90.

(4) Approval of major alternatives to recordkeeping and reporting under §63.10(f) and as defined in §63.90.

§63.7852 What definitions apply to this subpart?

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

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

Basic oxygen process furnace means any refractory-lined vessel in which high-purity oxygen is blown under pressure through a bath of molten iron, scrap metal, and fluxes to produce steel. This definition includes both top and bottom blown furnaces, but does not include argon oxygen decarburization furnaces.

Basic oxygen process furnace shop means the place where steelmaking operations that begin with the transfer of molten iron (hot metal) from the torpedo car and end prior to casting the molten steel, including hot metal transfer, desulfurization, slag skimming, refining in a basic oxygen process furnace, and ladle metallurgy occur.

Basic oxygen process furnace shop ancillary operations means the processes where hot metal transfer, hot metal desulfurization, slag skimming, and ladle metallurgy occur.

Blast furnace means a furnace used for the production of molten iron from iron ore and other iron bearing materials.

Bottom-blown furnace means any basic oxygen process furnace in which oxygen and other combustion gases are introduced into the bath of molten iron through tuyeres in the bottom of the vessel or through tuyeres in the bottom and sides of the vessel.

Casthouse means the building or structure that encloses the bottom portion of a blast furnace where the hot metal and slag are tapped from the furnace.

Certified observer means a visible emission observer certified to perform EPA Method 9 opacity observations.

Desulfurization means the process in which reagents such as magnesium, soda ash, and lime are injected into the hot metal, usually with dry air or nitrogen, to remove sulfur.

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

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

Discharge end means the place where those operations conducted within the sinter plant starting at the discharge of the sintering machine's traveling grate including (but not limited to) hot sinter crushing, screening, and transfer operations occur.

Emission limitation means any emission limit, opacity limit, or operating limit.

Hot metal transfer station means the location in a basic oxygen process furnace shop where molten iron (hot metal) is transferred from a torpedo car or hot metal car used to transport hot metal from the blast furnace casthouse to a holding vessel or ladle in the basic oxygen process furnace shop. This location also is known as the reladling station or ladle transfer station.

Integrated iron and steel manufacturing facility means an establishment engaged in the production of steel from iron ore.

Ladle metallurgy means a secondary steelmaking process that is performed typically in a ladle after initial refining in a basic oxygen process furnace to adjust or amend the chemical and/or mechanical properties of steel.

Primary emissions means particulate matter emissions from the basic oxygen process furnace generated during the steel production cycle which are captured and treated in the furnace's primary emission control system.

Primary emission control system means the combination of equipment used for the capture and collection of primary emissions (e.g., an open hood capture system used in conjunction with an electrostatic precipitator or a closed hood system used in conjunction with a scrubber).

Primary oxygen blow means the period in the steel production cycle of a basic oxygen process furnace during which oxygen is blown through the molten iron bath by means of a lance inserted from the top of the vessel (top-blown) or through tuyeres in the bottom and/or sides of the vessel (bottom-blown).

Responsible official means responsible official as defined in §63.2.

Secondary emissions means particulate matter emissions that are not controlled by a primary emission control system, including emissions that escape from open and closed hoods, lance hole openings, and gaps or tears in ductwork to the primary emission control system.

Secondary emission control system means the combination of equipment used for the capture and collection of secondary emissions from a basic oxygen process furnace.

Sinter cooler means the apparatus used to cool the hot sinter product that is transferred from the discharge end through contact with large volumes of induced or forced draft air.

Sinter plant means the machine used to produce a fused clinker-like aggregate or sinter of fine iron-bearing materials suited for use in a blast furnace. The machine is composed of a continuous traveling grate that conveys a bed of ore fines and other finely divided iron-bearing material and fuel (typically coke breeze), a burner at the feed end of the grate for ignition, and a series of downdraft windboxes along the length of the strand to support downdraft combustion and heat sufficient to produce a fused sinter product.

Skimming station means the locations inside a basic oxygen process furnace shop where slag is removed from the top of the molten metal bath.

Steel production cycle means the operations conducted within the basic oxygen process furnace shop that are required to produce each batch of steel. The following operations are included: scrap charging, preheating (when done), hot metal charging, primary oxygen blowing, sampling, (vessel turndown and turnup), additional oxygen blowing (when done), tapping, and deslagging. The steel production cycle begins when the scrap is charged to the furnace and ends after the slag is emptied from the vessel into the slag pot.

Top-blown furnace means any basic oxygen process furnace in which oxygen is introduced into the bath of molten iron by means of an oxygen lance inserted from the top of the vessel.

Windboxes means the compartments that provide for a controlled distribution of downdraft combustion air as it is drawn through the sinter bed of a sinter plant to make the fused sinter product.

Table 1 to Subpart FFFFF of Part 63—Emission and Opacity Limits

As required in §63.7790(a), you must comply with each applicable emission and opacity limit in the following table:

For . .	You must comply with each of the following .
7. Each casthouse at an existing blast furnace	a. You must not cause to be discharged to the atmosphere any gases that exit from a control device that contain particulate matter in excess of 0.01 gr/dscf $\sqrt{2}$ and b. You must not cause to be discharged to the atmosphere any secondary emissions that exit any opening in the casthouse or structure housing the blast furnace that exhibit opacity greater than 20 percent (6-minute average).
8. Each casthouse at a new blast furnace	a. You must not cause to be discharged to the atmosphere any gases that exit from a control device that contain particulate matter in excess of 0.003

	gr/dscf; and b. You must not cause to be discharged to the atmosphere any secondary emissions that exit any opening in the casthouse or structure housing the blast furnace that exhibit opacity greater than 15 percent (6-minute average).
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∨ This concentration limit (gr/dscf) for a control device does not apply to discharges inside a building or structure housing the discharge end at an existing sinter plant, inside a casthouse at an existing blast furnace, or inside an existing BOPF shop if the control device was installed before August 30, 2005.

Table 2 to Subpart FFFFF of Part 63—Initial Compliance with Emission and Opacity Limits

As required in §63.7825(a)(1), you must demonstrate initial compliance with the emission and opacity limits according to the following table:

For .	You have demonstrated initial compliance if
7. Each casthouse at an existing blast furnace...	a. The average concentration of particulate matter from a control device applied to emissions from a casthouse, measured according to the performance test procedures in § 63.7822(e), did not exceed 0.01 gr/dscf; and b. The opacity of secondary emissions from each casthouse, determined according to the performance test procedures in § 63.7823(c), did not exceed 20 percent (6-minute average).
8. Each casthouse at a new blast furnace	a. The average concentration of particulate matter from a control device applied to emissions from a casthouse, measured according to the performance test procedures in § 63.7822(e), did not exceed 0.003 gr/dscf; and b. The opacity of secondary emissions from each casthouse, determined according to the performance test procedures in § 63.7823(c), did not exceed 15 percent (6-minute average)

Table 3 to Subpart FFFFF of Part 63—Continuous Compliance with Emission and Opacity Limits

As required in §63.7833(a), you must demonstrate continuous compliance with the emission and opacity limits according to the following table:

For	You must demonstrate continuous compliance by.
7. Each casthouse at an existing blast furnace.	a. Maintaining emissions of particulate matter from a control device at or below 0.01 gr/dscf; and b. Maintaining the opacity of secondary emissions that exit any opening in the casthouse or structure housing the blast furnace at or below 20 percent (6-minute average); and c. Conducting subsequent performance tests at the frequencies specified in § 63.7821.
8. Each casthouse at a new blast furnace.	a. Maintaining emissions of furnace particulate

	matter from a control device at or below 0.003 gr/dscf; and b. Maintaining the opacity of secondary emissions that exit any opening in the casthouse or structure housing the casthouse at or below 15 percent (6-minute average);and c. Conducting subsequent performance tests at the frequencies specified in § 63.782
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Table 4 to Subpart FFFFF of Part 63—Applicability of General Provisions to Subpart FFFFF

As required in §63.7850, you must comply with the requirements of the NESHAP General Provisions (40 CFR part 63, subpart A) shown in the following table:

Citation	Subject	Applies to Subpart FFFFF	Explanation
§ 63.1	Applicability.	Yes.	
§ 63.2	Definitions	Yes.	
§ 63.3.	Units and Abbreviations	Yes	
§ 63.4	Prohibited Activities	Yes.	
§ 63.5	Construction/Reconstruction	Yes.	
§ 63.6(a), (b), (c), (d), (e) (f), (g), (h)(2)(ii)-(h)(9)	Compliance with Standards and Maintenance Requirements.	Yes.	
§ 63.6(h)(2)(i).	Determining Compliance with Opacity and VE Standards	No.	Subpart FFFFF specifies methods and procedures for determining compliance with opacity emission and operating limits
§63.6(i)	Extension of Compliance with Emission Standards.	Yes.	
§ 63.6(j).	Exemption from compliance with Emission Standards	Yes.	
§ 63.7(a)(1)-(2)	Applicability and Performance Test Dates	No	Subpart FFFFF and specifies performance test applicability and dates.
§ 63.7(a)(3), (b), (c)-(h).	Performance Testing Requirements.	Yes	
§ 63.8(a)(1)-(3), (b), (c)(1)-(3), (c)(4)(i)-(ii), (c)(5) and (6), (c)(7)- (8), (f)(1)-(5), (g)(1)-(4).	Monitoring Requirements	Yes	CMS requirements in § 63.8(c)(4) (i)-(ii), (c) (5)-(6), (d), and (e) apply only to COMS-
§ 63.8(a)(4).	Additional Monitoring Requirements for Control Devices in § 63.11.	No	Subpart FFFFF does not require flares.
§ 63.8(c)(4)	Continuous Monitoring System Requirements.	No.	Subpart FFFFF specifies requirements for operation of CMS.
§ 63.8(f)(6).	RATA Alternative	No.	
63.8(g)(5)	Data Reduction	No	Subpart FFFFF specifies data reduction requirements.

§ 63.9	Notification Requirements.	Yes.	Additional notifications for CMS in § 63.9(g) apply to COMS.
§ 63.10(a), (b)(1)-(2)(xii), (b)(2)(xiv), (b)(3), (c)(1)-(6)(c)(9)-(15), (d), (e)(1)-(2), (e)(4), (f).	Recordkeeping and Reporting Requirements.	Yes	Additional records for CMS in § 63.10(c)(1)-(6), (9)-(15), and reports in §63.10(d)(1)-(2) apply only to COMS.
§ 63.10(b)(2)(xiii)	CMS Records for RATA Alternative	No.	
§ 63.10(c)(7)-(8)	Records of Excess Emissions and Parameter Monitoring Exceedances for CMS	No.	Subpart FFFFF specifies record requirements.
§ 63.10(e)(3)	Excess Emission Reports	No	Subpart FFFFF specifies reporting requirements
§ 63.11	Control Device Requirements.	No	Subpart FFFFF does not require flares.
§ 63.12.	State Authority and Delegations	Yes	
§ 63.13-§ 63.15	Addresses, Incorporation by Reference, Availability of Information.	Yes	

SECTION D.8

FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)]: Number 1 BOP Shop.

- (a) Two (2) Stations, identified as No. 1 and No. 2, Hot Metal Transfer and Desulfurization Stations. The Desulfurization Stations were originally constructed in 1981 and the Hot Metal Transfer Stations were originally constructed in 1965, and replaced in 1998. Each station consists of Hot Metal Desulfurization, SSDS0201, Hot Metal Transfer SSMT0203 and Slag Skimming SSSS0205. Hot metal from the blast furnaces is desulfurized and skimmed prior to charging in the steel making vessels. The maximum capacity of each station is 456 tons per hour. Each station is equipped with a local exhaust ventilation hood to capture emissions ducted to the Hot Metal Desulfurization/Skimming Stations Baghouse SS3100. The desulfurization units are equipped with nitrogen suppression around where the desulfurization lance penetrates the hood hole.
- (b) One (1) Flux handling system, identified as SSFH0206, constructed in 1965, used for unloading, temporary storage, and transfer of fluxing agents to the steel making vessels, with a maximum capacity of 80 tons per hour. Emissions are controlled by No.1, No. 2 and No. 3 baghouses SS3058, SS3059, and SS3053. Nos.1 and 2 exhaust inside the building and No. 3 discharges through stack SS6056.
- (c) Basic Oxygen Process (BOP) Vessels, constructed in 1965, consisting of BOP vessel M, identified as SSVM0234, vessel E, identified as SSVE0235 and vessel D, identified as SSVD0236, with a maximum capacity of 250 tons per hour each. Emissions are controlled by open combustion hoods and an exhaust emission hood collection system, which exhausts emissions to the Gas Cleaning Systems SS3103 and SS3104.
- (d) Two (2) gas cleaning systems SS3103 and SS3104 that process the exhaust gases from the three (3) steel making vessels consisting of three (3) quenchers, two (2) scuppers, two (2) venturi scrubbers, two (2) separators, two (2) gas coolers fitted with internal mist eliminators and two (2) induced draft fans. Emissions exhaust through stacks SS6102 and SS6103.
- (e) CASbell/OB Lancing Stations M, D and E, include the controlled argon stirring process and blowing of oxygen to maintain temperature and chemistry. Constructed in 1981, Station M, identified as SSCM0231, Station E identified as SSCE0232, and Station D identified as SSCD0233 with a maximum capacity of 250 tons per hour each. Emissions are controlled by the CASbell/OB Lancing baghouse SS3105, exhausting through Stack SS6104 and uncaptured emissions venting to the roof monitor SS6636.
- (f) One (1) Slingot Moulding Station, including the casting of bottom-poured steel ingots, identified as SSMS0227, constructed in 1965, exhausting to the roof monitor SS6637.
- (g) Nine (9) natural gas fired Ladle Preheaters and Dryers identified as No. 1 through 9, with 1 through 4, constructed in 1983, 5 and 6 constructed in 1982 and 7 through 9 construction unknown. Six (6) Preheaters with a capacity of 14 MMBtu/hr each and three (3) Dryers with a capacity of 10 MMBtu/hr each, identified as SSLD0230, exhausting through Roof Monitor SS6637.
- (h) One (1) Continuous Caster, identified as SCSC0274, constructed in 1967, including a Tundish dryer with a heating capacity of 7.0 MMBtu/hr per hour, continuously casting steel slabs with a maximum capacity of 275 tons per hour. Emissions exhaust through Roof Monitor SC6638.
- (i) One (1) fugitive emissions mitigation system at the No.1 BOP Shop, constructed in June 2002, consisting of a capture hood system ducted to a 99% efficient baghouse with a flow rate of 11,500 acfm.

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

Facility Description [326 IAC 2-7-5(15): Number 1 BOP Shop (continued):

- (j) One emergency slag skimming station with a maximum capacity of 456 tons per hour with emissions ducted to the Hot Metal Transfer Station and Desulfurization/Skimming Stations Baghouse SS3100.

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

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.1 BOP Shop including the BOP Furnace, and shop ancillary operations (hot metal transfer, hot metal desulfurization, slag skimming, ladle metallurgy, and roof monitoring except when otherwise specified by Table 4 to 40 CFR 63, Subpart FFFFF.

D.8.2 Lake County PM₁₀ Emission Requirements [326 IAC 6.8-2-38]

Pursuant to 326 IAC 6.8-2-38, PM₁₀ emissions from the No. 1 Basic Oxygen Process Shop operations shall comply with the following:

- (a) The PM₁₀ emissions from the No. 1 BOP Shop Hot Metal Transfer and Desulfurization Stations Baghouse discharge shall not exceed 0.007 grains per dry standard cubic foot of exhaust air and 15.0 pounds per hour.
- (b) The PM₁₀ emissions from the No. 1 BOP Shop Gas Cleaning System Stacks SS6102 and SS6103 shall not exceed 0.011 grains per dry standard cubic foot of exhaust air and a total of 46.0 pounds per hour.
- (c) The PM₁₀ emissions from the No. 1 BOP CASBell/OB Lancing Baghouse Stack SS6104 shall not exceed 0.0070 grains per dry standard cubic foot of exhaust air and 5.10 pounds per hour.
- (d) Each emission limit applies to one (1) stack serving one (1) facility unless otherwise noted. The emissions limitations apply to one (1) stack serving the multiple units specified when the facility description notes stack serving, and to each stack of multiple stacks serving multiple facilities when the facility description notes each stack serving.

D.8.3 Particulate Emissions Limitations [326 IAC 6.8-1-2(a)]

Pursuant to 326 IAC 6.8-1-2(a), the particulate emissions from the roof monitors SS6636, NS6637 and SS6638 shall not exceed three-hundredths (0.03) grain per dry standard cubic foot (dscf).

D.8.4 Lake County Opacity Limitations [326 IAC 6.8-3-4]

Pursuant to 326 IAC 6.8-3-4, the visible emissions from the Number 1 Basic Oxygen Furnace operations shall comply with the following:

- (a) Opacity from the Hot Metal Transfer and Desulfurization Stations baghouse stack discharge shall not exceed five percent (5%) opacity, for any three (3) minute average.
- (b) Opacity from the No. 1 BOP Shop Roof Monitor SS6636 Operations shall not exceed twenty percent (20%) for any three (3) minute average.

- (c) Opacity from the BOP Furnace Operations Gas Cleaning System Stacks SS6102 and SS6103 shall not exceed twenty percent (20%), for any six (6) minute average.

D.8.5 Sulfur Dioxide (SO₂) Limitations [326 IAC 7-4.1-20(c)(3)]

Pursuant to 326 IAC 7-4.1-20(c)(3), an emission unit shall burn natural gas only:

- (a) If it is not listed in this rule; or
- (b) under any operating condition not specifically listed in this rule.

D.8.6 Sulfur Dioxide (SO₂) Limitations Hot Metal Transfer and Desulfurization Stations [326 IAC 7-4.1-20]

- (a) Pursuant to the U.S. EPA Administrative Consent Order, issued January 2, 2004, the Permittee shall comply with the following:
 - (1) The SO₂ emissions from the Nos. 1 and 2 Hot Metal Transfer and Desulfurization Stations Baghouse as measured during all hot metal processing activities shall not exceed 0.05 pound per ton of hot metal. Hot metal processing will include hot metal transfer, hot metal desulfurization reagent injection and hot metal skimming, as applicable.
 - (2) The SO₂ emissions from the Nos. 1 and 2 Hot Metal Transfer and Desulfurization Stations Baghouse as measured during hot metal desulfurization reagent injection only shall not exceed 0.01 pound per ton of hot metal.
- (b) Pursuant to 326 IAC 7-4.1-20(a)(1)(M) and ((b)(11), the SO₂ emissions from the Nos. 1 and 2 Hot Metal Transfer and Desulfurization Stations Baghouse shall not exceed 0.05 pounds per ton of hot metal and 28.54 pounds per hour.

D.8.7 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

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

Compliance Determination Requirements

D.8.8 Particulate Matter Testing Requirements [326 IAC 2-7-6(1),(6)][326 IAC 2-1.1-11]

- (a) Within thirty (30) months after issuance of this permit or five (5) years from the date of the last compliance test which ever is earlier, in order to demonstrate compliance with Condition D.8.3, the Permittee shall perform PM₁₀ testing on the No. 1 BOP Desulfurization Baghouse discharge using the appropriate methods to measure PM₁₀ as listed in 326 IAC 6.8-4-1(1) or other methods approved by the Commissioner. This test shall be repeated at least once every five (5) years from the date of this valid compliance demonstration. All tests shall be performed in accordance with Section C - Performance Testing.
- (b) Within thirty (30) months after issuance of this permit or two and one-half (2 ½) years from the date of the last compliance test which ever is earlier, in order to demonstrate compliance with Condition D.8.3, the Permittee shall perform PM₁₀ testing on the No. 1 BOP Gas Cleaning Systems Stacks SS6102 and SS6103 the appropriate methods to measure PM₁₀ as listed in 326 IAC 6.8-4-1(1) or other methods approved by the Commissioner. This test shall be repeated at least once every five (5) years from the date of this valid compliance demonstration. All tests shall be performed in accordance with Section C - Performance Testing.

D.8.9 Sulfur Dioxide Testing Requirements

- (a) Pursuant to the U.S. EPA Administrative Consent Order, issued January 2, 2004, within thirty (30) months after issuance of this permit or two and one-half (2 ½) years from the

date of the last valid compliance test whichever is earlier or an alternative date as determined by OAQ, Compliance Data Section, the Permittee shall perform SO₂ emission testing on the No. 1 and No. 2 Hot Metal Desulfurization station baghouse discharge utilizing the test method 40 CFR 60, Appendix A Method 6C or other methods as submitted in accordance with the U.S. EPA Administrative Consent Order, issued January 2, 2004, to show compliance with condition D.8.7(a). This test shall be repeated at least once every two and one-half (2 ½) years from the date of this valid compliance demonstration.

- (b) Pursuant to the U.S. EPA Administrative Consent Order, issued January 2, 2004, within thirty (30) months after issuance of this permit or two and one-half (2 ½) years from the date of the last valid compliance test whichever is earlier or an alternative date as determined by OAQ, Compliance Data Section, the Permittee shall perform SO₂ emission testing on the No. 1 and No. 2 Hot Metal Desulfurization Station Baghouse discharge utilizing the test method 40 CFR 60, Appendix A Method 6C or other methods as submitted in accordance with the U.S. EPA Administrative Consent Order, issued January 2, 2004, to demonstrate compliance with condition D.8.7(b) during the desulfurization reagent injection only. This test shall be repeated at least once every two and one-half (2 ½) years from the date of this valid compliance demonstration.
- (c) Pursuant to the U.S. EPA Administrative Consent Order, issued January 2, 2004 demonstration of compliance by performance testing per D.8.9 (b) above shall not fulfill the compliance demonstration requirement for D.8.9(a).

D.8.10 Particulate Matter Control [326 IAC 2-7-6(6)]

- (a) Except as otherwise provided by statute, rule or this permit, the control devices listed below shall be in operation for particulate emissions control at all times the associated process is in operation. The control devices are as follows:
 - (1) Te Hot Metal Desulfurization/Skimming Baghouse SS3100,
 - (2) Flux Handling System Baghouses SS3053, SS3058 and SS3059,
 - (3) BOP Gas Cleaning systems SS3103 and SS3104; and
 - (4) CASBell/OB Lancing Station Baghouse SS3105.
- (b) In the event that bag failure is observed in a multi-compartment baghouse, if operations will continue for ten (10) days or more after the failure is observed before the failed units will be repaired or replaced, the Permittee shall promptly notify the IDEM, OAQ of the expected date the failed units will be repaired or replaced. The notification shall also include the status of the applicable compliance monitoring parameters with respect to normal, and the results of any response actions taken up to the time of notification.

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

D.8.11 Visible Emissions Notations

- (a) Visible emission notations of the BOP Operations Gas Cleaning System stacks SS6102 and SS6103, and CASBell/OB Lancing Station Baghouse stack SS6104, shall be performed once per day during normal daylight operations. A trained employee shall record whether emissions are normal or abnormal.
- (b) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.

- (c) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.
- (d) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.
- (e) If abnormal emissions are observed, the Permittee shall take reasonable response steps in accordance with Section C- Response to Excursions or Exceedances. Failure to take response steps in accordance with Section C - Response to Excursions or Exceedances shall be considered a deviation from this permit.
- (f) The Permittee shall comply with the most current Continuous Compliance Plan visible emission evaluation program, in accordance with Section C - Continuous Compliance Plan.

D.8.12 Parametric Monitoring

- (a) The Permittee shall record the pressure drop across the CASBell/OB Lancing Stations baghouse SS3105 used in conjunction with the CASBell/OB Lancing Stations, at least once per day when the CASBell/OB Lancing Stations are in operation. When for any one reading, the pressure drop across the baghouses is outside the normal range of 2.0 and 10.0 inches of water or a range established during the latest stack test, the Permittee shall take reasonable response steps in accordance with Section C- Response to Excursions or Exceedances. A pressure reading that is outside the above mentioned range is not a deviation from this permit. Failure to take response steps in accordance with Section C Response to Excursions or Exceedances, shall be considered a deviation of this permit.
- (b) The Permittee shall record the pressure drop and flow rate of the scrubbers used in conjunction with the three (3) BOP vessels M, E, and D, at least once per day when the three (3) BOP vessels M, E, and D units are in operation. When for any one reading, the pressure drop across the scrubbers is outside the normal range of 50.0 and 90.0 inches of water or the flow rate of the scrubbers is outside the range of 2500 and 4500 gallons per minute (gpm) or ranges established during the latest stack test, the Permittee shall take reasonable response steps in accordance with Section C- Response to Excursions or Exceedances. A reading that is outside the above mentioned ranges for respective parameters is not a deviation from this permit. Failure to take response steps in accordance with Section C - Response to Excursions or Exceedances, shall be considered a deviation of this permit.
- (c) The Permittee shall record the pressure drop across the Hot Metal Transfer and Desulfurization Baghouse SS3100 used in conjunction with the No. 1 BOP Hot Metal Desulfurization stations, at least once per day when the No. 1 BOP Hot Metal Desulfurization Stations are in operation. When for any one reading, the pressure drop across the baghouses is outside the normal range of 2 to 10 inches of water or a range established during the latest stack test, the Permittee shall take reasonable response steps in accordance with Section C - Response to Excursions or Exceedances.. A pressure reading that is outside the above mentioned range is not a deviation from this permit. Failure to take response steps in accordance with Section C - Response to Excursions or Exceedances, shall be considered a deviation of this permit.
- (d) The Permittee shall comply with the most current Continuous Compliance Plan for the baghouse operation, recording and maintenance, in accordance with Section C- Continuous Compliance Plan.
- (e) The instruments used for determining the pressure and flow rate shall comply with Section C – Instrument Specifications, of this permit, shall be subject to approval by IDEM, OAQ, and shall be calibrated at least once every six (6) months.

D.8.13 Scrubber Failure Detection

In the event that a scrubber failure has been observed:
Failed units and the associated process will be shut down immediately until the failed units have been repaired or replaced. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions).

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

D.8.14 General Record Keeping Requirements

- (a) Pursuant to the U.S. EPA Administrative Consent Order, issued January 2, 2004, and in order to document compliance with Condition D.8.6, the Permittee shall keep records of the monthly hot metal throughput for the No1 and No. 2 Hot Metal Transfer and Desulfurization Stations.
- (b) To document compliance with Visible Emission Notations, Condition D.8.11, the Permittee shall maintain records of once per day visible emission notations of the Hot Metal Desulfurization Baghouse Stack SS6101, the BOP Gas Cleaning System Stacks SS6102 and SS6103 and the CASBell/OB Lancing Station Baghouse Stacks SS6104 exhausts.
- (c) To document compliance with Condition D.8.12, the Permittee shall maintain records of the parametric monitoring CASBell/OB Lancing Station Baghouse SS3105 and Hot Metal Transfer and Desulfurization Baghouse SS3100 total static pressure drop, and No.1 BOP Shop Gas Cleaning System scrubbers, pressure drop across the venturi throats and scrubber supply water flow rate once per day during normal operation.
- (d) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

National Emission Standards for Hazardous Air Pollutants (NESHAP) from Integrated Iron and Steel manufacturing [40 CFR 63, Subpart FFFFF]

D.8.15 National Emission Standards for Hazardous Air Pollutants (NESHAP) from Integrated Iron and Steel manufacturing – Basic Oxygen Process Furnaces (BOPF) [40 CFR 63, Subpart FFFFF]

Title 40: Protection of Environment

[PART 63—NATIONAL EMISSION STANDARDS FOR HAZARDOUS AIR POLLUTANTS FOR SOURCE CATEGORIES](#)

Subpart FFFFF—National Emission Standards for Hazardous Air Pollutants for Integrated Iron and Steel Manufacturing Facilities

Source: 68 FR 27663, May 20, 2003, unless otherwise noted.

What This Subpart Covers

§ 63.7780 What is the purpose of this subpart?

This subpart establishes national emission standards for hazardous air pollutants (NESHAP) for integrated iron and steel manufacturing facilities. This subpart also establishes requirements to demonstrate initial and continuous compliance with all applicable emission limitations and operation and maintenance requirements in this subpart.

§ 63.7781 Am I subject to this subpart?

You are subject to this subpart if you own or operate an integrated iron and steel manufacturing facility that is (or is part of) a major source of hazardous air pollutants (HAP) emissions. Your integrated iron and steel manufacturing facility is a major source of HAP if it emits or has the potential to emit any single HAP at a rate of 10 tons or more per year or any combination of HAP at a rate of 25 tons or more per year.

§ 63.7782 What parts of my plant does this subpart cover?

- (a) This subpart applies to each new and existing affected source at your integrated iron and steel manufacturing facility.
- (b) The affected sources are each new or existing basic oxygen process furnace (BOPF) shop at your integrated iron and steel manufacturing facility.
- (c) This subpart covers emissions from the BOPF shop including each individual BOPF and shop ancillary operations (hot metal transfer, hot metal desulfurization, slag skimming, and ladle metallurgy).
- (d) A BOPF shop at your integrated iron and steel manufacturing facility is existing if you commenced construction or reconstruction of the affected source before July 13, 2001.
- (e) A BOPF shop at your integrated iron and steel manufacturing facility is new if you commence construction or reconstruction of the affected source on or after July 13, 2001. An affected source is reconstructed if it meets the definition of reconstruction in §63.2.

§ 63.7783 When do I have to comply with this subpart?

- (a) If you have an existing affected source, you must comply with each emission limitation and operation and maintenance requirement in this subpart that applies to you by the dates specified in paragraphs (a)(1) and (2) of this section.
 - (1) No later than May 22, 2006 for all emission sources at an existing affected source except for a sinter cooler at an existing sinter plant.
 - (d) If your integrated iron and steel manufacturing facility is not a major source and becomes a major source of HAP, the following compliance dates apply to you.
 - (1) Any portion of the existing integrated iron and steel manufacturing facility that becomes a new affected source or a new reconstructed source must be in compliance with this subpart upon startup.
 - (2) All other parts of the integrated iron and steel manufacturing facility must be in compliance with this subpart no later than 2 years after it becomes a major source.
- (e) You must meet the notification and schedule requirements in §63.7840. Several of these notifications must be submitted before the compliance date for your affected source.

Emission Limitations

§ 63.7790 What emission limitations must I meet?

- (a) You must meet each emission limit and opacity limit in Table 1 to this subpart that applies to you.

(b) You must meet each operating limit for capture systems and control devices in paragraphs (b)(1) through (3) of this section that applies to you.

(1) You must operate each capture system applied to secondary emissions from a BOPF at or above the lowest value or settings established for the operating limits in your operation and maintenance plan;

(2) For each venturi scrubber applied to meet any particulate emission limit in Table 1 to this subpart, you must maintain the hourly average pressure drop and scrubber water flow rate at or above the minimum levels established during the initial performance test.

(3) For each electrostatic precipitator applied to emissions from a BOPF, you must maintain the hourly average opacity of emissions exiting the control device at or below 10 percent.

(c) An owner or operator who uses an air pollution control device other than a baghouse, venturi scrubber, or electrostatic precipitator must submit a description of the device; test results collected in accordance with §63.7822 verifying the performance of the device for reducing emissions of particulate matter to the atmosphere to the levels required by this subpart; a copy of the operation and maintenance plan required in §63.7800(b); and appropriate operating parameters that will be monitored to maintain continuous compliance with the applicable emission limitation(s). The monitoring plan identifying the operating parameters to be monitored is subject to approval by the Administrator.

Operation and Maintenance Requirements

§ 63.7800 What are my operation and maintenance requirements?

(a) As required by §63.6(e)(1)(i), you must always operate and maintain your affected source, including air pollution control and monitoring equipment, in a manner consistent with good air pollution control practices for minimizing emissions at least to the levels required by this subpart.

(b) You must prepare and operate at all times according to a written operation and maintenance plan for each capture system or control device subject to an operating limit in §63.7790(b). Each plan must address the elements in paragraphs (b)(1) through (5) of this section.

(1) Monthly inspections of the equipment that is important to the performance of the total capture system (e.g., pressure sensors, dampers, and damper switches). This inspection must include observations of the physical appearance of the equipment (e.g., presence of holes in ductwork or hoods, flow constrictions caused by dents or accumulated dust in the ductwork, and fan erosion). The operation and maintenance plan also must include requirements to repair any defect or deficiency in the capture system before the next scheduled inspection.

(2) Preventative maintenance for each control device, including a preventative maintenance schedule that is consistent with the manufacturer's instructions for routine and long-term maintenance.

(3) Operating limits for each capture system applied to secondary emissions from a BOPF. You must establish the operating limits according to the requirements in paragraphs (b)(3)(i) through (iii) of this section.

(i) Select operating limit parameters appropriate for the capture system design that are representative and reliable indicators of the performance of the capture system. At a minimum, you must use appropriate operating limit parameters that indicate the level of the ventilation draft and the damper position settings for the capture system when operating to collect emissions, including revised settings for seasonal variations. Appropriate operating limit parameters for ventilation draft include, but are not limited to, volumetric flow rate through each separately ducted hood, total volumetric flow rate at the inlet to the control device to which the capture system is vented, fan motor amperage, or static pressure.

(ii) For each operating limit parameter selected in paragraph (b)(3)(i) of this section, designate the value or setting for the parameter at which the capture system operates during the process operation. If your operation allows for more than one process to be operating simultaneously, designate the value or setting for the parameter at which the capture system operates during each possible configuration that you may operate.

(iii) Include documentation in your plan to support your selection of the operating limits established for the capture system. This documentation must include a description of the capture system design, a description of the capture system operating during production, a description of each selected operating limit parameter, a rationale for why you chose the parameter, a description of the method used to monitor the parameter according to the requirements of §63.7830(a), and the data used to set the value or setting for the parameter for each of your process configurations.

(4) Corrective action procedures for bag leak detection systems. In the event a bag leak detection system alarm is triggered, you must initiate corrective action to determine the cause of the alarm within 1 hour of the alarm, initiate corrective action to correct the cause of the problem within 24 hours of the alarm, and complete the corrective action as soon as practicable. Corrective actions may include, but are not limited to:

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

(ii) Sealing off defective bags or filter media.

(iii) Replacing defective bags or filter media or otherwise repairing the control device.

(iv) Sealing off a defective baghouse compartment.

(v) Cleaning the bag leak detection system probe, or otherwise repair the bag leak detection system.

(vi) Shutting down the process producing the particulate emissions; and

(5) Corrective actions procedures for venture scrubbers equipped with continuous parametric monitoring systems (CPMS). In the event a venture scrubber exceeds the operating limit in §63.7790(b)(2), you must take corrective actions consistent with your site-specific monitoring plan in accordance with §63.7831(a).

(6) Corrective action procedures for electrostatic precipitators equipped with COMS. In the event an electrostatic precipitator exceeds the operating limit in §63.7790(b)(3), you must take corrective actions consistent with your site-specific monitoring plan in accordance with §63.7831(a).

General Compliance Requirements

§ 63.7810 What are my general requirements for complying with this subpart?

(a) You must be in compliance with the emission limitations and operation and maintenance requirements in this subpart at all times, except during periods of startup, shutdown, and malfunction as defined in §63.2.

(b) During the period between the compliance date specified for your affected source in §63.7783 and the date upon which continuous monitoring systems have been installed and certified and any applicable operating limits have been set, you must maintain a log detailing the operation and maintenance of the process and emissions control equipment.

(c) You must develop a written startup, shutdown, and malfunction plan according to the provisions in §63.6(e)(3).

[68 FR 27663, May 20, 2003, as amended at 71 FR 20468, Apr. 20, 2006]

Initial Compliance Requirements

§ 63.7820 By what date must I conduct performance tests or other initial compliance demonstrations?

(a) You must conduct a performance test to demonstrate initial compliance with each emission and opacity limit in Table 1 to this subpart that applies to you. You must conduct the performance tests within 180 calendar days after the compliance date that is specified in §63.7783 for your affected source and report the results in your notification of compliance status.

(b) For each operation and maintenance requirement that applies to you where initial compliance is not demonstrated using a performance test or opacity observation, you must demonstrate initial compliance within 30 calendar days after the compliance date that is specified for your affected source in §63.7783.

§ 63.7821 When must I conduct subsequent performance tests?

You must conduct subsequent performance tests to demonstrate compliance with all applicable PM and opacity limits in Table 1 to this subpart at the frequencies specified in paragraphs (b) through (d) of this section.

(b) For each sinter cooler at an existing sinter plant and each emissions unit equipped with a control device other than a baghouse, you must conduct subsequent performance tests no less frequently than twice (at mid-term and renewal) during each term of your title V operating permit.

(c) For each emissions unit equipped with a baghouse, you must conduct subsequent performance tests no less frequently than once during each term of your title V operating permit.

(d) For sources without a title V operating permit, you must conduct subsequent performance tests every 2.5 years.

§ 63.7822 What test methods and other procedures must I use to demonstrate initial compliance with the emission limits for particulate matter?

(a) You must conduct each performance test that applies to your affected source according to the requirements in §63.7(e)(1) and the conditions detailed in paragraphs (b) through (i) of this section.

(b) To determine compliance with the applicable emission limit for particulate matter in Table 1 to this subpart, follow the test methods and procedures in paragraphs (b)(1) and (2) of this section.

(1) Determine the concentration of particulate matter according to the following test methods in appendix A to part 60 of this chapter:

(i) Method 1 to select sampling port locations and the number of traverse points. Sampling ports must be located at the outlet of the control device and prior to any releases to the atmosphere.

(ii) Method 2, 2F, or 2G to determine the volumetric flow rate of the stack gas.

(iii) Method 3, 3A, or 3B to determine the dry molecular weight of the stack gas.

(iv) Method 4 to determine the moisture content of the stack gas.

(v) Method 5, 5D, or 17, as applicable, to determine the concentration of particulate matter (front half filterable catch only).

(2) Collect a minimum sample volume of 60 dry standard cubic feet (dscf) of gas during each particulate matter test run. Three valid test runs are needed to comprise a performance test.

(d) If you apply two or more control devices in parallel to emissions from a BOPF, compute the average flow-weighted concentration for each test run using Equation 2 of this section as follows:

$$C_w = \frac{\sum_{i=1}^n C_i Q_i}{\sum_{i=1}^n Q_i} \quad (\text{Eq. 2})$$

Where:

C_w = Flow-weighted concentration, gr/dscf;

C_i = Concentration of particulate matter from exhaust stream "i", gr/dscf; and

Q_i = Volumetric flow rate of effluent gas from exhaust stream "i", dry standard cubic foot per minute (dscfm).

(f) For a primary emission control device applied to emissions from a BOPF with a closed hood system, sample only during the primary oxygen blow and do not sample during any subsequent reblows. Continue sampling for each run for an integral number of primary oxygen blows.

(g) For a primary emission control system applied to emissions from a BOPF with an open hood system and for a control device applied solely to secondary emissions from a BOPF, you must complete the requirements of paragraphs (g)(1) and (2) of this section:

(1) Sample only during the steel production cycle. Conduct sampling under conditions that are representative of normal operation. Record the start and end time of each steel production cycle and each period of abnormal operation; and

(2) Sample for an integral number of steel production cycles. The steel production cycle begins when the scrap is charged to the furnace and ends 3 minutes after the slag is emptied from the vessel into the slag pot.

(h) For a control device applied to emissions from BOPF shop ancillary operations (hot metal transfer, skimming, desulfurization, or ladle metallurgy), sample only when the operation(s) is being conducted.

(i) Subject to approval by the permitting authority, you may conduct representative sampling of stacks when there are more than three stacks associated with a process.

§ 63.7823 What test methods and other procedures must I use to demonstrate initial compliance with the opacity limits?

(a) You must conduct each performance test that applies to your affected source according to the requirements in §63.7(h)(5) and the conditions detailed in paragraphs (b) through (d) of this section.

(b) You must conduct each visible emissions performance test such that the opacity observations overlap with the performance test for particulate matter.

(d) To determine compliance with the applicable opacity limit in Table 1 to this subpart for BOPF shops:

(1) For an existing BOPF shop:

(i) Using a certified observer, determine the opacity of emissions according to Method 9 in appendix A to part 60 of this chapter except as specified in paragraphs (d)(1)(ii) and (iii) of this section.

(ii) Instead of procedures in section 2.4 of Method 9 in appendix A to part 60 of this chapter, record observations to the nearest 5 percent at 15-second intervals for at least three steel production cycles.

(iii) Instead of procedures in section 2.5 of Method 9 in appendix A to part 60 of this chapter, determine the 3-minute block average opacity from the average of 12 consecutive observations recorded at 15-second intervals.

(4) Opacity observations must cover the entire steel production cycle and must be made for at least three cycles. The steel production cycle begins when the scrap is charged to the furnace and ends 3 minutes after the slag is emptied from the vessel into the slag pot.

(5) Determine and record the starting and stopping times of the steel production cycle.

§ 63.7824 What test methods and other procedures must I use to establish and demonstrate initial compliance with operating limits?

(a) For each capture system subject to an operating limit in §63.7790(b)(1), you must certify that the system operated during the performance test at the site-specific operating limits established in your operation and maintenance plan using the procedures in paragraphs (a)(1) through (4) of this section.

(1) Concurrent with all opacity observations, measure and record values for each of the operating limit parameters in your capture system operation and maintenance plan according to the monitoring requirements specified in §63.7830(a).

(2) For any dampers that are manually set and remain at the same position at all times the capture system is operating, the damper position must be visually checked and recorded at the beginning and end of each opacity observation period segment.

(3) Review and record the monitoring data. Identify and explain any times the capture system operated outside the applicable operating limits.

(4) Certify in your performance test report that during all observation period segments, the capture system was operating at the values or settings established in your capture system operation and maintenance plan.

(b) For a venturi scrubber subject to operating limits for pressure drop and scrubber water flow rate in §63.7790(b)(2), you must establish site-specific operating limits according to the procedures in paragraphs (b)(1) and (2) of this section. You may establish the parametric monitoring limit during the initial performance test or during any other performance test run that meets the emission limit.

(1) Using the CPMS required in §63.7830(c), measure and record the pressure drop and scrubber water flow rate during each run of the particulate matter performance test.

(2) Compute and record the hourly average pressure drop and scrubber water flow rate for each individual test run. Your operating limits are the lowest average pressure drop and scrubber water flow rate value in any of the three runs that meet the applicable emission limit.

(c) You may change the operating limits for a capture system or venturi scrubber, if you meet the requirements in paragraphs (c) (1) through (3) of this section.

(1) Submit a written notification to the Administrator of your request to conduct a new performance test to revise the operating limit.

(2) Conduct a performance test to demonstrate compliance with the applicable emission limitation in Table 1 to this subpart.

(3) Establish revised operating limits according to the applicable procedures in paragraphs (a) through (c) of this section for a control device or capture system.

§ 63.7825 How do I demonstrate initial compliance with the emission limitations that apply to me?

(a) For each affected source subject to an emission or opacity limit in Table 1 to this subpart, you have demonstrated initial compliance if:

(1) You meet the conditions in Table 2 to this subpart; and

(2) For each capture system subject to the operating limit in §63.7790(b)(1), you have established appropriate site-specific operating limit(s) and have a record of the operating parameter data measured during the performance test in accordance with §63.7824(a)(1).

(3) For each venturi scrubber subject to the operating limits for pressure drop and scrubber water flow rate in §63.7790(b)(2), you have established appropriate site-specific operating limits and have a record of the pressure drop and scrubber water flow rate measured during the performance test in accordance with §63.7824(b).

(c) For each emission limitation that applies to you, you must submit a notification of compliance status according to §63.7840(e).

§ 63.7826 How do I demonstrate initial compliance with the operation and maintenance requirements that apply to me?

(a) For a capture system applied to secondary emissions from a BOPF, you have demonstrated initial compliance if you meet all of the conditions in paragraphs (a)(1) through (4) of this section.

(1) Prepared the capture system operation and maintenance plan according to the requirements of §63.7800(b), including monthly inspection procedures and detailed descriptions of the operating parameter(s) selected to monitor the capture system;

(2) Certified in your performance test report that the system operated during the test at the operating limits established in your operation and maintenance plan;

(3) Submitted a notification of compliance status according to the requirements in §63.7840(e), including a copy of the capture system operation and maintenance plan and your certification that you will operate the capture system at the values or settings established for the operating limits in that plan; and

(4) Prepared a site-specific monitoring plan according to the requirements in §63.7831(a).

(b) For each control device subject to operating limits in §63.7790(b)(2) or (3), you have demonstrated initial compliance if you meet all the conditions in paragraphs (b)(1) through (3) of this section.

(1) Prepared the control device operation and maintenance plan according to the requirements of §63.7800(b), including a preventative maintenance schedule and, as applicable, detailed descriptions of the corrective action procedures for baghouses and or control devices;

(2) Submitted a notification of compliance status according to the requirements in §63.7840(e), including a copy of the operation and maintenance plan; and

(3) Prepared a site-specific monitoring plan according to the requirements in §63.7831(a).

Continuous Compliance Requirements

§ 63.7830 What are my monitoring requirements?

(a) For each capture system subject to an operating limit in §63.7790(b)(1) established in your capture system operation and maintenance plan, you must install, operate, and maintain a CPMS according to the requirements in §63.7831(e) and the requirements in paragraphs (a)(1) through (3) of this section.

(1) Dampers that are manually set and remain in the same position are exempt from the requirement to install and operate a CPMS. If dampers are not manually set and remain in the same position, you must make a visual check at least once every 24 hours to verify that each damper for the capture system is in the same position as during the initial performance test.

(3) If you use a flow measurement device to monitor the operating limit parameter for a capture system applied to secondary emissions from a BOPF, you must monitor the average rate for each steel production cycle (e.g., the average actual volumetric flow rate through each separately ducted hood for each steel production cycle, the average total volumetric flow rate at the inlet to the control device for each steel production cycle) according to the requirements in §63.7832.

(b) Except as provided in paragraph (b)(3) of this section, you must meet the requirements in paragraph (b)(1) or (2) of this section for each baghouse applied to meet any particulate emission limit in Table 1 to this subpart. You must conduct inspections of each baghouse according to the requirements in paragraph (b)(4) of this section.

(1) Install, operate, and maintain a bag leak detection system according to §63.7831(f) and monitor the relative change in particulate matter loadings according to the requirements in §63.7832; or

(2) If you do not install and operate a bag leak detection system, you must install, operate, and maintain a COMS according to the requirements in §63.7831(h) and monitor the hourly average opacity of emissions exiting each control device stack according to the requirements in §63.7832.

(3) A bag leak detection system and COMS are not required for a baghouse that meets the requirements in paragraphs (b)(3)(i) and (ii) of this section.

(i) The baghouse is a positive pressure baghouse and is not equipped with exhaust gas stacks; and

(ii) The baghouse was installed before August 30, 2005.

(4) You must conduct inspections of each baghouse at the specified frequencies according to the requirements in paragraphs (b)(4)(i) through (viii) of this section.

(i) Monitor the pressure drop across each baghouse cell each day to ensure pressure drop is within the normal operating range identified in the manual.

- (ii) Confirm that dust is being removed from hoppers through weekly visual inspections or other means of ensuring the proper functioning of removal mechanisms.
 - (iii) Check the compressed air supply for pulse-jet baghouses each day.
 - (iv) Monitor cleaning cycles to ensure proper operation using an appropriate methodology.
 - (v) Check bag cleaning mechanisms for proper functioning through monthly visual inspection or equivalent means.
 - (vi) Make monthly visual checks of bag tension on reverse air and shaker-type baghouses to ensure that bags are not kinked (knead or bent) or laying on their sides. You do not have to make this check for shaker-type baghouses using self-tensioning (spring-loaded) devices.
 - (vii) Confirm the physical integrity of the baghouse through quarterly visual inspections of the baghouse interior for air leaks.
 - (viii) Inspect fans for wear, material buildup, and corrosion through quarterly visual inspections, vibration detectors, or equivalent means.
- (c) For each venturi scrubber subject to the operating limits for pressure drop and scrubber water flow rate in §63.7790(b)(2), you must install, operate, and maintain CPMS according to the requirements in §63.7831(g) and monitor the hourly average pressure drop and water flow rate according to the requirements in §63.7832.

§ 63.7831 What are the installation, operation, and maintenance requirements for my monitors?

- (a) For each CPMS required in §63.7830, you must develop and make available for inspection upon request by the permitting authority a site-specific monitoring plan that addresses the requirements in paragraphs (a)(1) through (8) of this section.
- (1) Installation of the CPMS sampling probe or other interface at a measurement location relative to each affected process unit such that the measurement is representative of control of the exhaust emissions (e.g., on or downstream of the last control device);
 - (2) Performance and equipment specifications for the sample interface, the parametric signal analyzer, and the data collection and reduction system;
 - (3) Performance evaluation procedures and acceptance criteria (e.g., calibrations);
 - (4) Ongoing operation and maintenance procedures in accordance with the general requirements of §§63.8(c)(1), (c)(3), (c)(4)(ii), (c)(7), and (c)(8);
 - (5) Ongoing data quality assurance procedures in accordance with the general requirements of §63.8(d); and
 - (6) Ongoing recordkeeping and reporting procedures in accordance the general requirements of §§63.10(c), (e)(1), and (e)(2)(i).
 - (7) Corrective action procedures you will follow in the event a venturi scrubber exceeds the operating limit in §63.7790(b)(2); and

(b) Unless otherwise specified, each CPMS must:

(1) Complete a minimum of one cycle of operation for each successive 15-minute period and collect a minimum of three of the required four data points to constitute a valid hour of data;

(2) Provide valid hourly data for at least 95 percent of every averaging period; and

(3) Determine and record the hourly average of all recorded readings.

(c) You must conduct a performance evaluation of each CPMS in accordance with your site-specific monitoring plan.

(d) You must operate and maintain the CPMS in continuous operation according to the site-specific monitoring plan.

(e) For each capture system subject to an operating limit in §63.7790(b)(1), you must install, operate, and maintain each CPMS according to the requirements in paragraphs (a) through (d) of this section.

(f) For each baghouse applied to meet any particulate emission limit in Table 1 of this subpart, you must install, operate, and maintain a bag leak detection system according to the requirements in paragraphs (f)(1) through (7) of this section.

(1) The system must be certified by the manufacturer to be capable of detecting emissions of particulate matter at concentrations of 10 milligrams per actual cubic meter (0.0044 grains per actual cubic foot) or less.

(2) The system must provide output of relative changes in particulate matter loadings.

(3) The system must be equipped with an alarm that will sound when an increase in relative particulate loadings is detected over a preset level. The alarm must be located such that it can be heard by the appropriate plant personnel.

(4) Each system that works based on the triboelectric effect must be installed, operated, and maintained in a manner consistent with the guidance document, "Fabric Filter Bag Leak Detection Guidance," EPA-454/R-98-015, September 1997. You may install, operate, and maintain other types of bag leak detection systems in a manner consistent with the manufacturer's written specifications and recommendations.

(5) To make the initial adjustment of the system, establish the baseline output by adjusting the sensitivity (range) and the averaging period of the device. Then, establish the alarm set points and the alarm delay time.

(6) Following the initial adjustment, do not adjust the sensitivity or range, averaging period, alarm set points, or alarm delay time, except as detailed in your operation and maintenance plan. Do not increase the sensitivity by more than 100 percent or decrease the sensitivity by more than 50 percent over a 365-day period unless a responsible official certifies, in writing, that the baghouse has been inspected and found to be in good operating condition.

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

(g) For each venturi scrubber subject to operating limits in §63.7790(b)(2) for pressure drop and scrubber water flow rate, you must install, operate, and maintain each CPMS according to the requirements in paragraphs (a) through (d) of this section.

§ 63.7832 How do I monitor and collect data to demonstrate continuous compliance?

(a) Except for monitoring malfunctions, out-of-control periods as specified in §63.8(c)(7), associated repairs, and required quality assurance or control activities (including as applicable, calibration checks and required zero and span adjustments), you must monitor continuously (or collect data at all required intervals) at all times an affected source is operating.

(b) You may not use data recorded during monitoring malfunctions, associated repairs, and required quality assurance or control activities in data averages and calculations used to report emission or operating levels or to fulfill a minimum data availability requirement, if applicable. You must use all the data collected during all other periods in assessing compliance.

(c) A monitoring malfunction is any sudden, infrequent, not reasonably preventable failure of the monitoring to provide valid data. Monitoring failures that are caused in part by poor maintenance or careless operation are not malfunctions.

§ 63.7833 How do I demonstrate continuous compliance with the emission limitations that apply to me?

(a) You must demonstrate continuous compliance for each affected source subject to an emission or opacity limit in §63.7790(a) by meeting the requirements in Table 3 to this subpart.

(b) You must demonstrate continuous compliance for each capture system subject to an operating limit in §63.7790(b)(1) by meeting the requirements in paragraphs (b)(1) and (2) of this section.

(1) Operate the capture system at or above the lowest values or settings established for the operating limits in your operation and maintenance plan; and

(2) Monitor the capture system according to the requirements in §63.7830(a) and collect, reduce, and record the monitoring data for each of the operating limit parameters according to the applicable requirements of this subpart;

(c) For each baghouse applied to meet any particulate emission limit in Table 1 to this subpart, you must demonstrate continuous compliance by completing the requirements in paragraphs (c)(1) or (2) of this section as applicable, and paragraphs (c)(3) and (4) of this section:

(1) For a baghouse equipped with a bag leak detection system, operating and maintaining each bag leak detection system according to §63.7831(f) and recording all information needed to document conformance with these requirements. If you increase or decrease the sensitivity of the bag leak detection system beyond the limits specified in §63.7831(f)(6), you must include a copy of the required written certification by a responsible official in the next semiannual compliance report.

(2) For a baghouse equipped with a COMS, operating and maintaining each COMS and reducing the COMS data according to §63.7831(h).

(3) Inspecting each baghouse according to the requirements in §63.7830(b)(4) and maintaining all records needed to document conformance with these requirements.

(4) Maintaining records of the time you initiated corrective action in the event of a bag leak detection system alarm or when the hourly average opacity exceeded 5 percent, the corrective action(s) taken, and the date on which corrective action was completed.

(d) For each venturi scrubber subject to the operating limits for pressure drop and scrubber water flow rate in §63.7790(b)(2), you must demonstrate continuous compliance by meeting the requirements of paragraphs (d)(1) through (4) of this section:

- (1) Maintaining the hourly average pressure drop and scrubber water flow rate at levels no lower than those established during the initial or subsequent performance test;
- (2) Operating and maintaining each venturi scrubber CPMS according to §63.7831(g) and recording all information needed to document conformance with these requirements; and
- (3) Collecting and reducing monitoring data for pressure drop and scrubber water flow rate according to §63.7831(b) and recording all information needed to document conformance with these requirements.
- (4) If the hourly average pressure drop or scrubber water flow rate is below the operating limits, you must follow the corrective action procedures in paragraph (g) of this section.

§ 63.7834 How do I demonstrate continuous compliance with the operation and maintenance requirements that apply to me?

(a) For each capture system and control device subject to an operating limit in §63.7790(b), you must demonstrate continuous compliance with the operation and maintenance requirements in §63.7800(b) by meeting the requirements of paragraphs (a)(1) through ~~(3)~~ **(4)** of this section:

- (1) Making monthly inspections of capture systems and initiating corrective action according to §63.7800(b)(1) and recording all information needed to document conformance with these requirements;
- (2) Performing preventative maintenance according to §63.7800(b)(2) and recording all information needed to document conformance with these requirements; and
- (3) Initiating and completing corrective action for a baghouse equipped with a bag leak detection system or COMS according to §63.7800(b)(4) and recording all information needed to document conformance with these requirements, including the time you initiated corrective action, the corrective action(s) taken, and date on which corrective action was completed.
- (4) Initiating and completing corrective action for a venturi scrubber equipped with a CPMS or an electrostatic precipitator equipped with a COMS according to §63.7833(g) and recording all information needed to document conformance with these requirements, including the time you initiated corrective action, the corrective action(s) taken within the first 24 hours according to §63.7833(g)(1) and whether they were successful, the corrective action(s) taken within the second 24 hours according to §63.7833(g)(2) and whether they were successful, and the date on which corrective action was completed.

(b) You must maintain a current copy of the operation and maintenance plan required in §63.7800(b) onsite and available for inspection upon request. You must keep the plans for the life of the affected source or until the affected source is no longer subject to the requirements of this subpart.

§ 63.7835 What other requirements must I meet to demonstrate continuous compliance?

(a) *Deviations.* Except as provided in §63.7833(g), you must report each instance in which you did not meet each emission limitation in §63.7790 that applies to you. This includes periods of startup, shutdown, and malfunction. You also must report each instance in which you did not meet each operation and maintenance requirement in §63.7800 that applies to you. These instances are deviations from the emission limitations and operation and maintenance requirements in this subpart. These deviations must be reported according to the requirements in §63.7841.

(b) *Startups, shutdowns, and malfunctions.* (1) Consistent with §§63.6(e) and 63.7(e)(1), deviations that occur during a period of startup, shutdown, or malfunction are not violations if you demonstrate to the Administrator's satisfaction that you were operating in accordance with §63.6(e)(1).

(2) The Administrator will determine whether deviations that occur during a period of startup, shutdown, or malfunction are violations, according to the provisions in §63.6(e).

[68 FR 27663, May 20, 2003, as amended at 71 FR 20468, Apr. 20, 2006]

Notifications, Reports, and Records

§ 63.7840 What notifications must I submit and when?

(a) You must submit all of the notifications in §§63.6(h)(4) and (5), 63.7(b) and (c), 63.8(e) and (f)(4), and 63.9(b) through (h) that apply to you by the specified dates.

(b) As specified in §63.9(b)(2), if you startup your affected source before May 20, 2003, you must submit your initial notification no later than September 17, 2003.

(d) If you are required to conduct a performance test, you must submit a notification of intent to conduct a performance test at least 60 calendar days before the performance test is scheduled to begin as required in §63.7(b)(1).

(e) If you are required to conduct a performance test, opacity observation, or other initial compliance demonstration, you must submit a notification of compliance status according to §63.9(h)(2)(ii).

(1) For each initial compliance demonstration that does not include a performance test, you must 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, you must 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 §63.10(d)(2).

§ 63.7841 What reports must I submit and when?

(a) *Compliance report due dates.* Unless the Administrator has approved a different schedule, you must submit a semiannual compliance report to your permitting authority according to the requirements in paragraphs (a)(1) through (5) of this section.

(1) The first compliance report must cover the period beginning on the compliance date that is specified for your affected source in §63.7783 and ending on June 30 or December 31, whichever date comes first after the compliance date that is specified for your source in §63.7783.

(2) The first compliance report must be postmarked or delivered no later than July 31 or January 31, whichever date comes first after your first compliance report is due.

(3) Each subsequent compliance report must cover the semiannual reporting period from January 1 through June 30 or the semiannual reporting period from July 1 through December 31.

(4) Each subsequent compliance report must be postmarked or delivered no later than July 31 or January 31, whichever date comes first after the end of the semiannual reporting period.

(5) For each affected source that is subject to permitting regulations pursuant to 40 CFR part 70 or 71, and if the permitting authority has established dates for submitting semiannual reports pursuant to 40 CFR 70.6(a)(3)(iii)(A) or 40 CFR 71.6(a)(3)(iii)(A), you may submit the first and subsequent compliance reports according to the dates the permitting authority has established instead of according to the dates in paragraphs (a)(1) through (4) of this section.

(b) *Compliance report contents.* Each compliance report must include the information in paragraphs (b)(1) through (3) of this section and, as applicable, paragraphs (b)(4) through (8) of this section.

(1) Company name and address.

(2) Statement by a responsible official, with that official's name, title, and signature, certifying the truth, accuracy, and completeness of the content of the report.

(3) Date of report and beginning and ending dates of the reporting period.

(4) If you had a startup, shutdown, or malfunction during the reporting period and you took actions consistent with your startup, shutdown, and malfunction plan, the compliance report must include the information in §63.10(d)(5)(i).

(5) If there were no deviations from the continuous compliance requirements in §§63.7833 and 63.7834 that apply to you, a statement that there were no deviations from the emission limitations or operation and maintenance requirements during the reporting period.

(6) If there were no periods during which a continuous monitoring system (including a CPMS, COMS, or continuous emission monitoring system (CEMS)) was out-of-control as specified in §63.8(c)(7), a statement that there were no periods during which the CPMS was out-of-control during the reporting period.

(7) For each deviation from an emission limitation in §63.7790 that occurs at an affected source where you are not using a continuous monitoring system (including a CPMS, COMS, or CEMS) to comply with an emission limitation in this subpart, the compliance report must contain the information in paragraphs (b)(1) through (4) of this section and the information in paragraphs (b)(7)(i) and (ii) of this section. This includes periods of startup, shutdown, and malfunction.

(i) The total operating time of each affected source during the reporting period.

(ii) Information on the number, duration, and cause of deviations (including unknown cause, if applicable) as applicable and the corrective action taken.

(8) For each deviation from an emission limitation occurring at an affected source where you are using a continuous monitoring system (including a CPMS or COMS) to comply with the emission limitation in this subpart, you must include the information in paragraphs (b)(1) through (4) of this section and the information in paragraphs (b)(8)(i) through (xi) of this section. This includes periods of startup, shutdown, and malfunction.

(i) The date and time that each malfunction started and stopped.

(ii) The date and time that each continuous monitoring was inoperative, except for zero (low-level) and high-level checks.

(iii) The date, time, and duration that each continuous monitoring system was out-of-control as specified in §63.8(c)(7), including the information in §63.8(c)(8).

(iv) The date and time that each deviation started and stopped, and whether each deviation occurred during a period of startup, shutdown, or malfunction or during another period.

(v) A summary of the total duration of the deviation during the reporting period and the total duration as a percent of the total source operating time during that reporting period.

(vi) A breakdown of the total duration of the deviations during the reporting period including those that are due to startup, shutdown, control equipment problems, process problems, other known causes, and other unknown causes.

(vii) A summary of the total duration of continuous monitoring system downtime during the reporting period and the total duration of continuous monitoring system downtime as a percent of the total source operating time during the reporting period.

(viii) A brief description of the process units.

(ix) A brief description of the continuous monitoring system.

(x) The date of the latest continuous monitoring system certification or audit.

(xi) A description of any changes in continuous monitoring systems, processes, or controls since the last reporting period.

(c) *Immediate startup, shutdown, and malfunction report.* If you had a startup, shutdown, or malfunction during the semiannual reporting period that was not consistent with your startup, shutdown, and malfunction plan, you must submit an immediate startup, shutdown, and malfunction report according to the requirements in §63.10(d)(5)(ii).

(d) *Part 70 monitoring report.* If you have obtained a title V operating permit for an affected source pursuant to 40 CFR part 70 or 71, you must report all deviations as defined in this subpart in the semiannual monitoring report required by 40 CFR 70.6(a)(3)(iii)(A) or 40 CFR 71.6(a)(3)(iii)(A). If you submit a compliance report for an affected source along with, or as part of, the semiannual monitoring report required by 40 CFR 70.6(a)(3)(iii)(A) or 40 CFR 71.6(a)(3)(iii)(A), and the compliance report includes all the required information concerning deviations from any emission limitation or operation and maintenance requirement in this subpart, submission of the compliance report satisfies any obligation to report the same deviations in the semiannual monitoring report. However, submission of a compliance report does not otherwise affect any obligation you may have to report deviations from permit requirements for an affected source to your permitting authority.

§ 63.7842 What records must I keep?

(a) You must keep the following records:

(1) A copy of each notification and report that you submitted to comply with this subpart, including all documentation supporting any initial notification or notification of compliance status that you submitted, according to the requirements in §63.10(b)(2)(xiv).

(2) The records in §63.6(e)(3)(iii) through (v) related to startup, shutdown, and malfunction.

(3) Records of performance tests, performance evaluations, and opacity observations as required in §63.10(b)(2)(viii).

(b) For each COMS, you must keep the records specified in paragraphs (b)(1) through (4) of this section.

(1) Records described in §63.10(b)(2)(vi) through (xi).

(2) Monitoring data for a performance evaluation as required in §63.6(h)(7)(i) and (ii).

(3) Previous (that is, superseded) versions of the performance evaluation plan as required in §63.8(d)(3).

(4) Records of the date and time that each deviation started and stopped, and whether the deviation occurred during a period of startup, shutdown, or malfunction or during another period.

(c) You must keep the records required in §63.6(h)(6) for visual observations.

(d) You must keep the records required in §§63.7833 and 63.7834 to show continuous compliance with each emission limitation and operation and maintenance requirement that applies to you.

§ 63.7843 In what form and how long must I keep my records?

(a) Your records must be in a form suitable and readily available for expeditious review, according to §63.10(b)(1).

(b) As specified in §63.10(b)(1), you must keep each record for 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record.

(c) You must keep each record on site for at least 2 years after the date of each occurrence, measurement, maintenance, corrective action, report, or record according to §63.10(b)(1). You can keep the records offsite for the remaining 3 years.

Other Requirements and Information

§ 63.7850 What parts of the General Provisions apply to me?

Table 4 to this subpart shows which parts of the General Provisions in §§63.1 through 63.15 apply to you.

§ 63.7851 Who implements and enforces this subpart?

(a) This subpart can be implemented and enforced by us, the United States Environmental Protection Agency (U.S. EPA), or a delegated authority such as your State, local, or tribal agency. If the U.S. EPA Administrator has delegated authority to your State, local, or tribal agency, then that agency has the authority to implement and enforce this subpart. You should contact your U.S. EPA Regional Office to find out if this subpart is delegated to your State, local, or tribal agency.

(b) In delegating implementation and enforcement authority of this subpart to a State, local, or tribal agency under subpart E of this part, the authorities contained in paragraph (c) of this section are retained by the Administrator of the U.S. EPA and are not transferred to the State, local, or tribal agency.

(c) The authorities that will not be delegated to State, local, or tribal agencies are specified in paragraphs (c)(1) through (4) of this section.

(1) Approval of alternative opacity emission limits in Table 1 to this subpart under §63.6(h)(9).

(3) Approval of major alternatives to monitoring under §63.8(f) and as defined in §63.90.

(4) Approval of major alternatives to recordkeeping and reporting under §63.10(f) and as defined in §63.90.

§63.7852 What definitions apply to this subpart?

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

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

Basic oxygen process furnace means any refractory-lined vessel in which high-purity oxygen is blown under pressure through a bath of molten iron, scrap metal, and fluxes to produce steel. This definition includes both top and bottom blown furnaces, but does not include argon oxygen decarburization furnaces.

Basic oxygen process furnace shop means the place where steelmaking operations that begin with the transfer of molten iron (hot metal) from the torpedo car and end prior to casting the molten steel, including hot metal transfer, desulfurization, slag skimming, refining in a basic oxygen process furnace, and ladle metallurgy occur.

Basic oxygen process furnace shop ancillary operations means the processes where hot metal transfer, hot metal desulfurization, slag skimming, and ladle metallurgy occur.

Blast furnace means a furnace used for the production of molten iron from iron ore and other iron bearing materials.

Bottom-blown furnace means any basic oxygen process furnace in which oxygen and other combustion gases are introduced into the bath of molten iron through tuyeres in the bottom of the vessel or through tuyeres in the bottom and sides of the vessel.

Casthouse means the building or structure that encloses the bottom portion of a blast furnace where the hot metal and slag are tapped from the furnace.

Certified observer means a visible emission observer certified to perform EPA Method 9 opacity observations.

Desulfurization means the process in which reagents such as magnesium, soda ash, and lime are injected into the hot metal, usually with dry air or nitrogen, to remove sulfur.

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

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

Discharge end means the place where those operations conducted within the sinter plant starting at the discharge of the sintering machine's traveling grate including (but not limited to) hot sinter crushing, screening, and transfer operations occur.

Emission limitation means any emission limit, opacity limit, or operating limit.

Hot metal transfer station means the location in a basic oxygen process furnace shop where molten iron (hot metal) is transferred from a torpedo car or hot metal car used to transport hot metal from the blast furnace casthouse to a holding vessel or ladle in the basic oxygen process furnace shop. This location also is known as the reladling station or ladle transfer station.

Integrated iron and steel manufacturing facility means an establishment engaged in the production of steel from iron ore.

Ladle metallurgy means a secondary steelmaking process that is performed typically in a ladle after initial refining in a basic oxygen process furnace to adjust or amend the chemical and/or mechanical properties of steel.

Primary emissions means particulate matter emissions from the basic oxygen process furnace generated during the steel production cycle which are captured and treated in the furnace's primary emission control system.

Primary emission control system means the combination of equipment used for the capture and collection of primary emissions (e.g., an open hood capture system used in conjunction with an electrostatic precipitator or a closed hood system used in conjunction with a scrubber).

Primary oxygen blow means the period in the steel production cycle of a basic oxygen process furnace during which oxygen is blown through the molten iron bath by means of a lance inserted from the top of the vessel (top-blown) or through tuyeres in the bottom and/or sides of the vessel (bottom-blown).

Responsible official means responsible official as defined in §63.2.

Secondary emissions means particulate matter emissions that are not controlled by a primary emission control system, including emissions that escape from open and closed hoods, lance hole openings, and gaps or tears in ductwork to the primary emission control system.

Secondary emission control system means the combination of equipment used for the capture and collection of secondary emissions from a basic oxygen process furnace.

Sinter cooler means the apparatus used to cool the hot sinter product that is transferred from the discharge end through contact with large volumes of induced or forced draft air.

Sinter plant means the machine used to produce a fused clinker-like aggregate or sinter of fine iron-bearing materials suited for use in a blast furnace. The machine is composed of a continuous traveling grate that conveys a bed of ore fines and other finely divided iron-bearing material and fuel (typically coke breeze), a burner at the feed end of the grate for ignition, and a series of downdraft windboxes along the length of the strand to support downdraft combustion and heat sufficient to produce a fused sinter product.

Skimming station means the locations inside a basic oxygen process furnace shop where slag is removed from the top of the molten metal bath.

Steel production cycle means the operations conducted within the basic oxygen process furnace shop that are required to produce each batch of steel. The following operations are included: scrap charging, preheating (when done), hot metal charging, primary oxygen blowing, sampling, (vessel turndown and turnup), additional oxygen blowing (when done), tapping, and deslagging. The steel production cycle begins when the scrap is charged to the furnace and ends after the slag is emptied from the vessel into the slag pot.

Top-blown furnace means any basic oxygen process furnace in which oxygen is introduced into the bath of molten iron by means of an oxygen lance inserted from the top of the vessel.

Windboxes means the compartments that provide for a controlled distribution of downdraft combustion air as it is drawn through the sinter bed of a sinter plant to make the fused sinter product.

Table 1 to Subpart FFFFF of Part 63—Emission and Opacity Limits

As required in §63.7790(a), you must comply with each applicable emission and opacity limit in the following table:

For .	You must comply with each of the following
9. Each BOPF at a new or existing shop.	<p>a. You must not cause to be discharged to the atmosphere any gases that exit from a primary emission control system for a BOPF with a closed hood system at a new or existing BOPF shop that contain, on a flow-weighted basis, particulate matter in excess of 0.03 gr/dscf during the primary oxygen blow \2\ ,\3\; and</p> <p>b. You must not cause to be discharged to the atmosphere any gases that exit from a primary emission control system for a BOPF with an open hood system that contain, on a flow-weighted basis, particulate matter in excess of 0.02 gr/dscf during the steel production cycle for an existing BOPF shop \2\ ,\3\ or 0.01 gr/dscf during the steel production cycle for a new BOPF shop; \3\ and</p> <p>c. You must not cause to be discharged to the atmosphere any gases that exit from a control device used solely for the collection of secondary emissions from the BOPF that contain particulate matter in excess of 0.01 gr/dscf for an existing BOPF shop \2\ or 0.0052 gr/dscf for a new BOPF shop.</p>
10. Each hot metal transfer, skimming, and desulfurization operation at a new or existing BOPF shop.	You must not cause to be discharged to the atmosphere any gases that exit from a control device that contain particulate matter in excess of 0.01 gr/dscf for an existing BOPF shop \2\ or 0.003 gr/dscf for a new BOPF shop.
11. Each ladle metallurgy operation at a new or existing BOPF shop.	You must not cause to be discharged to the atmosphere any gases that exit from a control device that contain particulate matter in excess of 0.01 gr/dscf for an existing BOPF shop \2\ or 0.004 gr/dscf for a new BOPF shop.
12. Each roof monitoring at an existing BOPF shop.	You must not cause to be discharged to the atmosphere any secondary emissions that exit any opening in the BOPF shop or any other building housing the BOPF or BOPF

	shop operation that exhibit opacity greater than 20 percent (3-minute average).
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\2\ This concentration limit (gr/dscf) for a control device does not apply to discharges inside a building or structure housing the discharge end at an existing sinter plant, inside a casthouse at an existing blast furnace, or inside an existing BOPF shop if the control device was installed before August 30, 2005.

\3\ This limit applies to control devices operated in parallel for a single BOPF during the oxygen blow.

Table 2 to Subpart FFFFF of Part 63—Initial Compliance with Emission and Opacity Limits

As required in §63.7825(a)(1), you must demonstrate initial compliance with the emission and opacity limits according to the following table:

For	You have demonstrated initial compliance if
9. Each BOPF at a new or existing BOPF shop..	<p>a. The average concentration of particulate matter from a primary emission control system applied to emissions from a BOPF with a closed hood system, measured according to the performance test procedures in §63.7822(f), did not exceed 0.03 gr/dscf for a new or existing BOPF shop;</p> <p>b. The average concentration of particulate matter from a primary emission control system applied to emissions from a BOPF with an open hood system, measured according to the performance test procedures in §63.7822(g), did not exceed 0.02 gr/dscf for an existing BOPF shop or 0.01 gr/dscf for a new BOPF shop; and</p> <p>c. The average concentration of particulate matter from a control device applied solely to secondary emissions from a BOPF, measured according to the performance test procedures in § 63.7822(g), did not exceed 0.01 gr/dscf for an existing BOPF shop or 0.0052 gr/dscf for a new BOPF shop.</p>
10. Each hot metal transfer skimming, and desulfurization at a new or existing BOPF shop.	The average concentration of particulate matter from a control device applied to emissions from hot metal transfer, skimming, or desulfurization, measured according to the performance test procedures in § 63.7822(h), did not exceed 0.01 gr/dscf for an existing BOPF shop or 0.003 gr/dscf for a new BOPF shop.
11. Each ladle metallurgy operation at a new or existing BOPF shop	The average concentration of particulate matter from a control device applied to emissions from a ladle metallurgy operation, measured according to the performance test procedures in § 63.7822(h), did not exceed 0.01 gr/dscf for an existing BOPF shop or 0.004 gr/dscf for a new BOPF shop.
12. Each roof monitor at an existing BOPF shop.	The opacity of secondary emissions from each BOPF shop, determined according to the performance test procedures in § 63.7823(did not exceed 20 percent (3-minute average).

Table 3 to Subpart FFFFF of Part 63—Continuous Compliance with Emission and Opacity Limits

As required in §63.7833(a), you must demonstrate continuous compliance with the emission and opacity limits according to the following table:

For .	You must demonstrate continuous compliance by
9. Each BOPF at a new or existing BOPF shop	a. Maintaining emissions of particulate matter from the primary emission control system for a BOPF with a closed hood system at or below 0.03 gr/dscf; and b. Maintaining emissions of particulate matter from the primary emission control system for a BOPF with an open hood system at or below 0.02 gr/dscf for an existing BOPF shop or 0.01 gr/dscf for a new BOPF shop; and c. Maintaining emissions of particulate matter from a control device applied solely to secondary emissions from a BOPF at or below 0.01 gr/dscf for an existing BOPF shop or 0.0052 gr/dscf for a new BOPF shop; and d. Conducting subsequent performance tests at the frequencies specified in § 63.7821.
10. Each hot metal transfer, skimming, and desulfurization operation at a new or existing BOPF shop.	a. Maintaining emissions of particulate matter from a control device at or below 0.01 gr/dscf at an existing BOPF or 0.003 gr/dscf for a new BOPF; and b. Conducting subsequent performance tests at the frequencies specified in § 63.7821.
11. Each ladle metallurgy operation at a new or existing BOPF shop	a. Maintaining emissions of particulate matter from a control device at or below 0.01 gr/dscf at an existing BOPF shop or 0.004 gr/dscf for a new BOPF shop; and b. Conducting subsequent performance tests at the frequencies specified in § 63.7821.
12. Each roof monitor at an existing BOPF shop.	a. Maintaining the opacity of secondary emissions that exit any opening in the BOPF shop or other building housing the BOPF or shop operation at or below 20 percent (3-minute average); and b. Conducting subsequent performance tests at the frequencies specified in § 63.7821.

Table 4 to Subpart FFFFF of Part 63—Applicability of General Provisions to Subpart FFFFF

As required in §63.7850, you must comply with the requirements of the NESHAP General Provisions (40 CFR part 63, subpart A) shown in the following table:

Citation	Subject	Applies to Subpart FFFFF	Explanation
§ 63.1	Applicability.	Yes.	
§ 63.2	Definitions	Yes.	
§ 63.3.	Units and Abbreviations	Yes	
§ 63.4	Prohibited Activities	Yes.	
§ 63.5	Construction/Reconstruction	Yes.	
§ 63.6(a), (b), (c), (d), (e) (f), (g), (h)(2)(ii)-(h)(9)	Compliance with Standards and Maintenance Requirements.	Yes.	
§ 63.6(h)(2)(i).	Determining Compliance with Opacity and VE Standards	No.	Subpart FFFFF specifies methods and procedures for determining compliance with opacity emission and operating limits
§63.6(i)	Extension of Compliance with Emission Standards.	Yes.	
§ 63.6(j).	Exemption from compliance with Emission Standards	Yes.	
§ 63.7(a)(1)-(2)	Applicability and Performance Test Dates	No	Subpart FFFFF and specifies performance test applicability and dates.
§ 63.7(a)(3), (b), (c)-(h).	Performance Testing Requirements.	Yes	
§ 63.8(a)(1)-(3), (b), (c)(1)-(3), (c)(4)(i-ii), (c)(5) and (6), (c)(7)- (8), (f)(1)-(5), (g)(1)-(4).	Monitoring Requirements	Yes	CMS requirements in § 63.8(c)(4) (i)-(ii), (c) (5)-(6), (d), and (e) apply only to COMS.
§ 63.8(a)(4).	Additional Monitoring Requirements for Control Devices in § 63.11.	No	Subpart FFFFF does not require flares.
§ 63.8(c)(4)	Continuous Monitoring System Requirements.	No.	Subpart FFFFF specifies requirements for operation of CMS.
§ 63.8(f)(6).	RATA Alternative	No.	
63.8(g)(5)	Data Reduction	No	Subpart FFFFF specifies data reduction requirements.
§ 63.9	Notification Requirements.	Yes.	Additional notifications for CMS in § 63.9(g) apply to COMS.
§ 63.10(a), (b)(1)-(2)(xii), (b)(2)(xiv), (b)(3), (c)(1)-(6) (c)(9)-(15), (d), (e)(1)-(2), (e)(4), (f).	Recordkeeping and Reporting Requirements.	Yes	Additional records for CMS in § 63.10(c)(1)-(6), (9)-(15), and reports in §63.10(d)(1)-(2) apply only to COMS.
§ 63.10(b)(2)(xiii)	CMS Records for RATA Alternative	No.	
§ 63.10(c)(7)-(8)	Records of Excess Emissions and Parameter Monitoring Exceedances for CMS	No.	Subpart FFFFF specifies record requirements.
§ 63.10(e)(3)	Excess Emission Reports	No	Subpart FFFFF specifies

			reporting requirements
§ 63.11	Control Device Requirements.	No	Subpart FFFFF does not require flares.
§ 63.12.	State Authority and Delegations	Yes	
§ 63.13-§ 63.15	Addresses, Incorporation by Reference, Availability of Information.	Yes	

SECTION D.9

FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)]: Number 2 Q-BOP Shop

- (a) Two (2) Hot Metal Transfer and Desulfurization Stations, identified as NSDS0246, constructed in 1987, with a maximum capacity of 510 tons per hour. These stations included: two (2) Hot Metal Mixers, identified as NSMM0264 and two (2) Hot Metal Mixer Heaters, identified as NSMH0251, constructed in 1973, with a maximum capacity of 255 tons per hour. The natural gas fired mixer heaters have a heat input capacity of 10 MMBtu/hr each. Emissions from the hot metal transfer and desulfurization stations, mixers and heaters are controlled by the Hot Metal Transfer and Desulfurization Stations Baghouse NS3115 that discharges through NS614. The uncontrolled emissions exhaust through roof monitor NS6631.
- (b) Q-Basic Oxygen Process (BOP) vessels, constructed in 1973, consisting of BOP vessel T identified as NSVT0268, vessel W, identified as NSVW0269, and vessel Y, identified as NSVY0270, with a maximum capacity of 250 tons per hour each. Primary emissions are controlled by open combustion hood and two (2) Gas Cleaning Systems, secondary emissions are controlled by the Secondary Emissions Baghouse NS3124, exhausting to stack NS6123, and uncontrolled emissions exhaust through Roof Monitor NS6632.
- (c) Two (2) Gas Cleaning Systems, identified as NS3125 and NS3126 located in the gas cleaner facility, constructed in 1973, process the exhaust gases from the three (3) steel making vessels through three (3) quenchers, two (2) scuppers (tank like structures that remove excess quench water and solids from the gas stream), two (2) venturi scrubbers, two (2) separators, two (2) gas coolers with mist eliminators, and two (2) induced draft fans exhausting to Stacks NS6124 and NS6125.
- (d) Three (3) Flux Bins T, W, and Y, identified as NSVT0265, NSVW0266 and NSVY0267, constructed in 1973, with a maximum capacity of 141 tons per hour each. Emissions are controlled by five (5) baghouses. Three (3) Flux Transfer Baghouses at 166' level identified as NS3112, NS3108, and NS3107, exhausting through Stacks NS6623, NS6627 and NS6628 recycling captured material back to the process; One (1) North Flux Handling Baghouse at 116' level identified as NS3109 and one (1) South Flux Handling Baghouse at 116' level identified as NS3110, exhausting through stacks NS6626 and NS6625. Uncontrolled emissions exhaust through the roof monitor NS6632.
- (e) Three (3) Ladle Metallurgical Facilities, LMF1 identified as NSL10293, LMF 2 identified as NSL20294 were constructed in 1986 and LMF 3 identified as NSL30295, constructed in 1991 with a maximum capacity of 348 tons per hour each. Hot fume emissions from LMF 1 and 2 are controlled by Nos. 1 and 2 LMF Hot Fume Exhaust Baghouses NS3135 and NS3136, exhausting through stacks NS6146 and NS6147. Material handling emissions at LMF 1 and 2 are controlled by the LMF Nos. 1 and 2 Material Handling Baghouse NS3052, exhausting through stack NS6055. The LMF 3 Hot Fume Exhaust and Material Handling emissions are controlled by the LMF 3 Hot Fume and Material Handling Baghouse NS3137, exhausting to stack NS6148. All uncontrolled emissions exhaust through the roof monitor NS6634.
- (f) One (1) R-H Vacuum Degasser, identified as NSVD0271, constructed in 1989, with a maximum capacity of 297.1 tons of steel per hour consisting of two (2) natural gas fired heaters, one (1) active and one (1) spare, identified as NSAB0276 and NSSB0275, with heat input capacities of 12 MMBtu per hour and 3 MMBtu per hour, respectively. Carbon monoxide and other combustible gas emissions are controlled with a flare that exhausts through Stack NS6145 and uncontrolled emissions exhaust through the Roof Monitor NS6634.

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

Facility Description [326 IAC 2-7-5(15)]: Number 2 Q-BOP Shop (continued):

- (g) One (1) Slag Conditioning Station servicing the RH Vacuum Degasser, constructed in 1997, with a maximum capacity of 297.1 tons of steel per hour.
 - (1) PM₁₀ emissions from the station are controlled by a baghouse exhausting through Stacks S-1 through S-6 and recycling captured material back to the process.
 - (2) PM₁₀ emissions from the material handling of slag conditioning and metallurgical agents are exhausted through the RH Vacuum Degasser Slag Conditioning Baghouse NS3207, exhausting through Stack NS6636.
- (h) One (1) Daytank Lime Silo at the lime dumping station, identified as NSDS0250 constructed in 1971. Emissions are controlled by the Daytank Lime Silo baghouse NS3106, exhausting through the stack, NS6629.
- (i) Three (3) Continuous Casting Lines, identified as Lines A, B and C identified as, NCCA0284, NCCB0285 and NCCC0286, with a total maximum capacity of 800 tons per hour combined. Lines A and B were constructed in 1986. Line C was constructed in 1991. Emissions from the continuous casters go to the Roof Monitor NC6635.
- (j) Fourteen (14) natural gas fired Ladle Preheaters, identified as NBLD0262, eleven (11) with a heat input capacity of 9 MMBtu per hour each and three (3) with a heat input of 10 MMBtu per hour each. Emissions go through Roof Monitor NS6633.
- (k) Two (2) Hot Metal Ladle Skimmers, identified as NSLS0248, constructed in 1973. Emissions go through Roof Monitor NS6631.
- (l) Two (2) Steel Slag Skimming Stations, consisting of slag skimmers, identified as NSS10292 and NSS20287. Both were constructed in 1973. Emissions go through Roof Monitor NS6633.
- (m) One (1) Slingot Station, identified as NSST0290, constructed in 1986. Emissions go through Roof Monitor NS6634.
- (n) Eight (8) natural gas fired Tundish Preheaters located at the No. 2 Caster, with a heat input capacity of 6 MMBtu per hour each. Emissions go through Roof Monitor NC6635.

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

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

D.9.1 General Provisions Relating to Hazardous Air Pollutants (HAPs) [326 IAC 20-1][40 CFR 63, Subpart A] [Table 4 to 40 CFR 63, Subpart FFFFF]

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.2 QBOP Shop, including the Q-BOP Furnace, and shop ancillary operations (hot metal mixers, hot metal desulfurization, slag skimming, ladle metallurgy, and roof monitoring, except when otherwise specified by Table 4 to 40 CFR 63, Subpart FFFFF.

D.9.2 Lake County PM₁₀ Emission Requirements [326 IAC 6.8-2-38]

Pursuant to 326 IAC 6.8-2-38, the PM₁₀ emissions from the Number 2 Q-BOP Shop operations shall comply with the following:

- (a) The PM₁₀ emissions from the Number 2 Q-BOP Hot Metal Transfer and Desulfurization Baghouses discharge NS6144 shall not exceed to 0.007 grains per dry standard cubic foot of exhaust air and 13.0 pounds per hour.
- (b) The PM₁₀ emissions from the Number 2 Q-BOP Secondary Emissions Baghouse stack NS6123 shall not exceed 0.007 grains per dry standard cubic foot of exhaust air and 27.0 pounds per hour.
- (c) The PM₁₀ emissions from the Number 2 Q-BOP Gas Cleaning System stacks NS6124 and NS6125 shall not exceed 0.0153 grains per dry standard cubic foot of exhaust air and a total of 44.40 pounds per hour.
- (d) The PM₁₀ emissions from the Number 2 Q-BOP North Flux Handling System Baghouse stack NS6626 shall not exceed to 0.0070 grains per dry standard cubic foot of exhaust air and 1.80 pounds per hour.
- (e) The emissions from the Number 2 Q-BOP South Flux Handling System Baghouse stack NS6625, shall not exceed 0.0070 grains per dry standard cubic foot of exhaust air and 1.80 pounds per hour.
- (f) The PM₁₀ emissions from the Number 2 Q-BOP LMF Number 1 Hot Fume Exhaust Baghouse Stack NS6146 shall not exceed 0.007 grains per dry standard cubic foot of exhaust air and 5.1 pounds per hour.
- (g) The PM₁₀ emissions from the Number 2 Q-BOP LMF Number 2 Hot Fume Exhaust Baghouse Stack NS6147 shall not exceed 0.007 grains per dry standard cubic foot of exhaust air and 5.1 pounds per hour.
- (h) The PM₁₀ emissions from the Number 2 Q-BOP LMF Number 3 Hot Fume Exhaust and Material Handling Baghouse Stack NS6148 shall not exceed 0 .0070 grains per dry standard cubic foot of exhaust air and 2.70 pounds per hour.
- (i) The PM₁₀ emissions from the Number 2 Q-BOP LMF Numbers 1 and 2 Material Handling Baghouse Stack NS6055, shall not exceed 0 .007 grains per dry standard cubic foot of exhaust air and 3.83 pounds per hour.
- (j) The PM₁₀ emissions from the Number 2 Q-BOP RH Vacuum Degasser Slag Conditioning Baghouse stacks S-1 through S-6 shall not exceed 0.007 grains per dry standard cubic foot of exhaust air and 5.49 pounds per hour.
- (k) Each emission limit applies to one (1) stack serving one (1) facility unless otherwise noted. The emissions limitations apply to one (1) stack serving the multiple units specified when the facility description notes stack serving, and to each stack of multiple stacks serving multiple facilities when the facility description notes each stack serving.

D.9.3 Particulate Emissions Limitations [326 IAC 6.8-1-2(a)]

Pursuant to 326 IAC 6.8-1-2(a), the particulate emissions from the roof monitors NS6631, NS6632, NS6633 and NS6634 shall not exceed three-hundredths (0.03) grain per dry standard cubic foot (dscf).

D.9.4 Lake County Opacity Limitations [326 IAC 6.8-3-4]

Pursuant to 326 IAC 6.8-3-4 the visible emissions from the Number 2 Q-BOP Shop operations shall be limited as follows:

- (a) Opacity from the Number 2 Q-BOP Hot Metal Transfer and Desulfurization Stations Baghouse stack NS6144 shall not exceed five percent (5%) for any three (3) minute average.

- (b) Opacity from the Number 2 Q-BOP Gas Cleaning system stacks NS6124 and NS6125 shall not exceed twenty percent (20%) for any six (6) minute average.
- (c) Opacity from the Number 2 Q-BOP Roof Monitor NS 6632 shall not exceed twenty percent (20%) for any three (3) minute average.
- (d) Opacity from the Number 2 Q-BOP North and South Flux Handling System Baghouse stacks NS6626 and NS6625, (previously known as the flux handling line baghouse shall not exceed five percent (5%) for any three (3) minute average.
- (e) Opacity from the Number 2 Q-BOP Secondary Baghouse stack NS6123 shall not exceed five percent (5%) for any three (3) minute average.
- (f) Opacity from the Number 2 Q-BOP LMF No.1 Hot Fume Exhaust Baghouse stack NS6146 shall not exceed five percent (5%) for any three (3) minute average.
- (g) Opacity from the Number 2 Q-BOP LMF No.2 Hot Fume Exhaust Baghouse stack NS6147 shall not exceed five percent (5%) for any, three (3) minute average.

D.9.5 Sulfur Dioxide (SO₂) Limitations [326 IC 7-4.1-20(c)(3)]

Pursuant to 326 IAC 7-4.1-20(c)(3) gaseous fuel sources shall burn natural gas only:

- (a) if it is not listed in 326 IAC 7-4.1-20; or
- (b) under an operating condition not specifically listed in 326 IAC 7-4.1-20.

D.9.6 Sulfur Dioxide (SO₂) Limitations – Hot Metal Transfer and Desulfurization Stations [326 IAC 7-4.1-20]

- (a) Pursuant to the U.S. EPA Administrative Consent Order, issued January 2, 2004, the Permittee shall comply with the following:
 - (1) The SO₂ emissions from the Hot Metal Transfer and Desulfurization Stations baghouse as measured during all hot metal processing activities shall not exceed 0.05 pound per ton of hot metal. Hot metal processing will include hot metal transfer, hot metal desulfurization reagent injection and hot metal skimming, as applicable.
 - (2) The SO₂ emissions from the Hot Metal Transfer and Desulfurization Stations Baghouse as measured during hot metal desulfurization reagent injection only shall not exceed 0.01 pound per ton of hot metal.
- (b) Pursuant to 326 IAC 7-4.1-20(a)(1)(L) and (b)(10), the SO₂ emissions from the No. 2 QBOP Shop Hot Metal Transfer and Desulfurization Stations Baghouse shall not exceed 0.05 pounds per ton of hot metal and 28.54 pounds per hour.

D.9.7 Carbon Monoxide (CO) Limitations 326 IAC 9-1-2

Pursuant to 326 IAC 9-1-2(2), no carbon monoxide shall be discharged from the Number 2 Q-BOP furnace waste gas stream, unless the gas stream is burned in one of the following: a direct-flame afterburner, boiler or recuperative incinerator. In instances where carbon monoxide destruction is not required, carbon monoxide emissions shall be released at such elevation that the maximum ground level concentration from a single source shall not exceed twenty percent (20%) of the maximum ground one hour Indiana ambient air quality value for carbon monoxide.

D.9.8 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

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

Compliance Determination Requirements

D.9.9 Particulate Testing Requirements [326 IAC 2-7-6(1),(6)][326 IAC 2-1.1-11]

- (a) Within thirty (30) months after issuance of this permit or five (5) years from the date of the last compliance test which ever is earlier, in order to demonstrate compliance with Condition D.9.2, the Permittee shall perform PM₁₀ testing on the Number 2 Q-BOP Hot Metal Transfer and Desulfurization Stations Baghouse discharge using the appropriate methods to measure PM₁₀ as listed in 326 IAC 6.8-4-1(1) or other methods approved by the Commissioner. This test shall be repeated at least once every five (5) years from the date of this valid compliance demonstration. All tests shall be performed in accordance with Section C - Performance Testing.
- (b) Within thirty (30) months after issuance of this permit or two and one half (2 ½) years from the date of the last compliance test which ever is earlier, in order to demonstrate compliance with Condition D.9.2, the Permittee shall perform PM₁₀ testing on the Number 2 Q-BOP Gas Cleaning System stacks NS6124 and NS6125 using the appropriate methods to measure PM₁₀ as listed in 326 IAC 6.8-4-1(1) or other methods approved by the Commissioner. This test shall be repeated at least once every five (5) years from the date of this valid compliance demonstration. All tests shall be performed in accordance with Section C - Performance Testing.
- (c) Within thirty (30) months after issuance of this permit or two and one half (2 ½) years from the date of the last compliance test which ever is earlier, in order to demonstrate compliance with Condition D.9.2 the Permittee shall perform PM₁₀ testing on the Number 2 Q-BOP Secondary Emissions Baghouse Stack NS6123, using the appropriate methods to measure PM₁₀ as listed in 326 IAC 6.8-4-1(1) or other methods approved by the Commissioner. This test shall be repeated at least once every five (5) years from the date of this valid compliance demonstration. All tests shall be performed in accordance with Section C - Performance Testing.

D.9.10 Sulfur Dioxide (SO₂) Testing Requirements

- (a) Pursuant to the U.S. EPA Administrative Consent Order, issued January 2, 2004, within thirty (30) months after issuance of this permit or two and one-half (2 ½) years from the date of the last valid compliance test whichever is earlier or an alternative date as determined by OAQ, Compliance Data Section, the Permittee shall perform SO₂ emission testing on the No. 2 QBOP Shop Hot Metal Transfer and Desulfurization Stations Baghouse discharge during hot metal transfer, hot metal desulfurization, reagent injection and hot metal skimming operations, utilizing the test protocol submitted in accordance with the U.S. EPA Administrative Consent Order, issued January 2, 2004, to show compliance with condition D.9.7(a). This test shall be repeated at least once every two and one-half (2 ½) years from the date of this valid compliance demonstration.
- (b) Pursuant to the U.S. EPA Administrative Consent Order, issued January 2, 2004, within thirty (30) months after issuance of this permit or two and one-half (2 ½) years from the date of the last valid compliance test whichever is earlier or an alternative date as determined by OAQ, Compliance Data Section, the Permittee shall perform SO₂ emission testing on the No. 2 QBOP Shop Hot Metal Transfer and desulfurization station baghouse discharge during reagent injection operations only utilizing a test method approved by the Commissioner to show compliance with condition D.9.6(b) during the desulfurization reagent injection only. This test shall be repeated at least once every two and one-half (2 ½) years from the date of this valid compliance demonstration.
- (c) Pursuant to the U.S. EPA Administrative Consent Order, issued January 2, 2004, demonstration of compliance by performance testing per D.9.10(b) above shall not fulfill the compliance demonstration requirement for D.9.10(a).

D.9.11 Particulate Matter Control [326 IAC 2-7-6(6)]

- (a) Except as otherwise provided by statute, rule or this permit, the control devices listed below shall be in operation for particulate emissions control at all times the associated operations at the No. 2 Q-BOP Shop are in operation. The control devices are as follows:
- (1) Hot Metal Transfer and Desulfurization Baghouse NS3115
 - (2) No. 2 QBOP Secondary Emissions Baghouse NS3124
 - (3) The two (2) No. 2 QBOP Gas Cleaning Systems NS3125 and NS3126
 - (4) No.1 LMF Hot Fume Exhaust Baghouse NS3135
 - (5) No. 2 LMF Hot Fume Exhaust Baghouse NS3136
 - (6) No. 1 and No. 2 LMF Material Handling Baghouse NS3052
 - (7) No. 3 LMF Hot Fume and Material Handling Baghouse NS3137
- (b) In the event that bag failure is observed in a multi-compartment baghouse, if operations will continue for ten (10) days or more after the failure is observed before the failed units will be repaired or replaced, the Permittee shall promptly notify the IDEM, OAQ of the expected date the failed units will be repaired or replaced. The notification shall also include the status of the applicable compliance monitoring parameters with respect to normal, and the results of any response actions taken up to the time of notification.

D.9.12 Carbon Monoxide (CO) Control

The R-H Vacuum Degasser Flare NS6145 shall be in operation at all times the R-H Vacuum Degasser is in operation to control the CO emissions.

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

D.9.13 Visible Emissions Notations

- (a) Visible emission notations of the Desulfurization Stations baghouse stack NS6144, Secondary Baghouse stack NS6123 and No. 2 Q-BOP Gas Cleaning System Stacks NS6124 and NS6125, shall be performed once per day during normal daylight operations. A trained employee shall record whether emissions are normal or abnormal.
- (b) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.
- (c) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.
- (d) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.
- (e) If abnormal emissions are observed, the Permittee shall take reasonable response steps in accordance with Section C - Response to Excursions or Exceedances. Failure to take response steps in accordance with Section C - Response to Excursions or Exceedances, shall be considered a deviation of this permit.
- (f) The Permittee shall comply with the most current Continuous Compliance Plan visible emission evaluation program, in accordance with Section C- Continuous Compliance Plan.

D.9.14 Parametric Monitoring

- (a) The Permittee shall record the pressure drop across the No. 2 QBOP Secondary Emissions baghouse NS3124 used in conjunction with the secondary emissions from the three (3) Q-BOP vessels T, W, and Y, at least once per day, when any of the three (3) Q-BOP vessels T, W, and Y, is in operation. When for any one reading, the pressure drop across the baghouse is outside the normal range of 2 and 10 inches of water or a range established during the latest stack test, the Permittee shall take reasonable response steps in accordance with Section C- Response to Excursions or Exceedances. A pressure reading that is outside the above mentioned range is not a deviation from this permit. Failure to take response steps in accordance with Section C - Response to Excursions or Exceedances, shall be considered a deviation of this permit.
- (b) The Permittee shall record the pressure drop across the venture scrubber throats and scrubber total supply water flow rate of the No. 2 Q-BOP gas cleaning Systems scrubbers NS3125 and NS3126 used in conjunction with the 3 No.2 Q-BOP vessels at least once per day when either the three (3) Q-BOP vessels T, W, and Y units is operating. For each scrubber system, when for any one reading across the venture scrubber throats is outside the normal range of 50 to 70 inches of water or the scrubber supply water flow rate is outside the normal range of 2,000 and 4,500 gallons per minute (gpm) or ranges established during the latest stack test, the Permittee shall take reasonable response steps in accordance with Section C- Response to Excursions or Exceedances. A reading that is outside the above mentioned ranges for respective parameters is not a deviation from this permit. Failure to take response steps in accordance with Section C - Response to Excursions or Exceedances, shall be considered a deviation of this permit.
- (c) The Permittee shall record the pressure drop across the Hot Metal Desulfurization baghouse NS3115 used in conjunction with the No, 2 Q-BOP Hot Metal Desulfurization stations and mixers, at least once per day when the desulfurization stations and mixers are in operation. When for any one reading, the pressure drop across the baghouse is outside the normal range of 2.0 and 10.0 inches of water or a range established during the latest stack test, the Permittee shall take reasonable response steps in accordance with Section C - Response to Excursions or Exceedances. A pressure reading that is outside the above mentioned range is not a deviation from this permit. Failure to take response steps in accordance with Section C - Response to Excursions or Exceedances, shall be considered a deviation of this permit.
- (d) The Permittee shall comply with the most current Continuous Compliance Plan for the baghouse operation, recording and maintenance, in accordance with Section C- Continuous Compliance Plan.
- (e) The instrument used for determining the pressure and flow rate shall comply with Section C – Instrument Specifications, of this permit, shall be subject to approval by IDEM, OAQ, and shall be calibrated at least once every six (6) months.

D.9.15 Scrubber Failure Detection

In the event that a scrubber failure has been observed:

Failed units and the associated process will be shut down immediately until the failed units have been repaired or replaced. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions).

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

D.9.16 General Record Keeping Requirements

- (a) Pursuant to the U.S. EPA Administrative Consent Order, issued January 2, 2004, and to document compliance with Condition D.9.6, the Permittee shall keep records of the monthly hot metal throughput for the No. 1 and No. 2 Hot Metal Desulfurization Stations.
- (b) To document compliance with Condition D.9.13 the Permittee shall maintain the records of once per day visible emission notations of the Hot Metal Transfer and Desulfurization Stations baghouse discharge NS6144, No. 2 QBOP Secondary Emissions Baghouse Stack NS6123, and No. 2 Q-BOP Gas Cleaning System Stacks NS6124 and NS6125 exhausts.
- (c) To document compliance with Condition D.9.14, the Permittee shall maintain records of the once per day of the pressure drop of the No. 2 QBOP secondary emissions baghouse NS3124, pressure drop across the venturi scrubber throats and supply water flow rate of the No. 2 QBOP Gas cleaning systems scrubbers NS3125 and NS3126, and pressure drop of the Hot Metal Transfer and Desulfurization baghouse NS3115, during normal operation.
- (d) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

National Emission Standards for Hazardous Air Pollutants (NESHAP) from Integrated Iron and Steel manufacturing [40 CFR 63, Subpart FFFFF]

D.9.17 National Emission Standards for Hazardous Air Pollutants (NESHAP) from Integrated Iron and Steel manufacturing – Basic Oxygen Process Furnaces (BOPF) [40 CFR 63, Subpart FFFFF]

Title 40: Protection of Environment

[PART 63—NATIONAL EMISSION STANDARDS FOR HAZARDOUS AIR POLLUTANTS FOR SOURCE CATEGORIES](#)

Subpart FFFFF—National Emission Standards for Hazardous Air Pollutants for Integrated Iron and Steel Manufacturing Facilities

Source: 68 FR 27663, May 20, 2003, unless otherwise noted.

What This Subpart Covers

§ 63.7780 What is the purpose of this subpart?

This subpart establishes national emission standards for hazardous air pollutants (NESHAP) for integrated iron and steel manufacturing facilities. This subpart also establishes requirements to demonstrate initial and continuous compliance with all applicable emission limitations and operation and maintenance requirements in this subpart.

§ 63.7781 Am I subject to this subpart?

You are subject to this subpart if you own or operate an integrated iron and steel manufacturing facility that is (or is part of) a major source of hazardous air pollutants (HAP) emissions. Your integrated iron and steel manufacturing facility is a major source of HAP if it emits or has the potential to emit any single HAP at a rate of 10 tons or more per year or any combination of HAP at a rate of 25 tons or more per year.

§ 63.7782 What parts of my plant does this subpart cover?

- (a) This subpart applies to each new and existing affected source at your integrated iron and steel manufacturing facility.
- (b) The affected sources are each new or existing basic oxygen process furnace (BOPF) shop at your integrated iron and steel manufacturing facility.
- (c) This subpart covers emissions from the BOPF shop including each individual BOPF and shop ancillary operations (hot metal transfer, hot metal desulfurization, slag skimming, and ladle metallurgy).
- (d) A BOPF shop at your integrated iron and steel manufacturing facility is existing if you commenced construction or reconstruction of the affected source before July 13, 2001.
- (e) A BOPF shop at your integrated iron and steel manufacturing facility is new if you commence construction or reconstruction of the affected source on or after July 13, 2001. An affected source is reconstructed if it meets the definition of reconstruction in §63.2.

§ 63.7783 When do I have to comply with this subpart?

- (a) If you have an existing affected source, you must comply with each emission limitation and operation and maintenance requirement in this subpart that applies to you by the dates specified in paragraphs (a)(1) and (2) of this section.
 - (1) No later than May 22, 2006 for all emission sources at an existing affected source except for a sinter cooler at an existing sinter plant.
 - (d) If your integrated iron and steel manufacturing facility is not a major source and becomes a major source of HAP, the following compliance dates apply to you.
 - (1) Any portion of the existing integrated iron and steel manufacturing facility that becomes a new affected source or a new reconstructed source must be in compliance with this subpart upon startup.
 - (2) All other parts of the integrated iron and steel manufacturing facility must be in compliance with this subpart no later than 2 years after it becomes a major source.
- (e) You must meet the notification and schedule requirements in §63.7840. Several of these notifications must be submitted before the compliance date for your affected source.

Emission Limitations

§ 63.7790 What emission limitations must I meet?

- (a) You must meet each emission limit and opacity limit in Table 1 to this subpart that applies to you.
- (b) You must meet each operating limit for capture systems and control devices in paragraphs (b)(1) through (3) of this section that applies to you.
 - (1) You must operate each capture system applied to secondary emissions from a BOPF at or above the lowest value or settings established for the operating limits in your operation and maintenance plan;

(2) For each venturi scrubber applied to meet any particulate emission limit in Table 1 to this subpart, you must maintain the hourly average pressure drop and scrubber water flow rate at or above the minimum levels established during the initial performance test.

(3) For each electrostatic precipitator applied to emissions from a BOPF, you must maintain the hourly average opacity of emissions exiting the control device at or below 10 percent.

(c) An owner or operator who uses an air pollution control device other than a baghouse, venturi scrubber, or electrostatic precipitator must submit a description of the device; test results collected in accordance with §63.7822 verifying the performance of the device for reducing emissions of particulate matter to the atmosphere to the levels required by this subpart; a copy of the operation and maintenance plan required in §63.7800(b); and appropriate operating parameters that will be monitored to maintain continuous compliance with the applicable emission limitation(s). The monitoring plan identifying the operating parameters to be monitored is subject to approval by the Administrator.

Operation and Maintenance Requirements

§ 63.7800 What are my operation and maintenance requirements?

(a) As required by §63.6(e)(1)(i), you must always operate and maintain your affected source, including air pollution control and monitoring equipment, in a manner consistent with good air pollution control practices for minimizing emissions at least to the levels required by this subpart.

(b) You must prepare and operate at all times according to a written operation and maintenance plan for each capture system or control device subject to an operating limit in §63.7790(b). Each plan must address the elements in paragraphs (b)(1) through (5) of this section.

(1) Monthly inspections of the equipment that is important to the performance of the total capture system (e.g., pressure sensors, dampers, and damper switches). This inspection must include observations of the physical appearance of the equipment (e.g., presence of holes in ductwork or hoods, flow constrictions caused by dents or accumulated dust in the ductwork, and fan erosion). The operation and maintenance plan also must include requirements to repair any defect or deficiency in the capture system before the next scheduled inspection.

(2) Preventative maintenance for each control device, including a preventative maintenance schedule that is consistent with the manufacturer's instructions for routine and long-term maintenance.

(3) Operating limits for each capture system applied to secondary emissions from a BOPF. You must establish the operating limits according to the requirements in paragraphs (b)(3)(i) through (iii) of this section.

(i) Select operating limit parameters appropriate for the capture system design that are representative and reliable indicators of the performance of the capture system. At a minimum, you must use appropriate operating limit parameters that indicate the level of the ventilation draft and the damper position settings for the capture system when operating to collect emissions, including revised settings for seasonal variations. Appropriate operating limit parameters for ventilation draft include, but are not limited to, volumetric flow rate through each separately ducted hood, total volumetric flow rate at the inlet to the control device to which the capture system is vented, fan motor amperage, or static pressure.

(ii) For each operating limit parameter selected in paragraph (b)(3)(i) of this section, designate the value or setting for the parameter at which the capture system operates during the process operation. If your operation allows for more than one process to be operating simultaneously, designate the value or setting for the parameter at which the capture system operates during each possible configuration that you may operate.

(iii) Include documentation in your plan to support your selection of the operating limits established for the capture system. This documentation must include a description of the capture system design, a description of the capture system operating during production, a description of each selected operating limit parameter, a rationale for why you chose the parameter, a description of the method used to monitor the parameter according to the requirements of §63.7830(a), and the data used to set the value or setting for the parameter for each of your process configurations.

(4) Corrective action procedures for bag leak detection systems. In the event a bag leak detection system alarm is triggered, you must initiate corrective action to determine the cause of the alarm within 1 hour of the alarm, initiate corrective action to correct the cause of the problem within 24 hours of the alarm, and complete the corrective action as soon as practicable. Corrective actions may include, but are not limited to:

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

(ii) Sealing off defective bags or filter media.

(iii) Replacing defective bags or filter media or otherwise repairing the control device.

(iv) Sealing off a defective baghouse compartment.

(v) Cleaning the bag leak detection system probe, or otherwise repair the bag leak detection system.

(vi) Shutting down the process producing the particulate emissions; and

(5) Corrective actions procedures for venture scrubbers equipped with continuous parametric monitoring systems (CPMS). In the event a venture scrubber exceeds the operating limit in §63.7790(b)(2), you must take corrective actions consistent with your site-specific monitoring plan in accordance with §63.7831(a).

(6) Corrective action procedures for electrostatic precipitators equipped with COMS. In the event an electrostatic precipitator exceeds the operating limit in §63.7790(b)(3), you must take corrective actions consistent with your site-specific monitoring plan in accordance with §63.7831(a).

General Compliance Requirements

§ 63.7810 What are my general requirements for complying with this subpart?

(a) You must be in compliance with the emission limitations and operation and maintenance requirements in this subpart at all times, except during periods of startup, shutdown, and malfunction as defined in §63.2.

(b) During the period between the compliance date specified for your affected source in §63.7783 and the date upon which continuous monitoring systems have been installed and certified and any applicable operating limits have been set, you must maintain a log detailing the operation and maintenance of the process and emissions control equipment.

(c) You must develop a written startup, shutdown, and malfunction plan according to the provisions in §63.6(e)(3).

[68 FR 27663, May 20, 2003, as amended at 71 FR 20468, Apr. 20, 2006]

Initial Compliance Requirements

§ 63.7820 By what date must I conduct performance tests or other initial compliance demonstrations?

(a) You must conduct a performance test to demonstrate initial compliance with each emission and opacity limit in Table 1 to this subpart that applies to you. You must conduct the performance tests within 180 calendar days after the compliance date that is specified in §63.7783 for your affected source and report the results in your notification of compliance status.

(b) For each operation and maintenance requirement that applies to you where initial compliance is not demonstrated using a performance test or opacity observation, you must demonstrate initial compliance within 30 calendar days after the compliance date that is specified for your affected source in §63.7783.

§ 63.7821 When must I conduct subsequent performance tests?

You must conduct subsequent performance tests to demonstrate compliance with all applicable PM and opacity limits in Table 1 to this subpart at the frequencies specified in paragraphs (b) through (d) of this section.

(b) For each sinter cooler at an existing sinter plant and each emissions unit equipped with a control device other than a baghouse, you must conduct subsequent performance tests no less frequently than twice (at mid-term and renewal) during each term of your title V operating permit.

(c) For each emissions unit equipped with a baghouse, you must conduct subsequent performance tests no less frequently than once during each term of your title V operating permit.

(d) For sources without a title V operating permit, you must conduct subsequent performance tests every 2.5 years.

§ 63.7822 What test methods and other procedures must I use to demonstrate initial compliance with the emission limits for particulate matter?

(a) You must conduct each performance test that applies to your affected source according to the requirements in §63.7(e)(1) and the conditions detailed in paragraphs (b) through (i) of this section.

(b) To determine compliance with the applicable emission limit for particulate matter in Table 1 to this subpart, follow the test methods and procedures in paragraphs (b)(1) and (2) of this section.

(1) Determine the concentration of particulate matter according to the following test methods in appendix A to part 60 of this chapter:

(i) Method 1 to select sampling port locations and the number of traverse points. Sampling ports must be located at the outlet of the control device and prior to any releases to the atmosphere.

(ii) Method 2, 2F, or 2G to determine the volumetric flow rate of the stack gas.

- (iii) Method 3, 3A, or 3B to determine the dry molecular weight of the stack gas.
 - (iv) Method 4 to determine the moisture content of the stack gas.
 - (v) Method 5, 5D, or 17, as applicable, to determine the concentration of particulate matter (front half filterable catch only).
- (2) Collect a minimum sample volume of 60 dry standard cubic feet (dscf) of gas during each particulate matter test run. Three valid test runs are needed to comprise a performance test.
- (d) If you apply two or more control devices in parallel to emissions from a BOPF, compute the average flow-weighted concentration for each test run using Equation 2 of this section as follows:

$$C_w = \frac{\sum_{i=1}^n C_i Q_i}{\sum_{i=1}^n Q_i} \quad (\text{Eq. 2})$$

Where:

C_w = Flow-weighted concentration, gr/dscf;

C_i = Concentration of particulate matter from exhaust stream "i", gr/dscf; and

Q_i = Volumetric flow rate of effluent gas from exhaust stream "i", dry standard cubic foot per minute (dscfm).

- (f) For a primary emission control device applied to emissions from a BOPF with a closed hood system, sample only during the primary oxygen blow and do not sample during any subsequent reblows. Continue sampling for each run for an integral number of primary oxygen blows.
- (g) For a primary emission control system applied to emissions from a BOPF with an open hood system and for a control device applied solely to secondary emissions from a BOPF, you must complete the requirements of paragraphs (g)(1) and (2) of this section:
 - (1) Sample only during the steel production cycle. Conduct sampling under conditions that are representative of normal operation. Record the start and end time of each steel production cycle and each period of abnormal operation; and
 - (2) Sample for an integral number of steel production cycles. The steel production cycle begins when the scrap is charged to the furnace and ends 3 minutes after the slag is emptied from the vessel into the slag pot.
- (h) For a control device applied to emissions from BOPF shop ancillary operations (hot metal transfer, skimming, desulfurization, or ladle metallurgy), sample only when the operation(s) is being conducted.
- (i) Subject to approval by the permitting authority, you may conduct representative sampling of stacks when there are more than three stacks associated with a process.

§ 63.7823 What test methods and other procedures must I use to demonstrate initial compliance with the opacity limits?

(a) You must conduct each performance test that applies to your affected source according to the requirements in §63.7(h)(5) and the conditions detailed in paragraphs (b) through (d) of this section.

(b) You must conduct each visible emissions performance test such that the opacity observations overlap with the performance test for particulate matter.

(d) To determine compliance with the applicable opacity limit in Table 1 to this subpart for BOPF shops:

(1) For an existing BOPF shop:

(i) Using a certified observer, determine the opacity of emissions according to Method 9 in appendix A to part 60 of this chapter except as specified in paragraphs (d)(1)(ii) and (iii) of this section.

(ii) Instead of procedures in section 2.4 of Method 9 in appendix A to part 60 of this chapter, record observations to the nearest 5 percent at 15-second intervals for at least three steel production cycles.

(iii) Instead of procedures in section 2.5 of Method 9 in appendix A to part 60 of this chapter, determine the 3-minute block average opacity from the average of 12 consecutive observations recorded at 15-second intervals.

(4) Opacity observations must cover the entire steel production cycle and must be made for at least three cycles. The steel production cycle begins when the scrap is charged to the furnace and ends 3 minutes after the slag is emptied from the vessel into the slag pot.

(5) Determine and record the starting and stopping times of the steel production cycle.

§ 63.7824 What test methods and other procedures must I use to establish and demonstrate initial compliance with operating limits?

(a) For each capture system subject to an operating limit in §63.7790(b)(1), you must certify that the system operated during the performance test at the site-specific operating limits established in your operation and maintenance plan using the procedures in paragraphs (a)(1) through (4) of this section.

(1) Concurrent with all opacity observations, measure and record values for each of the operating limit parameters in your capture system operation and maintenance plan according to the monitoring requirements specified in §63.7830(a).

(2) For any dampers that are manually set and remain at the same position at all times the capture system is operating, the damper position must be visually checked and recorded at the beginning and end of each opacity observation period segment.

(3) Review and record the monitoring data. Identify and explain any times the capture system operated outside the applicable operating limits.

(4) Certify in your performance test report that during all observation period segments, the capture system was operating at the values or settings established in your capture system operation and maintenance plan.

(b) For a venturi scrubber subject to operating limits for pressure drop and scrubber water flow rate in §63.7790(b)(2), you must establish site-specific operating limits according to the procedures in paragraphs (b)(1) and (2) of this section. You may establish the parametric monitoring limit during the initial performance test or during any other performance test run that meets the emission limit.

(1) Using the CPMS required in §63.7830(c), measure and record the pressure drop and scrubber water flow rate during each run of the particulate matter performance test.

(2) Compute and record the hourly average pressure drop and scrubber water flow rate for each individual test run. Your operating limits are the lowest average pressure drop and scrubber water flow rate value in any of the three runs that meet the applicable emission limit.

(c) You may change the operating limits for a capture system or venturi scrubber, if you meet the requirements in paragraphs (c) (1) through (3) of this section.

(1) Submit a written notification to the Administrator of your request to conduct a new performance test to revise the operating limit.

(2) Conduct a performance test to demonstrate compliance with the applicable emission limitation in Table 1 to this subpart.

(3) Establish revised operating limits according to the applicable procedures in paragraphs (a) through (c) of this section for a control device or capture system.

§ 63.7825 How do I demonstrate initial compliance with the emission limitations that apply to me?

(a) For each affected source subject to an emission or opacity limit in Table 1 to this subpart, you have demonstrated initial compliance if:

(1) You meet the conditions in Table 2 to this subpart; and

(2) For each capture system subject to the operating limit in §63.7790(b)(1), you have established appropriate site-specific operating limit(s) and have a record of the operating parameter data measured during the performance test in accordance with §63.7824(a)(1).

(3) For each venturi scrubber subject to the operating limits for pressure drop and scrubber water flow rate in §63.7790(b)(2), you have established appropriate site-specific operating limits and have a record of the pressure drop and scrubber water flow rate measured during the performance test in accordance with §63.7824(b).

(c) For each emission limitation that applies to you, you must submit a notification of compliance status according to §63.7840(e).

§ 63.7826 How do I demonstrate initial compliance with the operation and maintenance requirements that apply to me?

(a) For a capture system applied to secondary emissions from a BOPF, you have demonstrated initial compliance if you meet all of the conditions in paragraphs (a)(1) through (4) of this section.

(1) Prepared the capture system operation and maintenance plan according to the requirements of §63.7800(b), including monthly inspection procedures and detailed descriptions of the operating parameter(s) selected to monitor the capture system;

(2) Certified in your performance test report that the system operated during the test at the operating limits established in your operation and maintenance plan;

(3) Submitted a notification of compliance status according to the requirements in §63.7840(e), including a copy of the capture system operation and maintenance plan and your certification that you will operate the capture system at the values or settings established for the operating limits in that plan; and

(4) Prepared a site-specific monitoring plan according to the requirements in §63.7831(a).

(b) For each control device subject to operating limits in §63.7790(b)(2) or (3), you have demonstrated initial compliance if you meet all the conditions in paragraphs (b)(1) through (3) of this section.

(1) Prepared the control device operation and maintenance plan according to the requirements of §63.7800(b), including a preventative maintenance schedule and, as applicable, detailed descriptions of the corrective action procedures for baghouses and or control devices;

(2) Submitted a notification of compliance status according to the requirements in §63.7840(e), including a copy of the operation and maintenance plan; and

(3) Prepared a site-specific monitoring plan according to the requirements in §63.7831(a).

Continuous Compliance Requirements

§ 63.7830 What are my monitoring requirements?

(a) For each capture system subject to an operating limit in §63.7790(b)(1) established in your capture system operation and maintenance plan, you must install, operate, and maintain a CPMS according to the requirements in §63.7831(e) and the requirements in paragraphs (a)(1) through (3) of this section.

(1) Dampers that are manually set and remain in the same position are exempt from the requirement to install and operate a CPMS. If dampers are not manually set and remain in the same position, you must make a visual check at least once every 24 hours to verify that each damper for the capture system is in the same position as during the initial performance test.

(3) If you use a flow measurement device to monitor the operating limit parameter for a capture system applied to secondary emissions from a BOPF, you must monitor the average rate for each steel production cycle (e.g., the average actual volumetric flow rate through each separately ducted hood for each steel production cycle, the average total volumetric flow rate at the inlet to the control device for each steel production cycle) according to the requirements in §63.7832.

(b) Except as provided in paragraph (b)(3) of this section, you must meet the requirements in paragraph (b)(1) or (2) of this section for each baghouse applied to meet any particulate emission limit in Table 1 to this subpart. You must conduct inspections of each baghouse according to the requirements in paragraph (b)(4) of this section.

(1) Install, operate, and maintain a bag leak detection system according to §63.7831(f) and monitor the relative change in particulate matter loadings according to the requirements in §63.7832; or

(2) If you do not install and operate a bag leak detection system, you must install, operate, and maintain a COMS according to the requirements in §63.7831(h) and monitor the hourly average opacity of emissions exiting each control device stack according to the requirements in §63.7832.

(3) A bag leak detection system and COMS are not required for a baghouse that meets the requirements in paragraphs (b)(3)(i) and (ii) of this section.

(i) The baghouse is a positive pressure baghouse and is not equipped with exhaust gas stacks; and

(ii) The baghouse was installed before August 30, 2005.

(4) You must conduct inspections of each baghouse at the specified frequencies according to the requirements in paragraphs (b)(4)(i) through (viii) of this section.

- (i) Monitor the pressure drop across each baghouse cell each day to ensure pressure drop is within the normal operating range identified in the manual.
 - (ii) Confirm that dust is being removed from hoppers through weekly visual inspections or other means of ensuring the proper functioning of removal mechanisms.
 - (iii) Check the compressed air supply for pulse-jet baghouses each day.
 - (iv) Monitor cleaning cycles to ensure proper operation using an appropriate methodology.
 - (v) Check bag cleaning mechanisms for proper functioning through monthly visual inspection or equivalent means.
 - (vi) Make monthly visual checks of bag tension on reverse air and shaker-type baghouses to ensure that bags are not kinked (knead or bent) or laying on their sides. You do not have to make this check for shaker-type baghouses using self-tensioning (spring-loaded) devices.
 - (vii) Confirm the physical integrity of the baghouse through quarterly visual inspections of the baghouse interior for air leaks.
 - (viii) Inspect fans for wear, material buildup, and corrosion through quarterly visual inspections, vibration detectors, or equivalent means.
- (c) For each venturi scrubber subject to the operating limits for pressure drop and scrubber water flow rate in §63.7790(b)(2), you must install, operate, and maintain CPMS according to the requirements in §63.7831(g) and monitor the hourly average pressure drop and water flow rate according to the requirements in §63.7832.

§ 63.7831 What are the installation, operation, and maintenance requirements for my monitors?

- (a) For each CPMS required in §63.7830, you must develop and make available for inspection upon request by the permitting authority a site-specific monitoring plan that addresses the requirements in paragraphs (a)(1) through (8) of this section.
- (1) Installation of the CPMS sampling probe or other interface at a measurement location relative to each affected process unit such that the measurement is representative of control of the exhaust emissions (e.g., on or downstream of the last control device);
 - (2) Performance and equipment specifications for the sample interface, the parametric signal analyzer, and the data collection and reduction system;
 - (3) Performance evaluation procedures and acceptance criteria (e.g., calibrations);
 - (4) Ongoing operation and maintenance procedures in accordance with the general requirements of §§63.8(c)(1), (c)(3), (c)(4)(ii), (c)(7), and (c)(8);
 - (5) Ongoing data quality assurance procedures in accordance with the general requirements of §63.8(d); and
 - (6) Ongoing recordkeeping and reporting procedures in accordance the general requirements of §§63.10(c), (e)(1), and (e)(2)(i).

(7) Corrective action procedures you will follow in the event a venturi scrubber exceeds the operating limit in §63.7790(b)(2); and

(b) Unless otherwise specified, each CPMS must:

(1) Complete a minimum of one cycle of operation for each successive 15-minute period and collect a minimum of three of the required four data points to constitute a valid hour of data;

(2) Provide valid hourly data for at least 95 percent of every averaging period; and

(3) Determine and record the hourly average of all recorded readings.

(c) You must conduct a performance evaluation of each CPMS in accordance with your site-specific monitoring plan.

(d) You must operate and maintain the CPMS in continuous operation according to the site-specific monitoring plan.

(e) For each capture system subject to an operating limit in §63.7790(b)(1), you must install, operate, and maintain each CPMS according to the requirements in paragraphs (a) through (d) of this section.

(f) For each baghouse applied to meet any particulate emission limit in Table 1 of this subpart, you must install, operate, and maintain a bag leak detection system according to the requirements in paragraphs (f)(1) through (7) of this section.

(1) The system must be certified by the manufacturer to be capable of detecting emissions of particulate matter at concentrations of 10 milligrams per actual cubic meter (0.0044 grains per actual cubic foot) or less.

(2) The system must provide output of relative changes in particulate matter loadings.

(3) The system must be equipped with an alarm that will sound when an increase in relative particulate loadings is detected over a preset level. The alarm must be located such that it can be heard by the appropriate plant personnel.

(4) Each system that works based on the triboelectric effect must be installed, operated, and maintained in a manner consistent with the guidance document, "Fabric Filter Bag Leak Detection Guidance," EPA-454/R-98-015, September 1997. You may install, operate, and maintain other types of bag leak detection systems in a manner consistent with the manufacturer's written specifications and recommendations.

(5) To make the initial adjustment of the system, establish the baseline output by adjusting the sensitivity (range) and the averaging period of the device. Then, establish the alarm set points and the alarm delay time.

(6) Following the initial adjustment, do not adjust the sensitivity or range, averaging period, alarm set points, or alarm delay time, except as detailed in your operation and maintenance plan. Do not increase the sensitivity by more than 100 percent or decrease the sensitivity by more than 50 percent over a 365-day period unless a responsible official certifies, in writing, that the baghouse has been inspected and found to be in good operating condition.

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

(g) For each venturi scrubber subject to operating limits in §63.7790(b)(2) for pressure drop and scrubber water flow rate, you must install, operate, and maintain each CPMS according to the requirements in paragraphs (a) through (d) of this section.

§ 63.7832 How do I monitor and collect data to demonstrate continuous compliance?

(a) Except for monitoring malfunctions, out-of-control periods as specified in §63.8(c)(7), associated repairs, and required quality assurance or control activities (including as applicable, calibration checks and required zero and span adjustments), you must monitor continuously (or collect data at all required intervals) at all times an affected source is operating.

(b) You may not use data recorded during monitoring malfunctions, associated repairs, and required quality assurance or control activities in data averages and calculations used to report emission or operating levels or to fulfill a minimum data availability requirement, if applicable. You must use all the data collected during all other periods in assessing compliance.

(c) A monitoring malfunction is any sudden, infrequent, not reasonably preventable failure of the monitoring to provide valid data. Monitoring failures that are caused in part by poor maintenance or careless operation are not malfunctions.

§ 63.7833 How do I demonstrate continuous compliance with the emission limitations that apply to me?

(a) You must demonstrate continuous compliance for each affected source subject to an emission or opacity limit in §63.7790(a) by meeting the requirements in Table 3 to this subpart.

(b) You must demonstrate continuous compliance for each capture system subject to an operating limit in §63.7790(b)(1) by meeting the requirements in paragraphs (b)(1) and (2) of this section.

(1) Operate the capture system at or above the lowest values or settings established for the operating limits in your operation and maintenance plan; and

(2) Monitor the capture system according to the requirements in §63.7830(a) and collect, reduce, and record the monitoring data for each of the operating limit parameters according to the applicable requirements of this subpart;

(c) For each baghouse applied to meet any particulate emission limit in Table 1 to this subpart, you must demonstrate continuous compliance by completing the requirements in paragraphs (c)(1) or (2) of this section as applicable, and paragraphs (c)(3) and (4) of this section:

(1) For a baghouse equipped with a bag leak detection system, operating and maintaining each bag leak detection system according to §63.7831(f) and recording all information needed to document conformance with these requirements. If you increase or decrease the sensitivity of the bag leak detection system beyond the limits specified in §63.7831(f)(6), you must include a copy of the required written certification by a responsible official in the next semiannual compliance report.

(2) For a baghouse equipped with a COMS, operating and maintaining each COMS and reducing the COMS data according to §63.7831(h).

(3) Inspecting each baghouse according to the requirements in §63.7830(b)(4) and maintaining all records needed to document conformance with these requirements.

(4) Maintaining records of the time you initiated corrective action in the event of a bag leak detection system alarm or when the hourly average opacity exceeded 5 percent, the corrective action(s) taken, and the date on which corrective action was completed.

(d) For each venturi scrubber subject to the operating limits for pressure drop and scrubber water flow rate in §63.7790(b)(2), you must demonstrate continuous compliance by meeting the requirements of paragraphs (d)(1) through (4) of this section:

(1) Maintaining the hourly average pressure drop and scrubber water flow rate at levels no lower than those established during the initial or subsequent performance test;

(2) Operating and maintaining each venturi scrubber CPMS according to §63.7831(g) and recording all information needed to document conformance with these requirements; and

(3) Collecting and reducing monitoring data for pressure drop and scrubber water flow rate according to §63.7831(b) and recording all information needed to document conformance with these requirements.

(4) If the hourly average pressure drop or scrubber water flow rate is below the operating limits, you must follow the corrective action procedures in paragraph (g) of this section.

§ 63.7834 How do I demonstrate continuous compliance with the operation and maintenance requirements that apply to me?

(a) For each capture system and control device subject to an operating limit in §63.7790(b), you must demonstrate continuous compliance with the operation and maintenance requirements in §63.7800(b) by meeting the requirements of paragraphs (a)(1) through ~~(3)~~ (4) of this section:

(1) Making monthly inspections of capture systems and initiating corrective action according to §63.7800(b)(1) and recording all information needed to document conformance with these requirements;

(2) Performing preventative maintenance according to §63.7800(b)(2) and recording all information needed to document conformance with these requirements; and

(3) Initiating and completing corrective action for a baghouse equipped with a bag leak detection system or COMS according to §63.7800(b)(4) and recording all information needed to document conformance with these requirements, including the time you initiated corrective action, the corrective action(s) taken, and date on which corrective action was completed.

(4) Initiating and completing corrective action for a venturi scrubber equipped with a CPMS or an electrostatic precipitator equipped with a COMS according to §63.7833(g) and recording all information needed to document conformance with these requirements, including the time you initiated corrective action, the corrective action(s) taken within the first 24 hours according to §63.7833(g)(1) and whether they were successful, the corrective action(s) taken within the second 24 hours according to §63.7833(g)(2) and whether they were successful, and the date on which corrective action was completed.

(b) You must maintain a current copy of the operation and maintenance plan required in §63.7800(b) onsite and available for inspection upon request. You must keep the plans for the life of the affected source or until the affected source is no longer subject to the requirements of this subpart.

§ 63.7835 What other requirements must I meet to demonstrate continuous compliance?

(a) *Deviations.* Except as provided in §63.7833(g), you must report each instance in which you did not meet each emission limitation in §63.7790 that applies to you. This includes periods of startup, shutdown, and malfunction. You also must report each instance in which you did not meet each

operation and maintenance requirement in §63.7800 that applies to you. These instances are deviations from the emission limitations and operation and maintenance requirements in this subpart. These deviations must be reported according to the requirements in §63.7841.

(b) *Startups, shutdowns, and malfunctions.* (1) Consistent with §§63.6(e) and 63.7(e)(1), deviations that occur during a period of startup, shutdown, or malfunction are not violations if you demonstrate to the Administrator's satisfaction that you were operating in accordance with §63.6(e)(1).

(2) The Administrator will determine whether deviations that occur during a period of startup, shutdown, or malfunction are violations, according to the provisions in §63.6(e).

[68 FR 27663, May 20, 2003, as amended at 71 FR 20468, Apr. 20, 2006]

Notifications, Reports, and Records

§ 63.7840 What notifications must I submit and when?

(a) You must submit all of the notifications in §§63.6(h)(4) and (5), 63.7(b) and (c), 63.8(e) and (f)(4), and 63.9(b) through (h) that apply to you by the specified dates.

(b) As specified in §63.9(b)(2), if you startup your affected source before May 20, 2003, you must submit your initial notification no later than September 17, 2003.

(d) If you are required to conduct a performance test, you must submit a notification of intent to conduct a performance test at least 60 calendar days before the performance test is scheduled to begin as required in §63.7(b)(1).

(e) If you are required to conduct a performance test, opacity observation, or other initial compliance demonstration, you must submit a notification of compliance status according to §63.9(h)(2)(ii).

(1) For each initial compliance demonstration that does not include a performance test, you must 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, you must 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 §63.10(d)(2).

§ 63.7841 What reports must I submit and when?

(a) *Compliance report due dates.* Unless the Administrator has approved a different schedule, you must submit a semiannual compliance report to your permitting authority according to the requirements in paragraphs (a)(1) through (5) of this section.

(1) The first compliance report must cover the period beginning on the compliance date that is specified for your affected source in §63.7783 and ending on June 30 or December 31, whichever date comes first after the compliance date that is specified for your source in §63.7783.

(2) The first compliance report must be postmarked or delivered no later than July 31 or January 31, whichever date comes first after your first compliance report is due.

(3) Each subsequent compliance report must cover the semiannual reporting period from January 1 through June 30 or the semiannual reporting period from July 1 through December 31.

(4) Each subsequent compliance report must be postmarked or delivered no later than July 31 or January 31, whichever date comes first after the end of the semiannual reporting period.

(5) For each affected source that is subject to permitting regulations pursuant to 40 CFR part 70 or 71, and if the permitting authority has established dates for submitting semiannual reports pursuant to 40 CFR 70.6(a)(3)(iii)(A) or 40 CFR 71.6(a)(3)(iii)(A), you may submit the first and subsequent compliance reports according to the dates the permitting authority has established instead of according to the dates in paragraphs (a)(1) through (4) of this section.

(b) *Compliance report contents.* Each compliance report must include the information in paragraphs (b)(1) through (3) of this section and, as applicable, paragraphs (b)(4) through (8) of this section.

(1) Company name and address.

(2) Statement by a responsible official, with that official's name, title, and signature, certifying the truth, accuracy, and completeness of the content of the report.

(3) Date of report and beginning and ending dates of the reporting period.

(4) If you had a startup, shutdown, or malfunction during the reporting period and you took actions consistent with your startup, shutdown, and malfunction plan, the compliance report must include the information in §63.10(d)(5)(i).

(5) If there were no deviations from the continuous compliance requirements in §§63.7833 and 63.7834 that apply to you, a statement that there were no deviations from the emission limitations or operation and maintenance requirements during the reporting period.

(6) If there were no periods during which a continuous monitoring system (including a CPMS, COMS, or continuous emission monitoring system (CEMS)) was out-of-control as specified in §63.8(c)(7), a statement that there were no periods during which the CPMS was out-of-control during the reporting period.

(7) For each deviation from an emission limitation in §63.7790 that occurs at an affected source where you are not using a continuous monitoring system (including a CPMS, COMS, or CEMS) to comply with an emission limitation in this subpart, the compliance report must contain the information in paragraphs (b)(1) through (4) of this section and the information in paragraphs (b)(7)(i) and (ii) of this section. This includes periods of startup, shutdown, and malfunction.

(i) The total operating time of each affected source during the reporting period.

(ii) Information on the number, duration, and cause of deviations (including unknown cause, if applicable) as applicable and the corrective action taken.

(8) For each deviation from an emission limitation occurring at an affected source where you are using a continuous monitoring system (including a CPMS or COMS) to comply with the emission limitation in this subpart, you must include the information in paragraphs (b)(1) through (4) of this section and the information in paragraphs (b)(8)(i) through (xi) of this section. This includes periods of startup, shutdown, and malfunction.

(i) The date and time that each malfunction started and stopped.

(ii) The date and time that each continuous monitoring was inoperative, except for zero (low-level) and high-level checks.

(iii) The date, time, and duration that each continuous monitoring system was out-of-control as specified in §63.8(c)(7), including the information in §63.8(c)(8).

(iv) The date and time that each deviation started and stopped, and whether each deviation occurred during a period of startup, shutdown, or malfunction or during another period.

(v) A summary of the total duration of the deviation during the reporting period and the total duration as a percent of the total source operating time during that reporting period.

(vi) A breakdown of the total duration of the deviations during the reporting period including those that are due to startup, shutdown, control equipment problems, process problems, other known causes, and other unknown causes.

(vii) A summary of the total duration of continuous monitoring system downtime during the reporting period and the total duration of continuous monitoring system downtime as a percent of the total source operating time during the reporting period.

(viii) A brief description of the process units.

(ix) A brief description of the continuous monitoring system.

(x) The date of the latest continuous monitoring system certification or audit.

(xi) A description of any changes in continuous monitoring systems, processes, or controls since the last reporting period.

(c) *Immediate startup, shutdown, and malfunction report.* If you had a startup, shutdown, or malfunction during the semiannual reporting period that was not consistent with your startup, shutdown, and malfunction plan, you must submit an immediate startup, shutdown, and malfunction report according to the requirements in §63.10(d)(5)(ii).

(d) *Part 70 monitoring report.* If you have obtained a title V operating permit for an affected source pursuant to 40 CFR part 70 or 71, you must report all deviations as defined in this subpart in the semiannual monitoring report required by 40 CFR 70.6(a)(3)(iii)(A) or 40 CFR 71.6(a)(3)(iii)(A). If you submit a compliance report for an affected source along with, or as part of, the semiannual monitoring report required by 40 CFR 70.6(a)(3)(iii)(A) or 40 CFR 71.6(a)(3)(iii)(A), and the compliance report includes all the required information concerning deviations from any emission limitation or operation and maintenance requirement in this subpart, submission of the compliance report satisfies any obligation to report the same deviations in the semiannual monitoring report. However, submission of a compliance report does not otherwise affect any obligation you may have to report deviations from permit requirements for an affected source to your permitting authority.

§ 63.7842 What records must I keep?

(a) You must keep the following records:

(1) A copy of each notification and report that you submitted to comply with this subpart, including all documentation supporting any initial notification or notification of compliance status that you submitted, according to the requirements in §63.10(b)(2)(xiv).

(2) The records in §63.6(e)(3)(iii) through (v) related to startup, shutdown, and malfunction.

(3) Records of performance tests, performance evaluations, and opacity observations as required in §63.10(b)(2)(viii).

(b) For each COMS, you must keep the records specified in paragraphs (b)(1) through (4) of this section.

(1) Records described in §63.10(b)(2)(vi) through (xi).

(2) Monitoring data for a performance evaluation as required in §63.6(h)(7)(i) and (ii).

(3) Previous (that is, superceded) versions of the performance evaluation plan as required in §63.8(d)(3).

(4) Records of the date and time that each deviation started and stopped, and whether the deviation occurred during a period of startup, shutdown, or malfunction or during another period.

(c) You must keep the records required in §63.6(h)(6) for visual observations.

(d) You must keep the records required in §§63.7833 and 63.7834 to show continuous compliance with each emission limitation and operation and maintenance requirement that applies to you.

§ 63.7843 In what form and how long must I keep my records?

(a) Your records must be in a form suitable and readily available for expeditious review, according to §63.10(b)(1).

(b) As specified in §63.10(b)(1), you must keep each record for 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record.

(c) You must keep each record on site for at least 2 years after the date of each occurrence, measurement, maintenance, corrective action, report, or record according to §63.10(b)(1). You can keep the records offsite for the remaining 3 years.

Other Requirements and Information

§ 63.7850 What parts of the General Provisions apply to me?

Table 4 to this subpart shows which parts of the General Provisions in §§63.1 through 63.15 apply to you.

§ 63.7851 Who implements and enforces this subpart?

(a) This subpart can be implemented and enforced by us, the United States Environmental Protection Agency (U.S. EPA), or a delegated authority such as your State, local, or tribal agency. If the U.S. EPA Administrator has delegated authority to your State, local, or tribal agency, then that agency has the authority to implement and enforce this subpart. You should contact your U.S. EPA Regional Office to find out if this subpart is delegated to your State, local, or tribal agency.

(b) In delegating implementation and enforcement authority of this subpart to a State, local, or tribal agency under subpart E of this part, the authorities contained in paragraph (c) of this section are retained by the Administrator of the U.S. EPA and are not transferred to the State, local, or tribal agency.

(c) The authorities that will not be delegated to State, local, or tribal agencies are specified in paragraphs (c)(1) through (4) of this section.

(1) Approval of alternative opacity emission limits in Table 1 to this subpart under §63.6(h)(9).

(3) Approval of major alternatives to monitoring under §63.8(f) and as defined in §63.90.

(4) Approval of major alternatives to recordkeeping and reporting under §63.10(f) and as defined in §63.90.

§63.7852 What definitions apply to this subpart?

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

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

Basic oxygen process furnace means any refractory-lined vessel in which high-purity oxygen is blown under pressure through a bath of molten iron, scrap metal, and fluxes to produce steel. This definition includes both top and bottom blown furnaces, but does not include argon oxygen decarburization furnaces.

Basic oxygen process furnace shop means the place where steelmaking operations that begin with the transfer of molten iron (hot metal) from the torpedo car and end prior to casting the molten steel, including hot metal transfer, desulfurization, slag skimming, refining in a basic oxygen process furnace, and ladle metallurgy occur.

Basic oxygen process furnace shop ancillary operations means the processes where hot metal transfer, hot metal desulfurization, slag skimming, and ladle metallurgy occur.

Blast furnace means a furnace used for the production of molten iron from iron ore and other iron bearing materials.

Bottom-blown furnace means any basic oxygen process furnace in which oxygen and other combustion gases are introduced into the bath of molten iron through tuyeres in the bottom of the vessel or through tuyeres in the bottom and sides of the vessel.

Casthouse means the building or structure that encloses the bottom portion of a blast furnace where the hot metal and slag are tapped from the furnace.

Certified observer means a visible emission observer certified to perform EPA Method 9 opacity observations.

Desulfurization means the process in which reagents such as magnesium, soda ash, and lime are injected into the hot metal, usually with dry air or nitrogen, to remove sulfur.

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

(1) Fails to meet any requirement or obligation established by this subpart, including but not limited to any emission limitation (including operating limits) or operation and maintenance requirement;

(2) Fails to meet any term or condition that is adopted to implement an applicable requirement in this subpart and that is included in the operating permit for any affected source required to obtain such a permit; or

(3) Fails to meet any emission limitation in this subpart during startup, shutdown, or malfunction, regardless of whether or not such failure is permitted by this subpart.

Discharge end means the place where those operations conducted within the sinter plant starting at the discharge of the sintering machine's traveling grate including (but not limited to) hot sinter crushing, screening, and transfer operations occur.

Emission limitation means any emission limit, opacity limit, or operating limit.

Hot metal transfer station means the location in a basic oxygen process furnace shop where molten iron (hot metal) is transferred from a torpedo car or hot metal car used to transport hot metal from the blast furnace casthouse to a holding vessel or ladle in the basic oxygen process furnace shop. This location also is known as the reladling station or ladle transfer station.

Integrated iron and steel manufacturing facility means an establishment engaged in the production of steel from iron ore.

Ladle metallurgy means a secondary steelmaking process that is performed typically in a ladle after initial refining in a basic oxygen process furnace to adjust or amend the chemical and/or mechanical properties of steel.

Primary emissions means particulate matter emissions from the basic oxygen process furnace generated during the steel production cycle which are captured and treated in the furnace's primary emission control system.

Primary emission control system means the combination of equipment used for the capture and collection of primary emissions (e.g., an open hood capture system used in conjunction with an electrostatic precipitator or a closed hood system used in conjunction with a scrubber).

Primary oxygen blow means the period in the steel production cycle of a basic oxygen process furnace during which oxygen is blown through the molten iron bath by means of a lance inserted from the top of the vessel (top-blown) or through tuyeres in the bottom and/or sides of the vessel (bottom-blown).

Responsible official means responsible official as defined in §63.2.

Secondary emissions means particulate matter emissions that are not controlled by a primary emission control system, including emissions that escape from open and closed hoods, lance hole openings, and gaps or tears in ductwork to the primary emission control system.

Secondary emission control system means the combination of equipment used for the capture and collection of secondary emissions from a basic oxygen process furnace.

Sinter cooler means the apparatus used to cool the hot sinter product that is transferred from the discharge end through contact with large volumes of induced or forced draft air.

Sinter plant means the machine used to produce a fused clinker-like aggregate or sinter of fine iron-bearing materials suited for use in a blast furnace. The machine is composed of a continuous traveling grate that conveys a bed of ore fines and other finely divided iron-bearing material and fuel (typically coke breeze), a burner at the feed end of the grate for ignition, and a series of downdraft windboxes along the length of the strand to support downdraft combustion and heat sufficient to produce a fused sinter product.

Skimming station means the locations inside a basic oxygen process furnace shop where slag is removed from the top of the molten metal bath.

Steel production cycle means the operations conducted within the basic oxygen process furnace shop that are required to produce each batch of steel. The following operations are included: scrap charging, preheating (when done), hot metal charging, primary oxygen blowing, sampling, (vessel turndown and turnup), additional oxygen blowing (when done), tapping, and deslagging. The steel production cycle begins when the scrap is charged to the furnace and ends after the slag is emptied from the vessel into the slag pot.

Top-blown furnace means any basic oxygen process furnace in which oxygen is introduced into the bath of molten iron by means of an oxygen lance inserted from the top of the vessel.

Windboxes means the compartments that provide for a controlled distribution of downdraft combustion air as it is drawn through the sinter bed of a sinter plant to make the fused sinter product.

Table 1 to Subpart FFFFF of Part 63—Emission and Opacity Limits

As required in §63.7790(a), you must comply with each applicable emission and opacity limit in the following table:

For .	You must comply with each of the following
9. Each BOPF at a new or existing shop.	<p>a. You must not cause to be discharged to the atmosphere any gases that exit from a primary emission control system for a BOPF with a closed hood system at a new or existing BOPF shop that contain, on a flow-weighted basis, particulate matter in excess of 0.03 gr/dscf during the primary oxygen blow \2\ ,\3\; and</p> <p>b. You must not cause to be discharged to the atmosphere any gases that exit from a primary emission control system for a BOPF with an open hood system that contain, on a flow-weighted basis, particulate matter in excess of 0.02 gr/dscf during the steel production cycle for an existing BOPF shop \2\ ,\3\ or 0.01 gr/dscf during the steel production cycle for a new BOPF shop; \3\ and</p> <p>c. You must not cause to be discharged to the atmosphere any gases that exit from a control device used solely for the collection of secondary emissions from the BOPF that contain particulate matter in excess of 0.01 gr/dscf for an existing BOPF shop \2\ or 0.0052 gr/dscf for a new BOPF shop.</p>
10. Each hot metal transfer, skimming, and desulfurization operation at a new or existing BOPF shop.	You must not cause to be discharged to the atmosphere any gases that exit from a control device that contain particulate matter in excess of 0.01 gr/dscf for an existing BOPF shop \2\ or 0.003 gr/dscf for a new BOPF shop.
11. Each ladle metallurgy operation at a new or existing BOPF shop.	You must not cause to be discharged to the atmosphere any gases that exit from a

	control device that contain particulate matter in excess of 0.01 gr/dscf for an existing BOPF shop \2\ or 0.004 gr/dscf for a new BOPF shop.
12. Each roof monitoring at an existing BOPF shop.	You must not cause to be discharged to the atmosphere any secondary emissions that exit any opening in the BOPF shop or any other building housing the BOPF or BOPF shop operation that exhibit opacity greater than 20 percent (3-minute average).

\2\ This concentration limit (gr/dscf) for a control device does not apply to discharges inside a building or structure housing the discharge end at an existing sinter plant, inside a casthouse at an existing blast furnace, or inside an existing BOPF shop if the control device was installed before August 30, 2005.

\3\ This limit applies to control devices operated in parallel for a single BOPF during the oxygen blow.

Table 2 to Subpart FFFFF of Part 63—Initial Compliance with Emission and Opacity Limits

As required in §63.7825(a)(1), you must demonstrate initial compliance with the emission and opacity limits according to the following table:

For	You have demonstrated initial compliance if
9. Each BOPF at a new or existing BOPF shop..	<p>a. The average concentration of particulate matter from a primary emission control system applied to emissions from a BOPF with a closed hood system, measured according to the performance test procedures in §63.7822(f), did not exceed 0.03 gr/dscf for a new or existing BOPF shop;</p> <p>b. The average concentration of particulate matter from a primary emission control system applied to emissions from a BOPF with an open hood system, measured according to the performance test procedures in §63.7822(g), did not exceed 0.02 gr/dscf for an existing BOPF shop or 0.01 gr/dscf for a new BOPF shop; and</p> <p>c. The average concentration of particulate matter from a control device applied solely to secondary emissions from a BOPF, measured according to the performance test procedures in § 63.7822(g), did not exceed 0.01 gr/dscf for an existing BOPF shop or 0.0052 gr/dscf for a new BOPF shop.</p>
10. Each hot metal transfer skimming, and desulfurization at a new or existing BOPF shop.	The average concentration of particulate matter from a control device applied to emissions from hot metal transfer, skimming, or desulfurization, measured according to the performance test procedures in § 63.7822(h), did not exceed 0.01 gr/dscf for an existing BOPF shop or 0.003 gr/dscf for a new BOPF shop.
11. Each ladle metallurgy operation at a new or existing BOPF shop	The average concentration of particulate matter from a control device applied to emissions from

	a ladle metallurgy operation, measured according to the performance test procedures in § 63.7822(h), did not exceed 0.01 gr/dscf for an existing BOPF shop or 0.004 gr/dscf for a new BOPF shop.
12. Each roof monitor at an existing BOPF shop.	The opacity of secondary emissions from each BOPF shop, determined according to the performance test procedures in § 63.7823(did not exceed 20 percent (3-minute average)).

Table 3 to Subpart FFFFF of Part 63—Continuous Compliance with Emission and Opacity Limits

As required in §63.7833(a), you must demonstrate continuous compliance with the emission and opacity limits according to the following table:

For .	You must demonstrate continuous compliance by
9. Each BOPF at a new or existing BOPF shop	a. Maintaining emissions of particulate matter from the primary emission control system for a BOPF with a closed hood system at or below 0.03 gr/dscf; and b. Maintaining emissions of particulate matter from the primary emission control system for a BOPF with an open hood system at or below 0.02 gr/dscf for an existing BOPF shop or 0.01 gr/dscf for a new BOPF shop; and c. Maintaining emissions of particulate matter from a control device applied solely to secondary emissions from a BOPF at or below 0.01 gr/dscf for an existing BOPF shop or 0.0052 gr/dscf for a new BOPF shop; and d. Conducting subsequent performance tests at the frequencies specified in § 63.7821.
10. Each hot metal transfer, skimming, and desulfurization operation at a new or existing BOPF shop.	a. Maintaining emissions of particulate matter from a control device at or below 0.01 gr/dscf at an existing BOPF or 0.003 gr/dscf for a new BOPF; and b. Conducting subsequent performance tests at the frequencies specified in § 63.7821.
11. Each ladle metallurgy operation at a new or existing BOPF shop	a. Maintaining emissions of particulate matter from a control device at or below 0.01 gr/dscf at an existing BOPF shop or 0.004 gr/dscf for a new BOPF shop; and b. Conducting subsequent performance tests at the frequencies specified in § 63.7821.
12. Each roof monitor at an existing BOPF shop.	a. Maintaining the opacity of secondary emissions that exit any opening in the BOPF shop or other building housing the BOPF or shop operation at or below 20 percent (3-minute average); and b. Conducting subsequent performance tests at the frequencies specified in § 63.7821.

Table 4 to Subpart FFFFF of Part 63—Applicability of General Provisions to Subpart FFFFF

As required in §63.7850, you must comply with the requirements of the NESHAP General Provisions (40 CFR part 63, subpart A) shown in the following table:

Citation	Subject	Applies to Subpart FFFFF	Explanation
§ 63.1	Applicability.	Yes.	
§ 63.2	Definitions	Yes.	
§ 63.3.	Units and Abbreviations	Yes	
§ 63.4	Prohibited Activities	Yes.	
§ 63.5	Construction/Reconstruction	Yes.	
§ 63.6(a), (b), (c), (d), (e) (f), (g), (h)(2)(ii)-(h)(9)	Compliance with Standards and Maintenance Requirements.	Yes.	
§ 63.6(h)(2)(i).	Determining Compliance with Opacity and VE Standards	No.	Subpart FFFFF specifies methods and procedures for determining compliance with opacity emission and operating limits
§63.6(i)	Extension of Compliance with Emission Standards.	Yes.	
§ 63.6(j).	Exemption from compliance with Emission Standards	Yes.	
§ 63.7(a)(1)-(2)	Applicability and Performance Test Dates	No	Subpart FFFFF and specifies performance test applicability and dates.
§ 63.7(a)(3), (b), (c)-(h).	Performance Testing Requirements.	Yes	
§ 63.8(a)(1)-(3), (b), (c)(1)-(3), (c)(4)(i)-(ii), (c)(5) and (6), (c)(7)- (8), (f)(1)-(5), (g)(1)-(4).	Monitoring Requirements	Yes	CMS requirements in § 63.8(c)(4) (i)-(ii), (c) (5)-(6), (d), and (e) apply only to COMS.
§ 63.8(a)(4).	Additional Monitoring Requirements for Control Devices in § 63.11.	No	Subpart FFFFF does not require flares.
§ 63.8(c)(4)	Continuous Monitoring System Requirements.	No.	Subpart FFFFF specifies requirements for operation of CMS.
§ 63.8(f)(6).	RATA Alternative	No.	
63.8(g)(5)	Data Reduction	No	Subpart FFFFF specifies data reduction requirements.
§ 63.9	Notification Requirements.	Yes.	Additional notifications for CMS in § 63.9(g) apply to COMS.
§ 63.10(a), (b)(1)-(2)(xii), (b)(2)(xiv), (b)(3), (c)(1)-(6) (c)(9)-(15), (d), (e)(1)-(2), (e)(4),	Recordkeeping and Reporting Requirements.	Yes	Additional records for CMS in § 63.10(c)(1)-(6), (9)-(15), and reports in §63.10(d)(1)-(2) apply only to COMS.

(f).			
§ 63.10(b)(2)(xiii)	CMS Records for RATA Alternative	No.	
§ 63.10(c)(7)-(8)	Records of Excess Emissions and Parameter Monitoring Exceedances for CMS	No.	Subpart FFFFF specifies record requirements.
§ 63.10(e)(3)	Excess Emission Reports	No	Subpart FFFFF specifies reporting requirements
§ 63.11	Control Device Requirements.	No	Subpart FFFFF does not require flares.
§ 63.12.	State Authority and Delegations	Yes	
§ 63.13-§ 63.15	Addresses, Incorporation by Reference, Availability of Information.	Yes	

SECTION D.10

FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)]: One (1) Hot Rolling Mill

- (a) Four (4) reheat furnaces Nos. 1, 2, 3 and 4, identified as RMF10500, RMF20501, RMF30502 and RMF40503 commenced operation in 1967, with heat input capacity of 600 MMBtu per hour each. Each furnace is equipped to combust natural gas and coke oven gas with emissions exhausting through Stacks RM6500, RM6501, RM6502 and RM6503.
- (b) Two (2) waste heat boilers Nos. 1 and 2, identified as RB1B0508 and RB2B0509, commenced operation in 1967, with a heat input capacity of 226 MMBtu per hour each. The heat input capacity from fuel from these boilers is derived from a combination of waste heat ducted from the reheat furnaces and the combustion of natural gas and coke oven gas. Emissions exhaust through the waste heat boiler stacks HB6504 and HB6505.
- (c) One (1) 84-inch Hot Strip Mill, identified as RMV00504, commenced operation in 1967, with a maximum capacity of 856 tons per hour, 5 roughing mills and a 7-stand finishing mill with fugitive emissions through a Roof Monitor RM6630.

(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 Lake County PM₁₀ Emission Requirements [326 IAC 6.8-2-38]

- (a) Pursuant to Significant Source Modification 089-19709-00121, issued May 2, 2005 and 326 IAC 6.8-2-38, PM₁₀ emissions from the 84" Hot Strip Mill Reheat Furnaces Nos. 1, 2, 3 and 4 Stacks RM6500, RM6501, RM6502 and RM 6503 shall not exceed 0.017 pound per MMBtu of heat input and a total of 40.80 pounds per hour.
- (b) Pursuant to 326 IAC 6.8-2-38, PM₁₀ emissions from the 84" Hot Strip Mill Waste Heat Boilers Nos.1 and 2 shall comply with the following:
 - (1) The PM₁₀ emissions from the 84" Hot Strip Mill Waste Heat Boiler No. 1 Stack HB6504 shall not exceed 0.043 pound per MMBtu of heat input and 10.0 pounds per hour.
 - (2) The PM₁₀ emissions from the 84" Hot Strip Mill Waste Heat Boiler No. 2 Stack HB6505 shall not exceed 0.043 pound per MMBtu of heat input and 10.0 pounds per hour.
- (c) Each emission limit applies to one (1) stack serving one (1) facility unless otherwise noted. The emissions limitations apply to one (1) stack serving the multiple units specified when the facility description notes stack serving, and to each stack of multiple stacks serving multiple facilities when the facility description notes each stack serving.

D.10.2 Sulfur Dioxide (SO₂) Limitations [326 IAC 7-4.1-20]

Pursuant to 326 IAC 7-4.1-20, SO₂ emissions from the Reheat Furnace Nos.1, 2, 3 and 4, RMF10500, RMF20501, RMF30502 and RMF40503 and Waste Heat Boilers Nos. 1 and 2, RB1B0508 and RB2B0509 shall comply with the following:

- (a) Pursuant to 326 IAC 7-4.1-20(a)(1)(E) and (F), during periods when the coke oven gas desulfurization unit is not operating:

Emission Unit Operating Scenarios		Emission Limit lbs/MMBtu	Emission Limit lbs/hr
During periods when Reheat Furnace Nos. 1, 2, 3 and 4 are not combusting coke oven gas	Waste Heat Boiler Nos. 1 or 2	1.270	287.0
	Remaining Waste Heat Boiler	0.704	159.0
Reheat Furnace Nos. 1, 2, 3 and 4 during periods when combusting coke oven gas.	When four (4) furnaces are operating	0.256	615.0
	When three (3) furnaces are operating	0.342	615.0
	When two (2) furnaces are operating	0.513	615.0
	When one (1) furnace is operating	1.025	615.0

(b) Pursuant to 326 IAC 7-4.1-20(b)(6)(A) and (B), during periods when the coke oven gas desulfurization unit is operating:

Emission Unit Operating Scenarios		Emission Limit lbs/MMBtu	Emission Limit lbs/hr
Waste Heat Boiler Nos. 1 and 2	NA	0.260	58.8 each
Continuous Reheat Furnace Nos. 1, 2, 3 and 4	When four (4) furnaces are operating	0.182	436.5 total
	When three (3) furnaces are operating	0.243	436.5 total
	When two (2) furnaces are operating	0.354	436.5 total
	When one (1) furnace is operating	0.728	436.5 total

D.10.3 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 these facilities and any associated control devices.

Compliance Determination Requirements

D.10.4 Testing Requirements [326 IAC 2-7-6(1),(6)][326 IAC 2-1.1-11]

Within thirty (30) months after issuance of this permit, or an alternative date as determined by OAQ, Compliance Data Section, in order to comply with condition D.1.1, the Permittee shall perform PM₁₀ testing on one of the Nos. 1, 2, 3 and 4 Continuous Reheat Furnace stacks RM6500, RM6501, RM6502 or RM6503, using methods as listed in 326 IAC 6.8-4-1(1) or other methods approved by the Commissioner. This test shall be repeated at least once every five (5) years from the date of the last valid compliance demonstration with no stack being tested in successive tests. All tests shall be performed in accordance with Section C - Performance Testing.

D.10.5 Sulfur Fuel Sampling and Analysis [326 IAC 7-4.1-2]

Pursuant to 326 IAC 7-4.1-2, and in order to comply with conditions D.10.2, the Permittee shall follow the Sulfur Fuel Sampling and Analysis protocol in Section C - Sulfur Fuel Sampling and Analysis of this permit.

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

D.10.6 Record Keeping Requirements

- (a) To document compliance with Condition D.10.2, the Permittee shall maintain records in accordance with Section C- Sulfur Dioxide (SO₂) Record Keeping Requirements (Entire Source).
- (b) All records shall be maintained in accordance with Section C - General Record Keeping Requirements of this permit.

D.10.7 Reporting Requirements

A quarterly summary report to document compliance with condition D.10.2 shall be submitted to IDEM accordance with Section C – Sulfur Dioxide SO₂ Reporting Requirements (Entire Source). 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.11 FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)]: Two Continuous Pickle Lines

- (a) One (1) 84-inch Pickle Line, the North Continuous Pickle Line, identified as HWPO0625, constructed in 1968, with a maximum capacity of 314 tons per hour consisting of four (4) pickle tanks and two (2) rinse tanks (hot and cold). Emissions at this pickle line are controlled by a fume exhaust scrubber, HW3545 exhausting to stack HW6525.
- (b) One (1) 80-inch Pickle Line, the South Continuous Pickle Line, identified as HMPO0589, constructed in 1948, with a maximum capacity of 91 tons per hour, consisting of three (3) pickle tanks and two (2) rinse tanks (hot and cold). Emissions are controlled by a fume exhaust scrubber, HM3540, exhausting to stack HM6520.

(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 General Provisions Relating to Hazardous Air Pollutants (HAPs) [326 IAC 20-1-1][40 CFR Part 63, Subpart A]

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

D.11.2 National Emission Standards for Hazardous Air Pollutants (NESHAP) for Steel Pickling - HCl Process Facilities and Hydrochloric Acid Regeneration Plants [40 CFR Part 63, Subpart CCC][40 CFR 63.1157]

Pursuant to 40 CFR Part 63, Subpart CCC, the 80-inch and 84-inch Hydrochloric Acid Pickling lines shall comply with the following requirements:

The Permittee shall not cause or allow to be discharged into the atmosphere from the affected pickling lines:

- (a) Any gases that contain HCl in a concentration in excess of 18 ppmv; or
- (b) HCL at a mass emission rate that corresponds to a collection efficiency of less than 97 percent.

D.11.3 National Emission Standard for Hazardous Air Pollutants (NESHAP) Maintenance Requirements [40 CFR 63.1160]

The Permittee shall comply with the operation and maintenance requirements of 40 CFR Part 63.6(e) (Subpart A, General Provisions) at the 80-inch and 84-inch Hydrochloric Acid Pickling lines. 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 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.11.4 National Emission Standards for Hazardous Air Pollutants (NESHAP) Operational and Equipment Standards [40 CFR 63.1159, Subpart CCC] Hydrochloric acid storage vessels.

Pursuant to 40 CFR 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.

D.11.5 Particulate (PM) Limitation [326 IAC 6.8-1-2(a)]

Pursuant to 326 IAC 6.8-1-2(a), the pickle lines shall not discharge to the atmosphere any gases which contain particulate in excess of 0.03 grains per dry standard cubic feet.

Compliance Determination Requirements

D.11.6 Testing Requirements [40 CFR 63.1161, Subpart CCC]

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- (a) The Permittee shall conduct a performance test for each process or emission control device to determine and demonstrate compliance with the applicable emission limitation according to the requirements of 40 CFR 63.7 (Subpart A, General Provisions). These tests 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 one half (2 ½) 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.11.7 National Emission Standards for Hazardous Air Pollutants (NESHAP) Monitoring Requirements [40 CFR 63.1162, Subpart CCC]

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 Part 63.1160(b)(2).
- (b) Failure to record each of the operating parameters in 40 CFR Part 63.1162(a)(2) is a violation of the monitoring requirements of 40 CFR Part 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.

D.11.8 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 Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

D.11.9 Record Keeping Requirements [40 CFR Part 63.1165]

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- (a) To document compliance with Conditions D.11.2 and D.11.3, 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 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 Part 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 Part 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 Part 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 these provisions 40 CFR Part 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 Part 63, Subpart CCC records, for the most recent 2 years of operation must be maintained on site. 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.

D.11.10 Reporting Requirements [40 CFR 63.1164]

- (a) Pursuant to 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 Permittee 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) All reports shall be submitted in accordance with Section C - General Reporting Requirements.
- (e) The reports submitted by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

SECTION D.12 FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)]: The Sheet Products Division

- (a) North Sheet Mill
- (1) One (1) 5-Stand Cold Reduction Mill, identified as H5M50637, constructed in 1964, with a maximum capacity of 400 tons per hour, consisting of 5 Mill Stands. Emissions are controlled by fume collection H53547, exhausting to Stack H56527.
 - (2) Twenty-six (26) 4-Stack Box Annealing Furnaces and 50 bases, identified as HTAF0813 through HTAF0838, constructed in 1964, with a heat input capacity of 12 MMBtu per hour each. These furnaces are direct fired with emissions exhausting through vent pipes HT6530 through HT6555.
 - (3) One (1) 80-inch temper mill, constructed in 1964, with a maximum capacity of 250 tons per hour, with fugitive emissions.
 - (4) One (1) 80-inch Recoil Line, constructed in 1964, with a maximum capacity 120 tons per hour, with fugitive emissions.
- (b) South Sheet Mill
- (1) Seventeen (17) 8-Stack A Box Annealing furnaces and 66 bases, identified as HXBA0560 through HXBA0576, constructed in 1948. Eleven (11) furnaces have a heat input capacity of 15 MMBtu per hour each and the remaining six (6) are rated at 18 MMBtu per hour each. Emissions from these furnaces exhaust through the Roof Monitor HX6003.
 - (2) One (1) 2-Stand Temper Mill, identified as H2M00579, constructed in 1974, with a maximum capacity of 89 tons per hour, with fugitive emissions through Roof Monitor H26004.
 - (3) One (1) No. 6 East Galvanizing Line, constructed in 1962, with a maximum capacity of 48 tons an hour, with one (1) annealing furnace identified as H6F10527 with a heat input of 45 MMBtu per hour and emissions through stack H66516. Also, contains one (1) Galvanneal Furnace identified as HF20529 with a heat input capacity of 20.0 MMBtu per hour and emissions exhausting through Roof Monitor H66006.
 - (4) Two (2) hydrogen atmosphere batch annealing furnaces, with a total heat input capacity of 10.26 MMBtu per hour, constructed in 1997, consisting of three (3) fixed bases and two (2) movable cooling hoods.
 - (5) One (1) 84-inch Hot Roll Temper Mill, constructed in 1967, with a maximum capacity of 124 tons per hour, with fugitive emissions.
 - (6) One (1) coil prep line, constructed in 1968, with a maximum capacity of 73 tons per hour, with fugitive emissions.

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

Facility Description [326 IAC 2-7-5(15)]: The Sheet Products Division (continued):

(c) Electro-galvanizing Line (EGL)

- (1) One (1) Electro-galvanizing Line (EGL), with one HCl pickle tank, No.1 Pickle tank, identified as HET20685, a cleaner section, a plating section and associated scrubber, with a maximum capacity of 60.5 tons per hour. Fumes from the Pickle Section are controlled by a fume scrubber HE3583 exhausting through stack HE6563. The single sided process for this coating line was constructed in 1977 and was modified in 1993 to a double sided process for coating.
- (2) One (1) natural gas fired Boiler No. 1 in the EGL Boiler House, identified as HBB10675, constructed in 1978 and modified in 2001, with a heat input capacity of 39.147 MMBtu per hour, exhausting through stack HB6559.

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

The provisions of 40 CFR Part 60, Subpart A - General Provisions, which are incorporated by reference in 326 IAC 12-1, apply to the No. 1 Boiler in the EGL Boiler House except when otherwise specified in 40 CFR Part 60, Subpart Dc.

D.12.2 Lake County PM₁₀ Emission Requirements [326 IAC 6.8-2-38]

Pursuant to 326 IAC 6.8-2-38, the PM₁₀ emissions from the EGL Boiler House shall not exceed 0.0033 pounds per MMBtu of heat input and a total of 0.13 pound per hour.

D.12.3 Particulate Emissions Limitations [326 IAC 6.8-1-2(a)]

Pursuant to 326 IAC 6.8-1-2(a), the particulate emissions from the North Sheet Mill: 5-Stand Cold Reduction Mill Stack H56527 and the South Sheet Mill: No. 6 East Galvanize Line Stack H66516 shall not exceed three-hundredths (0.03) grain per dry standard cubic foot (dscf).

D.12.4 Nitrogen Dioxide (NO_x) Emissions Offset Limitations [326 IAC 2-3]

Pursuant to CP 089-8606-00121, issued October 20, 1997, the natural gas usage in the two (2) hydrogen atmosphere batch annealing furnaces shall not exceed 37.2 million cubic feet (MMCF) per 12 consecutive month period with compliance demonstrated at the end of each month. This production limitation is equivalent to NO_x emissions of 2.64 tons per 12 consecutive month period with compliance demonstrated at the end of each month. Therefore, the Emission Offset rule, 326 IAC 2-3, does not apply.

D.12.5 Sulfur Dioxide (SO₂) Limitations [326 IAC 7-4.1-20(c)(3)]

Pursuant to 326 IAC 7-4.1-20(c)(3) gaseous fuel sources shall burn natural gas only:

- (a) if it is not listed in 326 IAC 7-4.1-20; or
- (b) under an operating condition not specifically listed in 326 IAC 7-4.1-20.

D.12.6 Preventative 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 EGL Boiler House Boiler No.1.

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

D.12.7 Record Keeping Requirements

- (a) Pursuant to Minor Source Modification 089-14424-00121, issued August 2, 2001 (modified by MSM 089-15694-00121, issued August 21, 2002), and 40 CFR 60.40c the Permittee shall record and maintain monthly records of the amounts of fuel combusted for the one (1) 39.147 million British thermal units per hour (MMBtu/hr) natural gas fired boiler, identified as EGL-1 boiler.
- (b) Pursuant to Minor Source Modification 089-8606-00121, issued October 20, 1997 and to document compliance with Condition D.12.4 the Permittee shall maintain monthly records of the natural gas usage in the two (2) hydrogen atmosphere batch annealing furnaces.
- (c) All records shall be maintained in accordance with Section C - General Record Keeping requirements of this permit.

D.12.8 Reporting Requirements

- (a) Pursuant to Minor Source Modification 089-8606-00121, issued October 20, 1997 and to document compliance with Condition D.12.4 the Permittee shall submit within thirty (30) days of the end of each calendar quarter, the hydrogen atmosphere batch annealing furnaces monthly natural gas usage, using the reporting form located at the end of this permit or its equivalent.
- (b) All reports shall be submitted in accordance with Section C - General Reporting Requirements of this permit.
- (c) The reports submitted by the Permittee do require the certification by the “responsible official” as defined by 326 IAC 2-7-1(34).

SECTION D.13 FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)]: The Tin Division is comprised of the following:

- (a) One (1) 6-Stand Cold Reduction Mill, identified as TRM00709, constructed in 1967, with a maximum capacity of 150 tons per hour. Emissions are controlled by a mist eliminator TR3600, exhausting to stack TR6575.
- (b) One (1) cleaning line, identified as No. 7 Cleaning Line, constructed in 1967, with a maximum capacity of 80 tons per hour. Fumes are controlled by a fume scrubber exhausting to a stack.
- (c) Two (2) Annealing Lines, No. 1 and No. 2, each containing an annealing furnace, identified as T1AF0794 and T2AF0799, No.1 constructed in 1950 and No. 2 constructed in 1959, with a maximum heat input capacities of 32 and 35 MMBtu per hour, respectively. Emissions exhaust to stacks T16609 and T26610. The No. 2 Continuous Anneal Line has a cleaning section with fumes collected in a fume scrubber exhausting through a stack.
- (d) Five (5) 4-Stack A Box Annealing Furnaces and 12 bases, identified as TXAF0765 through TXAF0769, constructed in 1968. All furnaces have a heat input of 10.5 MMBtu per hour each. Emissions exhaust to stacks TX6580 through TX6584.
- (e) One (1) 48-inch Temper Mill, constructed in 1958, with a maximum capacity of 150 tons per hour, with fugitive emissions. This unit has a dust filter that exhausts inside the building.
- (f) One (1) Double Reduction Mill with two (2) mill stands, identified as TDMO0742, constructed in 1963, with a maximum capacity of 75 tons per hour. Emissions are controlled by a mist eliminator D3603, exhausting to stack TD6595.
- (g) One (1) No.1 Tin Free Steel Line (TFS), constructed in 1950, with a maximum capacity of 24 tons per hour. The chemical treatment rinse section, TFR00753 exhaust through stack TF6597 and all other fugitive emissions from the line to roof monitor TF6661.
- (h) One (1) No. 5 Electrolytic Tinning Line 5 (ETL), constructed in 1957, and with a maximum capacity of 50 tons per hour. The No. 5 ETL contains a Plating and Chemical Treatment Tank, identified as TFR00777, with fugitive emissions through Roof Monitor T56071.
- (i) One (1) No. 6 Electrolytic Tinning Line (6 ETL), constructed in 1966, with a maximum capacity of 120 tons per hour. The 6 ETL also contains a Plating and Chemical Treatment Tank, identified as T6H00786, with fugitive emissions through Roof Monitor T56071.
- (j) One (1) Tin Anode Caster, constructed in 1965, with a maximum capacity of 0.57 tons per hour, with fugitive emissions through roof monitor.
- (k) One (1) Tin Mill Recoil and inspection Line, constructed in 1967, with a maximum capacity of 14.8 tons per hour.
- (l) One (1) 45" Side Trimmer, constructed in 1961, with fugitive emissions through the roof monitor.

(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.13.1 Particulate Emissions Limitations [326 IAC 6.8-1-2(a)]

Pursuant to 326 IAC 6.8-1-2(a), the particulate emissions shall not exceed three-hundredths (0.03) grain per dry standard cubic feet (gr/dscf) from the following:

- (a) 6-Stand Cold Reduction Mill Stack TR6575,
- (b) One (1) Double Reduction Mill Stack TD6595, and
- (c) No. 1 Tin Free Steel Line Chemical Treatment Rinse Stack TF6597.

D.13.2 Sulfur Dioxide (SO₂) Limitations [326 IAC 7-4.1-20(c)(3)]

Pursuant to 326 IAC 7-4.1-20(c)(3) gaseous fuel sources shall burn natural gas only:

- (a) if it is not listed in 326 IAC 7-4.1-20; or
- (b) under an operating condition not specifically listed in 326 IAC 7-4.1-20.

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

D.13.3 Record Keeping Requirements

- (a) In order to demonstrate compliance with conditions D.13.1 and D.13.2, the Permittee shall maintain records of the natural gas usage of the furnaces.
- (b) All records shall be maintained in accordance with Section C - General Record Keeping requirements of this permit.

SECTION D.14 FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)]: One (1) Boiler House No. 4 , comprised of the following:

(a) Two (2) Boilers, No. 1 and No. 2, identified as O4B10459 and O4B20460, constructed in 1967, equipped to combust natural gas, blast furnace gas and fuel oil, with a maximum heat input of 500 MMBtu per hour each, exhausting through Stacks O46268 and O46269, respectively.

(b) One (1) Boiler, No. 3, identified as O4B30461, constructed in 1967, equipped to combust blast furnace gas and natural gas, with a maximum heat input of 500 MMBtu per hour, exhausting through Stack O46270.

(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.14.1 Lake County PM₁₀ Emission Requirements [326 IAC 6.8-2-38]

Pursuant to 326 IAC 6.8-2-38, the PM₁₀ emissions from the No. 4 Boiler House Boilers Nos. 1, 2 and 3 Stacks O46268, O46269 and O46270 shall comply with the following:

- (a) The PM₁₀ emissions from the Number 4 Boiler House Boilers, when one or two boilers are operating shall not exceed 0.054 pounds per MMBtu of heat input and a total of 54.1 pounds per hour.
- (b) The PM₁₀ emissions from the Number 4 Boiler House Boilers, when three boilers are operating shall not exceed 0.036 pounds per MMBtu of heat input and a total of 54.1 pounds per hour.
- (c) Each emission limit applies to one (1) stack serving one (1) facility unless otherwise noted. The emissions limitations apply to one (1) stack serving the multiple units specified when the facility description notes stack serving, and to each stack of multiple stacks serving multiple facilities when the facility description notes each stack serving.

D.14.2 Sulfur Dioxide (SO₂) Limitations [326 IAC 7-4.1-20]

Pursuant to 326 IAC 7-4.1-20, the SO₂ emissions from the No. 4 Boiler House Boilers Nos. 1, 2 and 3 Stacks O46268, O46269 and O46270 shall not exceed the following limitations:

- (a) Pursuant to 326 IAC 7-4.1-20(a)(1)(B), during periods when the coke oven gas desulfurization unit is not operating:

Emission Unit Operating Scenarios		Emission Limit Lbs/MMBtu	Emission Limit Lb/hr
During periods when No.14 Blast Furnace Stoves are combusting blast furnace gas	When three (3) boilers are operating:	0.115	172.5 total
	When two (2) boilers are operating:	0.173	172.5 total
	When one (1) boiler is operating:	0.345	172.5 total
During periods when No.14 Blast Furnace Stoves are not combusting blast furnace gas and the Hot Strip Mill Waste	When three (3) boilers are operating:	0.200	300.0 total
	When two (2) boilers are operating:	0.300	300.0 total

Heat Boilers Nos. 1 and 2 are combusting coke oven gas :	When one (1) boiler is operating:	0.600	300.0 total
During periods when No.14 Blast Furnace Stoves are not combusting blast furnace gas and the Hot Strip Mill Waste Heat Boilers Nos. 1 and 2 are not combusting coke oven gas :	When three (3) boilers are operating:	0.195	293.0 total
	When two (2) boilers are operating:	0.293	293.0 total
	When one (1) boiler is operating:	0.586	293.0 total

(b) Pursuant to 326 IAC 7-4.1-20(b)(2), during periods when the coke oven gas desulfurization unit is operating:

Emission Unit Operating Scenarios	Emission Limit Lbs/MMBtu	Emission Limit lb/hr
When three (3) boilers are operating:	0.353	529.0 total
When two (2) boilers are operating:	0.529	529.0 total
When one (1) boiler is operating	1.058	529.0 total

D.14.3 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 these facilities.

Compliance Determination Requirements

D.14.4 Sulfur Fuel Sampling and Analysis [326 IAC 7-4.1-2]

Pursuant to 326 IAC 7-4.1-2, and in order to comply with conditions D.14.1, the Permittee shall follow the Sulfur Fuel Sampling and Analysis protocol in Section C - Sulfur Fuel Sampling and Analysis of this permit.

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

D.14.5 Visible Emission Notations

When Boilers No. 1 and/or No. 2 combust fuel oil or any combination of fuel oil and natural gas or blast furnace gas:

- (a) Visible emission notations of the Boilers No. 1 stack O46268 and/or No. 2 stack O46269 shall be performed once per day during normal daylight operations when exhausting to the atmosphere. A trained employee shall record whether emissions are normal or abnormal.
- (b) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.
- (c) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.
- (d) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.

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

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

D.14.6 Record Keeping Requirements

- (a) To document compliance with Condition D.14.2, the Permittee shall maintain records in accordance with Section C- Sulfur Dioxide (SO₂) Record Keeping Requirements (Entire Source).
- (b) To document compliance with Conditions D.14.5, the Permittee shall maintain records of the once per day visible emission notations when Boilers No. 1 and/or No. 2 combust fuel oil or any combination of fuel oil and natural gas or blast furnace gas.
- (c) All records shall be maintained in accordance with Section C - General Record Keeping requirements, of this permit.

D.14.7 Reporting Requirements

A quarterly summary report to document compliance with conditions D.14.2 shall be submitted in accordance with Section C – Sulfur Dioxide Reporting Requirements (Entire Source) of this permit. This report does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

D.14.8 Natural Gas Fired Boiler Certification

A semi-annual certification shall be submitted to the address listed in Section C - General Reporting Requirements, of this permit, using the Natural Gas Fired Boiler Certification form located at the end of this permit, or its equivalent, for the Number 4 Boiler House Boilers Nos. 1, 2 and 3, five hundred (500) million British Thermal unit per hour (MMBtu/hr) natural gas fired boilers. This report shall be submitted in accordance with Section C- General Reporting Requirements of this permit. This report does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

SECTION D.15 FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)]: One (1) TurboBlower Boiler House (TBBH), comprised of the following:

- (a) Three (3) Boilers, No. 1, No. 2 and No. 3, identified as OTB10462, OTB20463 and OTB30464, constructed in 1948, equipped to combust blast furnace gas, coke oven gas, fuel oil and natural gas, with a maximum heat input of 410 MMBtu per hour each, exhausting through Stacks OT6271, OT6272 and OT6273, respectively.
- (b) One (1) Boiler, No. 4A, identified as OTB40465, constructed in 1990, with a maximum heat input of 244 MMBtu per hour when combusting natural gas. Emissions exhaust through Stack OT6274, with NO_x emissions monitored by a Predictive Emissions Monitoring System (PEMS).
- (c) One (1) Boiler No. 5, identified as OTB50466, constructed in 1958, equipped to combust blast furnace gas, coke oven gas, fuel oil and natural gas, with a maximum heat input of 410 MMBtu per hour, exhausting through Stack OT6275.
- (d) One (1) boiler, No. 6, identified as OTB60467, constructed after August 17, 1971, equipped to combust blast furnace gas and natural gas, with a maximum heat input capacity of 710 MMBtu per hour, exhausting through Stack OT6276.

(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.15.1 General Provisions Relating to New Source Performance Standards (NSPS) [326 IAC 12-1][40 CFR 60, Subpart A]

The provisions of 40 CFR Part 60, Subpart A - General Provisions, which are incorporated by reference in 326 IAC 12-1, applies to the No. 6 Boiler except when otherwise specified in 40 CFR Part 60, Subpart D and applies to No. 4A boiler, except when otherwise specified in 40 CFR 60, Subpart Db.

D.15.2 New Source Performance Standards (NSPS) Particulate Limitations [326 IAC 12] [40 CFR 60, Subpart D]

Pursuant to Minor Source Modification 089-10160-00121, issued January 13, 2000, 326 IAC 12 and 40 CFR 60.40 through 60.49, Subpart D (Standards of Performance for Fossil-Fuel-Fired Steam Generators for Which Construction is Commenced After August 17, 1971), Particulate matter (PM) emissions from TBBH Boiler No. 6 shall not exceed the following:

- (a) One-tenth (0.10) lb/MMBtu derived from fossil fuel combustion; and
- (b) Twenty percent (20%) opacity except for one six-minute period per hour of not more than 27% opacity.

D.15.3 Lake County PM₁₀ Emissions Requirements [326 IAC 6.8-2-38]

Pursuant to 326 IAC 6.8-2-38, the PM₁₀ emissions from the TBBH Boilers Nos. 1, 2, 3, 4A, 5 and 6 Stacks OT6271, OT6272, OT6273, OT6274, OT6275 and OT6276 shall comply with the following:

- (a) The PM₁₀ emissions from the TBBH Boilers Nos. 1, 2, 3 and 5: OT6271, OT6272, OT6273 and OT6275, when four boilers are operating, shall not exceed 0.037 pound per MMBtu of heat input each and a total of 61.0 pounds per hour.

- (b) The PM₁₀ emissions from the TBBH Boilers Nos. 1, 2, 3 and 5: OT6271, OT6272, OT6273 and OT6275, when three boilers are operating, shall not exceed 0.050 pound per MMBtu of heat input each and a total of 61.0 pounds per hour.
- (c) The PM₁₀ emissions from the TBBH Boilers Nos. 1, 2, 3 and 5: OT6271, OT6272, OT6273 and OT6275, when one or two boilers are operating, shall not exceed 0.074 pound per MMBtu of heat input each and a total of 61.0 pounds per hour.
- (d) The PM₁₀ emissions from the TBBH Boiler No.4A stack OT6274 shall not exceed 0.012 pound per MMBtu of heat input each and 2.9 pounds per hour.
- (e) The PM₁₀ emissions from the TBBH Boiler No. 6 Stack OT6276, shall not exceed 0.039 pound per MMBtu of heat input and 27.80 pounds per hour.
- (f) Each emission limit applies to one (1) stack serving one (1) facility unless otherwise noted. The emissions limitations apply to one (1) stack serving the multiple units specified when the facility description notes stack serving, and to each stack of multiple stacks serving multiple facilities when the facility description notes each stack serving.

D.15.4 Sulfur Dioxide (SO₂) Limitations [326 IAC 7-4.1-20]

Pursuant to 326 IAC 7-4.1-20, the SO₂ emissions from each of the TBBH Boilers Nos. 1, 2, 3, 4A, 5 and 6 Stacks OT6271, OT6272, OT6273, OT6274, OT6275 and OT6276 shall not exceed the following limitations:

- (a) Pursuant to 326 IAC 7-4.1-20(c)(3), sulfur dioxide limits are not specifically listed for Boiler No. 4A. In accordance with this rule, Boiler No, 4A shall burn natural gas only.
- (b) Pursuant to 326 IAC 7-4.1-20(a)(1)(A) and (b)(1)(B), the sulfur dioxide emissions from the No. 6 Boiler Stack shall not exceed 0.115 lbs/MMBtu and 81.7 lbs/hr.
- (c) Pursuant to 326 IAC 7-4.1-20(a)(2)(A)(i), the sulfur dioxide emissions from the Nos. 1, 2, 3 and 5 Boiler stacks shall not exceed the following during periods when the coke oven gas desulfurization unit is not operating and the Hot Strip Mill Waste Heat Boiler Nos. 1 and 2 are not combusting coke oven gas:

Emission Unit Operating Scenario		Emission Limit Lbs/MMBtu	Emission Limit lbs/hr
Jan – Apr	When four (4) boilers are operating	0.594	974.5 total
	When three (3) boilers are operating	0.792	974.5 total
	When two (2) boilers or less are operating	1.188	974.5 total
May – Oct	When four (4) boilers are operating	1.006	1650.0 total
	When three (3) boilers are operating	1.341	1650.0 total
	When two (2) boilers or less are operating	2.012	1650.0 total
Nov – Dec	When four (4) boilers are operating	0.384	630.0 total
	When three (3) boilers	0.512	630.0 total

	are operating		
	When two (2) boilers or less are operating	0.768	630.0 total

- (d) Pursuant to 326 IAC 7-4.1-20(a)(2)(A)(ii), the sulfur dioxide emissions from the Nos. 1, 2, 3 and 5 Boiler stacks shall not exceed the following during periods when the coke oven gas desulfurization unit is not operating and the Hot Strip Mill Waste Heat Boiler Nos. 1 and 2 are combusting coke oven gas:

Emission Unit Operating Scenario		Emission Limit lbs/MMBtu	Emission Limit lbs/hr
Jan – Apr	When four (4) boilers are operating	0.625	1025.00 total
	When three(3) boilers are operating	0.833	1025.00 total
	When two (2) boilers or less are operating	1.250	1025.00 total
May – Oct	When four (4) boilers are operating	0.994	1630.0 total
	When three(3) boilers are operating	1.325	1630.0 total
	When two (2) boilers or less are operating	1.988	1630.0 total
Nov – Dec	When four (4) boilers are operating	0.351	575.0 total
	When three(3) boilers are operating	0.467	575.0 total
	When two (2) boilers or less are operating	0.701	575.0 total

- (e) Pursuant to 326 IAC 7-4.1-20(b)(1)(A), the sulfur dioxide emissions from the Nos. 1, 2, 3 and 5 Boiler stacks shall not exceed the following during periods when the coke oven gas desulfurization unit is operating:

Emission Unit Operating Scenarios	Emission Limit lbs/MMBtu	Emission Limit lbs/hr
When four (4) boilers are operating	0.427	700.0 total
When three(3) boilers are operating	0.569	700.0 total
When two (2) boilers or less are operating	0.854	700.0 total

D.15.5 PSD Nitrogen Oxides (NO_x) Emission Offset Limitations [326 IAC 2-2] [326 IAC 2-3]

Pursuant to the Minor Source Modification 089-10160-00121 issued, January 13, 2000, 326 IAC 2-2 and 326 IAC 2-3, the NO_x emissions for the TBBH Boiler No. 6 Stack OT6276 shall be limited to the following:

- (a) Boiler No. 6 NO_x emissions shall not exceed 0.14 pounds of NO_x per MMBtu of heat input.
- (b) Natural gas usage shall be limited to 1,059.7 million cubic feet (MMCF) per twelve (12) consecutive month period with compliance demonstrated at the end of each month. Compliance with this limit will also preclude the Permittee from the requirement to install a continuous emissions monitor (CEM) for NO_x.

- (c) Blast furnace gas and natural gas shall be the only fuels combusted in TBBH Boiler No. 6, unless the Permittee receives prior approval from IDEM, OAQ to combust coke oven gas or fuel oil.
- (d) These limitations will ensure that the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration) and 326 IAC 2-3 (Emission Offset) do not apply.

D.15.6 Nitrogen Oxides (NO_x) Limitations [326 IAC 12][40 CFR Part 60, Subpart D and Subpart Db]

- (a) Pursuant to CP-089-9568-00121, issued September 21, 1998, 40 CFR 60 Subpart Db, and 326 IAC 12 (Standards of Performance for Industrial-Commercial-Institutional Steam Generating Units), NO_x emissions from the TBBH Boiler No. 4A Stack OT6274 shall comply with the following:
 - (1) The NO_x emissions shall not exceed 0.20 lb/MMBtu when the boiler is burning natural gas only. This is equivalent to 48.8 pounds per hour at a maximum heat input rate of 244 MMBtu per hour.
 - (2) The NO_x emissions shall not exceed 0.50 lb/MMBtu when the boiler is burning coke oven gas alone. This is equivalent to 122 pounds per hour at a maximum heat input rate of 244 MMBtu per hour.
- (b) Pursuant to Minor Source Modification 089-10160-00121, issued January 13, 2000, 326 IAC 12 and 40 CFR 60, Subpart D (Standards of Performance for Fossil-Fuel-Fired Steam Generators for Which Construction or modification is Commenced After August 17, 1971), NO_x emissions from the Turboblower Boiler House (TBBH) Boiler No. 6 Stack OT6276 shall not exceed 0.20 pound per MMBtu of heat input, when the boiler is burning natural gas only.

D.15.7 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for these facilities.

Compliance Determination Requirements

D.15.8 Testing Requirements [326 IAC 2-7-6(1),(6)][326 IAC 2-1.1-11]

- (a) Within twelve (12) months after issuance of this permit or two and one-half (2 ½) years from the date of the last compliance test which ever is earlier, in order to demonstrate compliance with Condition D.15.3, the Permittee shall perform PM₁₀ testing on the Turboblower Boiler House Boilers Nos. 1, 2, 3 and 5 when all four boilers are operating, using methods as listed in 326 IAC 6.8-4-1 or other methods approved by the Commissioner. This test shall be repeated at least once every two and one-half (2 ½) years from the date of this valid compliance demonstration. All tests shall be performed in accordance with Section C - Performance Testing.
- (b) Within twelve (12) months after issuance of this permit or two and one-half (2 ½) years from the date of the last compliance test which ever is earlier, in order to demonstrate compliance with Condition D.15.3, the Permittee shall perform PM₁₀ testing on the Turboblower Boiler House Boiler No. 4A when burning natural gas alone and when burning coke oven gas alone, using methods as listed in 326 IAC 6.8-4-1 or other methods approved by the Commissioner. This test shall be repeated at least once every two and one-half (2 ½) years from the date of this valid compliance demonstration. All tests shall be performed in accordance with Section C - Performance Testing.
- (c) Within twelve (12) months after issuance of this permit or two and one-half (2 ½) years from the date of the last compliance test which ever is earlier, in order to demonstrate compliance with Condition D.15.3, the Permittee shall perform PM₁₀ testing on the Turboblower Boiler House Boiler No. 6 when burning blast furnace gas on the main

burners alone and natural gas on the pilots, using methods as listed in 326 IAC 6.8-4-1 or other methods approved by the Commissioner. This test shall be repeated at least once every two and one-half (2 ½) years from the date of this valid compliance demonstration. All tests shall be performed in accordance with Section C - Performance Testing.

D.15.9 Sulfur Fuel Sampling and Analysis [326 IAC 7-4.1-2]

Pursuant to 326 IAC 7-4.1-2, and in order to comply with conditions D.15.4, the Permittee shall follow the Sulfur Fuel Sampling and Analysis protocol in Section C - Sulfur Fuel Sampling and Analysis of this permit.

D.15.10 Nitrogen Oxide (NOx) Emissions Monitoring for No. 4A Boiler [40 CFR 60.48b]

- (a) Pursuant to 40 CFR 60.48b, the Permittee shall calibrate, maintain, and operate all necessary Predictive emission monitoring systems (PEMS) at Boiler No. 4A stack OT6274.
- (b) The Permittee shall comply with Conditions D.15.6(a) on an on going basis using the Predictive Emissions Monitoring System (PEMS) to measure NOx emission rates by monitoring the steam generating operating conditions as specified in a plan submitted to and approved by IDEM, OAQ, pursuant to 40 CFR 60.49b(c).
- (c) In the event that a breakdown of a predictive emission monitoring system occurs, a record shall be made of the times and reasons of the breakdown and efforts made to correct the problem.
- (d) The Permittee shall have replacement parts such as flow meters or oxygen meters on hand, in the event a malfunction of the PEMS occurs.
- (e) The Permittee shall develop and implement a quality control (QC) and quality assurance (QA) program pursuant to the requirements of 40 CFR Part 60 Appendix F.
- (f) Nothing in this permit shall excuse the Permittee from complying with the requirements to operate a continuous emission monitoring system pursuant to the requirements of 40 CFR Part 60, Appendix F.

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

D.15.11 Visible Emission Notations

When any one or combination of Boilers No. 1, No. 2, No. 3 and No. 5 combust fuel oil or any combination of fuel oil, and natural gas, blast furnace gas or coke oven gas:

- (a) Visible emission notations of the Boilers No. 1, No. 2, No. 3 and/or No. 5 stacks OT6271, OT6372, OT6273 and OT6275 shall be performed once per day during normal daylight operations when exhausting to the atmosphere. A trained employee shall record whether emissions are normal or abnormal.
- (b) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.
- (c) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.
- (d) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.

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

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

D.15.12 Record Keeping Requirements

- (a) To document compliance with Condition D.15.4, the Permittee shall maintain records in accordance with Section C - Sulfur Dioxide (SO₂) Record Keeping Requirements (Entire Source).
- (b) To document compliance with condition D.15.5(b), the Permittee shall maintain records of the TBBH Boiler No. 6, natural gas usage.
- (c) To document compliance with TBBH Boilers 4A, condition D.15.5(a), the Permittee shall maintain records required under 40 CFR 60.49b(c), (g) and (h), as applicable.
- (d) To document compliance with Conditions D.15.11, the Permittee shall maintain records of once per day visible emission notations when any one or combination of Boilers No. 1, No. 2, No. 3 and/or No. 5 combust fuel oil or any combination of fuel oil and natural gas, blast furnace gas or coke oven gas.
- (e) All records shall be maintained in accordance with Section C - General Record Keeping requirements of this permit.

D.15.13 Reporting Requirements

- (a) To document compliance with conditions D.15.4, the Permittee shall submit a quarterly summary report as specified in Section C – Sulfur Dioxide Reporting (Entire Source) in this permit.
- (b) To document compliance with condition D.15.5(b), the Permittee shall submit a report within thirty (30) days of the end of the quarter containing the TBBH Boiler No. 6, natural gas usage using the form at the end of this permit or its equivalent.
- (c) If the Permittee elects to document compliance with condition D.15.6, either by monitoring of steam generating unit operating conditions or by operating a predictive emission monitoring system (PEMS) for NO_x emissions on No. 4A Boiler, the Permittee shall also submit reports as required under 40 CFR 60.49b(b) and (h).
- (d) The Permittee shall submit an excess emissions report, as required by 40 CFR 60.7(c), within thirty (30) days of the end of each quarter for Nos. 4A and 6 boilers. In addition to submitting this report to the addresses listed in Section C - General Reporting Requirements.
- (e) To document compliance with Conditions D.15.11, the Permittee shall maintain records of once per day visible emission notations when Boilers No. 1, No. 2, No. 3 and/or No. 5 combust fuel oil or any combination of fuel oil, and natural gas, blast furnace gas or coke oven gas.
- (f) All reports shall be submitted in accordance with Section C - General Reporting Requirements of this permit.
- (g) These reports do require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

D.15.14 Natural Gas Fired Boiler Certification

A semi-annual certification shall be submitted to the address listed in Section C - General Reporting Requirements, of this permit, using the Natural Gas Fired Boiler Certification form located at the end of this permit, or its equivalent, for each of the TBBH Boilers Nos. 1, 2 and 3, with heat input of four hundred (400) million British Thermal unit per hour (MMBtu/hr), No. 4A, with a heat input of two hundred forty-four (244) MMBtu/hr, No. 5, with a heat input of four hundred fifty (450) MMBtu/hr and No. 6 with heat input of five hundred (500) million British Thermal unit per hour (MMBtu/hr) natural gas fired boilers. This report shall be submitted in accordance with Section C – General reporting Requirements. This report does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

SECTION D.16 FACILITY OPERATION CONDITIONS

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

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

- (a) Paved Roads and Parking Lots
- (b) Unpaved Roads and Parking Lots
- (c) Batch Transfer-Loading and Unloading Operations
- (d) Continuous Transfer In and Out of Storage Piles
- (e) Batch Transfer Operations-Slag and Kish Handling
- (f) Wind Erosion from Storage Piles and Open Areas
- (g) In Plant Transfer by Truck or Rail
- (h) In Plant Transfer by Front End Loader or Skip Hoist
- (i) Material Processing Facility
- (j) Crusher Fugitive Emissions
- (k) Material Processing Facility Building Openings
- (l) 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.16.1 Particulate Matter (PM) Lake County Fugitive Dust Limits [326 IAC 6.8-10-4]

Pursuant to 326 IAC 6.8-10-4 (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) submitted on March 1, 2003 (See Attachment A). 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.16.2 Particulate Matter Control

Pursuant to 326 IAC 6.8-10-3 (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 and Exposed Areas

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 is 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) 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 in plant transportation requirement.

(g) 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.

(h) Material Processing Limitations

- (1) Compliance with stack opacity limitations from material processing facilities shall be determined using 40 CFR 60, Appendix A, Method 9.
- (2) Compliance with the opacity limitations for fugitive particulate emissions from material processing equipment, except from a crusher at which a capture system is not used, shall be determined using 40 CFR 60, Appendix A, Method 9.
- (3) Compliance with the opacity limitations for fugitive particulate emissions from a crusher at which a capture system is not used, shall be determined using 40 CFR 60, Appendix A, Method 9.
- (4) Compliance with the opacity limitations for fugitive particulate emissions from a building enclosing all or part of the material processing equipment, except from a vent in the building shall be determined using 40 CFR 60, Appendix A, Method 22.
- (5) Compliance with the opacity limitations for fugitive particulate emissions from building vents shall be determined using 40 CFR 60, Appendix A, Method 5 or 17 or 40 CFR 60, Appendix A, Method 9.

(i) 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.16.3 Record Keeping Requirements

Pursuant to 326 IAC 6.8-10-4(4) (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 clause (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.16.4 Reporting Requirements

- (a) Pursuant to 326 IAC 6.8-10-4(4)(G) (Lake County Fugitive Particulate Matter Control Requirements), a quarterly report shall be submitted to the department 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) 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.

Section D.17

FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)]: Insignificant activities as follows:

- (a) Specifically regulated insignificant activities:
- (1) Degreasing operations that do not exceed 145 gallons per 12 months, except if subject to 326 IAC 20-6. [326 IAC 8-3-5][326 IAC 8-3-6][326 IAC 8-9-1]
 - (2) Cleaners and solvents characterized as follows:
 - (A) Having a vapor pressure equal to or less than 2 kPa; 15 mm Hg; or 0.3 psi measured at 38 C (100 F) or;
 - (B) Having a vapor pressure equal to or less than 0.7 kPa; 5mm Hg; or 0.1 psi measured at 20 C (68 F); the use of which for all cleaners and solvents combined does not exceed 145 gallons per 12 months.[326 IAC 8-3-5][326 IAC 8-3-6][326 IAC 8-9-1]
 - (3) The following VOC and HAP storage containers:
 - (A) 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]
 - (B) Vessels storing lubricating oils, hydraulic oils, machining oils, and machining fluids. [326 IAC 8-9-1]
 - (4) The following equipment related to manufacturing activities not resulting in the emission of HAPs: brazing equipment, cutting torches, soldering equipment, welding equipment. [326 IAC 6.8-10-3]
 - (5) Any of the following structural steel and bridge fabrication activities:
 - (A) Cutting 200,000 linear feet or less of one inch (10) plate or equivalent.
 - (B) Using 80 tons or less of welding consumables. [326 IAC 6.8-10-3]
 - (6) Conveyors as follows:
 - (A) Covered conveyor for coal or coke conveying of less than or equal to 360 tons per day; [326 IAC 6.8-10-3]
 - (B) Uncovered coal conveying of less than or equal to 120 tons per day. [326 IAC 6.8-10-3]
 - (7) Coal bunker and coal scale exhausts and associated dust collector vents. [326 IAC 6.8-10-3]
 - (8) 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 6.8-1-2(a)]
 - (9) Vents from ash transport systems not operated at positive pressure. [326 IAC 6.8-1- 2(a)]
 - (10) Fuel dispensing activities, including the following:

- (A) A gasoline fuel transfer dispensing operation handling less than or equal to one thousand three hundred (1,300) gallons per day and filling storage tanks having a capacity equal to or less than ten thousand hundred (10,500) gallons. Such storage tanks may be in a fixed location or on mobile equipment. [326 IAC 8-9-1]
 - (B) A petroleum fuel other than gasoline dispensing facility, having a storage tank capacity less than or equal to ten thousand five hundred (10,500) gallons, and dispensing three thousand five hundred (3,500) gallons per day or less. A petroleum fuel, other than gasoline, dispensing facility having a storage capacity less than or equal to 10,500 gallons, dispensing less than or equal to 230,000 gallons per month. [326 IAC 8-9-1]
- (b) Other Insignificant Activities
- (1) Space heaters, process heaters, or boilers using the following fuels:
 - (A) Natural gas-fired combustion sources with heat input equal to or less than ten million (10,000,000) Btu per hour.
 - (B) Fuel oil-fired combustion sources with heat input equal to or less than two million (2,000,000) Btu per hour and firing fuel containing equal or less than five-tenths percent (0.5%) sulfur by weight.
 - (2) Equipment powered by diesel fuel fired or natural gas fired internal combustion engines of capacity equal to or less than five hundred thousand (500,000) British thermal units per hour except where total capacity of equipment operated by one (1) stationary source as defined by subdivision (38) exceeds two million (2,000,000) British thermal units per hour.
 - (3) Combustion source flame safety purging on startup.
 - (4) Refractory storage not requiring air pollution control equipment.
 - (5) Equipment used exclusively for the following:
 - (A) Packaging lubricants and greases.
 - (B) Filling drums, pails, or other packaging containers with the following: Lubricating oils, Waxes and Greases.
 - (6) Application of: oils; greases; lubricants; and nonvolatile material; as temporary protective coatings.
 - (7) Closed loop heating and cooling systems.
 - (8) Rolling oil recovery systems.
 - (9) Groundwater oil recovery wells.
 - (10) Activities associated with the treatment of wastewater streams with an oil and grease content less than or equal to 1% by volume.
 - (11) Water runoff ponds for petroleum coke-cutting and coke storage piles.
 - (12) Any operation using aqueous solutions containing less than 1% by weight of VOCs, excluding HAPS.

- (13) Water based adhesives that are less than or equal to 5% by volume of VOCs excluding HAPs.
- (14) Noncontact cooling tower systems with forced or induced draft cooling tower system not regulated under a NESHAP.
- (15) Quenching operations used with heat treating operations.
- (16) Replacement or repair of electrostatic precipitators, bags in baghouses and filters in other air filtration equipment.
- (17) Heat exchanger cleaning and repair.
- (18) Process vessel degassing and cleaning to prepare for internal repairs.
- (19) Stockpiled soils from soil remediation activities that are covered and waiting transport for disposal.
- (20) Paved and unpaved roads and parking lots with public access.
- (21) Underground conveyors.
- (22) Asbestos abatement projects regulated by 326 IAC 14-10.
- (23) Purging of gas lines and vessels that is related to routing maintenance and repair of buildings, structures, or vehicles at the source where air emissions from those activities would not be associated with any production process.
- (24) Flue gas conditioning systems and associated chemicals, such as the following: sodium sulfate, ammonia and sulfur trioxide.
- (25) Equipment used to collect any material that might be released during a malfunction, process upset, or spill cleanup, including catch tanks, temporary liquid separators, tanks, and fluid handling equipment.
- (26) Blow down for any of the following: sight glass; boiler; compressors; pumps; and cooling tower.
- (27) Activities associated with emergencies, including the following:
 - (A) On-site fire training approved by the department.
 - (B) Emergency generators as follows: Gasoline generators not exceeding one hundred ten (110) horsepower, Diesel generators not exceeding one thousand six hundred (1,600) horsepower and natural gas turbines or reciprocating engines not exceeding one thousand six hundred (1,600) horsepower.
 - (C) Stationary fire pump.
- (28) Purge double block and bleed valves.
- (29) A laboratory as defined in 326 IAC 2-7-1(21)(D).

(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.17.1 Fugitive Dust Emission Limitations [326 IAC 6-4-2][326 IAC 6.8-10-3]

(a) Pursuant to 326 IAC 6-4-2:

- (1) The brazing equipment, cutting torches, soldering equipment, welding equipment, structural steel and bridge fabrication, covered conveyors, dust collector vents associated with coal bunkers and coal scale, grinding and machining operations and ash transport systems vents generating fugitive dust shall be in violation of this rule (326 IAC 6-4) if any of the following criteria are violated:

- (1) A source or combination of sources which cause to exist fugitive dust concentrations greater than sixty-seven percent (67%) in excess of ambient upwind concentrations as determined by the following formula:

$$P = \frac{100(R - U)}{U}$$

Where

P = Percentage increase

R = Number of particles of fugitive dust measured at downward receptor site

U = Number of particles of fugitive dust measured at upwind or background site

- (B) The fugitive dust is comprised of fifty percent (50%) or more respirable dust, then the percent increase of dust concentration in subdivision (1) of this section shall be modified as follows:

$$PR = (1.5 \pm N) P$$

Where

N = Fraction of fugitive dust that is respirable dust;

PR = allowable percentage increase in dust concentration above background; and

P = no value greater than sixty-seven percent (67%).

- (C) The ground level ambient air concentrations exceed fifty (50) micrograms per cubic meter above background concentrations for a sixty (60) minute period.
- (D) If fugitive dust is visible crossing the boundary or property line of a source. This subdivision may be refuted by factual data expressed in subdivisions (1), (2) or (3) of this section. 326 IAC 6-4-2(4) is not federally enforceable.

- (2) Pursuant to 326 IAC 6-4-6(6) (Exceptions), fugitive dust from a source caused by adverse meteorological conditions will be considered an exception to this rule (326 IAC 6-4) and therefore not in violation.

- (b) Pursuant to 326 IAC 6.8-10-3 Lake County Fugitive Particulate Matter Emissions Limitations, fugitive emissions from the brazing equipment, cutting torches, soldering equipment, welding equipment, structural steel and bridge fabrication, covered conveyors, dust collector vents associated with coal bunkers and coal scale, grinding and machining operations and ash transport systems vents generating fugitive dust shall comply with the emissions limitations in Section C.5 - Fugitive Dust Emissions.

D.17.2 Volatile Organic Compounds (VOC) [326 IAC 8-3-2 (Cold Cleaner Degreaser Operation)]

Pursuant to 326 IAC 8-3-2 (Cold Cleaner Operations) for cold cleaning operations existing as of January 1, 1980, located, Lake County and which have the 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;
- (h) repair solvent leaks immediately, or shut down the degreaser;
- (i) Store waste solvent only in covered containers and not dispose of waste solvent or transfer to another party, such that greater than twenty percent (20%) of the waste solvent (by weight) can evaporate into the atmosphere.

D.17.3 Volatile Organic Compounds (VOC) [326 IAC 8-3-5 (Cold Cleaner Degreaser Operation and Control)]

- (a) Pursuant to 326 IAC 8-3-5(a), the owner or operator of a cold cleaner degreaser without remote solvent reservoirs existing as of July 1, 1990, located in Clark, Elkhart, Floyd, Lake, Marion, Porter or St. Joseph counties 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.
- (b) Pursuant to 326 IAC 8-3-5(b) (Cold Cleaner Degreaser Operation and Control), the owner or operator of a cold cleaning facility construction of which commenced after July 1, 1990, shall ensure that the following operating requirements are met:
 - (1) Close the cover whenever articles are not being handled in the degreaser.
 - (2) Drain cleaned articles for at least fifteen (15) seconds or until dripping ceases.
 - (3) Store waste solvent only in covered containers and prohibit the disposal or transfer of waste solvent in any manner in which greater than twenty percent (20%) of the waste solvent by weight could evaporate.

D.17.6 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 Lake County 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.

D.17.7 Volatile Organic Liquid Storage Vessels [326 IAC 8-9-1]

- (a) Pursuant to 326 IAC 8-9-1 (a) and (b) (Volatile Organic Liquid Storage Vessels), on and after October 1, 1995, stationary vessels used to store volatile organic liquids (VOL), that are located in Lake County with a capacity of less than thirty nine thousand (39,000) gallons are subject to the reporting and record keeping requirements of this rule. The VOL storage vessels are exempted from all other provisions of this rule.
- (b) Pursuant to 326 IAC 8-9-6 (a) and (b), the Permittee of each Volatile Organic Liquid Storage vessel to which 326 IAC 8-9-1 applies shall maintain the following records for the life of the vessel and submit a report to IDEM, OAQ containing the following for each vessel:
 - (1) The vessel identification number,
 - (2) The vessel dimensions, and
 - (3) The vessel capacity.

SECTION E.1

FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)]: The coal pulverization and air preheater system, located in the East Building consists of the following:

- (a) One (1) coal pulverization equipment train, identified as SS-1 that consists of a pulverizer with a maximum capacity of 90 tons per hour; a preheater with a maximum heat input capacity of 37.3 MMBtu per hour, and dual process separation cyclone, constructed in 1993, and exhausting to one baghouse with three modules (three stacks) 1A, 1B and 1C.
- (b) One (1) coal pulverization equipment train, identified as SS-2 that consists of a pulverizer with a maximum capacity of 90 tons per hour; a preheater with a maximum heat input capacity of 37.3 MMBtu per hour, and dual process separation cyclone, constructed in 1993, and exhausting to one baghouse with three modules (three stacks) 2A, 2B and 2C.
- (c) One (1) coal pulverization equipment train, identified as SS-3 that consists of a pulverizer with a maximum capacity of 90 tons per hour; a preheater with a maximum heat input capacity of 37.3 MMBtu per hour, and dual process separation cyclone, constructed in 1993, and exhausting to one baghouse with three modules (three stacks) 3A, 3B and 3C.

(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)]

E.1.1 General Provisions Relating to NSPS [326 IAC 12-1][40 CFR Part 60, Subpart A]

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

E.1.2 NSPS Coal Preparation Plant [326 IAC 12-1][40 CFR 60 Subpart Y]

Pursuant to 40 CFR 60.252 (a) and (c):

- (a) The Permittee shall not cause to be discharged into the atmosphere from any thermal dryer (preheater) gases which contain particulate matter in excess of 0.031 gr/dscf.
- (b) The Permittee shall not cause to be discharged into the atmosphere from any coal processing equipment gases which exhibit twenty percent (20%) opacity or greater.

E.1.3 PSD Minor Limit (NO_x) [326 IAC 2-2]

Pursuant to CP (45) 1895 issued October 26, 1990, the NO_x emissions from the pulverized coal preheaters and railcar heater (Section E.3) shall be limited to 37 tons per 12 consecutive month period. Pursuant to CP(45) 1895, the natural gas usage in the three (3) preheaters shall be limited to less than 549 million cubic feet per 12 consecutive month period with compliance demonstrated at the end of each month. The natural gas usage in the three (3) preheaters shall be limited to less than 183 million cubic feet per month. Compliance with this limit restricts the potential to emit for NO_x to less than 37 tons per year for the three (3) preheaters and makes the provisions of 326 IAC 2-2 Prevention of Significant Deterioration (PSD), not applicable.

E.1.4 PM and PM₁₀ Minor Limits [326 IAC 2-2][326 IAC 2-1.1-5]

- (a) The particulate matter (PM) from SS-1 stacks 1A, 1B and 1C; SS-2 stacks 2A, 2B and 2C; and SS-3 stacks 3A, 3B and 3C shall each not exceed 0.2 pounds per hour.
- (b) The particulate matter less than 10 microns (PM₁₀) from SS-1 stacks 1A, 1B and 1C; SS-2 stacks 2A, 2B and 2C; and SS-3 stacks 3A, 3B and 3C shall each not exceed 0.12 pounds per hour.

- (c) Compliance with the limitations in conditions E.1.4(a), E.2.3(a) and E.4.3(a) combined limits PM to less than 25 tons per year and makes 326 IAC 2-2 and 326 IAC 2-1.1-5 not applicable.
- (d) Compliance with the limitations in conditions E.1.4(b), E.2.3(b) and E.4.3(b) combined limits PM₁₀ to less than 15 tons per year and makes 326 IAC 2-2 and 326 IAC 2-1.1-5 not applicable.

E.1.5 Particulate Limitations [326 IAC 6.8-1-2(a)]

Pursuant to 326 IAC 6.8-1-2(a) (Particulate Matter Limitations for Lake County), the particulate matter from the coal pulverization equipment trains 1, 2 and 3 shall not exceed three-hundredths (0.03) grain per dry standard cubic foot (dscf).

E.1.6 Preventive Maintenance Plan

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for the pulverizers, preheaters, dual process separation cyclones and associated baghouses.

Compliance Determination Requirements

E.1.7 Testing Requirements

Within 36 months after issuance of Part 70 Operating Permit No. T089-7171-00169 (issued on July 19, 2006) and in order to comply with conditions E.1.2, E.1.4, and E.1.5 the Permittee shall perform PM/PM₁₀ stack tests on the three pulverization equipment train SS-1 baghouse stacks 1A, 1B and 1C, the three pulverization equipment train SS-2 baghouse stacks 2A, 2B and 2C, or the three pulverization equipment train SS-3, baghouse stacks 3A, 3B and 3C utilizing a testing method approved by the commissioner in accordance with Section C – Performance Testing. PM₁₀ includes filterable and condensable PM₁₀. These tests shall be repeated at least once every five years from the date of this valid compliance demonstration. The second five year cycle of tests shall be performed on the three pulverization equipment train baghouse SS-1 stacks 1A, 1B and 1C, the three pulverization equipment train SS-2 baghouse stacks 2A, 2B and 2C or the three pulverization equipment train SS-3 baghouse stacks 3A, 3B and 3C not previously tested in accordance with Section C- Performance Testing. The third year cycle of tests shall be performed on the three pulverization equipment train baghouse SS-1 stacks 1A, 1B and 1C, the three pulverization equipment train SS-2 baghouse stacks 2A, 2B and 2C or the three pulverization equipment train SS-3 baghouse stacks 3A, 3B and 3C not previously tested in accordance with Section C- Performance Testing. Then the five year cycle of test begins on the first three pulverization equipment train baghouse stacks tested.

E.1.8 NSPS Coal Preparation Plant [40 CFR 60.245]

Pursuant to 40 CFR 60.254, the Permittee shall demonstrate compliance as follows:

- (a) In conducting the performance tests required in 40 CFR 60.8, the Permittee shall use as reference methods and procedures, the test methods in 40 CFR 60 Appendix A or other methods and procedures as specified in 40 CFR 60.254, except as provided in 40 CFR 60.8(b).
- (b) The Permittee shall determine compliance with the particulate matter standards in condition E.1.2 as follows:
 - (1) For condition E.1.2(a), Method 5 shall be used to determine the particulate matter concentration. The sampling time and sample volume for each run shall be at least 60 minutes and 30 dscf. Sampling shall begin no less than 30 minutes after start-up and shall terminate before shutdown procedures begin.

- (2) For condition E.1.2(b), method 9 and the procedures in 40 CFR 60.11, shall be used to determine the opacity.

E.1.9 Particulate Matter Control [326 IAC 2-7-6(6)]

- (a) The baghouses for particulate control shall be in operation and control particulate emissions at all times the three (3) pulverization equipment trains are in operation.
- (b) In the event that bag failure is observed in a multi-compartment baghouse, if operations will continue for ten (10) days or more after the failure is observed before the failed units will be repaired or replaced, the Permittee shall promptly notify the IDEM, OAQ of the expected date the failed units will be repaired or replaced. The notification shall also include the status of the applicable compliance monitoring parameters with respect to normal, and the results of any response actions taken up to the time of notification.

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

E.1.10 NSPS Coal Preparation Monitoring Requirements [40 CFR 60.254]

Pursuant to 40 CFR 60.253(a), the Permittee of any thermal dryer shall install, calibrate, maintain and continuously operate monitoring devices as follows:

- (1) A monitoring device for the measurement of the temperature of the gas stream at the exit of the thermal dryer on a continuous basis. The monitoring device is to be certified by the manufacturer to be accurate within +/- 3 degrees F.
- (2) All monitoring devices under 40 CFR 60.254(a) are to be recalibrated annually in accordance with procedures under 40 CFR 60.13(b).

E.1.11 Visible Emissions Notations

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

E.1.12 Parametric Monitoring

The Permittee shall record the pressure drop across the baghouses used in conjunction with each pulverization equipment train, at least once per day when each pulverization equipment train is in operation. When for any one reading, the pressure drop across the baghouse is outside the normal range of 1.0 and 8.0 inches of water or a range established during the latest stack test, the Permittee shall take reasonable response steps in accordance with Section C- Response to Excursions or Exceedances. A pressure reading that is outside the above

mentioned range is not a deviation from this permit. Failure to take response steps in accordance with Section C - Response to Excursions or Exceedances, shall be considered a deviation of this permit.

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

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

E.1.13 Record Keeping Requirements

- (a) To document compliance with Condition E.1.3, the Permittee shall maintain records of the monthly natural gas usage in the three (3) air preheaters.
- (b) To document compliance with Conditions E.1.11, the Permittee shall maintain records of once per day visible emission notations of the three (3) pulverization equipment train baghouse stacks exhaust.
- (c) To document compliance with Condition E.1.12, the Permittee shall maintain records once per day of the pressure drop during normal operation.
- (d) To document compliance with Condition E.1.7, the Permittee shall maintain records of the stacks tested during each five year test cycle.
- (e) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

E.1.14 Reporting Requirements

A quarterly summary of the information to document compliance with conditions E.1.3 shall be submitted to the addresses listed in Section C - General Reporting Requirements, of this permit, using the reporting forms located at the end of this permit, or their equivalent, within thirty (30) days after the end of the quarter being reported. The report submitted by the Permittee does require the certification by the responsible official.

SECTION E.2 Facility Operation Conditions

Facility Description [326 IAC 2-7-5(15)]: The pulverized coal storage and feed system located in the West :

- (a) One (1) Pulverized Coal Transport, identified as Line A, constructed in 1993, with a maximum capacity of 210 tons per hour, ducted to a baghouse (A) exhausting to stack (SS-5),
- (b) One (1) Pulverized Coal Transport, identified as Line B, constructed in 1993, with a maximum capacity of 210 tons per hour, ducted to a baghouse (B) exhausting to stack (SS-6),
- (c) One (1) Pulverized Coal storage reservoir, constructed in 1993, with a maximum capacity of 600 tons, blanketed with nitrogen and ducted to a baghouse (vent filter house) exhausting to stack (SS-7),

(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)]

E.2.1 General Provisions Relating to NSPS [326 IAC 12-1][40 CFR Part 60, Subpart A]

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

E.2.2 NSPS Coal Preparation Plant [326 IAC 12-1][40 CFR 60 Subpart Y]

Pursuant to 40 CFR 60.252 (c), the Permittee shall not cause to be discharged into the atmosphere from any coal processing equipment (two (2) coal transport lines and coal storage reservoir) gases which exhibit twenty percent (20%) opacity or greater.

E.2.3 PM and PM₁₀ Minor Limits [326 IAC 2-2][326 IAC 2-1.1-5]

- (a) The particulate matter (PM) from stacks SS-5, SS-6 and SS-7 shall each not exceed 0.2 pounds per hour.
- (b) The particulate matter less than 10 microns (PM₁₀) from stacks SS-5, SS-6 and SS-7 shall each not exceed 0.12 pounds per hour.
- (c) Compliance with the limitations in conditions E.1.4(a), E.2.3(a) and E.4.3(a) combined limits PM to less than 25 tons per year and makes 326 IAC 2-2 and 326 IAC 2-1.1-5 not applicable.
- (d) Compliance with the limitations in conditions E.1.4(b), E.2.3(b) and E.4.3(b) combined limits PM₁₀ to less than 15 tons per year and makes 326 IAC 2-2 and 326 IAC 2-1.1-5 not applicable.

E.2.4 Particulate Limitations [326 IAC 6.8-1-2(a)]

Pursuant to 326 IAC 6.8-1-2(a) (Particulate Matter Limitations for Lake County), the particulate matter from the stacks SS-5, SS-6 and SS-7 shall not exceed three-hundredths (0.03) grain per dry standard cubic foot (dscf).

E.2.5 Preventive Maintenance Plan

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for the pulverized coal transport lines, coal storage reservoir and the associated baghouses.

Compliance Determination Requirements

E.2.6 NSPS Coal Preparation Plant [40 CFR 60.245]

Pursuant to 40 CFR 60.254, the Permittee shall demonstrate compliance as follows:

- (a) In conducting the performance tests required in 40 CFR 60.8, the Permittee shall use as reference methods and procedures, the test methods in 40 CFR 60 Appendix A or other methods and procedures as specified in 40 CFR 60.254, except as provided in 40 CFR 60.8(b).
- (b) The Permittee shall determine compliance with the opacity standards in condition E.2.2, Method 9 and the procedures in 40 CFR 60.11, shall be used to determine opacity.

E.2.7 Testing Requirements

Within 36 months after issuance of Part 70 Operating Permit No. T089-7171-00169 (issued on July 19, 2006) and in order to comply with conditions E.2.3 and E.2.4 the Permittee shall perform PM/PM₁₀ stack tests on one of the pulverized coal transport stacks SS-5 or SS-6 and the pulverized coal storage reservoir stack SS-7, utilizing a testing method approved by the commissioner in accordance with Section C – Performance Testing. PM₁₀ includes filterable and condensable PM₁₀. These tests shall be repeated at least once every five years from the date of this valid compliance demonstration.

The second five year cycle of tests shall be performed on the pulverized coal transport stacks SS-5 or SS-6 not previously tested and the pulverized coal storage reservoir stack SS-7 in accordance with Section C – Performance Testing. PM₁₀ includes filterable and condensable PM₁₀. These tests shall be repeated at least once every five years from the date of this valid compliance demonstration.

The next five year test cycle will repeat the first five year cycle of testing.

E.2.8 Particulate Control

The baghouses and vent filter house for the for particulate control shall be in operation and control particulate emissions at all times when the pulverized coal transport lines and coal storage reservoir are in operation.

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

E.2.9 Record Keeping Requirements

- (a) To document compliance with Condition E.2.7, the Permittee shall maintain records of the stacks tested during each five year testing cycle.
- (b) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

SECTION E.3 FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)]: The coal handling thaw shed

One (1) non-vented railcar heater system, constructed in 1993, with a maximum capacity of 14 MMBtu per hour.

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

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

E.3.1 PSD Minor Limit (NOx) [326 IAC 2-2]

Pursuant to CP (45) 1895 issued October 26, 1990, the NOx emissions from the railcar heater and pulverized coal preheaters (Section E.1) shall be limited to 37 tons per 12 consecutive month period. Pursuant to CP(45) 1895, the natural gas usage in the railcar heater shall be limited to less than 12.504 million cubic feet per 12 consecutive month period with compliance demonstrated at the end of each month. The natural gas usage in the railcar heater shall be limited to less than 5 million cubic feet per month. Compliance with this limit restricts the potential to emit for NOx to less than 37 tons per year for the railcar heater and makes the provisions of 326 IAC 2-2 Prevention of Significant Deterioration (PSD), not applicable.

E.3.2 Fugitive Dust Emission Limitations [326 IAC 6-4-2][326 IAC 6.8-10-3]

(a) Pursuant to 326 IAC 6-4-2:

(1) The railcar heater generating fugitive dust shall be in violation of this rule (326 IAC 6-4) if any of the following criteria are violated:

(A) A source or combination of sources which cause to exist fugitive dust concentrations greater than sixty-seven percent (67%) in excess of ambient upwind concentrations as determined by the following formula:

$$P = \frac{100(R - U)}{U}$$

Where

P = Percentage increase

R = Number of particles of fugitive dust measured at downward receptor site

U = Number of particles of fugitive dust measured at upwind or background site

(B) The fugitive dust is comprised of fifty percent (50%) or more respirable dust, then the percent increase of dust concentration in subdivision (1) of this section shall be modified as follows:

$$PR = (1.5 \pm N) P$$

Where

N = Fraction of fugitive dust that is respirable dust;

PR = allowable percentage increase in dust concentration above background; and

P = no value greater than sixty-seven percent (67%).

(C) The ground level ambient air concentrations exceed fifty (50) micrograms per cubic meter above background concentrations for a sixty (60) minute period.

- (D) If fugitive dust is visible crossing the boundary or property line of a source. This subdivision may be refuted by factual data expressed in subdivisions (1), (2) or (3) of this section. 326 IAC 6-4-2(4) is not federally enforceable.
- (2) Pursuant to 326 IAC 6-4-6(6) (Exceptions), fugitive dust from a source caused by adverse meteorological conditions will be considered an exception to this rule (326 IAC 6-4) and therefore not in violation.
- (b) Pursuant to 326 IAC 6.8-10-3 Lake County Fugitive Particulate Matter Emissions Limitations, fugitive emissions from the railcar heater generating fugitive dust shall comply with the emissions limitations in Section C - Fugitive Dust Emissions.

E.3.3 Preventive Maintenance Plan

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

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

E.3.4 Record Keeping Requirements

- (a) To document compliance with Conditions E.3.1, the Permittee shall maintain records of the monthly natural gas usage in the rail car heaters.
- (b) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

E.3.5 Reporting Requirements

A quarterly summary of the information to document compliance with condition E.3.1 shall be submitted to the addresses listed in Section C - General Reporting Requirements, of this permit, using the reporting forms located at the end of this permit, or their equivalent, within thirty (30) days after the end of the quarter being reported. The report submitted by the Permittee does require the certification by the responsible official.

SECTION E.4 FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)]: The coal handling processes

- (a) One (1) Railcar Dumper, identified as RCD-1, constructed in 1993, with a maximum capacity of 600 tons per hour, ducted to a baghouse 8AB exhausting through one or two fans to stacks 8A and/or 8B.
- (b) One (1) Reclaim Hopper, identified as RCH-1, constructed in 1993, with a maximum capacity of 300 tons per hour, ducted to baghouse DC-6 and exhausting to stack DC-6.
- (c) One (1) Car Dump Hopper 1/C1, identified as FS-8, constructed in 1993, with a maximum capacity of 200 tons per hour, ducted to baghouse DC-1 exhausting to stack F1,
- (d) One (1) Car dump Hopper 2/C1, identified as FS-9, constructed in 1993, with a maximum capacity of 200 tons per hour, ducted to a baghouse DC-2 exhausting to stack F2,
- (e) One (1) Car Dump Hopper 3/C1, identified as FS-10, constructed in 1993, with a maximum capacity of 200 tons per hour, ducted to a baghouse DC-3 exhausting to stack F3,
- (f) One (1) Transfer Point C1/C2, identified as FS-2, constructed in 1993, with a maximum capacity of 600 tons per hour, ducted to a baghouse (DC-4) exhausting to stack (F4),
- (g) One (1) Reclaim Hopper/C2, identified as FS-14, constructed in 1993, with a maximum capacity of 300 tons per hour, ducted to a baghouse DC-5 exhausting to stack F5,
- (h) One (1) Screen Transfer/C2, identified as FS-3, constructed in 1993, with a maximum capacity of 600 tons per hour, ducted to a baghouse DC-7 exhausting to stack F7,
- (i) One (1) Screen/C3 Gate Transfer identified as FS-11, constructed in 1993, ducted to a baghouse DC-8 exhausting to stack F8,
- (j) One (1) Screen/C4 Gate Transfer, identified as FS-12, constructed in 1993, with a maximum capacity of 600 tons per hour, ducted to a baghouse DC-9 exhausting to stack F9,
- (k) One (1) Transfer Point C4/C5, identified as FS-4, constructed in 1993, ducted to a baghouse DC-10 exhausting to stack F10,

East Building- Coal Handling

- (a) One (1) Transfer Point C5/C6, identified as FS-5, constructed in 1993, with a maximum capacity of 600 tons per hour, ducted to a baghouse DC-11 exhausting to stack F11,
- (b) One (1) Transfer Point C6/Bin 1, identified as FS-7, constructed in 1993, ducted to baghouse DC-12 exhausting to stack F12,
- (c) One (1) Transfer Point C5/Bin 2, identified as FS-6, constructed in 1993, ducted to baghouse DC-13 exhausting to stack F13,
- (d) One (1) Transfer Point C6/Bin 3, identified as FS-13, constructed in 1993, with a maximum capacity of 600 tons per hour, ducted to baghouse DC-14 exhausting to stack F14.

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

Facility Description [326 IAC 2-7-5(15)]: The coal handling operations (continued)

Coal Piles and Haul Roads

- (a) One coal pile operation, identified as F17, constructed in 1993, with a storage capacity of 100,000 tons and an area of 2 acres.
- (b) Haul – Roads – Vehicle Traffic

(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)]

E.4.1 General Provisions Relating to NSPS [326 IAC 12-1][40 CFR Part 60, Subpart A]

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

E.4.2 NSPS Coal Preparation Plant [326 IAC 12-1][40 CFR 60 Subpart Y]

Pursuant to 40 CFR 60.252 (c), the particulate matter opacity from the coal handling processes, shall not exceed twenty percent (20%) opacity.

E.4.3 PM and PM₁₀ Minor Limits [326 IAC 2-2][326 IAC 2-1.1-5]

- (a) The particulate matter (PM) from stacks 8A, 8B, DC-6, F1 through F5 and F7 through F17 shall each not exceed 0.2 pounds per hour.
- (b) The particulate matter less than 10 microns (PM₁₀) from stacks 8A, 8B, DC-6, F1 through F5 and F7 through F17 shall each not exceed 0.12 pound per hour.
- (c) Compliance with the limitations in conditions E.1.4(a), E.2.3(a) and E.4.3(a) combined limits PM to less than 25 tons per year and makes 326 IAC 2-2 and 326 IAC 2-1.1-5 not applicable.
- (d) Compliance with the limitations in conditions E.1.4(b), E.2.3(b) and E.4.3(b) combined limits PM₁₀ to less than 15 tons per year and makes 326 IAC 2-2 and 326 IAC 2-1.1-5 not applicable.

E.4.4 Particulate Limitations [326 IAC 6.8-1-2(a)]

Pursuant to 326 IAC 6.8-1-2(a) (Particulate Matter Limitations for Lake County), the particulate matter from the railcar dumpers, hoppers, screens, transfer points and east building transfer points and bins stacks 8A, 8B, DC-6, F1 through F5, F7 through F14 shall not exceed three-hundreds (0.03) grain per dry standard cubic foot (dscf).

E.4.5 Preventive Maintenance Plan

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for the railcar dumpers, hoppers screens, transfer points and associated baghouses.

Compliance Determination Requirements

E.4.6 NSPS Coal Preparation Plants [40 CFR 60.254]

Pursuant to 40 CFR 60.254, the Permittee shall demonstrate compliance using the following:

- (a) In conducting the performance tests required in 40 CFR 60.8, the Permittee shall use as reference methods and procedures, the test methods in 40 CFR 60 Appendix A or other

methods and procedures as specified in 40 CFR 60.254, except as provided in 40 CFR 60.8(b).

- (b) The Permittee shall determine compliance with the particulate matter standards in condition D.4.2, Method 9 and the procedures in 40 CFR 60.11, shall be used to determine opacity.

E.4.7 Testing Requirements

Within 36 months after issuance of Part 70 Operating Permit No. T089-7171-00169 (issued on July 19, 2006) and in order to comply with conditions E.4.3 and E.4.4 the Permittee shall perform PM/PM₁₀ stack tests on Railcar Dumper Stacks 8A and 8B and one of each of the following:

Reclaim Hopper RCH-1 baghouse Stack DC-6 or Reclaim Hopper/C2 stack F5;
Car Dump Hopper 1/C1 stack F1, Car Dump Hopper 2/C2 stack F2 or Car Dump Hopper 3/C3 stack F3;
Transfer Point C1/C2 Stack F4, Transfer Point C4/C5 stack F10 or Transfer Point C5/C6 stack F11;
Screen Transfer/C2 stack F7, Screen Transfer/C3 gate Transfer stack F8 or Screen Transfer/C4 Gate Transfer stack F9; and
Transfer Point C6/Bin 1, stack F12, Transfer Point C5/Bin 2, stack F13 or Transfer Point C6/Bin 3 stack F14

utilizing a testing method approved by the commissioner in accordance with Section C – Performance Testing. PM₁₀ includes filterable and condensable PM₁₀. These tests shall be repeated at least once every five years from the date of this valid compliance demonstration.

The second five year cycle of PM/PM₁₀ tests shall be performed on the Railcar Dumper Stacks 8A and 8B and one of each of the following not tested previously:

Reclaim Hopper RCH-1 baghouse Stack DC-6 or Reclaim Hopper/C2 stack F5;
Car Dump Hopper 1/C1 stack F1, Car Dump Hopper 2/C2 stack F2 or Car Dump Hopper 3/C3 stack F3;
Transfer Point C1/C2 Stack F4, Transfer Point C4/C5 stack F10 or Transfer Point C5/C6 stack F11;
Screen Transfer/C2 stack F7, Screen Transfer/C3 gate Transfer stack F8 or Screen Transfer/C4 Gate Transfer stack F9; and
Transfer Point C6/Bin 1, stack F12, Transfer Point C5/Bin 2, stack F13 or Transfer Point C6/Bin 3 stack F14

utilizing a testing method approved by the commissioner in accordance with Section C – Performance Testing. PM₁₀ includes filterable and condensable PM₁₀. These tests shall be repeated at least once every five years from the date of this valid compliance demonstration in accordance with Section C – Performance Testing.

The third five year cycle of PM/PM₁₀ tests shall be performed on the Railcar Dumper Stacks 8A and 8B, Reclaim Hopper RCH-1 baghouse Stack DC-6 or Reclaim Hopper/C2 stack F5 and one of each of the following not tested previously in test cycle one or two:

Car Dump Hopper 1/C1 stack F1, Car Dump Hopper 2/C2 stack F2 or Car Dump Hopper 3/C3 stack F3;
Transfer Point C1/C2 Stack F4, Transfer Point C4/C5 stack F10 or Transfer Point C5/C6 stack F11;
Screen Transfer/C2 stack F7, Screen Transfer/C3 gate Transfer stack F8 or Screen Transfer/C4 Gate Transfer stack F9; and
Transfer Point C6/Bin 1, stack F12, Transfer Point C5/Bin 2, stack F13 or Transfer Point C6/Bin 3 stack F14

utilizing a testing method approved by the commissioner in accordance with Section C – Performance Testing. PM_{10} includes filterable and condensable PM_{10} . These tests shall be repeated at least once every five years from the date of this valid compliance demonstration in accordance with Section C – Performance Testing.

E.4.8 Particulate Control

The baghouses for particulate control shall be in operation and control particulate emissions at all times the railcar dumpers, hoppers screens, and transfer points are in operation.

E.4.9 Fugitive Dust Control

A dust suppressant shall be applied to the coal piles and roads as necessary during the handling and transporting of coal.

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

E.4.10 Record Keeping Requirements

- (a) To document compliance with Condition E.4.7, the Permittee shall maintain records of the stacks tested during each five year testing cycle.
- (b) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

SECTION E.5 FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)]: Specifically Regulated insignificant activities include the following facilities, emission units, fugitive sources, control equipment, process equipment and operational practices:

- (a) Degreasing operations that do not exceed 145 gallons per 12 months, except if subject to 326 IAC 20-6.
- (b) Cleaners and solvents characterized as follows:
 - (1) Having a vapor pressure equal to or less than 2 kPa; 15 mm Hg; or 0.3 psi measured at 38°C (100°F) or;
 - (2) Having a vapor pressure equal to or less than 0.7 kPa; 5mm Hg; or 0.1 psi measured at 20°C (68°F); the use of which for all cleaners and solvents combined does not exceed 145 gallons per 12 months.
- (c) One (1) 5,000 gallon #2 diesel fuel tank - 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.

(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)]

E.5.1 Volatile Organic Compounds (VOC) [326 8-3-5]

- (a) 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°C) (one hundred degrees Fahrenheit (100°F));
 - (B) The solvent is agitated; or
 - (C) The solvent is heated.
 - (2) Equip the degreaser with a facility for draining cleaned articles. If the solvent volatility is greater than four and three-tenths (4.3) kiloPascals (thirty-two (32) millimeters of mercury or six-tenths (0.6) pounds per square inch) measured at thirty-eight degrees Celsius (38°C) (one hundred degrees Fahrenheit (100°F)), then the drainage facility must be internal such that articles are enclosed under the cover while draining. The drainage facility may be external for applications where an internal type cannot fit into the cleaning system.
 - (3) Provide a permanent, conspicuous label which lists the operating requirements outlined in subsection (b).
 - (4) The solvent spray, if used, must be a solid, fluid stream and shall be applied at a pressure which does not cause excessive splashing.

- (5) Equip the degreaser with one (1) of the following control devices if the solvent volatility is greater than four and three-tenths (4.3) kiloPascals (thirty-two (32) millimeters of mercury or six-tenths (0.6) pounds per square inch) measured at thirty-eight degrees Celsius (38^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.
- (b) Pursuant to 326 IAC 8-3-5(b) (Cold Cleaner Degreaser Operation and Control), the owner or operator of a cold cleaning facility construction of which commenced after July 1, 1990, shall ensure that the following operating requirements are met:
 - (1) Close the cover whenever articles are not being handled in the degreaser.
 - (2) Drain cleaned articles for at least fifteen (15) seconds or until dripping ceases.
 - (3) Store waste solvent only in covered containers and prohibit the disposal or transfer of waste solvent in any manner in which greater than twenty percent (20%) of the waste solvent by weight could evaporate.

E.5.2 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.

E.5.3 Volatile Organic Liquid Storage Vessels [326 IAC 8-9-1]

- (a) Pursuant to 326 IAC 8-9-1(a) and (b) (Volatile Organic Liquid Storage Vessels), on and after October 1, 1995, stationary vessels used to store volatile organic liquids (VOL), that are located in Clark, Floyd, Lake or Porter County with a capacity of less than thirty nine thousand (39,000) gallons are subject to the reporting and record keeping requirements of this rule. The VOL storage vessels are exempted from all other provisions of this rule.
- (b) Pursuant to 326 IAC 8-9-6(a) and (b), the Permittee shall maintain the following records for the life of the stationary storage vessels and submit a report to IDEM, OAQ containing the following for each vessel:
 - (1) The vessel identification number,
 - (2) The vessel dimensions, and
 - (3) The vessel capacity.

SECTION F Nitrogen Oxides Budget Trading Program - NOX Budget Permit for NOX Budget Units Under 326 IAC 10-4-1(a)

ORIS Code: 50733

NOX Budget Source [326 IAC 2-7-5(15)]

One (1) Boiler House No. 4, emissions group 720, comprised of the following:

- (a) Two (2) Boilers, 720 No. 1 and No. 2, identified as O4B10459 and O4B20460, constructed in 1967, equipped to combust natural gas, blast furnace gas and fuel oil, with a heat input of 500 MMBtu per hour each, exhausting through Stacks O46268 and O46269, respectively.
- (b) One (1) Boiler, 720 No. 3, identified as O4B30461, constructed in 1967, equipped to combust blast furnace gas and natural gas, with a heat input of 500 MMBtu per hour, exhausting through Stack O46270.

One (1) Turbo Blower Boiler House (TBBH), emissions group 701, comprised of the following:

- (a) Three (3) Boilers, 701 No. 1, No. 2, and No. 3, identified as OTB10462, OTB20463 and OTB30464, constructed in 1948, equipped to combust blast furnace gas, coke oven gas, fuel oil and natural gas, with a heat input of 400 MMBtu per hour each, exhausting through Stacks OT6271, OT6272 and OT6273, respectively.
- (b) One (1) Boiler 701 No. 5, identified as OTB50466, constructed in 1958, equipped to combust blast furnace gas, coke oven gas, fuel oil and natural gas, with a heat input of 410 MMBtu per hour, exhausting through Stack OT6275.
- (c) One (1) boiler 701 No. 6, identified as OTB60467, constructed prior to August 17, 1971, equipped to combust blast furnace gas and natural gas, with a heat input capacity of 710 MMBtu per hour, exhausting through Stack OT6276.

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

F.1 Automatic Incorporation of Definitions [326 IAC 10-4-7(e)]

This NOX budget permit is deemed to incorporate automatically the definitions of terms under 326 IAC 10-4-2.

F.2 Standard Permit Requirements [326 IAC 10-4-4(a)]

- (a) The owners and operators of the NOX budget source and each NOX budget unit shall operate each unit in compliance with this NOX budget permit.
- (b) The NOX budget units subject to this NOX budget permit are the following:
 - (1) At Boiler House No. 4, 720 No. 1, 720 No. 2, and 720 No. 3; and
 - (2) At Turbo Blower Boiler House, 701 No. 1, 701 No. 2, 701 No. 3, 701 No. 5, and 701 No. 6.

F.3 Monitoring Requirements [326 IAC 10-4-4(b)]

- (a) The owners and operators and, to the extent applicable, the NOX authorized account representative of the NOX budget source and each NOX budget unit at the source shall comply with the monitoring requirements of 40 CFR 75 and 326 IAC 10-4-12.

- (b) The emissions measurements recorded and reported in accordance with 40 CFR 75 and 326 IAC 10-4-12 shall be used to determine compliance by each unit with the NOX budget emissions limitation under 326 IAC 10-4-4(c) and Condition F.4, Nitrogen Oxides Requirements.

F.4 Nitrogen Oxides Requirements [326 IAC 10-4-4(c)]

- (a) The owners and operators of the NOX budget source and each NOX budget unit at the source shall hold NOX allowances available for compliance deductions under 326 IAC 10-4-10(j), as of the NOX allowance transfer deadline, in each unit's compliance account and the source's overdraft account in an amount:
 - (1) Not less than the total NOX emissions for the ozone control period from the unit, as determined in accordance with 40 CFR 75 and 326 IAC 10-4-12;
 - (2) To account for excess emissions for a prior ozone control period under 326 IAC 10-4-10(k)(5); or
 - (3) To account for withdrawal from the NOX budget trading program, or a change in regulatory status of a NOX budget opt-in unit.
- (b) Each ton of NOX emitted in excess of the NOX budget emissions limitation shall constitute a separate violation of the Clean Air Act (CAA) and 326 IAC 10-4.
- (c) Each NOX budget unit shall be subject to the requirements under (a) above and 326 IAC 10-4-4(c)(1) starting on May 31, 2004.
- (d) NOX allowances shall be held in, deducted from, or transferred among NOX allowance tracking system accounts in accordance with 326 IAC 10-4-9 through 11, 326 IAC 10-4-13, and 326 IAC 10-4-14.
- (e) A NOX allowance shall not be deducted, in order to comply with the requirements under (a) above and 326 IAC 10-4-4(c)(1), for an ozone control period in a year prior to the year for which the NOX allowance was allocated.
- (f) A NOX allowance allocated under the NOX budget trading program is a limited authorization to emit one (1) ton of NOX in accordance with the NOX budget trading program. No provision of the NOX budget trading program, the NOX budget permit application, the NOX budget permit, or an exemption under 326 IAC 10-4-3 and no provision of law shall be construed to limit the authority of the U.S. EPA or IDEM, OAQ to terminate or limit the authorization.
- (g) A NOX allowance allocated under the NOX budget trading program does not constitute a property right.
- (h) Upon recordation by the U.S. EPA under 326 IAC 10-4-10, 326 IAC 10-4-11, or 326 IAC 10-4-13, every allocation, transfer, or deduction of a NOX allowance to or from each NOX budget unit's compliance account or the overdraft account of the source where the unit is located is deemed to amend automatically, and become a part of, this NOX budget permit of the NOX budget unit by operation of law without any further review.

F.5 Excess Emissions Requirements [326 IAC 10-4-4(d)]

The owners and operators of each NOX budget unit that has excess emissions in any ozone control period shall do the following:

- (a) Surrender the NOX allowances required for deduction under 326 IAC 10-4-10(k)(5).

- (b) Pay any fine, penalty, or assessment or comply with any other remedy imposed under 326 IAC 10-4-10(k)(7).

F.6 Record Keeping Requirements [326 IAC 10-4-4(e)] [326 IAC 2-7-5(3)]

Unless otherwise provided, the owners and operators of the NOx budget source and each NOx budget unit at the source shall keep, either on site at the source or at a central location within Indiana for those owners or operators with unattended sources, each of the following documents for a period of five (5) years:

- (a) The account certificate of representation for the NOX authorized account representative for the source and each NOX budget unit at the source and all documents that demonstrate the truth of the statements in the account certificate of representation, in accordance with 326 IAC 10-4-6(h). The certificate and documents shall be retained either on site at the source or at a central location within Indiana for those owners or operators with unattended sources beyond the five (5) year period until the documents are superseded because of the submission of a new account certificate of representation changing the NOX authorized account representative.
- (b) All emissions monitoring information, in accordance with 40 CFR 75 and 326 IAC 10-4-12, provided that to the extent that 40 CFR 75 and 326 IAC 10-4-12 provide for a three (3) year period for record keeping, the three (3) year period shall apply.
- (c) Copies of all reports, compliance certifications, and other submissions and all records made or required under the NOX budget trading program.
- (d) Copies of all documents used to complete a NOX budget permit application and any other submission under the NOX budget trading program or to demonstrate compliance with the requirements of the NOX budget trading program.

This period may be extended for cause, at any time prior to the end of five (5) years, in writing by IDEM, OAQ or the U.S. EPA. Records retained at a central location within Indiana shall be available immediately at the location and submitted to IDEM, OAQ or U.S. EPA within three (3) business days following receipt of a written request. Nothing in 326 IAC 10-4-4(e) shall alter the record retention requirements for a source under 40 CFR 75. Unless otherwise provided, all records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

F.7 Reporting Requirements [326 IAC 10-4-4(e)]

- (a) The NOX authorized account representative of the NOX budget source and each NOX budget unit at the source shall submit the reports and compliance certifications required under the NOX budget trading program, including those under 326 IAC 10-4-8, 326 IAC 10-4-12, or 326 IAC 10-4-13.
- (b) Pursuant to 326 IAC 10-4-4(e) and 326 IAC 10-4-6(e)(1), each submission shall include the following certification statement by the NOX authorized account representative: "I am authorized to make this submission on behalf of the owners and operators of the NOX budget sources or NOX budget units for which the submission is made. I certify under penalty of law that I have personally examined, and am familiar with, the statements and information submitted in this document and all its attachments. Based on my inquiry of those individuals with primary responsibility for obtaining the information, I certify that the statements and information are to the best of my knowledge and belief true, accurate, and complete. I am aware that there are significant penalties for submitting false statements and information or omitting required statements and information, including the possibility of fine or imprisonment."
- (c) Where 326 IAC 10-4 requires a submission to IDEM, OAQ, the NOX authorized account representative shall submit required information to:

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

- (d) Where 326 IAC 10-4 requires a submission to U.S. EPA, the NOX authorized account representative shall submit required information to:

U.S. Environmental Protection Agency
Clean Air Markets Division
1200 Pennsylvania Avenue, NW
Mail Code 6204N
Washington, DC 20460

F.8 Liability [326 IAC 10-4-4(f)]

The owners and operators of each NOX budget source shall be liable as follows:

- (a) Any person who knowingly violates any requirement or prohibition of the NOX budget trading program, a NOX budget permit, or an exemption under 326 IAC 10-4-3 shall be subject to enforcement pursuant to applicable state or federal law.
- (b) Any person who knowingly makes a false material statement in any record, submission, or report under the NOX budget trading program shall be subject to criminal enforcement pursuant to the applicable state or federal law.
- (c) No permit revision shall excuse any violation of the requirements of the NOX budget trading program that occurs prior to the date that the revision takes effect.
- (d) Each NOX budget source and each NOX budget unit shall meet the requirements of the NOX budget trading program.
- (e) Any provision of the NOX budget trading program that applies to a NOX budget source, including a provision applicable to the NOX authorized account representative of a NOX budget source, shall also apply to the owners and operators of the source and of the NOX budget units at the source.
- (f) Any provision of the NOX budget trading program that applies to a NOX budget unit, including a provision applicable to the NOX authorized account representative of a NOX budget unit, shall also apply to the owners and operators of the unit. Except with regard to the requirements applicable to units with a common stack under 40 CFR 75 and 326 IAC 10-4-12, the owners and operators and the NOX authorized account representative of one (1) NOX budget unit shall not be liable for any violation by any other NOX budget unit of which they are not owners or operators or the NOX authorized account representative and that is located at a source of which they are not owners or operators or the NOX authorized account representative.

F.9 Effect on Other Authorities [326 IAC 10-4-4(g)]

No provision of the NOX budget trading program, a NOX budget permit application, a NOX budget permit, or an exemption under 326 IAC 10-4-3 shall be construed as exempting or excluding the owners and operators and, to the extent applicable, the NOX authorized account representative of a NOX budget source or NOX budget unit from compliance with any other provision of the applicable, approved state implementation plan, a federally enforceable permit, or the CAA.

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

PART 70 OPERATING PERMIT
CERTIFICATION

Source Name: U.S. Steel - Gary Works
Source Address: One North Broadway, Gary, IN 46402
Mailing Address: One North Broadway, Gary, IN 46402
Part 70 Permit No.: T089-7663-00121

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

Please check what document is being certified:

Test Result (specify) _____

Report (specify) _____

Notification (specify) _____

Other (specify) _____

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

Signature:

Printed Name:

Title/Position:

Phone:

Date:

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE BRANCH
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251
Phone: 317-233-0178
Fax: 317-233-6865**

EMERGENCY OCCURRENCE REPORT

Source Name: U.S. Steel - Gary Works
Source Address: One North Broadway, Gary, IN 46402
Mailing Address: One North Broadway, Gary, IN 46402
Part 70 Permit No.: T089-7663-00121

This form consists of 2 pages

Page 1 of 2

This is an emergency as defined in 326 IAC 2-7-1(12)

The Permittee must notify the Office of Air Quality (OAQ), within four (4) business hours (1-800-451-6027 or 317-233-0178, ask for Compliance Section); and
The Permittee must submit notice in writing or by facsimile within two (2) days (Facsimile Number: 317-233-6865), and follow the other requirements of 326 IAC 2-7-16.

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

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

If 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 Describe:
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

QUARTERLY DEVIATION AND COMPLIANCE MONITORING REPORT

Source Name: U.S. Steel - Gary Works
Source Address: One North Broadway, Gary, IN 46402
Mailing Address: One North Broadway, Gary, IN 46402
Part 70 Permit No.: T089-7663-00121

Months: _____ to _____ Year: _____

Page 1 of 2

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

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

Form Completed By: _____

Title/Position: _____

Date: _____

Phone: _____

Attach a signed certification to complete this report.

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

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

Source Name: U.S. Steel - Gary Works
Source Address: One North Broadway, Gary, IN 46402
Mailing Address: One North Broadway, Gary, IN 46402
Part 70 Permit No.: T089-7663-00121
Facility:

<input type="checkbox"/> Natural Gas Only <input type="checkbox"/> Alternative 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 Report

Source Name: U.S. Steel - Gary Works
Source Address: One North Broadway, Gary, IN 46402
Mailing Address: One North Broadway, Gary, IN 46402
Part 70 Permit No.: T089-7663-00121
Facility: No. 3 Sinter Plant Sinter Strand Windbox recirculating burners (ISB001, ISB002, and ISB003)
Parameter: Natural gas usage
Limit: 95.5 million cubic feet (MMCF) per 12-consecutive month period with compliance demonstrated at the end of each month.

QUARTER: _____ YEAR: _____

Month	Column 1	Column 2	Column 1 + Column 2
	This Month	Previous 11 Months	12 month Total
Month 1			
Month 2			
Month 3			

- No deviation occurred in this quarter.
- Deviation/s occurred in this quarter.

Deviation has been reported on: _____

Submitted by: _____

Title / Position: _____

Signature: _____

Date: _____

Phone: _____

Attach a signed certification to complete this report.

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

Part 70 Permit Quarterly Report

Source Name: U.S. Steel - Gary Works
Source Address: One North Broadway, Gary, IN 46402
Mailing Address: One North Broadway, Gary, IN 46402
Part 70 Permit No.: T089-7663-00121
Facility: No. 3 Sinter Plant Sinter Strand Windbox recirculating burners (ISB001, ISB002, and ISB003)
Parameter: Coke oven gas usage
Limit: 1,637.4 million cubic feet (MMCF) per 12-consecutive month period with compliance demonstrated at the end of each month

QUARTER: _____ YEAR: _____

Month	Column 1	Column 2	Column 1 + Column 2
	This Month	Previous 11 Months	12 Month Total
Month 1			
Month 2			
Month 3			

- No deviation occurred in this quarter.
- Deviation/s occurred in this quarter.

Deviation has been reported on: _____

Submitted by _____:

Title / Position: _____

Signature: _____

Date: _____

Phone: _____

Attach a signed certification to complete this report.

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

Part 70 Operating Permit Quarterly Report

Source Name: U.S. Steel - Gary Works
Source Address: One North Broadway, Gary, IN 46402
Mailing Address: One North Broadway, Gary, IN 46402
Part 70 Permit No.: T089-7663-00121
Facility: South Sheet Mill hydrogen atmosphere batch annealing furnaces
Parameter: NOx
Limit: 37.2 million cubic feet (MMCF) of natural gas per 12 consecutive month period with compliance demonstrated at the end of each month,

YEAR: _____

Month	Column 1	Column 2	Column 1 + Column 2
	This month	11 previous months	12 month total
Month 1			
Month 2			
Month 3			

- No deviation occurred in this quarter.
- Deviation/s occurred in this quarter.

Deviation has been reported on: _____

Submitted by: _____

Title / Position: _____

Signature: _____

Date: _____

Phone: _____

Attach a signed certification to complete this report.

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

Part 70 Operating Permit Quarterly Report

Source Name: U. S. Steel - Gary Works
Source Address: One North Broadway, Gary, Indiana 46402
Mailing Address: One North Broadway, Gary, Indiana 46402
Part 70 Part No.: T089-7663-00121
Facility: Turboblower Boiler House (TBBH) boiler no. 6
Parameter: Natural Gas Usage
Limits: 1,059.7 million cubic feet (MMCF) per 12-consecutive month period with compliance demonstrated at the end of each month.

QUARTER: _____ YEAR: _____

Month	Column 1	Column 2	Column 1 + Column 2
	This month	11 previous months	12 month total
Month 1			
Month 2			
Month 3			

- No deviation occurred in this quarter.
- Deviation/s occurred in this quarter.

Deviation has been reported on: _____

Submitted by: _____

Title / Position: _____

Signature: _____

Date: _____

Phone: _____

Attach a signed certification to complete this report.

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

Part 70 Quarterly Report

Source Name: US Steel - Gary Works
Source Address: One North Broadway, Gary, IN 46402
Mailing Address: One North Broadway, Gary, IN 46402
Part 70 Permit No.: T089-7663-00121
Facility: Coke oven battery natural gas injection jets (CPNG001, CPNG002, and CPNG003)
Parameter: Natural gas usage
Limit: 178.7 million cubic feet (MMCF) per 12-consecutive month period with compliance demonstrated at the end of each month.

QUARTER: _____ YEAR _____

Month	Column 1	Column 2	Column 1 + Column 2
	This month	11 previous months	12 month total
Month 1			
Month 2			
Month 3			

- No deviation occurred in this quarter.
- Deviation/s occurred in this quarter.

Deviation has been reported on: _____

Submitted by: _____

Title / Position: _____

Signature: _____

Date: _____

Phone: _____

Attach a signed certification to complete this report.

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

Part 70 Quarterly Report

Source Name: US Steel - Gary Works
 Source Address: One North Broadway, Gary, IN 46402
 Mailing Address: One North Broadway, Gary, IN 46402
 Part 70 Permit No.: T089-7663-00121
 Facility: Boilers No. through No. 10 and the temporary rental boiler at the coke plant boiler house
 Parameter: Total NOx emissions
 Limit: Less than 64.6 tons per twelve (12) consecutive month period with compliance demonstrated at the end of each month

NOx Emissions (tons/month) = $(280X + 36Y + 129 Z) / 2000$

Where X = total monthly natural gas usage in boilers No. 1 through No. 8 (MMCF/month)
 Y = monthly natural gas usage in the temporary rental boiler (MMCF/month)
 Z = total monthly natural gas usage in boilers No. 9 and 10 (MMCF/month)

QUARTER: _____ YEAR _____

Month	Column 1	Column 2	Column 1 + Column 2
	This month	11 previous months	12 month total
Month 1			
Month 2			
Month 3			

- No deviation occurred in this quarter.
- Deviation/s occurred in this quarter.

Deviation has been reported on: _____

Submitted by: _____

Title / Position: _____

Signature: _____

Date: _____

Phone: _____

Attach a signed certification to complete this report.

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

Part 70 Quarterly Report

Source Name: US Steel - Gary Works
Source Address: One North Broadway, Gary, IN 46402
Mailing Address: One North Broadway, Gary, IN 46402
Part 70 Permit No.: T089-7663-00121
Facility: Boilers No. 1 through No.10 and the temporary rental boiler at the coke plant boiler house
Parameter: Total Natural gas usage
Limit: Less than 2,550 MMCF per 12-consecutive month period with compliance demonstrated at the end of each month.

QUARTER: _____ YEAR _____

Month	Column 1	Column 2	Column 1 + Column 2
	This month	11 previous months	12 month total
Month 1			
Month 2			
Month 3			

- No deviation occurred in this quarter.
- Deviation/s occurred in this quarter.

Deviation has been reported on: _____

Submitted by: _____

Title / Position: _____

Signature: _____

Date: _____

Phone: _____

Attach a signed certification to complete this report.

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

Part 70 Quarterly Report

Source Name: US Steel - Gary Works
Source Address: One North Broadway, Gary, Indiana 46406
Mailing Address: One North Broadway, Gary, Indiana 46406
Part 70 Permit No.: T089-7663-00121
Facility: Granulation plant
Parameter: granule process rate
Limit: 1,704,000 tons per 12 consecutive month period with compliance demonstrated at the end of each month

Year: _____

Month	Column 1	Column 2	Column 1 + Column 2
	This Month	Previous 11 Months	12 Month Total
Month 1			
Month 2			
Month 3			

- No deviation occurred in this quarter.
- Deviations occurred in this quarter.

Deviation has been reported on: _____

Submitted by: _____

Title / Position _____

Signature _____

Date: _____

Phone: _____

Attach a signed certification to complete this report.

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

Part 70 Quarterly Report

Source Name: US Steel - Gary Works
Source Address: One North Broadway, Gary, IN 46402
Mailing Address: One North Broadway, Gary, IN 46402
Part 70 Permit No.: T089-7663-00121
Facility: Air Preheaters 1, 2 and 3 combined (former Gary Coal Processing, LP)
Parameter: Natural gas usage
Limit: Natural gas usage of 549 MMcf per 12 consecutive month period with compliance demonstrated at the end of each month and less than 183 MMcf per month.

YEAR: _____

Month	Column 1	Column 2	Column 1 + Column 2
	This Month	Previous 11 Months	12 Month Total
Month 1			
Month 2			
Month 3			

No deviation occurred in this quarter.

Deviation/s occurred in this quarter.

Deviation has been reported on: _____

Submitted by: _____

Title/Position: _____

Signature: _____

Date: _____

Phone _____

Attach a signed certification to complete this report.

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

Part 70 Quarterly Report

Source Name: US Steel - Gary Works
Source Address: One North Broadway, Gary, IN 46402
Mailing Address: One North Broadway, Gary, IN 46402
Part 70 Permit No.: T089-7663-00121
Facility: Railcar Heater - Thaw shed (former Gary Coal Processing, LP)
Parameter: Natural gas usage
Limit: Natural gas usage of 12.504 MMcft per 12 consecutive month period with compliance demonstrated at the end of each month and less than 5 MMcft per month.

YEAR: _____

Month	Column 1	Column 2	Column 1 + Column 2
	This Month	Previous 11 Months	12 Month Total
Month 1			
Month 2			
Month 3			

No deviation occurred in this quarter.

Deviation/s occurred in this quarter.

Deviation has been reported on:

Submitted by: _____

Title/Position: _____

Signature: _____

Date: _____

Phone _____

Attach a signed certification to complete this report.