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**NOTICE OF 60-DAY PERIOD
FOR PUBLIC COMMENT**

Preliminary Findings Regarding a Part 70 Operating Permit

**For ISG Burns Harbor, LLC and associated Contractors
in Porter County**

Part 70 No.: T127-6301-00001

The Indiana Department of Environmental Management (IDEM), has received an application from ISG Burns Harbor, LLC, located at U.S. Highway 12, Burns Harbor, Indiana 46304, for a Part 70 Operating Permit, also called a Title V Permit. IDEM's Office of Air Quality (OAQ) issues this type of permit to regulate the operation of sources that emit relatively large amounts of air pollution. This type of permit combines all of the requirements for controlling air pollution into one permit for the source, and requires the source to test equipment and keep records to ensure that the facility is following the requirements for controlling air pollution. IDEM has reviewed this application, and has developed preliminary findings, consisting of a draft permit and several supporting documents, that would allow ISG Burns Harbor, LLC, to operate a stationary steel works operation.

IDEM OAQ has determined that ISG Burns Harbor, LLC, and the following contractors are considered a single source. Separate Part 70 operating permits will be issued to ISG Burns Harbor, LLC, and the following contractors solely for administrative purposes:

- Indiana Flame Services, Part 70 No.: T127-16202-00098
- Levy Company, Part 70 No.: T127-7656-00026
- Mid-Continent Coal and Coke, Part 70 No.: T127-7634-00108
- Oil Technology, Part 70 No.: T127-7667-00074
- PSC Metals, Inc. Part 70 No.: T127-7664-00076

This draft Part 70 operating permit does not contain any new equipment that would emit air pollutants; however, some conditions from previously issued permits/approvals have been corrected, changed, or removed. This notice fulfills the public notice procedures to which those conditions are subject.

A copy of the permit application and IDEM's preliminary findings are available at:

Westchester Public Library
200 West Indiana Street
Chesterton, Indiana, 46304
And

IDEM Northwest Regional Office
8315 Virginia Street, Suite 1
Merrillville, Indiana 46410-9201
And

Northwestern Indiana Regional Planning Commission (NIRPC)
6100 Southport Road
Portage, Indiana, 46368

A copy of the preliminary findings is available on the Internet at: www.IN.gov/idem/air/permits/Air-Permits-Online

How can you participate in this process?

The day after this announcement is published in a newspaper marks the beginning of a 60-day public comment period. During that 60-day period, you may comment on this draft permit. If the 60th day of the comment period falls on a day when IDEM offices are closed for business, all comments must be postmarked or delivered in person on the next business day that IDEM is open.

You may request that IDEM hold a public hearing about this draft permit. If adverse comments concerning the **air pollution impact** of this draft permit are received, with a request for a public hearing, IDEM may hold a public hearing. If a public hearing is held, IDEM will make a separate announcement of the date, time, and location of that hearing. At a hearing, you would have an opportunity to submit written comments, make verbal comments, ask questions, and discuss any air pollution concerns with IDEM staff.

Comments and supporting documentation, or a request for a public hearing, should be sent in writing to IDEM. If you do not want to comment at this time, but would like to be added to IDEM's mailing list to receive notice of future action related to this permit application, please contact IDEM. Please refer to permit number 127-6301-00001 (and if necessary, include the appropriate contractor permit number) in all correspondence.

To Contact IDEM:

Melissa Groch
IDEM, Office of Air Quality
100 North Senate Avenue
Indianapolis, Indiana 46204
(800) 451-6027, ask for extension 3-8397
Or dial directly: (317) 233-8397
E-mail: mgroch@idem.IN.gov

All comments will be considered by IDEM when we make a decision to issue or deny the permit. Comments that are most likely to affect final permit decisions are those based on the rules and laws governing this permitting process (326 IAC 2), air quality issues, and technical issues. IDEM does not have legal authority to regulate zoning, odor or noise. For such issues, please contact your local officials.

What will happen after IDEM makes a decision?

Following the end of the public comment period, IDEM will issue a Notice of Decision stating whether the permit has been issued or denied. If the permit is issued, it may be different than the draft permit because of comments that were received during the public comment period. If comments are received during the public notice period, the final decision will include a document that summarizes the comments and IDEM's response to those comments. If you have submitted comments or have asked to be added to the mailing list, you will receive a Notice of the Decision. The notice will provide details on how you may appeal IDEM's decision, if you disagree with that decision. The final decision will also be available on the Internet at the address indicated above, at the local library indicated above, at the IDEM public file room on the 12th floor of the Indiana Government Center North, 100 N. Senate, Indianapolis, and at the IDEM Northwest Regional Office, 8315 Virginia Street, Suite 1, Merrillville, Indiana 46410-9201.

If you have any questions please contact Melissa Groch of my staff at the above address.

Paul Dubenetzky, Assistant Commissioner
Permits Branch
Office of Air Quality

For additional information about air permits, and how you can participate, please see IDEM **Citizens' Guide to Public Participation** and **Permit Guide** on the Internet at: www.IN.gov/idem/guides.



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DRAFT

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PART 70 OPERATING PERMIT OFFICE OF AIR QUALITY

**ISG Burns Harbor, LLC
U.S. Highway 12
Burns Harbor, Indiana 46304**

(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.: T127-6301-00001	
Issued by: Paul Dubenetzky, Assistant Commissioner Office of Air Quality	Issuance Date: Expiration Date:

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SECTION A

SOURCE SUMMARY

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

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

The Permittee owns and operates a stationary steel works operation consisting of a sintering plant, coke ovens, blast furnaces, steelmaking (BOF) and continuous casting, rolling mills, coating and pickling operations, and associated processes for the production of coke, chemical recovery coke oven products, iron, hot rolled steel, steel coils, steel strip, cold rolled and/or coated steel sheet and strip.

Responsible Official: General Manager of ISG Burns Harbor, LLC
Source Address: U.S. Highway 12, Burns Harbor, Indiana
Mailing Address: 250 West U.S. Highway 12, Burns Harbor, Indiana 46304-9745
General Source Phone Number: (219)787-2712
SIC Code: 3312
County Location: Porter
Source Location Status: Nonattainment for PM 2.5
Nonattainment for 1 hour and 8 hour ozone standards
Attainment for all other criteria pollutants
Source Status: Part 70 Permit Program
Major Source under PSD and Emission Offset Rules
Major Source, Section 112 of the Clean Air Act
1 of 28 Listed Source Categories

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

This steel works operation consists of a primary source, ISG (Indiana Steel Group) Burns Harbor, LLC (plant ID 00001), located at U.S. Highway 12, Burns Harbor, Indiana, with five (5) contractors:

- (a) Indiana Flame (plant ID 00098);
- (b) Levy Company (plant ID 00026);
- (c) Mid-Continent Coal and Coke (plant ID 00108);
- (d) Oil Technology (plant ID 00074); and
- (e) PSC Metals, Inc. (plant ID 00076).

All the companies listed above are contracted services of ISG Burns Harbor LLC, which are also located at U.S. Highway 12, Burns Harbor, Indiana.

IDEM has determined that ISG Burns Harbor, LLC and its contractors, listed above, are one source under the Part 70 operating permit program. This source and its contractors are considered in this manner due to the fact that the contractors are providing ISG Burns Harbor, LLC with services associated with steel mill operations at the sole permission of ISG Burns Harbor, LLC. Therefore, the term "source" in the Part 70 documents refers to both ISG Burns Harbor, LLC and its contractors listed in (a) through (f) above.

Separate Part 70 permits will be issued to ISG Burns Harbor, LLC (T127-6301-00001) and its contractors solely for administrative purposes. The contractor Part 70 permit numbers are as follows:

- (a) Indiana Flame (T127-16202-00098), operates an enclosed steel slab scarfing facility;
- (b) Levy Company (T127-7656-00026), operates slag separation and screening processes;
- (c) Mid-Continent Coal and Coke (T127-7634-00108), operates several portable coke fines screening

- (d) Oil Technology (T127-7667-00074), operates a waste oil recovery process; and
- (e) Phillip Metals (T127-7664-00076), operates a scrap metal reclamation process.

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

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

- (a) A Coke Oven process plant consisting of two (2) Coke Batteries, #1 and #2, with #1 modified in 1983 and a #2 pad-up rebuild (reconstruction) in 1994, each consisting of eighty-two (82) ovens, with maximum capacities of 1,400,000 and 1,371,870 tons per year of coal input respectively, consisting of the following:
 - (1) Batteries #1 & #2:
 - (A) Battery #1 underfire, identified as EU512-08, with a maximum heat input of 465 MMBtu/hr, and opacity measured by a continuous opacity monitor, exhausting at stack EP512-3026.
 - (B) Battery #2 underfire, identified as EU512-16, with a maximum heat input of 420 MMBtu/hr, and opacity measured by a continuous opacity monitor, exhausting at stack EP512-3027.
 - (C) Pushing operations, identified as EU512-06 and 14, respectively, with particulate emissions for each battery controlled by baghouse C512-3024 exhausting at stack EP512-3024, and scrubber C512-3018 exhausting to stack EP512-3018.
 - (D) Battery #1 gas collector main pressure valves, identified as EU512-07, exhausting to four (4) stacks collectively identified as EP512-3086 equipped with four (4) flares collectively identified as C512-3015.
 - (E) Battery #2 gas collector main pressure valves, identified as EU512-15, exhausting to six (6) stacks collectively identified as EP512-3087 equipped with six (6) flares collectively identified as C512-3016.
 - (F) Quenching operations, identified as EU512-09 and 17, respectively with emissions exiting stations EP512-3081 and 3082, including quench towers (servicing either battery) equipped with baffles and sprays.
 - (G) Batteries #1 and #2 fugitive emissions are generated from the following:
 - (1) Charging operations, identified as EU512-04 and 12, respectively, with fugitive emissions EP512-3016 and 3022, respectively;
 - (2) Lids (four on each oven), identified as EU512-03 and 11, respectively, with fugitive emissions EP512-3015 and 3021, respectively;
 - (3) Offtake Systems, identified as EU512-02 and 10, respectively, with fugitive emissions EP512-3014 and 3020, respectively; and
 - (4) Doors, identified as EU512-05 and 13, with fugitive emissions EP512-3017 and 3023.
- (b) Coke By-products Recovery plant, identified as EU512-18, constructed in 1969 and modified in 1972, consisting of the following:
 - (1) Equipment not required to be controlled under the provisions of Subpart L:
 - EP512-3012 Tar Loading facility
 - EP512-3049 Flushing Liquor Header
 - EP512-3054 500 gallon open Surge Tank

EP512-3055	Flushing Liquor Sump
EP512-3056	Ammonia Absorber Recirculation Tank
EP512-3059	Waste Water Sump #8
EP512-3060	Two (2) Waste Ammonia Liquor Clarifiers [both currently out of service]
EP512-3070	Ammonia Absorber Gas Drips Sump
EP512-3080	Crystallizer Hotwell Sump
EP512-3083	8000 gallon Tar Sludge Batch Tank
EP512-3084	15000 gallon Tar Sludge Tank
EP512-3088	No.9 Sump
EP512-3041	Barometric Condenser
EP512-3042	30,000 gallon Sulfuric Acid Tank
EP512-3043	20,000 gallon Sulfuric Acid Tank [currently out of service]
EP512-3044	Ball Mill

- (2) A gas blanketing system, identified as C512-3013, constructed in 1991, controlling the following associated equipment as required by the provisions of Subpart L, when in service:

EP512-3001	Tar Storage Tank A [currently out of service]
EP512-3002	Tar Precipitator Sump
EP512-3050	Flushing Liquor Decanter A, B, & C and sludge conveyor
EP512-3057	Purifier Muck Storage Tank
EP512-3067	Wash Oil Decanter
EP512-3068	No.5 Sump
EP512-3069	Tar Precipitator Seal Pots
EP512-3072	Tar Transfer Tank
EP512-3073	Flushing Liquor Circulation Tanks, North & South
EP512-3074	Tar Storage Tanks B & C
EP512-3075	Primary Cooler Condensate Tank
EP512-3077	Wash Oil Separation Tank
EP512-3078	Wash Oil Decanter Muck Storage Tank
EP512-3094	Exhauster's Area (Exhausters A, B and C including associated seal pots)

- (3) The following By-products Area Waste Water Treatment Facility emission units are subject to the provisions of Subpart FF:

EP512-3095	Mixing Tank
EP512-3096	Separation Tank
EP512-3097	Intermediate Tank
EP512-3098	Storage Tank
EP512-3099	Neutralization Tank
EP512-3100	1,000,000 gallon Waste Ammonia Liquid Clarifier
EP512-3101	Feed Tank

- (4) One (1) clean coke oven gas export line, identified as EU512-26, constructed in 1969, with a maximum export volume of 75 MMCF gas per day, equipped with emergency bleeder flare C512-3025 on stack EP512-3091.

- (c) One (1) Blast Furnace Granulated Coal Injection (BFGCI) system constructed in 1994, consisting of the following:

- (1) A Coal Storage and Reclaim System consisting of:

- (A) One (1) coal receiving conveyor system with a design rate of 2,300 tons per hour with emission points EP520-3522 and EP520-3565;
- (B) One (1) coal delivery conveying system from the reclaim operation to the coal preparation building with emission points EP520-3569 and 3570.

(The two conveyor systems above are components of the material handling transfer stations, EU520-07.)

- (C) One (1) stacker/reclaimer operation, with a bulldozer and reclaim hoppers, identified as EU520-25, with fugitive emission points identified as EP520-3566 through 3568.
- (2) A Coal Preparation System consisting of:
 - (A) Two (2) coal preparation systems collectively identified as EU520-60, consisting of two (2) raw coal storage bins with bin filters, identified collectively as C520-3509, exhausting at EP520-3578 and 79, respectively.
 - (B) Two (2) granulation mills or milling operations, with spinner separators pneumatically transporting coal via piping to the cyclone separators, identified as EU520-62, each with a baghouse for particulate control collectively identified as C520-3511, exhausting at EP520-3580 and 81; and
 - (C) Two (2) natural gas-fired burners for the granulation mill dry gas coal heater, each rated at 25 MMBtu/hr.
- (3) Coal Product Storage and Delivery System:
 - (A) Four (4) gravity fed Product Storage Bins, with transfer points enclosed and inside a building, which receive coal by enclosed chutes and screw conveyors, collectively identified as EU520-64, each with bin filters for particulate control collectively identified as C520-3513, exhausting at EP520-3582 through 85;
 - (B) Two (2) weigh feeders with no exhaust;
 - (C) Four (4) gravity fed Distribution Bins, with transfer points enclosed and inside a building, receiving coal from weigh hoppers through a slide gate assembly, identified as EU520-68, each with bin filters for particulate control collectively identified as C520-3517, exhausting at EP520-3586 through 89; and
 - (D) Eight (8) gravity fed Lock Hoppers, with transfer points enclosed and inside a building, feeding the blast furnace coal injectors via enclosed piping, identified as EU520-72, each with bin filters for particulate control collectively identified as C520-3521, and exhausting at EP520-90 through 97.
- (d) A Continuous Sintering process plant with a maximum throughput of 535 tons of sinter per hour located in the Blast Furnaces Department consisting of the following:
 - (1) One (1) mixing drum identified as EU520-04, with emissions controlled by one (1) venturi wet scrubber identified as C520-3502, exhausting at stack EP520-3512.
 - (2) One (1) sintering operation, consisting of twelve (12) windboxes, collectively identified as EU520-05, with emissions exhausting through one (1) multiclone, consisting of eight (8) cyclones followed in series by one (1) venturi scrubber and mist eliminator, collectively identified as C520-3503, with VOC emissions monitored by a Continuous Emissions Monitor System (CEMS), exhausting at stack EP520-3513.
 - (3) A miscellaneous material handling operation, identified as EU520-06, with particulate emissions controlled by one (1) dedust baghouse, identified as C520-3501, exhausting at stack EP520-3511.
 - (4) A finished sinter cooler operation, identified as EU520-24, with fugitive emissions identified as EP520-3514.
- (e) Two (2) Blast Furnaces, designated as C and D, constructed in 1971 and modified in 1994, with a total maximum production rate of 455,000 tons of iron per month each, consisting of the following:
 - (1) One (1) rail car thaw shed and thaw shed natural gas dryer, collectively identified as EU520-11, constructed in 1969, and fugitive emissions from all thaw shed activities reporting to two (2) roof monitors collectively identified as EP520-3564.

- (2) One (1) car dumper shed, identified as EU520-08, and one (1) truck hopper, identified as EU520-27, with emissions from the car dumper controlled by baghouse C520-3506, and exhausting at stacks EP520-3520 (north) and 3532 (south), and various building openings for fugitive shed emissions collectively identified as EP520-3606.
 - (3) Material handling transfer stations, identified as EU520-07, consisting of conveyors, with fifteen (15) building openings identified as EP520-3516, 3518, 3519, 3523 to 3525, 3527, 3529, and 3571 to 3573.
 - (4) C Stockhouse, identified as EU520-12, reporting to roof monitor EP520-3530.
 - (5) D Stockhouse, identified as EU520-13, reporting to roof monitor EP520-3534.
 - (6) C Casthouses, East and West, identified as EU520-18a and 18b, with particulate emissions controlled by a TREC (Tilting Runner Emissions Control) system baghouse C520-3507 that exhausts at three (3) stacks collectively identified as EP520-3544, with fugitive emissions reporting to roof monitors identified as EP520-3543 and 3545.
 - (7) D Casthouses, East and West, identified as EU520-19a and 19b, with particulate emissions controlled by a TREC (Tilting Runner Emissions Control) system baghouse C520-3508 that exhausts at three (3) stacks collectively identified as EP520-3557, with fugitive emissions reporting to roof monitors identified as EP520-3556 and 3558.
 - (8) Blast Furnace Offgas C which is conditioned by an integral gas cleaning collection train consisting of a cyclone, a scrubber, a septum valve, a mist eliminator, and a cooler collectively identified as C520-3529, routing conditioned blast furnace gas to the stoves and export line equipped with natural gas piloted flares, collectively identified as EP520-3540.
 - (9) Blast Furnace Offgas D which is conditioned by an integral gas cleaning collection train consisting of a cyclone, a scrubber, a septum valve, a mist eliminator, and a cooler collectively identified as C520-3531, routing conditioned blast furnace gas to the stoves and export line equipped with natural gas piloted flares, collectively identified as EP520-3553.
 - (10) Four (4) Stoves for Blast Furnace C, capable of combusting natural gas, conditioned blast furnace gas, and coke oven gas, with a total heat input rate of 660 MMBtu/hr, identified as EU520-18c, exhausting to EP520-3547.
 - (11) Four (4) Stoves for Blast Furnace D, capable of combusting natural gas, conditioned blast furnace gas, and coke oven gas, with a total heat input rate of 660 MMBtu/hr, identified as EU520-19c, exhausting to EP520-3560.
 - (12) One (1) Flue Dust handling system, identified as EU520-22 with dust catchers EU520-22a and 22b as particulate control for blast furnace C and D gas conditioning systems, respectively, with fugitive emissions EP520-3541 from blast furnace C gas conditioning system, and fugitive emissions EP520-3554 from blast furnace D gas conditioning system.
- (f) A Basic Oxygen Furnace (BOF) Shop operation located in the Steelmaking Department consisting of the following:
- (1) Three (3) Hot Metal Transfer/Desulfurization and Skimming Stations, with a total combined maximum throughput of 455,000 tons of hot metal per month, with #1 & #2 constructed in 1968, and #3 in 1978 and modified in 1992, each identified as EU534-01, 02, and 03, each with particulate emissions controlled by baghouses C534-4001, 4002, and 4003, respectively, exhausting at stacks EP534-4002, 4006, and 4008, respectively.
 - (2) Three (3) BOF Shop vessels, with #1 & #2 constructed in 1968 and #3 in 1978, identified as EU534-06a (No.1), EU534-06b (No.2), and EU534-07(No.3), with a combined rated capacity of 500 tons per hour of molten steel, with emissions from vessels No.1 and No.2 (EU534-06a, 06b) controlled by three (3) scrubbers, numbered #2, #3, and #4 in parallel, collectively identified as C534-4004, each exhausting at respective stacks EP534-4013, 4014, and 4015, respectively, and emissions from vessel No.3 (EU534-07) controlled by scrubber C534-4007 exhausting to

stack EP534-4017, equipped with CO flare C534-4008.

- (3) Refining Cycles for three BOF Shop vessels, identified as EU534-10 for vessels No.1 and No.2 (EU534-06a, EU534-06b), and EU534-11 for vessel No.3 (EU534-07), using the respective exhausts and emissions control equipment for the associated BOF Shop vessels listed above.
- (4) Three (3) Molten Steel Ladle Addition Stations consisting of:
 - (A) Station No.1 argon stirring, constructed in 1968, identified as EU534-14, with fugitive emissions reporting to roof monitor EP534-4003; and
 - (B) Stations No.2 and No.3 stirring and desulfurization, constructed in 1978, collectively identified as EU534-15, with particulate emissions from both controlled by baghouse C534-4016, exhausting to stack EP534-4031.
- (5) Two (2) Steel Ladle Treatment Stations No.4 and No.5, constructed in 1986, collectively identified as EU534-16, with particulate emissions controlled by baghouses C534-4017 and 4099, respectively, exhausting at respective stacks EP534-4031 and 4099.
- (6) One (1) Vacuum Degasser, identified as EU534-19, constructed in 1989, with a maximum capacity of 490,071 pounds per hour and 2,146,511 tons per year of hot steel, utilizing a steam ejector identified as C534-4019 for vessel evacuation, with exhausts to stack EP534-4034 which is equipped with a CO flare, identified as C534-4020.
- (7) Two (2) Continuous Casters, each with a maximum capacity of 1000 tons of molten steel per hour, consisting of:
 - (A) Continuous Caster #1 constructed in 1975 and modified in 1984, identified as EU595-24, with particulate emissions controlled by a demister identified as C595-4501, exhausting to stack EP595-4501; and
 - (B) Continuous Caster #2 constructed in 1985, identified as EU595-25, with particulate emissions controlled by three (3) demisters identified as C595-4504, exhausting to two stacks, collectively identified as EP595-4504.
- (8) One (1) natural gas fired FM boiler for the BOF Shop, constructed in 1968, identified as EU534-23, with a rated capacity of 50 MMBtu/hr heat input, exhausting to stack EP534-4018.

Steel making material handling operations consisting of:

- (9) One (1) Track hopper, constructed in 1989, identified as EU 534-21, with particulate emissions controlled by baghouse C534-4013, exhausting to stack EP534-4021.
- (10) Two (2) Junction Houses, constructed in 1968 and modified in 1996, identified as H1 (EU534-31) and H2 (EU534-32), enclosing the transfer points between conveyors L2 and L3, and L3 and L4, respectively, with particulate emissions controlled by two (2) baghouses, identified as C534-4014 and 15, respectively, with each exhausting to respective stacks EP534-4027 and 28.
- (11) Three (3) BOF weigh hoppers constructed in 1968 and modified in 1996, collectively identified as EU534-36, with particulate emissions controlled by two (2) baghouses, collectively identified as C534-4010, exhausting to respective stacks EP534-4020 and 4026.
- (12) Two (2) BOF vessel storage bins, constructed in 1968 and modified in 1996, collectively identified as EU534-33, with particulate emissions from both controlled by baghouse C534-4009, exhausting at stack EP534-4019.
- (13) Vacuum Degasser Material handling for alloy addition, constructed in 1989, identified as EU534-20, with particulate emissions controlled by baghouse C534-4018, exhausting to stack EP534-4033.

Additional steel making activities consisting of:

- (14) Eight (8) steel ladle and sub car dryers (including a torpedo car dryer), constructed in 1982, collectively identified as EU534-17, with fugitive emissions reporting to roof monitor EP534-4003.
 - (15) Teeming Aisles, constructed in 1969, collectively identified as EU534-18, with fugitive emissions reporting to roof monitor EP534-4003.
 - (16) Vacuum Degasser ladle dryers and preheaters, collectively identified as EU534-22, all using natural gas as fuel with maximum capacities of 7 MMBtu/hr for the preheat burner, 9 MMBtu/hr for the refractory dryer burner, and 4.5 MMBtu/hr for the refractory dryer burner, with all collectively exhausting at stack EP534-4036.
 - (17) BOF Auxiliaries, collectively identified as EU534-40, consisting of fugitive emissions EP534-4004, 4005, 4007, and 4051.
- (g) One (1) Slab/Plate Mill Complex consisting of the following operations and equipment:
- (1) No.1 Slab Yard operations consisting of one (1) natural gas-fired Flame Cutting Bed, constructed in 1976, identified as EU673-13, with fugitive emissions reporting to roof monitor EP673-6606.
 - (2) No.2 Slab Yard operations consisting of:
 - (A) Three (3) natural gas-fired Slab Preheater Furnaces Nos.1, 2 & 3, constructed in 1964, collectively identified as EU673-10, with capacities of 16 MMBtu/hr heat input each for No.1 & No.2, and 5 MMBtu/hr heat input for No.3, with fugitive emissions from each reporting to roof monitor EP673-6605.
 - (B) One (1) natural gas-fired Flame Cutting Bed and one (1) natural gas-fired Scarfing Bed, constructed in 1964, identified as EU673-11 and EU673-12, respectively, with fugitive emissions from each reporting to roof monitor EP673-6605.
 - (3) No.3 Slab Yard operations consisting of:
 - (A) Three (3) natural gas-fired Slab Preheater Furnaces Nos.4, 5, and 6, constructed in 1968, collectively identified as EU673-06, with capacities of 25 MMBtu/hr heat input for each, with fugitive emissions from each reporting to roof monitor EP673-6604.
 - (B) One (1) natural gas-fired Scarfing Bed, constructed in 1968, identified as EU673-07, with fugitive emissions reporting to roof monitor EP673-6604.
 - (C) One (1) natural gas-fired portable Heavy Gauge Flame Cutting Machine, constructed in 1976, identified as EU673-09, with fugitive emissions reporting to roof monitor EP673-6604.
 - (D) One (1) Slab Grinder, constructed in 1985, identified as EU673-08, with particulate emissions controlled by baghouse C673-6606, exhausting at stack EP673-6603.
 - (4) No.4 Slab Yard operations consisting of two (2) outside natural gas-fired Slab Preheater Furnaces No.7 and No.8, constructed in 1978, collectively identified as EU673-05, with capacities of 25 MMBtu/hr heat input each, with fugitive emissions EP673-6601 and 6602.
 - (5) 160 Inch Plate Mill operations consisting of:
 - (A) One (1) Slab Reheat Furnace No.1 – Continuous Pusher, capable of firing natural gas, coke oven gas, No.2 and No.6 fuel oil, constructed in 1964, identified as EU673-14, with a furnace maximum rated capacity of 500 MMBtu/hr heat input, equipped with low NOx burners, with emissions exhausting at stack EP673-6503.
 - (B) One (1) Slab Reheat Furnace No.2 - Continuous Pusher, capable of firing natural gas, coke oven gas, No.2 and No.6 fuel oil, constructed in 1964, identified as EU673-15, with a furnace maximum rated capacity of 500 MMBtu/hr heat input, equipped with low NOx

burners, with emissions exhausting at stack EP673-6504.

- (C) One (1) In and Out Reheat Furnace No.5, capable of firing natural gas, coke oven gas, No.2 and No.6 fuel oil, constructed in 1964, identified as EU673-17, with maximum rated capacity of 70 MMBtu/hr heat input, with emissions exhausting at stack EP673-6501.
- (D) Two (2) In and Out Reheat Furnaces No.6 and No.7, capable of firing natural gas, coke oven gas, No.2 and No.6 fuel oil, with No.6 constructed in 1967 and No.7 constructed in 1971, identified as EU673-18 and 19, respectively, each with maximum rated capacities of 70 MMBtu/hr heat input, with emissions collectively exhausting at stack EP673-6502.
- (E) One (1) Three Zone Pusher Reheat Furnace No.8, capable of firing natural gas, coke oven gas, No.2 and No.6 fuel oil, constructed in 1977, identified as EU673-20, with a maximum rated capacity of 89 MMBtu/hr heat input, with emissions exhausting at stack EP673-6505.
- (F) One (1) Rolling Process, constructed in 1964, identified as EU673-32, with fugitive emissions reporting to roof monitor EP673-6507.

Steel Plate operations (located in the 160 Inch Plate Mill building) consisting of:

- (G) One (1) natural gas-fired Car Bottom Furnace (Normalizing and Annealing), constructed in 1965, identified as EU673-23, with a maximum capacity of 50 MMBtu/hr heat input, and fugitive emissions reporting to roof monitor EP673-6508.
- (H) One (1) natural gas-fired Continuous Hardening and Normalizing Furnace, constructed in 1966, identified as EU673-24, with a maximum capacity of 100 MMBtu/hr heat input, and fugitive emissions reporting to roof monitor EP673-6508.
- (I) One (1) natural gas-fired Continuous Tempering Furnace, constructed in 1966, identified as EU673-25, with a maximum capacity of 100 MMBtu/hr heat input, and fugitive emissions reporting to roof monitor EP673-6508.

(6) 110 Inch Plate Mill operations consisting of:

- (A) Two (2) Slab Reheat Furnaces- Continuous Walking Beam No.1 and No.2, capable of firing natural gas, coke oven gas, No.2 and No.6 fuel oil, both constructed in 1977, identified as EU674-26 and 27, respectively, each with maximum rated capacities of 380 MMBtu/hr heat input, equipped with low NOx burners, with emissions collectively exhausting at stack EP674-7001.
- (B) One (1) natural gas-fired Normalizing Furnace, capable of firing natural gas, and No.2 and No.6 fuel oil, constructed in 1979, identified as EU674-30, with a maximum capacity of 82 MMBtu/hr heat input, and emissions exhausting to stack EP674-7005.
- (C) One (1) natural gas-fired Flame Cutting torch operation (Extra Process Building), constructed in 1965, identified as EU674-28, with fugitive emissions reporting to roof monitor EP674-7004.
- (D) One (1) Rolling Process, constructed in 1977, identified as EU674-33, with fugitive emissions reporting to roof monitor EP674-7003.

(h) Hot strip mill (HSM) operations consisting of:

- (1) Various natural gas-fired portable cutting torches and hand scarfers with fugitive emissions reporting to roof monitors EP670-5501, 5502, and 5516.
- (2) One (1) reheat furnace No.1, capable of firing natural gas, coke oven gas, and/or propane, constructed in 1966, identified as EU670-05, with a maximum capacity of 730 MMBtu/hr of heat input, equipped with low NOx burners, with exhausts at stacks EP670-5504 and 5505.

- (3) One (1) reheat furnace No.2, capable of firing natural gas, coke oven gas, and/or propane, constructed in 1966, identified as EU670-06, with a maximum capacity of 730 MMBtu/hr of heat input, equipped with low NOx burners, with exhausts at stacks EP670-5506 and 5507.
 - (4) One (1) reheat furnace No.3, capable of firing natural gas, coke oven gas, and/or propane, constructed in 1966, identified as EU670-07, with a maximum capacity of 730 MMBtu/hr of heat input, with exhausts at stacks EP670-5508 and 5509.
 - (5) One (1) hot strip mill rolling process constructed in 1966, identified as EU670-08, with fugitive emissions reporting to roof monitors EP670-5510, 5511, and 5512.
- (i) Cold sheet mill operations, with a maximum annual production of 2,300,000 tons of treated steel consisting of:
- (1) Pickle line No.1 constructed in 1965, identified as EU672-01, with emissions controlled by two fume scrubbers, C672-6001 and 6002, both exhausting at stack EP672-6001.
 - (2) Pickle line No.2 constructed in 1968, identified as EU672-02, with emissions controlled by fume scrubber C672-6002, exhausting at stack EP672-6001.
 - (3) Pickle line acid storage tanks constructed in 1968, collectively identified as EU672-03, consisting of:
 - (A) Pickle line No.1- four (4) acid and rinse tanks, each with a storage capacity of 35,000 gallons, collectively controlled by fume scrubber C672-6002.
 - (B) Pickle line No.1- one (1) waste pickle liquor tank, with a storage capacity of 35,000 gallons, controlled by fume scrubber C672-6002.
 - (C) Pickle line No.2- four (4) acid and rinse tanks, each with a storage capacity of 35,000 gallons, collectively controlled by fume scrubber C672-6002.
 - (D) Pickle lines Nos.1 and 2- six (6) HCL acid gravity fed storage tanks vented at EP672-6002.
 - (4) One (1) 80 inch five (5) stand tandem mill constructed in 1965, identified as EU672-04, with emissions controlled by mist eliminator C672-6003, exhausting at stack EP672-6008.
 - (5) One (1) natural gas-fired batch annealing process constructed in 1965, identified as EU672-05, consisting of twenty-four (24) furnaces, with a combined maximum rated capacity of 240 MMBtu/hr heat input, or 10 MMBtu/hr heat input each furnace, with fugitive emissions reporting to roof monitor EP672-6009.
 - (6) Natural gas-fired continuous heat treat line (CHTL) preheat, heat and soak furnaces constructed in 1983, collectively identified as EU672-07, with a combined maximum rated capacity of 76 MMBtu/hr heat input, with preheat emissions exhausting to stack EP672-6014, and heat and soak emissions at stack EP672-6015.
 - (7) One (1) natural gas-fired CHTL reheat furnace constructed in 1983, identified as EU672-08, with a maximum rated capacity of 34 MMBtu/hr heat input, with emissions exhausting at stack EP672-6017.
 - (8) One (1) CHTL pickling tank constructed in 1983, identified as EU672-09, with emissions controlled by fume scrubber C672-6006, exhausting at stack EP672-6022.
 - (9) One (1) hot dip coating line (HDCL) for hot galvanizing, galvannealing, chemical treatment and cleaning of steel, constructed in 1992, identified as EU672-13, with a maximum capacity of 140 tons of steel coil per hour, with cleaning section emissions controlled by fume scrubbers C672-6007, exhausting at stack EP672-6022.
 - (10) One (1) natural gas-fired HDCL radiant tube furnace constructed in 1992, identified as EU672-

- 14, with a maximum capacity of 95 MMBtu/hr heat input, with NOx emissions controlled by selective catalytic reduction (SCR) equipped with a continuous emissions monitoring system (CEMS) C672-6008 measuring NOx and CO2, exhausting at stack EP672-6023.
- (11) One (1) temper mill constructed in 1965, identified as EU672-11, with emissions controlled by mist eliminator C672-6010, exhausting at stack EP672-6024.
 - (12) One (1) cold mill finishing process constructed in 1965, identified as EU672-12, with fugitive emissions reporting to roof monitor EP672-6034.
- (j) One (1) Power Station, consisting of the following boilers:
- (1) No.7 boiler, capable of firing natural gas, coke oven gas, and blast furnace gas, constructed in 1978 and modified in 1990, identified as EU460-01, with a rated capacity of 650 MMBtu/hr heat input, with emissions exhausting at stack EP460-2501;
 - (2) No.8 boiler, capable of firing natural gas, coke oven gas, blast furnace gas, and No.2 and No.6 fuel oil, constructed in 1972, identified as EU460-02, with a rated capacity of 650 MMBtu/hr heat input, with emissions exhausting at stack EP460-2502;
 - (3) No.9 boiler, capable of firing natural gas, coke oven gas, blast furnace gas, and No.2 and No.6 fuel oil, constructed in 1972, identified as EU460-03, with a rated capacity of 650 MMBtu/hr heat input, with emissions exhausting at stack EP460-2503;
 - (4) No.10 boiler, capable of firing natural gas, coke oven gas, blast furnace gas, and No.2 and No.6 fuel oil, constructed in 1971, identified as EU460-04, with a rated capacity of 650 MMBtu/hr heat input, with emissions exhausting at stack EP460-2504;
 - (5) No.11 boiler, capable of firing natural gas, coke oven gas, blast furnace gas, and No.2 and No.6 fuel oil, constructed in 1969, identified as EU460-05, with a rated capacity of 650 MMBtu/hr heat input, with emissions exhausting at stack EP460-2505; and
 - (6) No.12 boiler, capable of firing natural gas, coke oven gas, blast furnace gas, and No.2 and No.6 fuel oil, constructed in 1969, identified as EU460-06, with a rated capacity of 650 MMBtu/hr heat input, with emissions exhausting at stack EP460-2506.
- (k) Service shops and technical maintenance operations, consisting of:
- (1) No.1 roll shop north shot blast booth constructed in 1967, identified as EU410-01, with particulate controlled by baghouse C410-1001, exhausting to stack EP410-1001, and fugitive emissions reporting to roof monitor EP410-1003.
 - (2) No.1 roll shop south shot blast booth constructed in 1965, identified as EU410-02, with particulate controlled by baghouse C410-1002, exhausting to stack EP410-1002, and fugitive emissions reporting to roof monitor EP410-1003.
 - (3) No.2 roll shop shot blast booth constructed in 1966, identified as EU411-03, with particulate controlled by baghouse C411-1503, exhausting to stack EP411-1502, and fugitive emissions reporting to roof monitor EP411-1501.
 - (4) One (1) locomotive shop paint booth constructed pre-1965, identified as EU420-07, with a maximum capacity of less than one vehicle per hour and less than one gallon of coating sprayed per vehicle, utilizing one HVLP spray gun, with fugitive emissions reporting to wall vent EP420-2021.
- (l) Fugitive Dust Emissions Operations
- (1) Coal and Coke Storage and Handling:
 - (A) Coal piles, identified as EU512-19 and 28, with respective fugitive emissions, EP512-3003 and 3093.

- (B) Coal preparation process (Blending Building), identified as EU512-01, with particulate emissions controlled by dust suppressant spray identified as C512-3002, reporting to roof monitors EP512-3005 through 3011.
- (C) Coke handling and screening process, identified as EU512-20 and 22, respectively, with fugitive emissions at EP512-3085 and roof monitor EP512-3034, respectively.
- (2) Sinter Plant operations:
 - (A) Bay plant piles containing revert materials, identified as EU520-01, with fugitive emissions identified as EP520-3501.
 - (B) Sinter bedding piles, identified as EU520-02, with fugitive emissions identified as EP520-3503.
 - (C) Bedding plant material transfer, material conveyors, and junction houses, collectively identified as EU520-03, with fugitive emissions venting through any of six (6) separate openings in the sides of the building, each identified as EP520-3502, and EP520-3504 through 3508.
- (3) Blast Furnace operations:
 - (A) C Casthouse Slag Pit fugitive emissions identified as EP520-3546.
 - (B) D Casthouse Slag Pit fugitive emissions identified as EP520-3559.
 - (C) Beach Iron operation fugitive emissions identified as EP520-3550.
 - (D) Ore Dock Unloading fugitive emissions identified as EP520-3517.
 - (E) Ore Field fugitive emissions identified as EP520-3526.
- (4) Unregulated and regulated roads, consisting of:
 - (A) Paved and unpaved roads, identified as EU420-08, with fugitive emissions EP420-2008.
 - (B) Paved and unpaved slab haul roads, identified as EU420-10, with fugitive emissions EP420-2016.
 - (C) Regulated unpaved roads, identified as EU420-04, with fugitive emissions EP420-2018.
 - (D) Regulated paved roads, identified as EU420-11, with fugitive emissions EP420-2017.
 - (E) One (1) open air clean fill storage area, identified as EU420-20, with fugitive emissions EP420-2020.
 - (F) One (1) open air BOF land farming area for BOF slurry, identified as EU534-39, with fugitive emissions EP534-4050.
 - (G) One (1) open air mill scale piles area, identified as EU670-13, with fugitive emissions EP670-5513.

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

This stationary source also includes the following insignificant activities which are specifically regulated, as defined in 326 IAC 2-7-1(21), and found in Section D.13, of this permit:

- (a) A petroleum fuel, other than gasoline, dispensing facility having a storage capacity less than or equal to 10,500 gallons, and dispensing less than or equal to 230,000 gallons per month. [326 IAC 8-9-1]
- (b) The following VOC and HAP storage containers:

- (1) Storage tanks with capacity less than or equal to 1,000 gallons and annual throughput less than 12,000 gallons.
- (2) Vessels storing lubricating oils, hydraulic oils, machining oils, and machining fluids. [326 IAC 8-9-1]
- (c) Degreasing operations that do not exceed 145 gallons per 12 months, except if subject to 326 IAC 20-6. [326 IAC 8-3]
- (d) 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 degrees Celsius (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 degrees Celsius 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]
- (e) The following equipment related to manufacturing activities not resulting in the emission of HAPs: brazing equipment, cutting torches, soldering equipment, welding equipment. [326 IAC 6-3-2]
- (f) Any of the following structural steel and bridge fabrication activities:
 - (1) Cutting 200,000 linear feet or less of one (1) inch plate or equivalent.
 - (2) Using 80 tons or less of welding consumables. [326 IAC 6-3-2]
- (g) Conveyors as follows: Covered conveyor for coal or coke conveying of less than or equal to 360 tons per day. [326 IAC 6-3-2]
- (h) Coal bunker and coal scale exhausts and associated dust collector vents. [326 IAC 6-3-2]
- (i) 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 6-3-2]
- (j) Vents from ash transport systems not operated at positive pressure. [326 IAC 6-3-2]

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

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

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

SECTION B

GENERAL CONDITIONS

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

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

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

- (a) This permit, T127-6301-00026, is issued for a fixed term of five (5) years from the issuance date of this permit, as determined in accordance with IC 4-21.5-3-5(f) and IC 13-15-5-3. Subsequent revisions, modifications, or amendments of this permit do not affect the expiration date of this permit.
- (b) If IDEM, OAQ, upon receiving a timely and complete renewal permit application, fails to issue or deny the permit renewal prior to the expiration date of this permit, this existing permit shall not expire and all terms and conditions shall continue in effect, including any permit shield provided in 326 IAC 2-7-15, until the renewal permit has been issued or denied.

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

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

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

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

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

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

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

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

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

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

- (a) The Permittee shall furnish to IDEM, OAQ, within a reasonable time, any information that IDEM, OAQ, may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit, or to determine compliance with this permit. The submittal by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34). Upon request, the Permittee shall also furnish to IDEM, OAQ, copies of records required to be kept by this permit.
- (b) For information furnished by the Permittee to IDEM, OAQ, the Permittee may include a claim of confidentiality in accordance with 326 IAC 17.1. When furnishing copies of requested records directly to U.S. EPA, the Permittee may assert a claim of confidentiality in accordance with 40 CFR 2, Subpart B.

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

- (a) Where specifically designated by this permit or required by an applicable requirement, any application form, report, or compliance certification submitted shall contain certification by a responsible official of truth, accuracy, and completeness. This certification shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.
- (b) One (1) certification shall be included, using the attached Certification Form, with each submittal requiring certification. One (1) certification may cover multiple forms in one (1) submittal.
- (c) A responsible official is defined at 326 IAC 2-7-1(34).

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

- (a) The Permittee shall annually submit a compliance certification report which addresses the status of the source's compliance with the terms and conditions contained in this permit, including emission limitations, standards, or work practices. The initial certification shall cover the time period from the date of final permit issuance through December 31 of the same year. All subsequent certifications shall cover the time period from January 1 to December 31 of the previous year, and shall be submitted in letter form no later than April 15 of each year to:

Indiana Department of Environmental Management
Compliance Branch, Office of Air Quality
100 North Senate Avenue
Indianapolis, Indiana 46204-2251

and

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

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

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

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

- (a) The Permittee shall prepare and maintain Preventive Maintenance Plans (PMPs) within ninety (90) days after issuance of this permit, for the source as described in 326 IAC 1-6-3. At a minimum, the PMPs shall include:
- (1) Identification of the individual(s) responsible for inspecting, maintaining, and repairing emission control devices;
 - (2) A description of the items or conditions that will be inspected and the inspection schedule for said items or conditions; and
 - (3) Identification and quantification of the replacement parts that will be maintained in inventory for quick replacement.
- (b) A copy of the PMPs shall be submitted to IDEM, OAQ, upon request and within a reasonable time, and shall be subject to review and approval by IDEM, OAQ. IDEM, OAQ, may require the Permittee to revise its PMPs whenever lack of proper maintenance causes or is the primary contributor to an exceedance of

any limitation on emissions or potential to emit. The PMPs do not require the certification by the “responsible official” as defined by 326 IAC 2-7-1(34).

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

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

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

- (b) An emergency, as defined in 326 IAC 2-7-1(12), constitutes an affirmative defense to an action brought for noncompliance with a technology-based emission limitation if the affirmative defense of an emergency is demonstrated through properly signed, contemporaneous operating logs or other relevant evidence that describe the following:

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

Telephone Number: 1-800-451-6027 (ask for Office of Air Quality, Compliance Section), or
Telephone Number: 317-233-5674 (ask for Compliance Section)
Facsimile Number: 317-233-5967

and for the Northwest Regional Office;

Telephone Number: 1-888-209-8892 (ask for Office of Air Quality, Compliance Section)
Telephone Number: 219-757-0265 (ask for Air Compliance Section)
Facsimile Number: 219-757-0267

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

Indiana Department of Environmental Management
Compliance Branch, Office of Air Quality
100 North Senate Avenue
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 T127-6301-00001 and issued pursuant to permitting programs approved into the state implementation plan have been:
 - (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 combined new source review and 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
Indianapolis, Indiana 46204-2251

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

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

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

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

- (a) This permit may be modified, reopened, revoked and reissued, or terminated for cause. The filing of a request by the Permittee for a Part 70 permit modification, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay any condition of this permit. [326 IAC 2-7-5(6)(C)] The notification by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).
- (b) This permit shall be reopened and revised under any of the circumstances listed in IC 13-15-7-2 or if IDEM, OAQ, determines any of the following:

- (1) That this permit contains a material mistake.
- (2) That inaccurate statements were made in establishing the emissions standards or other terms or conditions.
- (3) That this permit must be revised or revoked to assure compliance with an applicable requirement. [326 IAC 2-7-9(a)(3)]
- (c) Proceedings by IDEM, OAQ, to reopen and revise this permit shall follow the same procedures as apply to initial permit issuance and shall affect only those parts of this permit for which cause to reopen exists. Such reopening and revision shall be made as expeditiously as practicable. [326 IAC 2-7-9(b)]
- (d) The reopening and revision of this permit, under 326 IAC 2-7-9(a), shall not be initiated before notice of such intent is provided to the Permittee by IDEM, OAQ, at least thirty (30) days in advance of the date this permit is to be reopened, except that IDEM, OAQ, may provide a shorter time period in the case of an emergency. [326 IAC 2-7-9(c)]

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

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

Request for renewal shall be submitted to:

Indiana Department of Environmental Management
Permits Branch, Office of Air Quality
100 North Senate Avenue
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
Indianapolis, Indiana 46204-2251

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

- (c) The Permittee may implement administrative amendment changes addressed in the request for an

administrative amendment immediately upon submittal of the request. [326 IAC 2-7-11(c)(3)]

- (d) No permit amendment or modification is required for the addition, operation or removal of a nonroad engine, as defined in 40 CFR 89.2.

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

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

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

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

- (1) The changes are not modifications under any provision of Title I of the Clean Air Act;
- (2) Any preconstruction approval required by 326 IAC 2-7-10.5 has been obtained;
- (3) The changes do not result in emissions which exceed the 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
Indianapolis, Indiana 46204-2251

and

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

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

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

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

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

- (1) A brief description of the change within the source;
- (2) The date on which the change will occur;
- (3) Any change in emissions; and

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

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

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

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

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

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

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

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

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

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

Permits Branch, Office of Air Quality
100 North Senate Avenue
Indianapolis, Indiana 46204-2251

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

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

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

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

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]

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

SECTION C

SOURCE OPERATION CONDITIONS

Entire Source

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

C.1 Opacity [326 IAC 5-1]

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

- (a) Opacity shall not exceed an average of forty percent (40%) in any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.
- (b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.

C.2 Open Burning [326 IAC 4-1] [IC 13-17-9]

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

C.3 Incineration [326 IAC 4-2] [326 IAC 9-1-2]

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

C.4 Operation of Equipment [326 IAC 2-7-6(6)]

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

C.5 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.6 Source Specific and Facility Emission Limitations for TSP in Porter County [326 IAC 6-6]

Sources and facilities specifically listed in 326 IAC 6-6-4 and 6-6-5 of this rule shall comply with the limitations contained therein, and in accordance with Section D- Facility Operation Conditions, of this permit. 326 IAC 6-6 is not federally enforceable.

C.7 Porter County Sulfur Dioxide Limitations [326 IAC 7-4-14]

- (a) Pursuant to 326 IAC 7-4-14(1), the facilities located at Bethlehem Steel Burns Harbor Works (ISG Burns Harbor) shall comply with the sulfur dioxide emission limitations contained therein, and other requirements of this rule, unless otherwise specified, and in accordance with Section D- Facility Operation Conditions, of this permit.
- (b) Pursuant to 326 IAC 7-4-14(1)(D):
 - (1) Coke oven gas usage at facilities other than the No.1 and 2 Coke Battery Underfire Stacks shall be restricted to no more than seventy-five (75) million cubic feet per day; and

- (2) Total sulfur dioxide emissions from the facilities listed in 326 IAC 7-4-14(1)(B)(i) through (iv), (viii) through (xi), and (xiii) through (xvii) of this rule shall not exceed four thousand four hundred twenty-nine (4,429) pounds per hour.

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

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

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

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

- (a) All testing shall be performed according to the provisions of 326 IAC 3-6 (Source Sampling Procedures), except as provided elsewhere in this permit, utilizing any applicable procedures and analysis methods specified in 40 CFR 51, 40 CFR 60, 40 CFR 61, 40 CFR 63, 40 CFR 75, or other 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
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.10 Source Specific and Facility Emission Limitations for TSP in Porter County - Testing [326 IAC 6-6]

- (a) Pursuant to 326 IAC 6-6-2(j)(4), the commissioner may require stack tests in addition to the specific requirements of 326 IAC 6-6, Source Specific and Facility Emission Limitations for TSP in Porter County. When such testing is required, the Permittee shall permit the performance of stack tests in accordance with 40 CFR 60, Appendix A, Methods 1-5.
- (b) Pursuant to 326 IAC 6-6-2(o), testing required by the commissioner to determine the amount of particulate matter emitted from any non-stack source or facility subject to the requirements of 326 IAC 6-6 shall be conducted in accordance with procedures approved by the commissioner.

326 IAC 6-6 is not federally enforceable.

Compliance Requirements [326 IAC 2-1.1-11]

C.11 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.

C.12 Source Specific and Facility Emission Limitations for TSP in Porter County - Methods to Determine Compliance [326 IAC 6-6-2]

Pursuant to 326 IAC 6-6-2, Methods to Determine Compliance, the Permittee shall demonstrate compliance with the emission limitations contained in 326 IAC 6-6-4 (as listed in the D Section of this operating permit), utilizing the methods in 326 IAC 6-6-2, as follows:

- (a) All lb/ton (pound per ton) emission factor limits are expressed as "pounds of particulate emissions per ton

of product” unless otherwise stated. By-products which may be sold as product shall not be included under the term “product.”

- (b) All lb/MMBtu (pounds per million Btu) emission factor limits are expressed as “pounds of particulate emissions per million Btu of fuel(s) fired in the source” unless otherwise stated.
- (c) Fuel usage data may be used to determine compliance for any non-fossil-fuel-fired source and any fossil fuel-fired source that does not have a gas cleaning device which is used to reduce particulate emissions to the atmosphere, provided that the procedures under 326 IAC 6-6-2(d) are followed.
- (d) The sampling and test methodologies used must be approved by the commissioner. The most recent No.6 fuel oil emission factor obtained using the procedure in shall be used in emission rate calculations. The emission factors used for fuels other than No.6 fuel oil shall be as listed in 326 IAC 6-6-2(d)(4).
- (e) For each monthly monitoring period, the Permittee shall calculate the pounds of particulate matter ~~emitted~~ per hour, or lb/MMBtu as applicable from each source using the equation given in 326 IAC 6-6- 2(d). An equivalent alternate method may be used with the prior approval of the commissioner.
- (f) A list of those sources relying on fuel usage data to determine compliance with their particulate emission limitations is shown in 326 IAC 6-6-2(d)(6), Table 2.
- (g) If a compliance determination based on fuel usage data does not agree with a compliance determination based on stack test data, the determination based on stack test data shall govern. Stack test data may reflect a total sampling time of less than twenty-four (24) hours and be acceptable for such a compliance determination.
- (h) Application for an alternative source-specific opacity limit may not be based on fuel usage data.
- (i) Compliance with applicable particulate emission limitations for stack sources for which compliance is not based on fuel monitoring shall be determined on the basis of opacity observations performed in accordance with 326 IAC 5-1 and the exceptions to 326 IAC 5-1, as listed in 326 IAC 6-6-2(j).

C.13 Porter County Sulfur Dioxide Emission Limitations - Sulfur Dioxide (SO₂) Fuel Sampling and Analysis (Entire Source) [326 IAC 7-4-14(1)(F)]

- (a) Pursuant to 326 IAC 7-4-14(1)(F), and in order to comply with sulfur dioxide limitations in the D sections, the Permittee shall follow the Sulfur Dioxide (SO₂) Fuel Sampling and Analysis protocol; and
- (b) Pursuant to CP127-2725-00001, issued January 28, 1994, for Coke Battery 2, the determination of heat content procedure outlined in the protocol submitted December 23, 1988, shall continue to be implemented.

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

C.14 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 thirty (30) 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
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.15 Maintenance of Continuous Emission Monitoring Equipment [326 IAC 2-7-5(3)(A)(iii)]

- (a) The Permittee shall install, calibrate, maintain, and operate all necessary continuous emission monitoring systems (CEMS) and related equipment.
- (b) In the event that a breakdown of a continuous emission monitoring system occurs, a record shall be made of the times and reasons of the breakdown and efforts made to correct the problem.
- (c) Whenever a continuous emission monitor other than an opacity monitor is malfunctioning or will be down for calibration, maintenance, or repairs for a period of four (4) hours or more, a calibrated backup CEMS shall be brought online within four (4) hours of shutdown of the primary CEMS, and shall be operated until such time as the primary CEMS is back in operation.
- (d) Nothing in this permit shall excuse the Permittee from complying with the requirements to operate a continuous emission monitoring system pursuant to 326 IAC 3-5 and 326 IAC 8-13.

C.16 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.17 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.18 Emergency Reduction Plans [326 IAC 1-5-2] [326 IAC 1-5-3]

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

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

Indiana Department of Environmental Management
Compliance Branch, Office of Air Quality
100 North Senate Avenue
Indianapolis, Indiana 46204-2251

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

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

- (c) If the ERP is disapproved by IDEM, OAQ, the Permittee shall have an additional thirty (30) days to resolve the differences and submit an approvable ERP.
- (d) These ERPs shall state those actions that will be taken, when each episode level is declared, to reduce or eliminate emissions of the appropriate air pollutants.
- (e) Said ERPs shall also identify the sources of air pollutants, the approximate amount of reduction of the pollutants, and a brief description of the manner in which the reduction will be achieved.

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

C.19 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.20 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.21 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.22 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
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.23 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(II)) 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) Before beginning actual construction of the “project” (as defined in 326 IAC 2-2-1(qq) and/or 326 IAC 2-3-1(II)) at an existing emissions unit, document and maintain the following records:
 - (A) A description of the project.
 - (B) Identification of any emissions unit whose emissions of a regulated new source review pollutant could be affected by the project.
 - (C) A description of the applicability test used to determine that the project is not a major modification for any regulated NSR pollutant, including:
 - (i) Baseline actual emissions;
 - (ii) Projected actual emissions;
 - (iii) Amount of emissions excluded under section 326 IAC 2-2-1(rr)(2)(A)(iii) and/or 326 IAC 2-3-1(mm)(2)(A)(3); 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.24 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
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(II)) 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
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.25 Source Specific and Facility Emission Limitations for TSP in Porter County - Record Keeping and Reporting Requirements [326 IAC 6-6]

Pursuant to 326 IAC 6-6-2, Methods to Determine Compliance, the Permittee shall demonstrate compliance with the emission limitations contained in 326 IAC 6-6-4, by keeping the following records and/or submitting the required report, as applicable:

- (a) Fuel usage data may be used to determine compliance for any non-fossil-fuel-fired source and any fossil fuel-fired source that does not have a gas cleaning device which is used to reduce particulate emissions to the atmosphere, provided that the following procedures are followed:
 - (1) The Permittee shall collect fuel usage data at least once per month and shall record them in a log which is readily available for inspection. Records must be retained for two (2) years from the date of collection.
 - (2) The following fuel usage data shall be recorded for each source monthly:
 - (A) number of hours in operation;
 - (B) cubic feet of each gaseous fuel fired;
 - (C) gallons of each liquid fuel fired;
 - (D) pounds of each solid fuel fired.
 - (3) Once each calendar quarter the Permittee shall conduct sampling and analysis to determine the heat content factors (i.e., H_i) contained in the equations set forth in 326 IAC 6-6-2(d)(4).
 - (4) Once each calendar quarter the Permittee shall conduct sampling and analysis to determine the sulfur content of No.6 fuel oil and shall calculate the emission factor for this fuel using the equation in 326 IAC 6-6-2(d)(4).
 - (5) Within thirty (30) days of the end of each calendar quarter the Permittee shall submit to the commissioner a written report of any emissions exceeding the applicable limits and the nature and cause of the excess emissions, if known.
 - (6) Results of the calculations performed and documented for 326 IAC 6-6-2(d)(4) within thirty (30) days of the end of each monthly monitoring period must be retained for two (2) years. An equivalent alternate frequency may be used with the prior approval of the commissioner.

C.26 Porter County Sulfur Dioxide Emission Limitations - Record Keeping and Reporting Requirements [326 IAC 7-4-14(1)(E)]

Pursuant to 326 IAC 7-4-14(1)(E), ISG Burns Harbor, Inc., shall submit a report to the department within thirty (30) days following the end of each calendar quarter containing the following information:

- (a) Records of the total coke oven gas, blast furnace gas, fuel oil, and natural gas usage for each day at each facility listed in 326 IAC 7-4-14(1)(B) through (C).

- (b) Records of the average sulfur content and heating value as determined per the procedures specified in clause 326 IAC 7-4-14(1)(F) for each fuel type used during the calendar quarter.
- (c) The calculated sulfur dioxide emission rate in the applicable emission units (pounds per hour, pounds per million Btu, and/or pounds per ton) for each facility for each day and the average sulfur dioxide emissions from the facilities listed in 326 IAC 7-4-14(1)(C)(i) through (C)(iv), (C)(vii)(AA) through (C)(vii)(BB), (C)(viii) through (C)(xi), and (C)(xiii) through (C)(xvii) for each day in pounds per hour during the calendar quarter.

Stratospheric Ozone Protection

C.27 Compliance with 40 CFR 82 and 326 IAC 22-1

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

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

SECTION D.1

FACILITY OPERATION CONDITIONS

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

- (a) A Coke Oven process plant consisting of two (2) Coke Batteries, #1 and #2, with #1 modified in 1983 and a #2 pad-up rebuild (reconstruction) in 1994, each consisting of eighty-two (82) ovens, with maximum capacities of 1,400,000 and 1,371,870 tons per year of coal input respectively, consisting of the following:
- (1) Batteries #1 & #2:
- (A) Battery #1 underfire, identified as EU512-08, with a maximum heat input of 465 MMBtu/hr, and opacity measured by a continuous opacity monitor, exhausting at stack EP512-3026.
- (B) Battery #2 underfire, identified as EU512-16, with a maximum heat input of 420 MMBtu/hr, and opacity measured by a continuous opacity monitor, exhausting at stack EP512-3027.
- (C) Pushing operations, identified as EU512-06 and 14, respectively, with particulate emissions for each battery controlled by baghouse C512-3024 exhausting at stack EP512-3024, and scrubber C512-3018 exhausting at stack EP512-3018.
- (D) Battery #1 gas collector main pressure valves, identified as EU512-07, exhausting at four (4) stacks collectively identified as EP512-3086 equipped with four (4) flares collectively identified as C512-3015.
- (E) Battery #2 gas collector main pressure valves, identified as EU512-15, exhausting at six (6) stacks collectively identified as EP512-3087 equipped with six (6) flares collectively identified as C512-3016.
- (F) Quenching operations, identified as EU512-09 and 17, respectively with emissions exiting stations EP512-3081 and 3082, including quench towers (servicing either battery) equipped with baffles and sprays.
- (G) Batteries #1 and #2 fugitive emissions are generated from the following:
- (1) Charging operations, identified as EU512-04 and 12, respectively, with fugitive emissions EP512-3016 and 3022, respectively;
- (2) Lids (four on each oven), identified as EU512-03 and 11, respectively, with fugitive emissions EP512-3015 and 3021, respectively;
- (3) Offtake Systems, identified as EU512-02 and 10, respectively, with fugitive emissions EP512-3014 and 3020, respectively; and
- (4) Doors, identified as EU512-05 and 13, with fugitive emissions EP512-3017 and 3023.

(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 PSD Minor Limit [326 IAC 2-2] and Emission Offset [326 IAC 2-3]

- (a) Pursuant to CP127-2725-00001, issued January 28, 1994, for Coke Battery 2, and the National Emissions Standards for Hazardous Air Pollutants; Coke Oven Batteries, the applicable requirements specified in this NESHAPs shall be achieved. Compliance with these standards will make the requirements of the Prevention of Significant Deterioration rule, 326 IAC 2-2, and emissions offset rule 326 IAC 2-3 not applicable for particulate matter (TSP & PM10), sulfur dioxide, carbon monoxide, volatile organic compounds, and nitrogen oxide.
- (b) Pursuant to CP127-2725-00001, issued January 28, 1994, the amount of nitrogen oxide (NOx) emissions from Coke Battery #2 (underfire EP512-27), shall be limited to 650 tons per year based on a twelve month average rolled on a monthly basis in order to make the provisions of 326 IAC 2-2 not applicable.
- (c) Pursuant to Significant Modification 127-15656-00001, issued October 17, 2002, Coke Battery #2 shall generate and supply to the steel manufacturing plant at least 1,793,385,000 cubic feet of coke oven gas per twelve consecutive months with compliance demonstrated at the end of each month, excluding any hours when the Coke Battery #2 is not in operation.

D.1.2 Particulate Emission Limitations for Manufacturing Processes [326 IAC 6-3]

Pursuant to 326 IAC 6-3 (Process Operations), the allowable PM emission rate from Batteries #1 and #2 shall not exceed 56.11 and 55.89 pounds per hour, respectively, when operating at process weight rates of 1,400,000 and 1,371,870 tons per year, respectively. The pounds per hour limitation was calculated with the following equation:

Interpolation and extrapolation of the data for the process weight rate in excess of 60,000 pounds per hour shall be accomplished by use of the equation:

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

Pursuant to 326 IAC 6-3-2(e)(3), when the process weight exceeds two hundred (200) tons/hour, the maximum allowable emission may exceed that shown in (e)(3), provided the concentration of particulate matter in the discharge gases to the atmosphere is less than 0.10 pounds per one thousand (1,000) pounds of gases.

D.1.3 Source Specific and Facility Emission Limitations for TSP in Porter County [326 IAC 6-6]

Pursuant to 326 IAC 6-6-4, Bethlehem Steel Corporation (ISG Burns Harbor) specific source and facility TSP emission limits, the annual particulate matter emissions of each of the following facilities shall not exceed the limit listed below for that facility:

- (a) Coke Oven Battery No.1 Underfiring (EU512-08) shall not exceed 0.129 lb/ton of coal.
- (b) Coke Oven Battery No.2 Underfiring (EU512-16) shall not exceed 0.129 lb/ton of coal.
- (c) Coke Oven Battery Charging, Lids, Offtakes, Collector Mains, Doors, Pushing and Quenching shall not exceed those listed in 326 IAC 11-3. (EU512-04, 12, 03, 11, 02, 10, 05, 13, 06, 14, 07, 15, 09, 17)
- (d) Breaker (Blender) Building emissions shall not exceed 1.2 lb/hr.

This condition is not federally enforceable.

D.1.4 Coke Battery #2 Underfire Particulate Matter Emissions

In accordance with IDEM letter dated February 17, 1998, (proposed condition 9a, for CP 127-2725, A127-5804, and Case No. 94-A-J-1017) in lieu of original operation condition 9(a) of CP127-2725-00001, issued January 28, 1994, for Coke Battery 2, the underfiring (EU512-16) particulate matter emissions shall not exceed 0.23 lbs/MMBtu.

D.1.5 Porter County Sulfur Dioxide Limitations [326 IAC 7-4-14]

Pursuant to CP127-2725-00001, issued January 28, 1994, for Coke Battery 2, the sulfur dioxide emissions from the coke batteries, Nos. 1 & 2 underfire (EU512-08, 16), shall be limited pursuant to 326 IAC 7-4-14(1)(B), as listed below.

- (a) Pursuant to 326 IAC 7-4-14(1)(B)(v), the sulfur dioxide emissions from the Coke Battery #1 Underfire (EU512-08) shall be limited to less than 1.73 lb/MMBtu and 803 lb/hr.
- (b) Pursuant to 326 IAC 7-4-14(1)(B)(vi), the sulfur dioxide emissions from the Coke Battery #2 Underfire (EU512-16) shall be limited to less than 1.96 lb/MMBtu and 911 lb/hr.

D.1.6 Operation Conditions

- (a) Pursuant to Permit Modification 127-19106-00001, issued July 16, 2004, for Coke Battery No.2, the amount of coal processed through battery No.2 shall not exceed 1,279,268.70 tons of dry coal per year, rolled monthly on a 12 month basis, with compliance determined at the end of each month.
- (b) Pursuant to CP127-2725-00001, issued January 28, 1994, for Coke Battery No.2, the total dissolved solids (TDS) shall not exceed an average of 500 milligrams per liter when evaporated at a temperature of 103 to 105 degrees centigrade and the quench tower baffles shall cover 95% or more of the cross sectional area of the exhaust to ensure emissions do not exceed 0.31 lb/ton of coal.

D.1.7 Coke Oven Batteries [326 IAC 11-3]

- (a) Pursuant to CP127-2725-00001, issued January 28, 1994, for Coke Battery 2, the visible emissions for Coke Battery #2 shall be limited as required by 326 IAC 11-3-2. Visible emissions from Coke Battery #1 shall be limited pursuant to 326 IAC 11-3-2. These requirements are as follows:
- (1) Pursuant to 326 IAC 11-3-2(b)(4), emissions from the charging systems (EU512-04, 52), including any open charge port, offtake system (EP512-3014), 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. Pursuant to 326 IAC 11-3-2(b)(5), one charge out of twenty (20) consecutive charges shall be exempt from the total seconds of charging using procedures set forth in 326 IAC 11-3-4(a).
 - (2) Pursuant to 326 IAC 11-3-2(c)(4), no visible emissions shall be permitted from more than three percent (3%) of the total charge port lids (EU512-03, 11).
 - (3) Pursuant to 326 IAC 11-3-2(d)(4), no visible emissions shall be permitted from more than ten percent (10%) of the total offtake piping (EU512-02, 10).
 - (4) Pursuant to 326 IAC 11-3-2(e)(4), no visible emissions shall be permitted from more than three (3) points on the gas collect main (EU512-07, 15), excluding the connection with the standpipes.
 - (5) Pursuant to 326 IAC 11-3-2(f)(4), no emissions shall be permitted from more than ten percent (10%) of the total coke oven doors (EU512-05, 13), plus four doors, on any coke oven battery.
- (b) Pursuant to 326 IAC 11-3-2(g), Coke Battery #1 and #2 pushing emission 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, and in addition, pursuant to CP127-2725-00001, issued January 28, 1994, for Coke Battery #2, the effluent gas particulate emissions shall not exceed 0.04 lbs/ton of the coke pushed after control.
 - (2) Such device 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 (90%) of the pushing emissions. The permit shall be submitted to U.S. EPA as a SIP revision.
- (c) Pursuant to 326 IAC 11-3-2(h), quenching emissions requirements shall be as follows:
- (1) Quench towers serving coke oven batteries No.1 and No.2 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 particulates into the atmosphere (EP512-3081 and 3082). 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.
 - (2) The quench tower makeup (when servicing coke oven battery No.1 only) must contain a total dissolved solids content of no more than one thousand five hundred (1,500) milligrams per liter. If an individual facility or source is required to comply with conflicting Indiana water pollution control requirements, the commissioner may revise quenching requirements of this subsection on a case-by-case basis.
- (d) Pursuant to 326 IAC 11-3-2(i), underfire particulate and sulfur dioxide emissions requirements shall be as follows:
- (1) Particulate and sulfur dioxide emissions from underfire stacks shall be limited by the emission limitations determined under 326 IAC 6-2 and 326 IAC 7-1.1, respectively.

- (2) In accordance with IDEM letter dated February 17, 1998, proposed condition 9c, for CP 127-2725, A127-5804, and Case No. 94-A-J-1017, in lieu of original operation condition 9c of CP127-2725-00001, issued January 28, 1994, for Coke Battery 2, visible emissions from the underfire combustion stack (EP512-3027) for Coke Battery #2 shall comply with 326 IAC 5-1.
- (e) Pursuant to 326 IAC 11-3-3 (Identification of coke oven), the identity of each coke oven shall be maintained 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.1.8 Opacity Limitations

In accordance with IDEM letter dated February 17, 1998, proposed condition 5(b) and 5(c), for CP 127-2725, A127-5804, and Case No. 94-A-J-1017, in lieu of original operation conditions 5(b) and 5(c), issued January 28, 1994, for Coke Battery 2:

- (a) The instantaneous opacity at the pushing emission control baghouse stack shall not exceed ten percent (10%) opacity for an aggregate of six (6) minutes within any six (6) hour period. Twenty-four (24) instantaneous opacity readings greater than ten percent (10%) within any six (6) hour period shall be considered a six (6) minute aggregate. There shall be no instantaneous opacity readings equal to or greater than forty percent (40%) opacity exiting the baghouse stack during the operation of the baghouse.
- (b) Visible emissions during the pushing operation shall not exceed an average of twenty percent (20%) opacity during twenty-four (24) consecutive readings.

D.1.9 Coke Oven Battery Door Emissions Control Program

Pursuant to Agreed Order A-481, issued January 30, 1992, Orders 11 and 12, a "Coke Oven Battery Door Emissions Control Program" for Coke Batteries #1 and #2 shall be executed, and shall contain the minimum elements:

- (a) All new welded steel doors purchased for either Coke Oven Battery shall be stress relieved prior to installation.
- (b) All door machines shall have brush-type door cleaners to clean the entire vertical sealing ring gas channel that is adjacent to the knife-edge surface of each door, after such door has been removed for the purpose of pushing its oven.
- (c) All coke side door machines shall have laser spotters utilized in the cleaning of each coke side door jamb after the oven is pushed.

D.1.10 General Provisions relating to NESHAP [326 IAC 20-1-1][326 IAC 20-3][40 CFR Part 63, Subpart A]

- (a) The provisions of 40 CFR Part 63, Subpart A - General Provisions, which are incorporated by reference in 326 IAC 20-3 (40 CFR Part 63, Subpart L), apply to Coke Batteries #1 and #2, except when otherwise specified in 40 CFR Part 63, Subpart A.
- (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 Coke Batteries #1 and #2, except when otherwise specified by Table 1 to 40 CFR 63, Subpart CCCCC. The Permittee must comply with these requirements on or after April 14, 2003.
- (c) Since the applicable requirements associated with the compliance options are not included and specifically identified in this permit, the permit shield does not apply to part (b) of this condition, as authorized by Section B of this permit in the condition titled Permit Shield, and set out in 326 IAC 2-7-15.

D.1.11 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, emissions from Coke Batteries #1 and #2 in excess of the amounts listed below. Note that the Permittee has elected to meet the following emission limitations and requirements in lieu of 40 CFR 63.302:
 - (1) Four and three-tenths percent (4.3%) leaking coke oven doors for each tall by-product coke oven battery;
 - (2) Four-tenths percent (0.4%) leaking topside port lids;

- (3) Two and five-tenths percent (2.5%) leaking off take systems; and
 - (4) Twelve (12) seconds of visible emissions per charge.
 - (5) On or after January 1, 2010, unless the U.S. EPA or IDEM, OAQ, promulgates more stringent limits pursuant to Section 112(i)(8)(C) of Clean Air Act (CAA), the Permittee shall comply with the limitations described in 40 CFR 63.304(b)(3) in place of those listed in (1) above.
- (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 or, for a coke oven battery not subject to visible emission limitations under 40 CFR 63 Subpart L, other federally enforceable visible emission limitations for these emission points.
- (1) The work practice plan must address each of the topics specified in 40 CFR 63.306(b) 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 40 CFR 63.306(b) for each emission point subject to a visible emission standard under this subpart, 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 (40 CFR 63.306(b)). 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 section, 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 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 to prevent exceedances;
 - (v) For batteries equipped with hand-luted doors, procedures for luting and re-luting, 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; and
 - (ii) Procedures for identifying off take system components that leak and procedures for sealing leaks that are detected.
 - (F) Procedures for dampering 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. On and after November 15, 1993, the Permittee of a coke oven battery shall implement the provisions of the coke oven emission control work practice plan according to the following requirements:

The Permittee of a coke oven battery subject to visible emission limitations under Subpart L on and after November 15, 1993, shall:

- (A) 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 purposes of 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 Part 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 under 40 CFR 63.306(c)(1)(i).
- (6) Revisions to the work practice emission control plan will be governed by the following provisions of 40 CFR 63.306(d) and 40 CFR 63.306(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 disapproves 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 of 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 IDEM, OAQ determines that the revised plan is inadequate to prevent exceedances of the visible emission limitation under this subpart for the emission point for which a plan revision is required or, in the case of a battery not subject to visual emission limitations under this subpart, other federally enforceable emission limitations for such an emission point. The IDEM, OAQ may also disapprove the finding that may be submitted pursuant to 40 CFR 63.306(d)(3) if IDEM, OAQ determines 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:
- (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) Not vent coke oven emissions to the atmosphere through bypass/bleeder stacks, except through the flare system.
- (3) Design each flare 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) Ensure that each flare has either a continuously operable pilot flame which operates at all times pursuant to 40 CFR 63.309(h)(2), or an electronic igniter that meets the following requirements:

- (A) Each flare shall be equipped with at least two ignitor 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.
- (5) Ensure that each flare installed to meet the requirements of this section 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:
- (1) Inspect the coke oven battery collecting main for leaks at least once daily.
 - (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:
- (1) Operate and maintain the coke oven batteries and their pollution control devices at all times including periods of startup, shut down and malfunction.
 - (2) Develop and implement a written Startup, Shutdown and Malfunction (SSM) 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. 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.
 - (3) Do the following during a period of startup, shutdown or malfunction:
 - (A) Operate the coke batteries and their control devices according to the procedures in the SSM plan.
 - (B) Correct malfunctions as soon as practicable after their occurrence, in accordance with the SSM plan.
 - (C) Notify, with respect to the observation (or set of observations) for a particular day, the following of a startup, shutdown or malfunction:
 - (i) To the certified observer, if practicable, 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) Submit, within 14 days of the notification made to the certified observer and enforcement agency, or after a startup or shutdown, a written report to the applicable permitting authority 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 SSM plan.
- (E) Maintain a record of internal reports that are based on each malfunction notification.
- (F) 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) Revise, as directed by IDEM, OAQ, the SSM 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 this subpart;
 - (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.1.12 National Emission Standards for Hazardous Air Pollutants for Coke Ovens: Pushing, Quenching and Battery Stacks- Emission Limitations [40 CFR 63, Subpart CCCCC]

- (a) The provisions of 40 CFR 63, Subpart CCCCC (National Emission Standards for Hazardous Air Pollutants for Coke Ovens: Pushing, Quenching and Battery Stacks) apply to the affected sources: Coke Batteries #1 and #2. A copy of this rule is available on the U.S. EPA Air Toxics Website at <http://www.epa.gov/ttn/atw/mcm/mcmpg.html>. The Permittee must comply with these requirements on and after April 14, 2006.
- (b) Since the applicable requirements associated with the compliance options are not included and specifically identified in this permit, the permit shield authorized by Section B of this permit in the condition titled Permit Shield, and set out in 326 IAC 2-7-15, does not apply to part (a) of this condition.

- (c) Terminology used in this section is defined in the CAA, in 40 CFR 63, Section 63.2, and in 40 CFR 63.8105, and is applicable to the affected source.
- (d) Pursuant to 40 CFR 63.7290, the Permittee shall meet each emission limitation that applies to the capture systems and control devices (C512-3024, C512-3018) for pushing emissions from Coke Batteries #1 and #2.
- (e) Pursuant to 40 CFR 63.7291, the Permittee shall meet each work practice standard for fugitive pushing emissions for by-product oven batteries with vertical flues that applies to Coke Batteries #1 and #2.
- (f) Pursuant to 40 CFR 63.7294, the Permittee shall meet each work practice standard for soaking that applies to Coke Batteries #1 and #2.
- (g) Pursuant to 40 CFR 63.7295, the Permittee shall meet each requirement for quenching that applies to Coke Batteries #1 and #2.
- (h) Pursuant to in 40 CFR 63.7296, the Permittee shall meet each emission limitation for battery stacks that applies to Coke Batteries #1 and #2.
- (i) Pursuant to 40 CFR 63.7300, the Permittee shall meet each operation and maintenance requirement that applies to Coke Batteries #1 and #2 and required capture and control equipment.
- (j) Pursuant to 40 CFR 63.7310(c), the Permittee shall develop and implement a written start-up, shutdown and malfunction plan. During periods of start-up, shutdown or malfunction, the Permittee shall operate in accordance with the plan and 40 CFR 63.7336(b).
- (k) Pursuant to 40 CFR 63.7330, the Permittee shall meet each monitoring requirement that applies to Coke Batteries #1 and #2 and required capture and control equipment.
- (l) Pursuant to 40 CFR 63.7331, the Permittee shall meet each requirement regarding installation, operation and maintenance of monitors for each monitor required by 40 CFR 63, Subpart CCCC that applies to Coke Batteries #1 and #2 and required capture and control equipment.

Compliance Determination Requirements

D.1.13 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 stack test, whichever is earlier, the Permittee shall perform PM, SO₂ and opacity testing on the underfire stack exhausts EP512-3026 and 3027 using methods as approved by the Commissioner, in order to demonstrate compliance with conditions D.1.3, D.1.4, D.1.5, D.1.7, and condition C.2 - Opacity. These tests shall be repeated at least once every five (5) years from the date of this valid compliance demonstration.
- (b) In order to demonstrate compliance with conditions D.1.3(b) and D.1.4, in accordance with IDEM letter dated February 17, 1998, proposed conditions 9a and 9b, for CP 127-2725, A127-5804, and Case No. 94-A-J-1017, in lieu of original operation conditions 9(a) and (b), issued January 28, 1994, for Coke Battery 2, as proposed for CP127-2725-00001, issued January 28, 1994, for operation conditions 9(a) and 9(b), compliance shall be verified by stack test using EPA Method 5.
- (c) Pursuant to the December 11, 1997 letter from IDEM, regarding 6-6-2(e)(1), within four (4) years from the date of the most recent compliant stack test, the Permittee shall conduct PM testing for Coke Batteries #1 and #2 pushing emission control stacks (EP512-3024, 3018). These tests shall be repeated at least once every four (4) years from the date of the most recent valid compliant stack test.

All stack testing shall be performed in accordance with Section C - Performance Testing.

D.1.14 Methods to Determine Compliance [326 IAC 6-6-2]

- (a) Pursuant to 326 IAC 6-6-2(i), compliance with the coke quenching water quality limits shall be determined according to the procedures given below:

- (1) The water as applied to the coke shall be sampled once per calendar quarter. Samples shall be collected once per day per tower for five (5) consecutive days and shall be composited into one (1) sample for each tower.
 - (2) Each composite sample shall be analyzed for total dissolved solids (TDS), in accordance with ASTM D1888-78, Method A or an equivalent method approved by the commissioner, with the results expressed in milligrams per liter (mg/l).
 - (3) Compliance shall be determined on the basis of the results of the composite sample for each tower. Alternate testing and/or analysis intervals may be used with prior approval of the board.
- (b) Pursuant to 326 IAC 6-6-2(n), in determining compliance for coke oven pushing, charging, oven door leaks, and charging lid and offtake leaks, the requirements specified under 326 IAC 11-3 shall govern.

This condition is not federally enforceable.

D.1.15 Opacity

- (a) In accordance with IDEM letter dated February 17, 1998, proposed condition 5(b), for CP 127-2725, A127-5804, and Case No. 94-A-J-1017, in lieu of original operation condition 5(b), issued January 28, 1994, for Coke Battery 2, the pushing emission control baghouse stack shall be maintained and operated according to the equipment manufacturer's specifications and remain operating at all times that coke is being pushed.
- (b) In accordance with IDEM letter dated February 17, 1998, proposed condition 5(c), for CP 127-2725, A127-5804, and Case No. 94-A-J-1017, in lieu of original operation condition 5(c), issued January 28, 1994, for Coke Battery 2, for purposes of the opacity limit for the No.2 Coke Battery pushing operation, visible emissions shall be read at the top of the battery with the observer on the ground outside of the quench car tracks and shall begin upon the inspector's first observation of the movement of coke into the quench car or the inspector's notification that the coke has begun to move. For purposes of this limit for the No.2 Coke Battery, pushing operation shall be defined at the first movement of coke from the oven and end upon initial movement of the quench car. Visible emissions observations shall continue until the end of the pushing operation. Visible emission readings from successive pushes shall be considered consecutive for purposes of determining compliance with the twenty percent (20%) six (6) minute average opacity limit.

D.1.16 Compliance Determination for Charging [326 IAC 11-3-4(a)]

- (a) Pursuant to 326 IAC 11-3-4(a), and in order to demonstrate compliance with condition D.1.7, 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.1.17 Compliance Determination for Charge Port Lids and Offtake Piping [326 IAC 11-3-4(b)]

Pursuant to 326 IAC 11-3-4(b), and in order to determine compliance with condition D.1.7, 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:
- (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) Offtake piping assembly which are not contained in one (1) of the categories in this subdivision.

D.1.18 Compliance Determination 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 condition D.1.7, 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 the 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.1.19 Compliance Determination for the Gas Collector Main [326 IAC 11-3-4(e)]

Pursuant to 326 IAC 11-3-4(e), and in order to determine compliance with condition D.1.7, the observer shall walk the length of the top side of the gas collector main, to record the number of points in a single traverse from which emissions are visible.

D.1.20 Coke Oven Inspections- Panel Patch Repair Program

Pursuant to Agreed Order A-481, issued January 30, 1992, Order 3, after each push on Coke Battery #1 and #2 (EU512-06 and 14), the ovens shall be inspected for cracks and holes. Any oven in which cracks or holes have been found shall not be recharged until the Permittee performs temporary repairs or panel patch repairs on such ovens.

D.1.21 Continuous Opacity Monitoring [326 IAC 3-5]

Pursuant to Agreed Order A-481, issued January 30, 1992, Order 5, and 326 IAC 3-5, the quality assured continuous opacity monitoring system installed on the Coke Battery #1 and #2 underfire stacks (EP512-3026, 3027) shall be calibrated, maintained, operated, and certified in accordance with, and meet the performance specifications of, 326 IAC 3, Monitoring Requirements.

D.1.22 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 continuous opacity monitoring systems shall meet the performance specifications of 40 CFR 60, Appendix B, Performance Specification No.1, and are subject to monitor system certification requirements pursuant to 326 IAC 3-5.
- (c) In the event that a breakdown of a continuous opacity monitoring system occurs, a record shall be made of the times and reasons of the breakdown and efforts made to correct the problem.
- (d) Whenever a continuous opacity monitor (COM) is malfunctioning or will be down for calibration, maintenance, or repairs for a period of one (1) hour or more, compliance with the applicable opacity limits shall be demonstrated by the following:
 - (1) Visible emission (VE) notations shall be performed once per hour during daylight operations following the shutdown or malfunction of the primary COM. A trained employee shall record whether emissions are normal or abnormal for the state of operation of the emission unit at the time of the reading.
 - (A) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.
 - (B) If abnormal emissions are noted during two consecutive emission notations, the Permittee shall begin Method 9 opacity observations within four hours of the second abnormal notation.
 - (C) VE notations may be discontinued once a COM is online or formal Method 9 readings have been implemented.
 - (2) If a COM is not online within twenty-four (24) hours of shutdown or malfunction of the primary COM, the Permittee shall provide certified opacity reader(s), who may be employees of the Permittee or independent contractors, to self-monitor the emissions from the emission unit stack.
 - (A) Visible emission readings shall be performed in accordance with 40 CFR 60, Appendix A, Method 9, for a minimum of five (5) consecutive six (6) minute averaging periods beginning not more than twenty-four (24) hours after the start of the malfunction or down time.

- (B) Method 9 opacity readings shall be repeated for a minimum of five (5) consecutive six (6) minute averaging periods at least once every four (4) hours during daylight operations, until such time that a COM is in operation.
 - (C) Method 9 readings may be discontinued once a COM is online.
 - (D) Any opacity exceedances determined by Method 9 readings shall be reported with the Quarterly Opacity Exceedances Reports.
- (3) If abnormal emissions are observed, the Permittee shall take reasonable response steps in accordance with Section C - 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, (and 40 CFR 63).

D.1.23 Particulate Control

Pursuant to CP127-2725-00001, issued January 28, 1994, for Coke Battery #2:

- (a) Pushing (EU512-14) particulate emissions shall be collected by a Minister Stein type hood and evacuated to a baghouse (C512-3024).
- (b) The Minister-Stein system shall be operated and monitored at all times that coke pushing is being conducted and shall comply with the requirements 326 IAC 11-3-2(g) listed in condition D.1.7(b). The operating parameters to be maintained by the Minister-Stein system shall include the fan amperage to maintain an air flow of 200,000 acfm at the fan exhaust with the fresh air intakes closed, recording of the pushing times, and recording the time that the fresh air intakes are open. An open fresh air intake during the time of pushing or any significant variation of the fan amperage during pushing will be considered a malfunction.

D.1.24 Coke Oven Batteries NESHAP [40 CFR Part 63 Subpart L] [326 IAC 20-3]

Pursuant to 40 CFR 63.308 (Standards for Collecting Mains) and 326 IAC 20-3 (Emission Standards for Hazardous Air Pollutants from Coke Oven Batteries), the Permittee shall:

- (a) Inspect the collecting main (EU512-07, 15) for leaks at least once (1) daily according to the procedures in 40 CFR 63 Appendix A Method 303.
- (b) The Permittee shall record the time and date a leak is first detected, the time and date the leak is temporarily sealed and the time and date of repair.
- (c) The Permittee shall temporarily seal any leak in the collecting main as soon as possible after detection but no later than four (4) hours after detection of the leak.
- (d) The Permittee shall institute a collecting main repair as expeditiously as possible, but no later than five (5) calendar days after initial detection of the leak. The repair shall be completed within fifteen (15) calendar days after initial detection of the leak unless an alternative schedule is approved by the Administrator.

D.1.25 National Emission Standards for Hazardous Air Pollutants from Coke Oven Batteries - Visible Emission Inspection Requirements [326 IAC 20] [40 CFR Part 63, Subpart L]

- (a) Pursuant to 40 CFR 63.309 (Visible Emission Inspection Requirements), the Permittee shall, except as otherwise provided, 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.1.11(a). If a facility pushes and charges only at night, then that 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 shall be conducted according to the procedures and requirements in this section and in Method 303 or 303A in Appendix A to 40 CFR Part 63 or Methods 9 and 22 in Appendix A to 40 CFR Part 60 (where applicable).
- (2) Each performance test shall 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 this section, 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 this section.

- (A) The inspection fee shall be determined according to the following formula:

$$F = H \times S$$

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 this section, for any monitoring or inspection services required by paragraph (a) of this section 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 this section.
- (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 IDEM, OAQ is responsible for performing the inspections required by this section, pursuant to 40 CFR 63.313(b).
 - (6) Within thirty (30) days of receiving notification from the IDEM, OAQ 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.
 - (7) The enforcement agency shall commence daily performance tests on the applicable date specified in 40 CFR 63.300(a) or (c).
 - (8) The certified observer shall conduct each performance test according to the requirements in this paragraph:
 - (A) The certified observer shall conduct one run each day to observe and record visible emissions from each coke oven door (except for doors covered by an alternative standard under 40 CFR 63.305), topside port lid, and offtake 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 or Method 303A in Appendix A to 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 to 40 CFR Part 63.
- (B) 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.
 - (C) 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.
 - (i) The Permittee shall demonstrate pursuant to Method 303 in Appendix A to 40 CFR Part 63 the accuracy of the pressure measurement device upon request of the certified observer.
 - (ii) The Permittee shall not adjust the pressure to a level below the range of normal operation during or prior to the inspection.
 - (D) The certified observer shall monitor visible emissions from coke oven doors subject to an alternative standard under 40 CFR 63.305 on the schedule specified in 40 CFR 63.305(f).
 - (E) If applicable, the certified observer shall monitor the opacity of any emissions escaping the control device for a shed covering doors subject to an alternative standard under 40 CFR 63.305 on the schedule specified in 40 CFR 63.305(f).
 - (F) 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.
- (9) 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 or 303A 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:
- (A) The 30-run rolling average of the percent leaking coke oven doors, topside port lids, and offtake 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 (or section 3.4.3.2 of Method 303A) in Appendix A to 40 CFR Part 63;
 - (B) 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;
 - (C) For a battery subject to an alternative emission limitation for coke oven doors on by-product coke oven batteries pursuant to 40 CFR 63.305, the 30-run rolling average of the percent leaking coke oven doors for any side of the battery not subject to such alternative emission limitation;
 - (D) 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;
 - (E) For an approved alternative emission limitation for coke oven doors according to 40 CFR 63.305, the weekly or monthly observation of the percent leaking coke oven doors using Method 303 in Appendix A to 40 CFR Part 63, the percent opacity of visible emissions from the control device for the shed using Method 9 in Appendix A to 40 CFR Part 60, and visible emissions from the shed using Method 22 in Appendix A to 40 CFR Part 60.
- (10) 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.

- (11) 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.
 - (12) For a flare installed to meet the requirements of 40 CFR 63.307(b):
 - (A) 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
 - (B) 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.
 - (13) 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.
- (b) The certified observer shall conduct each performance test according to 40 CFR 63.309(c).

D.1.26 National Emission Standards for Hazardous Air Pollutants for Coke Ovens: Pushing, Quenching and Battery Stacks- Compliance Requirements for Coke Batteries [40 CFR 63.7310(a)][40 CFR 63.7324][40 CFR 63.7326][40 CFR 63.7328][40 CFR 63.7332 to 63.7335]

- (a) Pursuant to 40 CFR 63.7310(a), the Permittee shall be in compliance with the emission limitations and operation and maintenance requirements in condition D.1.11 at all times, except during periods of start-up, shutdown and malfunction as defined in 40 CFR 63.2, which incorporated by reference in 326 IAC 20-1-3.
- (b) Pursuant to 40 CFR 63.7326, the Permittee shall demonstrate initial compliance with the emission limitations that apply to the Coke Batteries #1 and #2 by-product coke batteries, for the following:
 - (1) Particulate matter emission limit from a control device applied to pushing emissions;
 - (2) Opacity limit for stacks; and
 - (3) Total Dissolved Solids (TDS) limit or constituent limits for quench water.
- (c) Pursuant to 40 CFR 63.7327 and 63.7320(c), the Permittee shall demonstrate initial compliance with the work practice standards for by-product coke oven batteries with vertical flues that apply to Coke Batteries #1 and #2, for the following:
 - (1) Work practice standards for fugitive pushing emissions;
 - (2) Work practice standards for soaking; and
 - (3) Work practice standards for quenching.
- (d) The Permittee shall demonstrate initial compliance with the operation and maintenance requirements that apply to Coke Batteries #1 and #2, in accordance with 40 CFR 63.7328 and 63.7320(c).
- (e) The Permittee shall monitor and collect data to demonstrate continuous compliance with 40 CFR 63, Subpart CCCCC, in accordance with 40 CFR 63.7332.

- (f) The Permittee shall demonstrate continuous compliance with the emissions limitations of 40 CFR 63, Subpart CCCCC, that apply to Coke Batteries #1 and #2 and required capture and control equipment in accordance with 40 CFR 63.7333.
- (g) Pursuant to 40 CFR 63.7334, the Permittee shall demonstrate continuous compliance with work practice standards for by-product coke oven batteries with vertical flues, that apply to Coke Batteries #1 and #2, for the following:
 - (1) Work practice standards for fugitive pushing emissions, in accordance with 40 CFR 63.7334(a);
 - (2) Work practice standards for soaking, in accordance with 40 CFR 63.7334(d); and
 - (3) Work practice standards for quenching, in accordance with 40 CFR 63.7334(e).
- (h) Pursuant to 40 CFR 63.7335, the Permittee shall demonstrate continuous compliance with the operation and maintenance requirements of 40 CFR 63, Subpart CCCCC, that apply to Coke Batteries #1 and #2 and required capture and control equipment.

D.1.27 National Emission Standards for Hazardous Air Pollutants for Coke Ovens: Pushing, Quenching and Battery Stacks -Testing Requirements [40 CFR 63.7320 through 63.7324]

- (a) The Permittee shall conduct performance tests and other initial compliance demonstrations that apply to Coke Batteries #1 and #2, in accordance with 40 CFR 63.7320 for the following:
 - (1) Each emission limit in 40 CFR 63.7290(a) for particulate matter from a control device applied to pushing emissions within 180 days of April 14, 2006;
 - (2) TDS limit or constituent for quench water in 40 CFR 63.7295(a)(1) by April 14, 2006; and
 - (3) Each opacity limit in 40 CFR 63.7296(a) for a by-product coke oven battery stack by April 14, 2006.
- (b) The Permittee shall conduct subsequent performance tests that apply to each control device subject to an emission limit for particulate matter in 40 CFR 63.7290(a) that is used at Coke Batteries #1 and #2, in accordance with 40 CFR 63.7321.
- (c) The Permittee shall use the test methods and other procedures in 40 CFR 63.7322, when demonstrating compliance with the emission limits for particulate matter from the pushing control device for the Coke Batteries #1 and #2.
- (d) The Permittee shall use the test methods and other procedures in 40 CFR 63.7323 to establish and demonstrate initial compliance with operating limits for Coke Batteries #1 and #2 and required capture and control equipment.
- (e) The Permittee shall use the test methods and other procedures in 40 CFR 63.7324 when demonstrating compliance with the opacity limits for Coke Batteries #1 and #2.
- (f) The Permittee shall use the test methods and other procedures in 40 CFR 63.7325 to demonstrate initial compliance with the TDS or constituent limits for quench water for Coke Batteries #1 and #2.

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

D.1.28 Operation Condition Monitoring

Pursuant to Permit Modification 127-19106-00001, issued July 16, 2004:

- (a) To demonstrate compliance with condition D.1.6(a), the Permittee shall determine and document the moisture content of coal charged through the Coke Battery No.2 by following these coal sampling and analysis procedures:
 - (1) The coal sample acquisition point shall be at a location where representative samples of the total coal flow to be charged to the ovens may be obtained.

- (2) The sample collected shall be analyzed in accordance with the methods specified in ASTM D 3173 using a moisture determination balance analyzer.
 - (3) Coal samples shall be collected for analysis at a minimum of once per day, five times per 7-day week.

For days that no samples were collected, the moisture content to be used for determination shall be the average of the moisture content of the 5 most recent consecutive samples taken.
 - (4) The daily dry tons calculated above will be summed each month for a monthly total.
- (b) To modify or use other equivalent coal sampling and analysis procedures, the Permittee shall submit documentation of the procedures and results to IDEM OAQ for approval.

D.1.29 Continuous Opacity Monitoring Downtime

Whenever a continuous opacity monitor (COM) is malfunctioning, the Permittee shall follow the procedures in accordance with D.1.22, Maintenance of Opacity Monitoring Equipment, until such time that the continuous opacity monitor is back in operation.

D.1.30 Visible Emissions Notations

- (a) Visible emission notations of the Coke Battery No.1 pushing scrubber stack exhaust (EP512-3018) shall be performed once per day during normal daylight operations when exhausting to the atmosphere. A trained employee shall record whether emissions are normal or abnormal.
- (b) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.
- (c) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.
- (d) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.
- (e) If abnormal emissions are observed, the Permittee shall take reasonable response steps in accordance with Section C - Response to Excursions or Exceedances. Failure to take response steps in accordance with Section C - Response to Excursions or Exceedances, shall be considered a deviation from this permit.

D.1.31 Parametric Monitoring

- (a) The Permittee shall record the pressure drop across the baghouse (C512-3024) and scrubber (C512-3018) used in conjunction with the pushing operations, at least once per day when the respective coke battery is in operation. When for any one reading, the pressure drop across the baghouse and scrubber is outside its normal range of 5 and 10 inches of water for the baghouse, and 60 and 70 inches of water for the scrubber, or a range established during the latest stack test, the Permittee shall take reasonable response steps in accordance with Section C - Response to Excursions or Exceedances. A pressure reading that is outside the above mentioned range is not a deviation from this permit. Failure to take response steps in accordance with Section C - Response to Excursions or Exceedances, shall be considered a deviation from this permit.
- (b) The instrument used for determining the pressure shall comply with Section C - Instrument Specifications, of this permit, and shall be calibrated in accordance with the manufacturer's specifications. The specifications shall be available on site with the Preventive Maintenance Plan.

D.1.32 Scrubber Failure

In the event that scrubber failure has been observed, failed units and the associated process will be shut down immediately until the failed units have been repaired or replaced. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions).

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

D.1.33 Record Keeping Requirements

- (a) Pursuant to Significant Modification 127-15656-00001, issued October 17, 2002, Coke Battery #2 shall maintain records of coke oven gas generated and supplied to the steel manufacturing facilities at the plant on a quarterly basis to demonstrate compliance with condition D.1.1(c).
- (b) To document compliance with conditions D.1.3 and D.1.5, the Permittee shall keep records in accordance with Section C – Record Keeping and Reporting Requirements, of this permit.
- (c) Pursuant to Permit Modification 127-19106-00001, issued July 16, 2004, for Coke Battery No.2, to document compliance with condition D.1.6(a), the Permittee shall document:
 - (1) The Permittee shall determine and document the actual amount of dry coal charged through the Coke Battery No.2.
 - (2) The moisture content of coal charged through the Coke Battery No.2 by following these coal sampling and analysis procedures:
 - (A) The coal sample acquisition point shall be at a location where representative samples of the total coal flow to be charged to the ovens may be obtained.
 - (B) The sample collected shall be analyzed in accordance with the methods specified in ASTM D 3173 using a moisture determination balance analyzer.
 - (C) Coal samples shall be collected for analysis at a minimum of once per day, five times per 7-day week.

For days that no samples were collected, the moisture content to be used for determination shall be the average of the moisture content of the 5 most recent consecutive samples taken.
 - (D) The daily dry tons calculated above will be summed each month for a monthly total.

The Permittee shall make these records available to IDEM, OAQ and the U.S. EPA upon request.

- (d) Pursuant to Agreed Order A-481, issued January 30, 1992, Orders 11 and 12, the following records shall be kept of the “Coke Oven Battery Door Emissions Control Program” to document compliance with condition D.1.9:
 - (1) The date when each new welded steel door is first installed, the battery number, the battery side, and the number of the oven on which the door is installed, whether or not the door was stress relieved prior to installation, and an explanation regarding the reason(s) any such door was not stress relieved;
 - (2) For each month in which a failure of condition D.1.9(b) occurs, the Permittee shall record the number of pushes per month on that particular coke oven battery, the number of doors on each side of the coke oven battery that did not have both of the entire vertical sealing ring gas channel adjacent to the knife edges cleaned by a brush-type door cleaner between all pushes, and an explanation regarding all the reason(s) such cleaning was not performed; and
 - (3) For each month in which a failure of condition D.1.9(c) occurs, the Permittee shall record the number of pushes per month on that particular coke oven battery, the number of pushing cycles on each date where the laser spotters were not used in the cleaning of coke side jambs on the coke oven battery, and an explanation regarding the reason(s) such laser spotters were not used.
- (e) To document compliance with condition D.1.21 (Coke Oven Inspections- Panel Patch Repair Program), the Permittee shall record;
 - (1) the oven numbers of all ovens at Coke Batteries #1 and #2 where crack(s) and/or hole(s) were identified;

- (2) the date the oven was taken out of service or is scheduled to be taken out of service;
 - (3) the date(s) the temporary repairs or panel patch repairs were performed;
 - (4) the date the oven was returned to service after repair;
 - (5) and a description of both the crack(s) and/or hole(s) and its (their) repair.
- (f) Pursuant to Agreed Order A-481, issued January 30, 1992, Order 5, records shall be maintained and submitted to the Department (OAQ) in accordance with 326 IAC 3 procedures to document compliance with condition D.1.22. 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 with condition D.1.30.
- (g) To document compliance with condition D.1.31, the Permittee shall maintain records of visible emission notations for the specified exhausts.
- (h) To document compliance with condition D.1.32, the Permittee shall maintain records of the pressure drop across the pushing operation baghouse (C512-3024) and scrubber (C512-3018).
- (i) To document compliance with condition D.1.34, the Permittee shall maintain records of equipment failure.

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

D.1.34 Reporting Requirements

- (a) The Permittee shall submit quarterly records to demonstrate compliance with D.1.1(c).
- (b) To document compliance with conditions D.1.3 and D.1.5, the Permittee shall submit reports in accordance with Section C – Record Keeping and Reporting Requirements, of this permit.
- (c) Pursuant to Permit Modification 127-19106-00001, issued July 16, 2004, for Coke Battery No.2, to document compliance with condition D.1.6(a), the Permittee shall submit a quarterly report of the actual amount of dry coal charged through the Coke Battery No.2, using the Quarterly Report of Dry Coal Charged, or its equivalent.
- (d) Pursuant to CP127-2725-00001, issued January 28, 1994, for Coke Battery #2, quarterly summaries of the information to document compliance with conditions D.1.2(c), D.1.7(c), and D.1.8(b) of this permit shall be submitted, 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. These reports shall include tons of hot steel to the vacuum degasser, length of visible emission exceedances for Coke Batteries #1 and #2, and the continued submittal of the “Sulfur Dioxide Emission Monitoring Quarterly Reports”.
- (e) A quarterly report of opacity exceedances of this permit shall be submitted within thirty (30) days after the end of the quarter being reported.
- (f) Pursuant to Agreed Order A-481, issued January 30, 1992, Order 3;
 - (1) Copies of the records required under condition D.1.35(e) shall be sent to the OAQ within thirty (30) days after the calendar quarter in which the activities recorded occur; and
 - (2) The Permittee shall be permitted to modify the primary elements of the “Panel Patch Repair Program” as necessary to provide an ongoing and effective program, provided that all additions, deletions or modifications to the primary elements of the program are submitted to the Department for approval first.
- (g) Pursuant to Agreed Order A-481, issued January 30, 1992, Orders 11(c) and 12(c), the Permittee shall submit quarterly reports of the records required to be kept by condition D.1.35(c) within thirty (30) days of the calendar quarter in which the activities recorded occur.

- (h) Each report shall be submitted to the address(es) listed in Section C - General Reporting Requirements, of this permit.

All of the reports submitted by the Permittee require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

D.1.35 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.1.11, the Permittee shall maintain the following records:
- (1) A copy of the work practice plan for each emission point, any revisions to the plan, 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.1.11.
 - (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 jambs;
 - (5) The design drawings and engineering specifications for the bypass/bleeder stack flare system; and
 - (6) Records specified in 40 CFR 63.311(f) regarding the basis of each malfunction.
- (b) A semiannual compliance certification to document compliance with condition D.1.11 shall include the following:
- (1) No coke oven gas was vented except through the bypass/bleeder stack flare system of a by-product coke battery during the reporting period, or
 - (2) A venting of coke oven gas that was not through the bypass/bleeder stack flare system was reported within 24 hours, and a written report was submitted within thirty (30) days.
 - (3) A startup, shutdown or malfunction did not occur during the reporting period, or
 - (4) A startup, shutdown or malfunction did occur and date report was reported and submitted within fourteen (14) days.

D.1.36 National Emission Standards for Hazardous Air Pollutants from National Emission Standards for Hazardous Air Pollutants for Coke Ovens: Pushing, Quenching and Battery Stacks- Record Keeping Requirements for Coke Oven Batteries [40 CFR 63.7310(b)][40 CFR 63.7]

- (a) Upon the compliance date of April 14, 2006, the Permittee shall maintain a log detailing the operation and maintenance of the No.1 and No.2 Coke Batteries and control equipment, in accordance with 40 CFR 63.7310(b).
- (b) The Permittee shall keep the records required by 40 CFR 63.7342(a).
- (c) If a Continuous Opacity Monitoring System (COMS) is used to comply with an opacity standard, the Permittee shall keep the records specified in 40 CFR 63.7342(b).

- (d) The Permittee shall keep the records required in 40 CFR 63.6(h)(6) for visible observations in accordance with 40 CFR 63.7342(c).
- (e) Pursuant to 40 CFR 63.7333 and 63.7342 (d), the Permittee shall keep the records required to demonstrate continuous compliance with each emission limitation requirement for each by-product coke battery that applies to the No.1 and No.2 Coke Batteries, for the following:
 - (1) Each control device and capture system applied to pushing emissions;
 - (2) Opacity limits for stacks;
 - (3) TDS limit for quenching; and
 - (4) Constituent limit for quenching.
- (f) Pursuant to 40 CFR 63.7334 and 63.7342(d), the Permittee shall keep the records to demonstrate continuous compliance with the work practice standards for each by-product Coke Battery with vertical flues that applies to the No.1 and No.2 Coke Batteries, as follows:
 - (1) Work practice standards for fugitive pushing emissions, in accordance with 40 CFR 63.7334(a);
 - (2) Work practice standards for soaking, in accordance with 40 CFR 63.7334(d); and
 - (3) Work practice standards for quenching, in accordance with 40 CFR 63.7334(e).
- (g) Pursuant to 40 CFR 63.7335 and 63.7342(d), the Permittee shall keep the records required to show continuous compliance with each operation and maintenance requirement that applies to the No.1 and No.2 Coke Batteries, for the following:
 - (1) The operation and maintenance plan requirements;
 - (2) Capture systems or control devices applied to pushing emissions;
 - (3) Baghouses applied to pushing emissions; and
 - (4) The requirements to maintain a current copy of the operation and maintenance plan.
- (h) The Permittee shall keep the records required by 40 CFR 63, CCCCC in accordance with 40 CFR 63.7343 and the General Record Keeping Requirements in Section C of this permit.

D.1.37 National Emission Standards for Hazardous Air Pollutants for Coke Ovens: Pushing, Quenching and Battery Stacks - Reporting Requirements for Coke Oven Batteries [40 CFR 63.7336][40 CFR 63.7341]

- (a) The Permittee shall report each deviation in the Quarterly Deviation and Compliance Monitoring Report required by the Section C of this permit in accordance with 40 CFR 63.7336(a), 40 CFR 63.7341(e), 326 IAC 2-1.1-11 and 326 IAC 2-7-5(3).
- (b) The Permittee shall submit the notifications required by 40 CFR 63.6(h)(4) and (5), 40 CFR 63.7(b) and (c), 40 CFR 63.8(e) and (f)(4) and 40 CFR 63.9(b) through (h) that apply by the dates specified in those sections in accordance with 40 CFR 63.7340(a).
- (c) The Permittee shall submit an initial notification no later than August 12, 2003 in accordance with 40 CFR 63.9(b) and 40 CFR 63.7340(b). The initial notification shall be submitted to:

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

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

- (d) The Permittee shall submit a notification of compliance status in accordance with 40 CFR 63.9(h)(2)(ii) and 40 CFR 63.7340(e).
- (1) For each initial compliance demonstration that does not include a performance test, the Permittee shall submit the notification of compliance status before the close of business on the 30th calendar day following completion of the initial compliance demonstration.
 - (2) For each initial compliance demonstration that does include a performance test, the Permittee shall submit the notification of compliance status, including the performance test results, before the close of business on the 60th calendar day following the completion of the performance test according to 40 CFR 63.10(d)(2).
 - (3) The notification of compliance status shall be submitted to:

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

The notification of compliance status requires the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).
- (e) The Permittee shall submit quarterly compliance reports and semiannual compliance reports in accordance with 40 CFR 63.7341(a) through (c).
- (f) If a start-up, shutdown or malfunction occurred during the semiannual reporting period that was not consistent with the start-up, shutdown or malfunction plan, the Permittee shall submit an immediate start-up, shutdown and malfunction report according to the requirements in 40 CFR 63.10(d)(5)(ii) and 40 CFR 63.7341(d).

D.1.38 Requirements to Submit a Significant Permit Modification Application [326 IAC 2-7-5] [326 IAC 2-7-12]

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

- (a) The significant permit modification application shall be consistent with 326 IAC 2-7-12, including information sufficient for IDEM, OAQ to incorporate into the Part 70 permit the applicable requirements of 40 CFR 63, Subpart CCCCC, a description of the affected source and activities subject to the standard, and a description of how the Permittee will meet the applicable requirements of the standard.
- (b) The significant permit modification application shall be submitted no later than April 14, 2006 or the date that the notification of compliance status is submitted, whichever is later.
- (c) The significant permit modification application shall be submitted to:

Indiana Department of Environmental Management
Permits Branch, Office of Air Quality
100 North Senate Avenue
Indianapolis, Indiana 46204-2251

SECTION D.2

FACILITY OPERATION CONDITIONS

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

(b) Coke By-products Recovery plant, identified as EU512-18, constructed in 1969 and modified in 1972, consisting of the following:

(1) Equipment not required to be controlled under the provisions of Subpart L:

EP512-3012	Tar Loading facility
EP512-3049	Flushing Liquor Header
EP512-3054	500 gallon open Surge Tank
EP512-3055	Flushing Liquor Sump
EP512-3056	Ammonia Absorber Recirculation Tank
EP512-3059	Waste Water Sump #8
EP512-3060	Two (2) Waste Ammonia Liquor Clarifiers [both currently out of service]
EP512-3070	Ammonia Absorber Gas Drips Sump
EP512-3080	Crystallizer Hotwell Sump
EP512-3083	8000 gallon Tar Sludge Batch Tank
EP512-3084	15000 gallon Tar Sludge Tank
EP512-3088	No.9 Sump
EP512-3041	Barometric Condenser
EP512-3042	30,000 gallon Sulfuric Acid Tank
EP512-3043	20,000 gallon Sulfuric Acid Tank [currently out of service]
EP512-3044	Ball Mill

(2) A gas blanketing system, identified as C512-3013, constructed in 1991, controlling the following associated equipment as required by the provisions of Subpart L, when in service:

EP512-3001	Tar Storage Tank A [currently out of service]
EP512-3002	Tar Precipitator Sump
EP512-3050	Flushing Liquor Decanter A, B, & C and sludge conveyer
EP512-3057	Purifier Muck Storage Tank
EP512-3067	Wash Oil Decanter
EP512-3068	No.5 Sump
EP512-3069	Tar Precipitator Seal Pots
EP512-3072	Tar Transfer Tank
EP512-3073	Flushing Liquor Circulation Tanks, North & South
EP512-3074	Tar Storage Tanks B & C
EP512-3075	Primary Cooler Condensate Tank
EP512-3077	Wash Oil Separation Tank
EP512-3078	Wash Oil Decanter Muck Storage Tank
EP512-3094	Exhauster's Area (Exhausters A, B and C including associated seal pots)

(3) The following By-products Area Waste Water Treatment Facility emission units are subject to the provisions of Subpart FF:

EP512-3095	Mixing Tank
EP512-3096	Separation Tank
EP512-3097	Intermediate Tank
EP512-3098	Storage Tank
EP512-3099	Neutralization Tank
EP512-3100	1,000,000 gallon Waste Ammonia Liquid Clarifier
EP512-3101	Feed Tank

(4) One (1) clean coke oven gas export line, identified as EU512-26, constructed in 1969, with a maximum export volume of 75 MMCF gas per day, equipped with emergency bleeder flare C512-3025 on stack EP512-3091.

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

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

D.2.1 General Provisions Relating to HAPs [326 IAC 14] [40 CFR Part 61 Subpart L, Subpart V, and Subpart FF]

The provisions of 40 CFR Part 61, Subpart A - General Provisions, which are incorporated by reference as 326 IAC 14, apply to the Coke By-products Recovery plant (EU512-18) 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.2.2 National Emission Standards for Benzene Emissions from Coke By-Product Recovery Plants, Equipment Leaks (Fugitive Emission Sources), and Benzene Waste Operations [40 CFR Part 61, Subpart L, Subpart V, and Subpart FF] [326 IAC 14]

- (a) The applicable provisions of 40 CFR Part 61, Subpart L - National Emission Standards for Benzene Emissions from Coke By-Product Recovery Plants, apply to the Coke By-products Recovery plant units required to be controlled by the gas blanketing system (C512-3013) except when otherwise specified.
- (b) The applicable provisions of 40 CFR Part 61, Subpart V- National Emission Standard for Equipment Leaks (Fugitive Emission Sources), as referenced by Subpart L, apply to the Coke By-products Recovery plant (EU512-18) except when otherwise specified.
- (c) The applicable provisions of 40 CFR Part 61, Subpart FF- National Emission Standards for Benzene Waste Operations, apply to the Coke By-products Recovery plant waste water treatment facility units except when otherwise specified.

D.2.3 Coke By-Product Recovery Plants NESHAP [40 CFR Part 61 Subpart L] [326 IAC 14]

- (a) Pursuant to 40 CFR 61.132(a), the Permittee shall:
 - (1) Enclose and seal all openings on each process vessel (EP512-3057, 3067, 3068, 3073, 3077, 3078), tar storage tank (EP512-3001, 3002, 3072, 3074), and tar-intercepting sump (EP512-3075).
 - (2) Duct gases from each process vessel (EP512-3057, 3067, 3068, 3073, 3077, 3078, 3088), tar storage tank (EP512-3001, 3002, 3072, 3074), and tar-intercepting sump (EP512-3075) 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) of Subpart V (National Emissions Standard for Equipment Leaks (Fugitive Emission Sources)). This system can be designed as a closed, positive pressure, gas blanketing system (C512-3013).
 - (A) Except, 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 (EP512-3050) necessary to permit operation of a sludge conveyor (EP512-3050). If the owner or operator elects to maintain an opening on part of the liquid surface of the tar decanter, the owner or operator 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 for the operation of the sludge conveyor.
- (b) Pursuant to 40 CFR 61.132(b) and (c), following the installation of the gas blanketing system (C512-3013) used to meet the requirements of 40 CFR 61.132(a):
 - (1) The Permittee shall monitor the connections and seals on each control system to determine if it is operating with no detectable emissions, using Reference 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 re-pressurized 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 Reference 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.
- (2) The Permittee shall conduct a maintenance inspection of the gas blanketing system (C512-3013) 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.
- (c) Pursuant to 40 CFR 61.134, the Permittee of final coolers and final-cooler cooling towers shall allow “zero” emissions from these facilities.
 - (d) Pursuant to 40 CFR 61.135(f), each exhauster (EP512-3088) is exempt from the requirements of 40 CFR 61.135(d) because it equipped with a gas blanketing system capable of capturing and transporting any leakage from the seal or seals to a control device that complies with the requirements of 40 CFR 61.242-11 except as provided in 40 CFR 61.135(g):
 - Any exhauster that is designated, as described in 40 CFR 61.246(e) of subpart V 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) of subpart L if the exhauster:
 - (A) 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 61.245(c) of Subpart V; and
 - (B) Is tested for compliance with (A) above initially upon designation, annually, and at other times requested by the Administrator.
 - (e) Pursuant to 40 CFR 61.135 Standard, Equipment Leaks (b), the provisions of 40 CFR 61.242-3 and 40 CFR 61.242-9 of subpart V do not apply to subpart L.

D.2.4 Benzene Waste Operations NESHAP [40 CFR Part 61, Subpart FF] [326 IAC 14]

Pursuant to 40 CFR 61.342(a), the Permittee of a facility at which the total annual benzene quantity from facility waste is equal to or greater than 10 Mg/yr (11 ton/yr) as determined in 40 CFR 61.342(a) may elect to manage and treat the facility waste as follows:

- (a) The Permittee shall manage and treat facility waste with a flow-weighted annual average water content of less than 10 percent in accordance with the requirements of 40 CFR 61.342(c)(1); and
- (b) The Permittee shall manage and treat facility waste (including remediation and process unit turnaround waste) with a flow-weighted annual average water content of 10 percent or greater, on a volume basis as total water, and each waste stream that is mixed with water or wastes at any time such that the resulting mixture has an annual water content greater than 10 percent, in accordance with the following:
 - (1) The benzene quantity for the wastes described in part (b) above, must be equal to or less than 6.0 Mg/yr (6.6 ton/yr), as determined in 40 CFR 61.355(k). Wastes as described in part (b) above, that are transferred offsite shall be included in the determination of benzene quantity as provided in 40 CFR 61.355(k).
 - (2) The determination of benzene quantity for each waste stream defined in part (b) above, shall be made in accordance with 40 CFR 61.355(k).

Compliance Determination Requirements

D.2.5 National Emission Standards for Hazardous Air Pollutants (NESHAP) - Compliance Provisions and Alternative Means of Emission Limitation, Test Methods and Procedures [40 CFR 61 Subpart L] [326 IAC 14]

- (a) The Permittee shall demonstrate compliance with the requirements of 40 CFR 61.132 through 61.135, except as provided under 40 CFR 61.243-1 and 61.243-2 of Subpart V.
- (b) Compliance with this subpart shall be determined by a review of records, review of performance test results, inspections, or any combination thereof, using the methods and procedures specified in 40 CFR 61.137.
 - (1) The Permittee subject to the provisions of 40 CFR Part 61, Subpart L shall comply with the requirements in 40 CFR 61.245 of Subpart V.
 - (2) 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).
- (c) Pursuant to 40 CFR 61.136(d):
 - (1) An Permittee may request permission to use an alternative means of emission limitation to meet the requirements in 40 CFR 61.132, 61.133, and 61.135 of this subpart and 40 CFR 61.242-2, -5, -6, -7, -8, and -11 of subpart V. Permission to use an alternative means of emission limitation shall be requested as specified in 40 CFR 61.12(d).
 - (2) When the Administrator evaluates requests for permission to use alternative means of emission limitation for sources subject to 40 CFR 61.132 and 61.133 (except tar decanters) the Administrator shall compare test data for the means of emission limitation to a benzene control efficiency of 98 percent. For tar decanters, the Administrator shall compare test data for the means of emission limitation to a benzene control efficiency of 95 percent.
 - (3) For any requests for permission to use an alternative to the work practices required under 40 CFR 61.135, the provisions of 40 CFR 61.244(c) shall apply. Pursuant to 40 CFR 61.136(b), the Permittee shall do the following to determine compliance:
 - (a) The Permittee shall review records, performance test results, inspections or any combination thereof, using the methods and procedures specified in 40 CFR 60.137.
 - (b) The Permittee subject to the provisions of 40 CFR Part 61, Subpart L shall comply with the requirements in 40 CFR 61.245.
 - (c) 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.2.6 Test Methods and Procedures [40 CFR Part 61, Subpart V] [326 IAC 14]

Pursuant to 40 CFR 61.245(c), when equipment is tested for compliance with or monitored for no detectable emissions, the Permittee shall comply with the following requirements:

- (a) The requirements of 40 CFR 61.245(b)(1) through (4) shall apply as follows:
 - (1) Monitoring shall comply with Method 21 of appendix A of 40 CFR part 60.
 - (2) The detection instrument shall meet the performance criteria of Reference Method 21.
 - (3) The instrument shall be calibrated before use on each day of its use by the procedures specified in Reference Method 21.
 - (4) Calibration gases shall be:

- (A) Zero air (less than 10 ppm of hydrocarbon in air); and
 - (B) A mixture of methane or n-hexane and air at a concentration of approximately, but less than, 10,000 ppm methane or n-hexane.
- (b) The background level shall be determined, as set forth in Reference Method 21.
 - (c) The instrument probe shall be traversed around all potential leak interfaces as close as to the interface as possible as described in Reference Method 21.
 - (d) The arithmetic difference between the maximum concentration indicated by the instrument and the background level is compared with 500 ppm for determining compliance.

D.2.7 Monitoring of Operations, Test Methods and Procedures and Compliance Provisions [40 CFR Part 61, Subpart FF] [326 IAC 14]

- (a) Pursuant to 40 CFR 61.354, the Permittee shall monitor each treatment process or wastewater treatment system unit to ensure the unit is properly operated and maintained by:

Measuring the benzene concentration of the waste stream exiting the treatment process complying with 40 CFR 61.348(a)(1)(i) at least once per month by collecting and analyzing one or more samples using the procedures specified in 40 CFR 61.355(c)(3).
- (b) Pursuant to 40 CFR 61.355(c)(3), for the purposes of the calculation required by 40 CFR 61.355(a) of Subpart FF, the Permittee shall determine the flow-weighted annual average benzene concentration in a manner that meets the requirements given in 40 CFR 61.355(c)(2) and (c)(3).

D.2.8 National Emission Standards for Hazardous Air Pollutants (NESHAP) - Equipment Leaks - Monitoring Procedures [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).
 - (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 condition D.2.8(e).
 - (6) A first attempt at repair shall be made no later than 5 calendar days after each leak is detected.
- (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).
 - (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.
- (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) and paragraph (c)(7) of this condition.
- (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 activated carbon canister system.
 - (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 the activated carbon canister system to ensure that it is operated and maintained in conformance with its design.
- (g) Pursuant to 40 CFR 61.242-11(f), the monitoring requirements listed below apply to the closed-vent system.
 - (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 U.S. 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.2.9 National Emission Standards for Hazardous Air Pollutants (NESHAP) - Equipment Leaks - Leak Detection Testing Requirements [40 CFR 61 Subpart V] [326 IAC 14]

- (a) When equipment is tested for compliance with or monitored for no detectable emissions in accordance with the standard for pressure relief devices in 40 CFR 61.242-4 and closed-vent system in 40 CFR 61.242-11, the Permittee shall comply with the following requirements:
 - (1) Reference Method 21 of Appendix A of 40 CFR part 60 procedures and performance criteria shall be used to:
 - (A) Meet the detection instrument calibration;
 - (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 - hexane and air at a concentration of approximately, but less than m 10,000 ppm methane or n-hexane; and
 - (D) The instrument probe shall be traversed around all potential leak interfacings.
 - (2) Each piece of equipment within a process unit that can conceivably contain equipment in VHAP service is presumed to be in VHAP service if the percent VHAP content exceeds ten (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.
 - (4) Method 22 of appendix 40 CFR 60 shall be used to determine compliance of flares with the visible emissions provisions of this subpart.
 - (5) The presence of a flare pilot flame shall be monitored using a thermocouple or any other equivalent device to detect a flame.
- (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.

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

D.2.10 Record Keeping Requirements [326 IAC 2-7-5(3)] [40 CFR 61 Subpart L][40 CFR 61 Subpart V] [326 IAC 14]

- (a) The following information pertaining to the design of control equipment installed to comply with 40 CFR 61.132 through 40 CFR 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 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 the leak.
 - (4) A brief description of any system abnormalities found during the annual maintenance inspection, the repairs made, the date of attempted repair, and the date of actual repair.
- (c) Each Permittee of a source subject to 40 CFR 61.135 shall comply with 40 CFR 61.246:
 - (1) Recordkeeping Requirements:
 - (A) Each Permittee subject to the provisions of this subpart shall comply with the recordkeeping requirements of this section.
 - (B) A Permittee of more than one process unit subject to the provisions of this subpart may comply with the recordkeeping requirements for these process units in one recordkeeping system if the system identifies each record by each process unit.
 - (2) When each leak is detected as specified in 40 CFR 61.242-2, 61.242-3, 61.242-7, 61.242-8, and 61.135, the following requirements apply:
 - (A) A weatherproof and readily visible identification, marked with the equipment identification number, shall be attached to the leaking equipment.
 - (B) 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.
 - (C) The identification on equipment, except on a valve, may be removed after it has been repaired.
 - (3) When each leak is detected as specified in 40 CFR 61.242-2, 61.242-3, 61.242-7, 61.242-8, and 61.135, the following information shall be recorded in a log and shall be kept for 2 years in a readily accessible location:
 - (A) The instrument and operator identification numbers and the equipment identification number.
 - (B) The date the leak was detected and the dates of each attempt to repair the leak.

- (C) Repair methods applied in each attempt to repair the leak.
 - (D) "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.
 - (E) "Repair delayed" and the reason for the delay if a leak is not repaired within 15 calendar days after discovery of the leak.
 - (F) The signature of the Permittee (or designate) whose decision it was that repair could not be effected without a process shutdown.
 - (G) The expected date of successful repair of the leak if a leak is not repaired within 15 calendar days.
 - (H) Dates of process unit shutdowns that occur while the equipment is unrepaired.
 - (I) The date of successful repair of the leak.
- (4) The following information pertaining to the design requirements for closed-vent systems and control devices described in 40 CFR 61.242-11 shall be recorded and kept in a readily accessible location:
- (A) Detailed schematics, design specifications, and piping and instrumentation diagrams.
 - (B) The dates and descriptions of any changes in the design specifications.
 - (C) A description of the parameter or parameters monitored, as required in 40 CFR 61.242-11(e), to ensure that control devices are operated and maintained in conformance with their design and an explanation of why that parameter (or parameters) was selected for the monitoring.
 - (D) Periods when the closed-vent systems and control devices required in 40 CFR 61.242-2, 61.242-3, 61.242-4, 61.242-5 and 61.242-9 are not operated as designed, including periods when a flare pilot light does not have a flame.
 - (E) Dates of startups and shutdowns of the closed-vent systems and control devices required in 40 CFR 61.242-2, 61.242-3, 61.242-4, 61.242-5 and 61.242-9.
- (5) 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:
- (A) A list of identification numbers for equipment (except welded fittings) subject to the requirements of this subpart.
 - (B) 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.

- (C) A list of equipment identification numbers for pressure relief devices required to comply with 40 CFR 61.242-4(a).

- (D) The dates of each compliance test required in 40 CFR 61.242-2(e), 61.242-3(i), 61.242-4, 61.242-7(f), and 61.135(g).

The background level measured during each compliance test.

The maximum instrument reading measured at the equipment during each compliance test.

- (6) A list of identification numbers for equipment in vacuum service.
- (7) The following information pertaining to all valves subject to the requirements of 40 CFR 61.242-7(g) and (h) and to all pumps subject to the requirements of 40 CFR 61.242-2(g) shall be recorded in a log that is kept in a readily accessible location:
 - (A) A list of identification numbers for valves and pumps that are designated as unsafe to monitor, an explanation for each valve or pump stating why the valve or pump is unsafe to monitor, and the plan for monitoring each valve or pump.
 - (B) A list of identification numbers for valves that are designated as difficult to monitor, an explanation for each valve stating why the valve is difficult to monitor, and the planned schedule for monitoring each valve.
- (8) The following information shall be recorded for valves complying with 40 CFR 61.243-2:
 - (A) A schedule of monitoring.
 - (B) The percent of valves found leaking during each monitoring period.
- (9) The following information shall be recorded in a log that is kept in a readily accessible location:
 - (A) Design criterion required in 40 CFR 61.242-2(d)(5), 61.242-3(e)(2), and 61.135(e)(4) and an explanation of the design criterion; and
 - (B) Any changes to this criterion and the reasons for the changes.
 - (i) The following information shall be recorded in a log that is kept in a readily accessible location for use in determining exemptions as provided in the applicability section of this subpart and other specific subparts:
 - An analysis demonstrating the design capacity of the process unit, and
 - An analysis demonstrating that equipment is not in VHAP service.
- (10) 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.2.11 Reporting Requirements [326 IAC 2-7-5(3)] [40 CFR 61.138 of 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:
 - For sources subject to 40 CFR 61.132 and sources subject to 40 CFR 61.133,
 - (1) A brief description of any visible defect in the source or ductwork,
 - (2) The number of leaks detected and repaired, and
 - (3) A brief description of any system abnormalities found during each annual maintenance inspection that occurred in the reporting period and the repairs made.
 - (b) A statement signed by the owner or operator stating whether all provisions of 40 CFR part 61, subpart L, have been fulfilled during the semiannual reporting period.
 - (c) Revisions to items reported according to 40 CFR 61.138(e) if changes have occurred since the initial report or subsequent revisions to the initial report.

D.2.12 Reporting Requirements [326 IAC 2-7-5(3)] [40 CFR 61.138 of Subpart FF] [326 IAC 14]

Pursuant to 40 CFR 61.357(d)(2), the Permittee shall submit annually the IDEM Office of Air Quality, a report that updates the information listed in 40 CFR 61.357(a)(1) through (a)(3) of this section.

- (a) The report shall include the following information:
- (1) Total annual benzene quantity from facility waste determined in accordance with 40 CFR 61.355(a) of this subpart.
 - (2) A table identifying each waste stream and whether or not the waste stream will be controlled for benzene emissions in accordance with the requirements of this subpart.
 - (3) For each waste stream identified as not being controlled for benzene emissions in accordance with the requirements of this subpart the following information shall be added to the table:
 - (A) Whether or not the water content of the waste stream is greater than 10 percent;
 - (B) Whether or not the waste stream is a process wastewater stream, product tank drawdown, or landfill leachate;
 - (C) Annual waste quantity for the waste stream;
 - (D) Range of benzene concentrations for the waste stream;
 - (E) Annual average flow-weighted benzene concentration for the waste stream; and
 - (F) Annual benzene quantity for the waste stream.
- (b) Pursuant to 40 CFR 61.357(d)(6), the Permittee shall submit a quarterly certification that all of the required inspections have been carried out in accordance with the requirements of 40 CFR 61, Subpart FF.
- (c) Pursuant to 40 CFR 61.357(d)(7)(i), the Permittee shall submit a quarterly report that includes:
- If a treatment process or wastewater treatment system unit is monitored in accordance with 40 CFR 61.354(a)(1) of this subpart, then each period of operation during which the concentration of benzene in the monitored waste stream exiting the unit is equal to or greater than 10 ppmw.

D.2.13 National Emission Standards for Hazardous Air Pollutants (NESHAP) - Equipment Leaks - Reporting Requirements [40 CFR 61 Subpart V] [326 IAC 14]

- (a) Pursuant to 40 CFR 61.247, the Permittee shall comply with the reporting requirements of this paragraph. A report shall be submitted to the U.S. EPA and IDEM, OAQ semi-annually, that includes the following information:
- (b) Process unit identification;
 - (c) 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.2.8(c).
 - (2) Number of valves for which leaks were not repaired as required in 40 CFR 61.242-7(d) and condition D.2.8(c).
 - (3) Number of pumps for which leaks were detected as described in 40 CFR 61.242-2(b) and condition D.2.8(a).
 - (4) Number of pumps for which leaks were not repaired as required in 40 CFR 61.242-2(c) and condition D.2.8(a).
 - (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;
- (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; and,
- (d) The results of all performance tests and monitoring to determine compliance with no detectable emissions conducted within the semi-annual reporting period.

SECTION D.3

FACILITY CONDITIONS

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

- (c) One (1) Blast Furnace Granulated Coal Injection (BFGCI) system constructed in 1994, consisting of the following:
- (1) A Coal Storage and Reclaim System consisting of:
 - (A) One (1) coal receiving conveyor system with a design rate of 2,300 tons per hour with emission points EP520-3522 and EP520-3565;
 - (B) One (1) coal delivery conveying system from the reclaim operation to the coal preparation building with emission points EP520-3569 and 3570.

(The two conveyor systems above are components of the material handling transfer stations, EU520-07.)

 - (C) One (1) stacker/reclaimer operation, with a bulldozer and reclaim hoppers, identified as EU520-25, with fugitive emission points identified as EP520-3566 through 3568.
- (2) A Coal Preparation System consisting of:
- (A) Two (2) coal preparation systems collectively identified as EU520-60, consisting of two (2) raw coal storage bins with bin filters, identified collectively as C520-3509, exhausting at EP520-3578 and 79, respectively.
 - (B) Two (2) granulation mills or milling operations, with spinner separators pneumatically transporting coal via piping to the cyclone separators, identified as EU520-62, each with a baghouse for particulate control collectively identified as C520-3511, exhausting at EP520-3580 and 81; and
 - (C) Two (2) natural gas-fired burners for the granulation mill dry gas coal heater, each rated at 25 MMBtu/hr.
- (3) Coal Product Storage and Delivery System:
- (A) Four (4) gravity fed Product Storage Bins, with transfer points enclosed and inside a building, which receive coal by enclosed chutes and screw conveyors, collectively identified as EU520-64, each with bin filters for particulate control collectively identified as C520-3513, exhausting at EP520-3582 through 85;
 - (B) Two (2) weigh feeders with no exhaust;
 - (C) Four (4) gravity fed Distribution Bins, with transfer points enclosed and inside a building, receiving coal from weigh hoppers through a slide gate assembly, identified as EU520-68, each with bin filters for particulate control collectively identified as C520-3517, exhausting at EP520-3586 through 89; and
 - (D) Eight (8) gravity fed Lock Hoppers, with transfer points enclosed and inside a building, feeding the blast furnace coal injectors via enclosed piping, identified as EU520-72, each with bin filters for particulate control collectively identified as C520-3521, and exhausting at EP520-90 through 97.

(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 Construction Permit Particulate Matter and Opacity Limitations

Pursuant to CP127-2802-00001, issued August 4, 1993, emissions from points numbered EP520-3522, EP520-3565, EP520-3566 through 3569, EP520-3578 through 3589, and EP520-3590 to 3597, and their corresponding operations, shall be considered in compliance with 326 IAC 6-6 provided that:

- (a) the raw coal bins (EP520-3578, 79), cyclone separators (EP520-80, 81), product storage bins (EP520-3582 to 3585) and the lock hopper vents (EP520-3590 to 3597) shall be controlled with bin filters or baghouses;
- (b) emissions from the following vents shall not exceed:
 - (1) 0.020 grains/dscf at an air flow of 240 scfm for each of the 2 raw coal bin vent (EP520-3578, 3579) units.

- (2) 0.005 grains/dscf at an air flow of 16,700 scfm for each of the 2 cyclone separator filter vents (EP520-3580, 3581).
 - (3) 0.020 grains/dscf at an air flow of 200 scfm for each of the 4 bin filter vent (EP520-3582 to 3585) units.
 - (4) 0.020 grains/dscf at an air flow of 200 scfm for each of the 4 distribution bin filter vent (EP520-3586 to 3589) units.
 - (5) 0.020 grains/dscf at an air flow of 440 scfm for each of the 8 lock hopper filter vent (EP520-3590 to 3597) units.
- (c) the visible emissions from the baghouses and bin filters (C520-3509, 3511, 3513, 3517, 3521) shall be limited to 20% opacity or levels established during stack tests;
 - (d) the opacity from EP520-3566 to EP520-3568 shall not exceed 20%; and
 - (e) the baghouses and bin filters referenced in part (a) of this condition shall be in operation when the associated process is operating.

D.3.2 Fuel Usage

Pursuant to CP127-2725-00001, issued January 28, 1994, the heaters (BFGCI milling operations 1 and 2, EU520-62) installed in Construction Permit 127-2802 for the blast furnace granulated coal injection system shall be restricted to the use of natural gas only.

Compliance Monitoring Requirements

D.3.3 Parametric Monitoring

The Permittee shall record the pressure drop across the baghouses (C520-3511), used in conjunction with the blast furnace granulation milling operations, at least once per day when the facility is in operation. When for any one reading, the pressure drop across the baghouse is less than 0.5 inches of water, or a range established during the latest stack test, the Permittee shall take reasonable response steps in accordance with Section C - Response to Excursions or Exceedances. A pressure reading that is outside the above mentioned range is not a deviation from this permit. Failure to take response steps in accordance with Section C - Response to Excursions or Exceedances, shall be considered a deviation from this permit.

The instrument used for determining the pressure shall comply with Section C - Instrument Specifications, of this permit, and shall be calibrated in accordance with the manufacturer's specifications. The specifications shall be available on site with the Preventive Maintenance Plan.

D.3.4 Baghouse Failure

For a single compartment baghouse controlling emissions from a batch process, the feed to the process shall be shut down immediately until the failed unit has been repaired or replaced. The emissions unit shall be shut down no later than the completion of the processing of the material in the line. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions).

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

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

D.3.5 Record Keeping Requirements

- (a) Pursuant to CP127-2802-00001, issued August 4, 1993, a log of pressure drop readings necessary to document compliance with conditions D.3.1 and D.3.3 shall be maintained.
- (b) Pursuant to CP127-2725-00001, issued January 28, 1994, a log of information necessary to document compliance with condition D.3.2 shall be maintained.
- (c) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of

SECTION D.4

FACILITY OPERATION CONDITIONS

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

- (d) A Continuous Sintering process plant with a maximum throughput of 535 tons of sinter per hour located in the Blast Furnaces Department consisting of the following:
- (1) One (1) mixing drum identified as EU520-04, with emissions controlled by one (1) venturi wet scrubber identified as C520-3502, exhausting at stack EP520-3512.
 - (2) One (1) sintering operation, consisting of twelve (12) windboxes, collectively identified as EU520-05, with emissions exhausting through one (1) multiclone, consisting of eight (8) cyclones followed in series by one (1) venturi scrubber and mist eliminator, collectively identified as C520-3503, with VOC emissions monitored by a Continuous Emissions Monitor System (CEMS), exhausting at stack EP520-3513.
 - (3) A miscellaneous material handling operation, identified as EU520-06, with particulate emissions controlled by one (1) dedust baghouse, identified as C520-3501, exhausting at stack EP520-3511.
 - (4) A finished sinter cooler operation, identified as EU520-24, with fugitive emissions identified as EP520-3514.

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

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

D.4.1 Particulate [326 IAC 6-3-2]

- (a) Pursuant to 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes), the allowable particulate emission rate from the bedding plant material transfer, material conveyors, and junction houses (EU520-03), the Sinter Plant Windboxes (EU520-05), the Sinter Plant Miscellaneous Material Handling operations (EU520-06), the Sinter Plant Mixing Drum (EU520-04), and the Finished Sinter Cooler operation (EU520-24) shall not exceed 69.78 pounds per hour each, when operating at a process weight rate of 535 tons per hour. The pounds per hour limitation was calculated with the following equation:

Interpolation and extrapolation of the data for the process weight rate in excess of 60,000 pounds per hour shall be accomplished by use of the equation:

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

- (b) Pursuant to 326 IAC 6-3-2(e)(3), when the process weight exceeds two hundred (200) tons/hour, the maximum allowable emission may exceed that shown in the table under 326 IAC 6-3-2(e)(3), provided the concentration of particulate matter in the discharge gases to the atmosphere from EP520-3502, 3504 through 3508, 3511, 3512, 3513, and 3514 is less than one-tenth (0.10) pound per one thousand (1,000) pounds of gases.

D.4.2 Source Specific and Facility Emission Limitations for TSP in Porter County [326 IAC 6-6-4]

Pursuant to 326 IAC 6-6-4, Bethlehem Steel Corporation (ISG Burns Harbor) specific source and facility TSP emission limits, the annual particulate matter emissions of each of the following facilities shall not exceed the limit listed below for that facility:

- (a) The Sinter Plant Windbox Scrubber (EP520-3513) annual particulate matter emissions shall not exceed 0.277 pounds per ton of sinter produced.
- (b) The Sinter Plant Miscellaneous Material Handling operations Dedust Baghouse (EP 520-3511) annual particulate matter emissions shall not exceed 42.9 pounds per hour.
- (c) The Sinter Plant Mixing Drum Scrubber (EP 520-3512) annual particulate matter emissions shall not exceed 4.7 pounds per hour.

This condition is not federally enforceable.

D.4.3 Porter County Sulfur Dioxide Limitations [326 IAC 7-4-14]

Pursuant to 326 IAC 7-4-14(1)(B)(iv) and 7-4-14(1)(c)(iv), the Sinter Plant Windbox Exhaust (EP520-3513) shall not exceed 1.0 pound of sulfur dioxide per ton of process material and 400 pounds of sulfur dioxide per hour.

D.4.4 Sinter Plants [326 IAC 8-13]

(a) Pursuant to 326 IAC 8-13-3 (Emission Limit), sinter plant windbox exhaust gas VOC emissions shall not exceed the following VOC emission limits:

- (1) During the period of May 1 through September 30, the total VOC emissions (the seasonal cap) shall not exceed the VOC emission limit of 447,410 pounds of VOC.
- (2) 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 3,150 pounds of VOC.
- (3) 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 the VOC emission limit of 2,924 pounds of VOC.

A high ozone level day shall be predicted by the Permittee in accordance with a high ozone day action plan (submitted November 24, 1998) developed by the source and submitted to the IDEM, OAQ as part of the report required by 326 IAC 8-13-4(b).

- (4) 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.
- (b) Pursuant to 326 IAC 8-13-4(b)(8) and the approval letter for the Permittee's High Ozone Day Action Plan, dated September 1, 1999, the Permittee shall complete the plan's requirements, which includes, but is not limited to, the following:
- (1) Seek to limit mill scale in the five-day bedded pile to less than one percent (1%) free oil and grease;
 - (2) Monitor pounds of emissions on an hourly basis; and
 - (3) If it appears that emissions for the day may exceed allowable pounds, operating parameters will be adjusted by the Permittee, including potentially curtailing production, to ensure demonstrating compliance with the allowable pounds.

D.4.5 General Provisions Relating to HAPs [326 IAC 20-1][40 CFR 63, Subpart A] [Table 4 to 40 CFR 63, Subpart FFFFF]

- (a) The provisions of 40 CFR 63, Subpart A- General Provisions, which are incorporated by reference as 326 IAC 20-1-1, apply to the affected source, the sintering operation, except when otherwise specified by Table 4 to 40 CFR 63, Subpart FFFFF.
- (b) Since the applicable requirements associated with the compliance options are not included and specifically identified in this permit, the permit shield authorized by Section B of this permit in the condition titled Permit Shield, and set out in 326 IAC 2-7-15 does not apply to part (a) of this condition, except as otherwise provided in this condition. The permit shield applies to condition D.4.23.

D.4.6 National Emission Standards for Hazardous Air Pollutants from Integrated Iron and Steel Manufacturing - Emission Limitations for Sinter Plants [40 CFR 63, Subpart FFFFF]

- (a) The provisions of 40 CFR 63, Subpart FFFFF (National Emission Standards for Hazardous Air Pollutants: Integrated Iron and Steel Manufacturing) apply to the affected source, the sintering operation. A copy of this rule is available on the U.S. EPA Air Toxics Website at <http://www.epa.gov/ttn/atw/mcm/mcmpg.html>. The Permittee must comply with these requirements on and after May 22, 2006.
- (b) Since the applicable requirements associated with the compliance options are not included and specifically identified in this permit, the permit shield authorized by Section B of this permit in the

- condition titled Permit Shield, and set out in 326 IAC 2-7-15 does not apply to part (a) of this condition, except as otherwise provided in this condition.
- (c) The terminology used in this section is defined in the CAA, in 40 CFR Part 63, Section 63.2, and in 40 CFR 63.8105, and is applicable to the affected source.
 - (d) The Permittee shall meet each emission limitation in 40 CFR 63.7790 that applies to the Sinter Plant Windbox operation EU520-05, the Finished Sinter Cooler operation EU520-24, and the Sinter Discharge End Areas EU520-06.
 - (e) The Permittee shall meet each operation and maintenance requirement in 40 CFR 63.7800 that applies to the sintering operation and required capture and control equipment.
 - (f) The Permittee shall develop and implement a written startup, shutdown, and malfunction plan in accordance with 40 CFR 63.7810(c). During periods of startup, shutdown, or malfunction, the Permittee shall operate in accordance with the plan and 40 CFR 63.7835(b).
 - (g) The Permittee shall meet each monitoring requirement in 40 CFR 63.7830 that applies to the sintering operation and required capture and control equipment.
 - (h) The Permittee shall meet each requirement in 40 CFR 63.7831 regarding installation, operation, and maintenance of monitors for each monitor required by 40 CFR 63, Subpart FFFFF, that applies to the sintering operation and required capture and control equipment.

Compliance Determination Requirements

D.4.7 Testing Requirements [326 IAC 2-7-6(1),(6)] [326 IAC 2-1.1-11]

- (a) Within 12 months of issuance of this permit, or within two (2) years from the date of the most recent valid stack test, whichever is later, the Permittee shall perform particulate and opacity testing on the sinter plant windboxes exhaust (EP520-3513) using methods as approved by the Commissioner, in order to demonstrate compliance with condition D.4.1 and condition C.1 - Opacity. These tests shall be repeated at least once every two (2) years from the date of this valid compliance demonstration. Testing shall be conducted in accordance with Section C - Performance Testing.
- (b) Pursuant to 326 IAC 6-6-2(e)(1), Methods to determine compliance, for the particulate emission limitations contained in condition D.4.2, when required by the commissioner, the Permittee shall make any stack modifications necessary to permit a stack test in accordance with 40 CFR 60, Appendix A, Methods 1-5. The following are emission points for which stack tests are required to determine compliance with particulate emission limitations:
 - (1) The sinter plant windbox scrubber stack shall be tested to determine compliance with particulate emission limitations once in each two (2) year period.
 - (2) The sinter plant dedusting baghouse shall be tested to determine compliance with particulate emission limitations once in each two (2) year period.

This condition part is not federally enforceable.

D.4.8 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 Sinter Plant Windbox operation stacks (C520-3503), 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.4.4 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.

D.4.9 VOC Monitoring Downtime [326 IAC 2-7-6] [326 IAC 2-7-5(3)] [326 IAC 8-13-5(d)]

Whenever the VOC CEMS is malfunctioning or down for repairs or adjustments, 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).

D.4.10 National Emission Standards for Hazardous Air Pollutants from Integrated Iron and Steel Manufacturing - Compliance Requirements for Sinter Plants [40 CFR 63.7810(a)][40 CFR 63.7825][40 CFR 63.7826][40 CFR 63.7832]

- (a) Pursuant to 40 CFR 63.7810(a), the Permittee shall be in compliance by May 22, 2006, with the emission limitations and operation and maintenance requirements in condition D.4.6 at all times, except during periods of startup, shutdown, and malfunction as defined in 40 CFR 63.2, which is incorporated by reference in 326 IAC 20-1-3.
- (b) The Permittee shall demonstrate initial compliance with the emission limitations that apply to the sintering operation in accordance with 40 CFR 63.7825.
- (c) The Permittee shall demonstrate initial compliance with the operation and maintenance requirements that apply to the sintering operation in accordance with 40 CFR 63.7826.
- (d) The Permittee shall monitor and collect data to demonstrate continuous compliance with 40 CFR 63, Subpart FFFFF in accordance with 40 CFR 63.7832.
- (e) The Permittee shall demonstrate continuous compliance with the emission limitations of 40 CFR 63, Subpart FFFFF that apply to the sintering operation and required capture and control equipment in accordance with 40 CFR 63.7833.
- (f) The Permittee shall demonstrate continuous compliance with the operation and maintenance requirements of 40 CFR 63, Subpart FFFFF that apply to the sintering operation and required capture and control equipment in accordance with 40 CFR 63.7834.

D.4.11 National Emission Standards for Hazardous Air Pollutants from Integrated Iron and Steel Manufacturing - Testing Requirements for Sinter Plants [40 CFR 63.7820 through 63.7824]

- (a) The Permittee shall conduct performance tests and other initial compliance demonstrations that apply to the sintering operation in accordance with 40 CFR 63.7820.
- (b) The Permittee shall conduct subsequent performance tests that apply to the sintering operation in accordance with 40 CFR 63.7821.
- (c) The Permittee shall use the test methods and other procedures in 40 CFR 63.7822 when demonstrating compliance with the emission limits for particulate matter for the Sintering Plant Windboxes EU520-05, and Sinter Cooler operation EU520-24.
- (d) The Permittee shall use the test methods and other procedures in 40 CFR 63.7823 when demonstrating compliance with the opacity limits for the Sinter Plant Discharge End Areas EU520-06.
- (e) The Permittee shall use the test methods and other procedures in 40 CFR 63.7824 to establish and demonstrate initial compliance with operating limits for the sintering operation and required capture and control equipment.

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

D.4.12 Visible Emissions Notations

- (a) Visible emission notations of the Sinter Plant Windbox scrubber exhaust (EP520-3513) and the Dedust baghouse stack (EP520-3511) 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.

D.4.13 Parametric Monitoring

- (a) The Permittee shall record the pressure drop across the Dedust Baghouse (C520-3501) used in conjunction with the sinter plant, at least once per day when the material handling process is in operation. When for any one reading, the pressure drop across the baghouse is outside the normal range of 5 and 15 inches of water, or a range established for each 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.
- (b) The Permittee shall record the pressure drop and flow rate of the scrubber (C520-3503) used in conjunction with the sinter plant process, at least once per day when the windboxes are in operation. When for any one reading, the pressure drop is under a minimum of 59 inches of water, or 43 inches when only one fan is operating, or the flow rate of the scrubber liquid is below the minimum of 5500 gallons per minute, or below a minimum rate established during the latest valid stack test, the Permittee shall take reasonable response steps in accordance with Section C- Response to Excursions or Exceedances. A pressure drop reading that is outside the above mentioned range, or a flow rate reading that is below the minimum gallons per minute, 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, and shall be calibrated in accordance with the manufacturer's specifications. The specifications shall be available on site with the Preventive Maintenance Plan.

D.4.14 Broken or Failed Bag Detection and Scrubber Failure

- (a) For a single compartment baghouse controlling emissions from a batch process, the feed to the process shall be shut down immediately until the failed unit has been repaired or replaced. The emissions unit shall be shut down no later than the completion of the processing of the material in the line. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions).

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

- (b) In the event that scrubber failure has been observed, failed units and the associated process will be shut down immediately until the failed units have been repaired or replaced. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions).

Failure to take response steps in accordance with Section C - Response to Excursions or Exceedances, shall be considered a deviation from this permit.

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

D.4.15 Record Keeping Requirements

- (a) To document compliance with D.4.2 and D.4.3, the Permittee shall keep records in accordance with

Section C – Record Keeping and Reporting Requirements, of this permit.

- (b) Pursuant to 326 IAC 8-13-8 (Continuous emissions monitoring), the Permittee shall demonstrate compliance with condition D.4.4 by complying with the recordkeeping requirements in 326 IAC 3-5, and the following for the period May 1 through September 30:
 - (1) The VOC emitted each day.
 - (2) The cumulative total of VOC emitted.
 - (3) The sinter produced each operating day.
- (c) To document compliance with condition D.4.13, Visible Emissions Notations, the Permittee shall maintain records of visible emission notations of the specified stack exhausts.
- (d) To document compliance with condition D.4.14, the Permittee shall maintain records of the pressure drop of the baghouse and liquid flow rate of the scrubber.
- (e) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

D.4.16 Reporting Requirements

- (a) Pursuant to 326 IAC 8-13-8(a), within thirty (30) days of the exceedance of an applicable VOC emission limit in condition D.4.4, the Permittee shall submit a report containing the following:
 - (1) The name and location of the source.
 - (2) The nature of the exceedance.
 - (3) The date of the occurrence.
 - (4) The cause of the exceedance, such as, but not limited to production rates or characteristics of the sinter burden.
 - (5) The corrective action taken according to the correction action plan in 326 IAC 8-13-4(b)(5).
- (b) Pursuant to 326 IAC 8-13-8(a)(4), the Permittee shall demonstrate compliance with condition D.4.4, by submitting the CEM certification reports according to the procedures and schedule in 326 IAC 3-5.
- (c) To determine compliance with conditions D.4.2 and D.4.3, the Permittee shall submit reports in accordance with Section C – Record Keeping and Reporting Requirements, of this permit.

Reports submitted by the Permittee, as required by this condition, require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

D.4.17 National Emission Standards for Hazardous Air Pollutants from Integrated Iron and Steel Manufacturing - Record Keeping Requirements for Sinter Plants [40 CFR 63.7810(b)][40 CFR 63.7]

- (a) The Permittee shall keep the records required by 40 CFR 63.7842(a).
- (b) The Permittee shall keep the records required in 40 CFR 63.6(h)(6) for visible observations in accordance with 40 CFR 63.7842(c).
- (c) The Permittee shall keep the records required in 40 CFR 63.7833 and 63.7834 to show continuous compliance with each emission limitation and operation and maintenance requirement that applies to the sintering operation in accordance with 40 CFR 63.7842(d).
- (d) The Permittee shall keep the records required by 40 CFR 63, Subpart FFFFFF in accordance with 40 CFR 63.7843 and the General Record Keeping Requirements in Section C of this permit.

D.4.18 National Emission Standards for Hazardous Air Pollutants from Integrated Iron and Steel Manufacturing - Reporting Requirements for Sinter Plants [40 CFR 63.7835][40 CFR 63.7840]

- (a) The Permittee shall report each deviation in the Quarterly Deviation and Compliance Monitoring Report required by Section C of this permit, in accordance with 40 CFR 63.7835(a), 40 CFR 63.7841(d), 326 IAC 2-1.1-11, and 326 IAC 2-7-5(3).
- (b) The Permittee shall submit the notifications required by 40 CFR 63.6(h)(4) and (5), 40 CFR 63.7(b) and (c), 40 CFR 63.8(e) and (f)(4), and 40 CFR 63.9(b) through (h) that apply by the dates specified in those sections in accordance with 40 CFR 63.7840(a).
- (c) The Permittee shall submit a notification of compliance status in accordance with 40 CFR 63.9(h)(2)(ii) and 40 CFR 63.7840(e).
 - (1) For each initial compliance demonstration that does not include a performance test, the Permittee shall submit the notification of compliance status before the close of business on the 30th calendar day following completion of the initial compliance demonstration.
 - (2) For each initial compliance demonstration that does include a performance test, the Permittee shall submit the notification of compliance status, including the performance test results, before the close of business on the 60th calendar day following the completion of the performance test according to 40 CFR 63.10(d)(2).
 - (3) The notification of compliance status shall be submitted to:

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

The notification of compliance status requires the certification by the “responsible official” as defined by 326 IAC 2-7-1(34).
- (d) The Permittee shall submit semiannual compliance reports in accordance with 40 CFR 63.7841(a) and (b).
- (e) If a startup, shutdown, or malfunction occurred during the semiannual reporting period that was not consistent with the startup, shutdown, and malfunction plan, the Permittee shall submit an immediate startup, shutdown, and malfunction report according to the requirements in 40 CFR 63.10(d)(5)(ii) and 40 CFR 63.7841(c).

D.4.19 Requirement to Submit a Significant Permit Modification Application [326 IAC 2-7-12][326 IAC 2-7-5]

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

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

Indiana Department of Environmental Management
Permits Branch, Office of Air Quality
100 North Senate Avenue
Indianapolis, Indiana 46204-2251

SECTION D.5

FACILITY OPERATION CONDITIONS

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

- (e) Two (2) Blast Furnaces, designated as C and D, constructed in 1971 and modified in 1994, with a total maximum production rate of 455,000 tons of iron per month each, consisting of the following:
- (1) One (1) rail car thaw shed and thaw shed natural gas dryer, collectively identified as EU520-11, constructed in 1969, and fugitive emissions from all thaw shed activities reporting to two (2) roof monitors collectively identified as EP520-3564.
 - (2) One (1) car dumper shed, identified as EU520-08, and one (1) truck hopper, identified as EU520-27, with emissions from the car dumper controlled by baghouse C520-3506, and exhausting at stacks EP520-3520 (north) and 3532 (south), and various building openings for fugitive shed emissions collectively identified as EP520-3606.
 - (3) Material handling transfer stations, identified as EU520-07, consisting of conveyors, with fifteen (15) building openings identified as EP520-3516, 3518, 3519, 3523 to 3525, 3527, 3529, and 3571 to 3573.
 - (4) C Stockhouse, identified as EU520-12, reporting to roof monitor EP520-3530.
 - (5) D Stockhouse, identified as EU520-13, reporting to roof monitor EP520-3534.
 - (6) C Casthouses, East and West, identified as EU520-18a and 18b, with particulate emissions controlled by a TREC (Tilting Runner Emissions Control) system baghouse C520-3507 that exhausts at three (3) stacks collectively identified as EP520-3544, with fugitive emissions reporting to roof monitors identified as EP520-3543 and 3545.
 - (7) D Casthouses, East and West, identified as EU520-19a and 19b, with particulate emissions controlled by a TREC (Tilting Runner Emissions Control) system baghouse C520-3508 that exhausts at three (3) stacks collectively identified as EP520-3557, with fugitive emissions reporting to roof monitors identified as EP520-3556 and 3558.
 - (8) Blast Furnace Offgas C which is conditioned by an integral gas cleaning collection train consisting of a cyclone, a scrubber, a septum valve, a mist eliminator, and a cooler collectively identified as C520-3529, routing conditioned blast furnace gas to the stoves and export line equipped with natural gas piloted flares, collectively identified as EP520-3540.
 - (9) Blast Furnace Offgas D which is conditioned by an integral gas cleaning collection train consisting of a cyclone, a scrubber, a septum valve, a mist eliminator, and a cooler collectively identified as C520-3531, routing conditioned blast furnace gas to the stoves and export line equipped with natural gas piloted flares, collectively identified as EP520-3553.
 - (10) Four (4) Stoves for Blast Furnace C, capable of combusting natural gas, conditioned blast furnace gas, and coke oven gas, with a total heat input rate of 660 MMBtu/hr, identified as EU520-18c, exhausting at EP520-3547.
 - (11) Four (4) Stoves for Blast Furnace D, capable of combusting natural gas, conditioned blast furnace gas, and coke oven gas, with a total heat input rate of 660 MMBtu/hr, identified as EU520-19c, exhausting at EP520-3560.
 - (12) One (1) Flue Dust handling system, identified as EU520-22 with dust catchers EU520-22a and 22b as particulate control for blast furnace C and D gas conditioning systems, respectively, with fugitive emissions EP520-3541 from blast furnace C gas conditioning system, and fugitive emissions EP520-3554 from blast furnace D gas conditioning 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.5.1 Particulate Matter (PM) [326 IAC 6-2]

Pursuant to 326 IAC 6-2-2 (Emission limitations for facilities specified in 326 IAC 6-2-1(a)), the particulate emissions from the C and D Blast Furnace stoves (EU520-18c and 19c) rated at a total combined maximum operating capacity of 1320 MMBtu per hour shall not exceed 0.23 pounds per MMBtu of heat input when calculated using the total source maximum operating capacity rating of Q, which equals 4570 MMBtu per hour, as determined by the following equation:

$$Pt = \frac{0.87}{Q^{0.16}} \quad \text{where } Pt = \text{Pounds of particulate matter emitted per million Btu (lb/mmBtu) heat input.}$$

Q = Total source maximum operating capacity rating in million Btu per hour (mmBtu/hr) heat input.

The above condition is federally enforceable, because rule 326 IAC 6-6 (Source Specific and Facility Emission Limitations for TSP in Porter County) is not federally approved.

D.5.2 Particulate Matter (PM) [326 IAC 6-3]

- (a) Pursuant to 326 IAC 6-3 (Process Operations), the allowable PM emission rate from the coal thaw shed (EU520-11), truck hopper (EU520-27), material handling transfer stations (EU520-07), C and D Stockhouses (EU520-12, 13), operations shall not exceed the pound per hour emission rate established as E in the following formula. The pounds per hour limitation is calculated with the following equation:

Interpolation and extrapolation of the data for the process weight rate in excess of 60,000 pounds per hour shall be accomplished by use of the equation:

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

- (b) Pursuant to 326 IAC 6-3-2 (Particulate emission limitations), when the process weight exceeds two hundred (200) tons/hour at the coal thaw shed (EP520-3564), car dump baghouse (EP520-3520, 3532), material handling transfer stations (EP520-3516, 3518, 3519, 3522-25, 3527, 3529, 3565, 3569-73), and C and D Stockhouses (EP520-3530, 3534), the maximum allowable emission may exceed that shown in the table listed in 326 IAC 6-3-2(c), provided the concentration of particulate matter in the discharge gases to the atmosphere is less than 0.10 pounds per one thousand (1,000) pounds of gases.

The above conditions are federally enforceable, because rule 326 IAC 6-6 (Source Specific and Facility Emission Limitations for TSP in Porter County) is not federally approved.

D.5.3 Source Specific and Facility Emission Limitations for TSP in Porter County [326 IAC 6-6-4]

- (a) Pursuant to 326 IAC 6-6-4 (Bethlehem Steel Corporation specific source and facility TSP emission limits), the annual particulate matter emissions of each of the following facilities shall not exceed the limit listed below for that facility:

- (1) Blast Furnace Casting (EU520-18a, 18b, 19a, 19b) shall not exceed 0.6 lb/ton of iron.
- (2) Blast Furnace Stoves (EP520-3547, 3560) shall not exceed 0.016 lb/MMBtu.
- (3) Blast Furnace Flare (EP520-3540, 3553) shall not exceed 0.017 lb/MMBtu.
- (4) Blast Furnace Car Dumper Baghouse (C520-3506) shall not exceed 20.6 lb/hr.

The above conditions are enforceable by the state only, because rule 326 IAC 6-6 (Source Specific and Facility Emission Limitations for TSP in Porter County) is not federally approved.

- (b) Pursuant to CP127-2802-00001, issued August 4, 1993, operation condition 5(b), the point source and fugitive emissions from the car dump (EU520-08) shall comply with Rule 326 IAC 6-6, and be considered in compliance with this rule provided that the emissions from the following shall not exceed the following:

0.007 grains/dscf at an air flow of 120,000 scfm for the coal (car) dump hopper baghouse (C520-3506).

Although the rule 326 IAC 6-6 (Source Specific and Facility Emission Limitations for TSP in Porter County) has not been federally approved, part (b) above is federally enforceable because it is a condition of a federally enforceable construction permit.

D.5.4 Porter County Sulfur Dioxide Limitations [326 IAC 7-4-14]

Pursuant to 326 IAC 7-4-14(1)(B) (Porter County sulfur dioxide emission limitations), the following facilities shall comply with the sulfur dioxide emission limitations and other requirements:

- (a) The Blast Furnace C Stoves (EP520-3547) shall not exceed 0.83 lb/MMBtu, and 545 lb/hr of sulfur dioxide.

- (b) The Blast Furnace D Stoves (EP520-3560) shall not exceed 0.83 lb/MMBtu, and 545 lb/hr of sulfur dioxide.
- (c) The Blast Furnace Flare (EP520-3540, 3553) shall not exceed 0.07 lb/MMBtu of sulfur dioxide.

D.5.5 Operation Condition

Pursuant to CP127-2802-00001, issued August 4, 1993, operation condition 7, the total production rate of blast furnaces C and D (EU520-18, 19) shall be limited to 455,000 tons of hot metal per month.

D.5.6 General Provisions Relating to HAPs [326 IAC 20-1][40 CFR 63, Subpart A] [Table 4 to 40 CFR 63, Subpart FFFFF]

- (a) The provisions of 40 CFR 63, Subpart A- General Provisions, which are incorporated by reference as 326 IAC 20-1-1, apply to the affected source, the Blast Furnace Casthouses C and D, except when otherwise specified by Table 4 to 40 CFR 63, Subpart FFFFF. The Permittee must comply with these requirements on and after May 20, 2003.
- (b) Since the applicable requirements associated with the compliance options are not included and specifically identified in this permit, the permit shield authorized by Section B of this permit in the condition titled Permit Shield, and set out in 326 IAC 2-7-15 does not apply to part (a) of this condition, except as otherwise provided in this condition. The permit shield applies to condition D.5.18(c), National Emission Standards for Hazardous Air Pollutants from Integrated Iron and Steel Manufacturing - Notification Requirements.

D.5.7 National Emission Standards for Hazardous Air Pollutants from Integrated Iron and Steel Manufacturing - Emission Limitations for Blast Furnaces [40 CFR 63, Subpart FFFFF]

- (a) The provisions of 40 CFR 63, Subpart FFFFF (National Emission Standards for Hazardous Air Pollutants: Integrated Iron and Steel Manufacturing) apply to the affected source, the Blast Furnace Casthouses C and D. A copy of this rule is available on the U.S. EPA Air Toxics Website at <http://www.epa.gov/ttn/atw/mcm/mcmpg.html>. The Permittee must comply with these requirements on and after May 22, 2006.
- (b) Since the applicable requirements associated with the compliance options are not included and specifically identified in this permit, the permit shield authorized by Section B of this permit in the condition titled Permit Shield, and set out in 326 IAC 2-7-15 does not apply to part (a) of this condition, except as otherwise provided in this condition.
- (c) The terminology used in this section is defined in the CAA, in 40 CFR Part 63, Section 63.2, and in 40 CFR 63.8105, and is applicable to the affected source.
- (d) The Permittee shall meet each emission limitation in 40 CFR 63.7790 that applies to the:
 - (1) Blast Furnace Casthouses C and D baghouses (EP520-3544, 3557); and
 - (2) Blast Furnace Casthouses C and D roof monitors (EP520-3543, 3545, 3556, 3558)
- (e) The applicability sections of 40 CFR 63, Subpart FFFFF at 40 CFR 63.7781 and 40 CFR 63.7782 are incorporated by reference.
- (f) The definitions of 40 CFR 63, Subpart FFFFF at 40 CFR 63.7852 are incorporated by reference.
- (g) The Permittee shall meet each emission limitation in 40 CFR 63.7790 that applies to the Blast Furnace Casthouses C and D.
- (h) The Permittee shall meet each operation and maintenance requirement in 40 CFR 63.7800 that applies to the Blast Furnace Casthouses C and D and required capture and control equipment.
- (i) The Permittee shall develop and implement a written startup, shutdown, and malfunction plan in accordance with 40 CFR 63.7810(c). During periods of startup, shutdown, or malfunction, the Permittee shall operate in accordance with the plan and 40 CFR 63.7835(b).
- (j) The Permittee shall meet each monitoring requirement in 40 CFR 63.7830 that applies to the Blast

Furnace Casthouses C and D and required capture and control equipment.

- (k) The Permittee shall meet each requirement in 40 CFR 63.7831 regarding installation, operation, and maintenance of monitors for each monitor required by 40 CFR 63, Subpart FFFFF, that applies to the Blast Furnace Casthouses C and D and required capture and control equipment.

Compliance Determination Requirements

D.5.8 Testing Requirements [326 IAC 2-7-6(1),(6)] [326 IAC 2-1.1-11]

Within 30 to 36 months, after the most recent compliant stack test, or after issuance of this permit, the Permittee shall perform PM, and PM-10 testing on the applicable Blast Furnace Department exhausts, when not specified otherwise as a condition in this permit, using methods as approved by the Commissioner, in order to demonstrate compliance with Conditions D.5.1, D.5.2, and D.5.3. These tests shall be repeated once every two and a half (2.5) years from the date of this valid compliance demonstration. Testing shall be conducted in accordance with Section C- Performance Testing.

D.5.9 Particulate Matter (PM)

Pursuant to CP127-2802-00001, issued August 4, 1993, operation condition 5, parts (a) and (d);

- (a) The point source and fugitive emissions from the car dump (EU520-08) and all conveyors and weigh belts shall comply with Rule 326 IAC 6-6, and be considered in compliance with this rule provided that the car dump hopper is controlled with bagfilters or baghouses (C520-3506).
- (b) The point source and fugitive emissions from the car dump (EU520-08), all conveyors and weigh belts shall comply with Rule 326 IAC 6-6 and emissions shall be considered in compliance with 326 IAC 6-6 provided that the bagfilters and baghouses (C520-3506) are in operation at all times that the point source is operating.

Although the rule 326 IAC 6-6 (Source Specific and Facility Emission Limitations for TSP in Porter County) has not been federally approved, conditions (a) and (b) above are federally enforceable because they are conditions from a federally enforceable construction permit.

D.5.10 National Emission Standards for Hazardous Air Pollutants from Integrated Iron and Steel Manufacturing - Compliance Requirements for Blast Furnaces [40 CFR 63.7810(a)][40 CFR 63.7825][40 CFR 63.7826][40 CFR 63.7832]

- (a) Pursuant to 40 CFR 63.7810(a), the Permittee shall be in compliance with the emission limitations and operation and maintenance requirements in condition D.5.7 at all times, except during periods of startup, shutdown, and malfunction as defined in 40 CFR 63.2, which is incorporated by reference in 326 IAC 20-1-3.
- (b) The Permittee shall demonstrate initial compliance with the emission limitations that apply to the Blast Furnace Casthouses C and D operation in accordance with 40 CFR 63.7825.
- (c) The Permittee shall demonstrate initial compliance with the operation and maintenance requirements that apply to the Blast Furnace Casthouses C and D operation in accordance with 40 CFR 63.7826.
- (d) The Permittee shall monitor and collect data to demonstrate continuous compliance with 40 CFR 63, Subpart FFFFF in accordance with 40 CFR 63.7832.
- (e) The Permittee shall demonstrate continuous compliance with the emission limitations of 40 CFR 63, Subpart FFFFF that apply to the Blast Furnace Casthouses C and D and required capture and control equipment in accordance with 40 CFR 63.7833.
- (f) The Permittee shall demonstrate continuous compliance with the operation and maintenance requirements of 40 CFR 63, Subpart FFFFF that apply to the Blast Furnace Casthouses C and D and required capture and control equipment in accordance with 40 CFR 63.7834.

D.5.11 National Emission Standards for Hazardous Air Pollutants from Integrated Iron and Steel Manufacturing - Testing Requirements for Blast Furnaces [40 CFR 63.7820 through 63.7824]

- (a) The Permittee shall conduct performance tests and other initial compliance demonstrations that apply to the Blast Furnace Casthouses C and D in accordance with 40 CFR 63.7820.

- (b) The Permittee shall conduct subsequent performance tests that apply to the Blast Furnace Casthouses C and D in accordance with 40 CFR 63.7821.
- (c) The Permittee shall use the test methods and other procedures in 40 CFR 63.7822 when demonstrating compliance with the emission limits for particulate matter for the Blast Furnace Casthouses C and D.
- (d) The Permittee shall use the test methods and other procedures in 40 CFR 63.7823 when demonstrating compliance with the opacity limits for the Blast Furnace Casthouses C and D.
- (e) The Permittee shall use the test methods and other procedures in 40 CFR 63.7824 to establish and demonstrate initial compliance with operating limits for the Blast Furnace Casthouses C and D and required capture and control equipment.

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

D.5.12 Visible Emissions Notations

- (a) Visible emission notations of all blast furnace exhausts (EP520-3606, 3544, 3557) 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.

D.5.13 Parametric Monitoring

- (a) The Permittee shall record the pressure drop across the baghouses listed below, used in conjunction with the blast furnace operations, at least once per day when their associated facilities are in operation. When for any one reading, the pressure drop across any baghouse is outside its normal range listed, 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.

Unit	Unit ID	Range (inches of water)
Car dumper baghouse	C520-3506	5 to 15
C casthouse baghouse	C520-3507	6 to 9
D casthouse baghouse	C520-3508	6 to 9

- (b) The Permittee shall record the pressure drop across the scrubbers (C520-3529, 31) used in conjunction with the C and D Casthouse operations, at least once per day when the process is in operation. When for any one reading, the pressure drop across either scrubber is less than 50 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, and shall be calibrated in accordance with the manufacturer's specifications. The specifications shall be available on site with the Preventive Maintenance Plan.

D.5.14 Control Equipment Failure

- (a) For a single compartment baghouse controlling emissions from a batch process, the feed to the process shall be shut down immediately until the failed unit has been repaired or replaced. The emissions unit shall be shut down no later than the completion of the processing of the material in the line. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions).

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

- (b) In the event that scrubber failure has been observed, failed units and the associated process will be shut down immediately until the failed units have been repaired or replaced. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions).

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

D.5.15 Record Keeping Requirements

- (a) To document compliance with conditions D.5.3 and D.5.4, the Permittee shall keep the following records in accordance with Section C – Record Keeping and Reporting Requirements, of this permit.
- (b) To document compliance with condition D.5.12, the Permittee shall maintain records of visible emission notations of the blast furnace exhausts.
- (c) To document compliance with condition D.5.13, the Permittee shall maintain records of the pressure drop during normal operation.
- (d) Pursuant to CP127-2802-00001, issued August 4, 1993, operation condition 8, a log of information necessary to document compliance with conditions D.5.4 and D.5.5 shall be maintained.
- (f) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

D.5.16 Reporting Requirements

- (a) To document compliance with conditions D.5.3 and D.5.4, the Permittee shall submit reports in accordance with Section C – Record Keeping and Reporting Requirements, of this permit.
- (b) Quarterly summaries of the information to document compliance with the applicable conditions of this section, specified below, 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.
- (c) Pursuant to CP127-2802-00001, issued August 4, 1993, operation condition 8, quarterly summaries shall include tons of hot metal produced per month from the two (2) blast furnaces (EU520-18, 19).

D.5.17 National Emission Standards for Hazardous Air Pollutants from Integrated Iron and Steel Manufacturing - Record Keeping Requirements for Blast Furnaces [40 CFR 63.7810(b)][40 CFR 63.7]

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

- (e) The Permittee shall keep the records required in 40 CFR 63.7833 and 63.7834 to show continuous compliance with each emission limitation and operation and maintenance requirement that applies to the Blast Furnace Casthouses C and D in accordance with 40 CFR 63.7842(d).
- (f) The Permittee shall keep the records required by 40 CFR 63, Subpart FFFFF in accordance with 40 CFR 63.7843 and the General Record Keeping Requirements in Section C of this permit.

D.5.18 National Emission Standards for Hazardous Air Pollutants from Integrated Iron and Steel Manufacturing - Reporting Requirements for Blast Furnaces [40 CFR 63.7835][40 CFR 63.7840]

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

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

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

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

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

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

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

D.5.19 Requirement to Submit a Significant Permit Modification Application [326 IAC 2-7-12][326 IAC 2-7-5]

The Permittee shall submit an application for a significant permit modification to IDEM, OAQ to include information

from the notification of compliance status in the Part 70 permit.

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

Indiana Department of Environmental Management
Permits Branch, Office of Air Quality
100 North Senate Avenue
Indianapolis, Indiana 46204-2251

SECTION D.6

FACILITY OPERATION CONDITIONS

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

- (f) A Basic Oxygen Furnace (BOF) Shop operation located in the Steelmaking Department consisting of the following:
- (1) Three (3) Hot Metal Transfer/Desulfurization and Skimming Stations, with a total combined maximum throughput of 455,000 tons of hot metal per month, with #1 & #2 constructed in 1968, and #3 in 1978 and modified in 1992, each identified as EU534-01, 02, and 03, each with particulate emissions controlled by baghouses C534-4001, 4002, and 4003, respectively, exhausting at stacks EP534-4002, 4006, and 4008, respectively.
 - (2) Three (3) BOF Shop vessels, with #1 & #2 constructed in 1968 and #3 in 1978, identified as EU534-06a (No.1), EU534-06b (No.2), and EU534-07 (No.3), with a combined rated capacity of 500 tons per hour of molten steel, with emissions from vessels No.1 and No.2 (EU534-06a, 06b) controlled by three (3) scrubbers, numbered #2, #3, and #4 in parallel, collectively identified as C534-4004, each exhausting at respective stacks EP534-4013, 4014, and 4015, respectively, and emissions from vessel No.3 (EU534-07) controlled by scrubber C534-4007 exhausting at stack EP534-4017, equipped with CO flare C534-4008.
 - (3) Refining Cycles for three BOF Shop vessels, identified as EU534-10 for vessels No.1 and No.2 (EU534-06a, EU534-06b), and EU534-11 for vessel No.3 (EU534-07), using the respective exhausts and emissions control equipment for the associated BOF Shop vessels listed above.
 - (4) Three (3) Molten Steel Ladle Addition Stations consisting of:
 - (A) Station No.1 argon stirring, constructed in 1968, identified as EU534-14, with fugitive emissions reporting to roof monitor EP534-4003; and
 - (B) Stations No.2 and No.3 stirring and desulfurization, constructed in 1978, collectively identified as EU534-15, with particulate emissions from both controlled by baghouse C534-4016, exhausting at stack EP534-4031.
 - (5) Two (2) Steel Ladle Treatment Stations No.4 and No.5, constructed in 1986, collectively identified as EU534-16, with particulate emissions controlled by baghouses C534-4017 and 4099, respectively, exhausting at respective stacks EP534-4031 and 4099.
 - (6) One (1) Vacuum Degasser, identified as EU534-19, constructed in 1989, with a maximum capacity of 490,071 pounds per hour and 2,146,511 tons per year of hot steel, utilizing a steam ejector identified as C534-4019 for vessel evacuation, with exhausts at stack EP534-4034 which is equipped with a CO flare, identified as C534-4020.
 - (7) Two (2) Continuous Casters, each with a maximum capacity of 1000 tons of molten steel per hour, consisting of:
 - (A) Continuous Caster #1 constructed in 1975 and modified in 1984, identified as EU595-24, with particulate emissions controlled by a demister identified as C595-4501, exhausting at stack EP595-4501; and
 - (B) Continuous Caster #2 constructed in 1985, identified as EU595-25, with particulate emissions controlled by three (3) demisters identified as C595-4504, exhausting at two stacks, collectively identified as EP595-4504.
 - (8) One (1) natural gas fired FM boiler for the BOF Shop, constructed in 1968, identified as EU534-23, with a rated capacity of 50 MMBtu/hr heat input, exhausting at stack EP534-4018.
- Steel making material handling operations consisting of:
- (9) One (1) Track hopper, constructed in 1989, identified as EU 534-21, with particulate emissions controlled by baghouse C534-4013, exhausting at stack EP534-4021.
 - (10) Two (2) Junction Houses, constructed in 1968 and modified in 1996, identified as H1 (EU534-31) and H2 (EU534-32), enclosing the transfer points between conveyors L2 and L3, and L3 and L4, respectively, with particulate emissions controlled by two (2) baghouses, identified as C534-4014 and 15, respectively, with each exhausting at respective stacks EP534-4027 and 28.
 - (11) Three (3) BOF weigh hoppers constructed in 1968 and modified in 1996, collectively identified as EU534-36, with particulate emissions controlled by two (2) baghouses, collectively identified as C534-4010, exhausting at respective stacks EP534-4020 and 4026.
 - (12) Two (2) BOF vessel storage bins, constructed in 1968 and modified in 1996, collectively identified as EU534-33,

with particulate emissions from both controlled by baghouse C534-4009, exhausting at stack EP534-4019.

- (13) Vacuum Degasser Material handling for alloy addition, constructed in 1989, identified as EU534-20, with particulate emissions controlled by baghouse C534-4018, exhausting at stack EP534-4033.

Additional steel making activities consisting of:

- (14) Eight (8) steel ladle and sub car dryers (including a torpedo car dryer), constructed in 1982, collectively identified as EU534-17, with fugitive emissions reporting to roof monitor EP534-4003.
- (15) Teeming Aisles, constructed in 1969, collectively identified as EU534-18, with fugitive emissions reporting to roof monitor EP534-4003.
- (16) Vacuum Degasser ladle dryers and preheaters, collectively identified as EU534-22, all using natural gas as fuel with maximum capacities of 7 MMBtu/hr for the preheat burner, 9 MMBtu/hr for the refractory dryer burner, and 4.5 MMBtu/hr for the refractory dryer burner, with all collectively exhausting at stack EP534-4036.
- (17) BOF Auxiliaries, collectively identified as EU534-40, consisting of fugitive emissions EP534-4004, 4005, 4007, and 4051.

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

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

D.6.1 PSD Minor Limit [326 IAC 2-2]

- (a) Pursuant to CP 127-2480-00001, issued November 12, 1992, the particulate emissions from baghouse C534-4003 shall be limited to 0.03 grains per dry standard cubic feet, and flow shall not exceed 135,000 acfm. This is equivalent to an emission rate of 31.3 pounds per hour.
- (b) Pursuant to CP 127-2480-00001, issued November 12, 1992, the total hot iron throughput through the three (3) stations (EU534-01, 02, 03) shall be limited to 455,000 tons per month.
- (c) Pursuant to Significant Modification 127-15656-00001, issued October 17, 2002, the Vacuum Degasser (EU534-19) shall not remove more than 0.04% carbon from the steel based on a twelve month period rolled on a monthly basis and the production level shall not exceed 490,071 pounds per hour averaged over a twelve 12 consecutive month period and 2,146,511 tons of hot steel, per twelve consecutive month period with compliance determined at the end of each month. This limit is equivalent to 64.8 tons per year of CO emissions.

This provisions set by this condition will make the PSD rule, 326 IAC 2-2, not applicable.

D.6.2 Particulate Matter (PM) and Particulate Matter Less Than 10 Microns (PM10)

- (a) Pursuant to 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes), the allowable particulate emission rate from the BOF shop operations EU534-01, 02, 03, 06a, 06b, 07, 14, 15, 16, 21, 24, 25, 31, 32, 36 shall not exceed 69.0 pounds per hour each, when operating at a process weight rate of 500 tons per hour hot metal. The pounds per hour limitation was calculated using the following equation:

Interpolation and extrapolation of the data for the process weight rate in excess of 60,000 pounds per hour shall be accomplished by use of the equation:

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

Pursuant to 326 IAC 6-3-2(e)(3), when the process weight exceeds two hundred (200) tons/hour, the maximum allowable emission may exceed that shown in 326 IAC 6-3-2 (e)(3), provided the concentration of particulate matter in the discharge gases to the atmosphere is less than 0.10 pounds per one thousand (1,000) pounds of gases.

- (b) Pursuant to the Registered Construction approval, issued January 5, 1985, the No.1 "West" Hot Metal Desulfurization, Reladling/Transfer and Skimming Station (EU534-01) particulate matter emissions shall be limited to 0.01 grains per dry standard cubic foot.

- (c) Pursuant to PC(64)1788, issued February 14, 1990, the Vacuum Degasser facility shall have the following limits:
- (1) Particulate matter emissions from the vacuum degasser steam ejector discharge flare stack (EP534-4034) shall be limited to 0.02 gr/dscf and 9.0 tons per year.
 - (2) PM10 emissions from the vacuum degasser steam ejector discharge flare stack (EP534-4034) shall be limited to 0.01 gr/dscf and 4.5 tons per year.
 - (3) One hundred percent (100%) of the particulate matter generated by the vacuum degasser alloy additive material handling equipment consisting of 18 alloy storage bins (EU534-20), 3 weigh hoppers (EU 534-36) and conveyor transfer points shall be captured and vented to the vacuum degasser material handling baghouse (C534-4018) and shall comply with the following limits:
 - (A) Particulate matter emissions shall be limited to 0.02 gr/dscf and 10.1 tons per year.
 - (B) PM10 emissions shall be limited to 0.01 gr/dscf and 5.1 tons per year.

D.6.3 Source Specific and Facility Emission Limitations for TSP in Porter County [326 IAC 6-6-4]

Pursuant to 326 IAC 6-6-4, Bethlehem Steel Corporation (ISG Burns Harbor) specific source and facility TSP emission limits, the annual particulate matter emissions of each of the following facilities shall not exceed the limit listed below for that facility:

- (1) The BOF Shop Nos. 1 and 2 vessel scrubber stacks [three (3) stacks (EP534-4013, 14, 15) collectively restricted to limit] shall not exceed 0.09 pounds per ton of liquid steel.
- (2) The BOF Shop Nos. 1 and 2 vessel (EU534-06) charging and tapping shall not exceed 0.35 lb/ton of liquid steel.
- (3) The BOF Shop No.3 vessel scrubber stack (EP534-4017) shall not exceed 0.022 grains/dscf.
- (4) The BOF Shop No.3 vessel charging and tapping (EU534-07) shall not exceed 0.05 lb/ton of liquid steel.
- (5) BOF Shop Teeming operation (EU534-18) shall not exceed 0.07 pounds per ton of liquid steel.
- (6) The BOF Reladling baghouses (C534-4001, 02, 03) shall not exceed 23.1 pounds per hour, combined.
- (7) The BOF Desulfurization baghouse (C534-4016) shall not exceed 6.0 pounds per hour.
- (8) The Track Hopper Building particulate matter emissions (C534-4013) shall not exceed 1.2 pounds per hour.
- (9) The Conveyor Junction H1 particulate matter emissions (C534-4014) shall not exceed 0.6 pounds per hour.
- (10) The Conveyor Junction H2 particulate matter emissions (C534-4015) shall not exceed 0.6 pounds per hour.
- (11) The BOF No.1 vessel storage bins baghouse (C534-4009) particulate matter emissions shall not exceed 1.7 pounds per hour.
- (12) The BOF No.2 vessel storage bins baghouse (C534-4009) particulate matter emissions shall not exceed 1.7 pounds per hour.
- (13) The BOF No.1 vessel weigh hopper baghouses (C534-4010a, 10b) particulate matter emissions for the BOF No.1 vessel, shall not exceed 2.2 pounds per hour.
- (14) The BOF No.2 vessel weigh hopper baghouses (C534-4010a, 10b) particulate matter emissions for the BOF No.2 vessel, shall not exceed 2.2 pounds per hour.

- (15) The Continuous Casters (EU595-24 and 25) shall not exceed 0.015 lb/ton of liquid steel cast, on an annual basis.
- (16) The BOF Shop FM Boiler (EP534-4018) annual particulate matter emissions shall not exceed 0.005 lb/MMBtu.

This condition is not federally enforceable.

D.6.4 Porter County Sulfur Dioxide Limitations [326 IAC 7-4-14]

Pursuant to 326 IAC 7-4-14(1)(A)(i), the BOF FM Boiler EU534-23, shall burn natural gas only.

D.6.5 Carbon Monoxide

Pursuant to 326 IAC 9-1-2(2), no carbon monoxide shall be discharged from the No.3 BOF shop vessel (EU534-07, 11), unless the waste 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 one (1) hour Indiana ambient air quality value for carbon monoxide.

D.6.6 Operation Conditions

Pursuant to PC(64)1788, issued February 14, 1990;

- (a) The refractory drying and preheating burners (EU534-22) shall burn only natural gas and be limited to the following maximum heat input rates:
 - (1) Vessel preheat burner 7 million Btu per hour
 - (2) Refractory dryer burner 9 million Btu per hour
 - (3) Refractory dryer burner 4.5 million Btu per hour
- (b) The visible emissions from any stack, other process exhaust, building roof monitor, or building opening due to the operations of the vacuum degasser process (EU534-19), the alloy material handling system (EU534-20) and the vessel preheat and refractory dryer burners (EU534-22) shall not exceed five percent (5%) opacity, as determined by 40 CFR 60 appendix A, Method 9 and 326 IAC 5-1.
- (c) The vacuum degassing equipment shall be operated and maintained in accordance with the manufacturer's specifications.

D.6.7 General Provisions Relating to NSPS [326 IAC 12-1][40 CFR Part 60, Subpart N]

The provisions of 40 CFR Part 60, Subpart A (General Provisions), which are incorporated by reference in 326 IAC 12-1, apply to the Basic Oxygen Process Furnace vessel No.3, except when otherwise specified in 40 CFR Part 60, Subpart N.

D.6.8 Particulate Matter (PM) [40 CFR Part 60, Subpart N]

Pursuant to 40 CFR Part 60, Subpart N (Standards of Performance for Primary Emissions From Basic Oxygen Process Furnaces for Which Construction Is Commenced After June 11, 1973), the Permittee shall not discharge or cause the discharge into the atmosphere from BOF Shop vessel No.3 (EU534-07, 11) any gases which:

- (a) Contain particulate matter in excess of 50 mg/dscm (0.022 gr/dscf). (BOF Shop vessel No.3, EU534-07, 11)
- (b) Exit from a control device and exhibit 10 percent opacity or greater, except that an opacity of greater than 10 percent but less than 20 percent may occur once per steel production cycle. (BOF Shop No.3 vessel scrubber stack, EP534-4017)

D.6.9 General Provisions Relating to HAPs [326 IAC 20-1][40 CFR 63, Subpart A] [Table 4 to 40 CFR 63, Subpart FFFFF]

- (a) The provisions of 40 CFR 63, Subpart A- General Provisions, which are incorporated by reference as 326 IAC 20-1-1, apply to the affected source, Basic Oxygen Furnace (BOF) Shop operation, except when otherwise specified by Table 4 to 40 CFR 63, Subpart FFFFF. The Permittee must comply with these

requirements on and after May 20, 2003.

- (b) Since the applicable requirements associated with the compliance options are not included and specifically identified in this permit, the permit shield authorized by Section B of this permit in the condition titled Permit Shield, and set out in 326 IAC 2-7-15 does not apply to part (a) of this condition, except as otherwise provided in this condition. The permit shield applies to condition D.6.26, National Emission Standards for Hazardous Air Pollutants from Integrated Iron and Steel Manufacturing – Reporting Requirements for Basic Oxygen Process Furnace (BOPF) Shops.

D.6.10 National Emission Standards for Hazardous Air Pollutants from Integrated Iron and Steel Manufacturing - Emission Limitations for Basic Oxygen Process Furnace (BOPF) Shops [40 CFR 63, Subpart FFFFFF]

- (a) The provisions of 40 CFR 63, Subpart FFFFFF (National Emission Standards for Hazardous Air Pollutants: Integrated Iron and Steel Manufacturing) apply to the affected source, Basic Oxygen Furnace (BOF) Shop operation. A copy of this rule is available on the U.S. EPA Air Toxics Website at <http://www.epa.gov/ttn/atw/mcm/mcmpg.html>. The Permittee must comply with these requirements on and after May 22, 2006.
- (b) Since the applicable requirements associated with the compliance options are not included and specifically identified in this permit, the permit shield authorized by Section B of this permit in the condition titled Permit Shield, and set out in 326 IAC 2-7-15 does not apply to part (a) of this condition, except as otherwise provided in this condition.
- (c) The terminology used in this section is defined in the CAA, in 40 CFR Part 63, Section 63.2, and in 40 CFR 63.8105, and is applicable to the affected source.
- (d) The Permittee shall meet each emission limitation in 40 CFR 63.7790 that applies to the Hot Metal Transfer (EU534-01, 02, and 03), Hot Metal Desulfurization (EU534-01, 02, and 03), BOF Shop Vessels (EU534-06a, 06b, 07, 10, and 11), Slag Skimming (EU534-06 and 07), Ladle Metallurgy (EU534-14, 15, and 16).
- (e) The Permittee shall meet each operation and maintenance requirement in 40 CFR 63.7800 that applies to the Basic Oxygen Furnace (BOF) Shop operation and required capture and control equipment.
- (f) The Permittee shall develop and implement a written startup, shutdown, and malfunction plan in accordance with 40 CFR 63.7810(c). During periods of startup, shutdown, or malfunction, the Permittee shall operate in accordance with the plan and 40 CFR 63.7835(b).
- (g) The Permittee shall meet each monitoring requirement in 40 CFR 63.7830 that applies to the Basic Oxygen Furnace (BOF) Shop operation and required capture and control equipment.
- (h) The Permittee shall meet each requirement in 40 CFR 63.7831 regarding installation, operation, and maintenance of monitors for each monitor required by 40 CFR 63, Subpart FFFFFF, that applies to the Basic Oxygen Furnace (BOF) Shop operation and required capture and control equipment.

Compliance Determination Requirements

D.6.11 Testing Requirements [326 IAC 2-7-6(1),(6)] [326 IAC 2-1.1-11][326 IAC 6-6-2]

- (a) Within 180 days after issuance of this permit, or 2.5 years from the last compliant stack test, whichever is later, the Permittee shall perform PM, PM10, and opacity testing on scrubber stacks (EP534-4013, 4014, 4015) and baghouse stacks (EP534-4002, 4006, and 4008), using methods as approved by the Commissioner, in order to demonstrate compliance with conditions D.6.1 and D.6.2. These tests shall be repeated at least once every two and a half (2.5) years from the date of this valid compliance demonstration. In addition to these requirements, IDEM may require compliance testing when necessary to determine if the facility is in compliance.
- (b) Pursuant to 326 IAC 6-6-2(e), for the particulate emission limitations contained in condition D.6.3, when required by the commissioner, the Permittee shall make any stack modifications necessary to permit a stack test in accordance with 40 CFR 60, Appendix A, Methods 1-5. The following are sources for which stack tests are required to determine compliance with particulate emission limitations:

The BOF Shop: Nos. 1 and 2 Vessel Scrubber stacks (three [3] stacks, EP534-4013, 14, 15)

shall be tested once in each four (4) year period.

This condition part is not federally enforceable.

D.6.12 Particulate Control [326 IAC 2-7-6(6)]

- (a) Pursuant to PC 64-716, issued July 11, 1974, BOF No.3 (EU534-07) shall have some type of auxiliary hoods for PM control during tapping and charging.
- (b) Pursuant to PC (64)1559, issued September 17, 1984, the particulate emissions from the desulfurization process shall be captured and controlled by the existing local exhaust ventilation system and baghouses (C534-4001, 4002) for the hot metal (iron) desulfurization equipment at the existing BOF shop hot metal reladling station (EU534-01, 02).
- (c) The pressure drop across the filter media of the Hot Metal Desulfurization Station #3 baghouse (C534-4003) and its associate fan or fans shall not be less than one (1) inch water.
- (d) The scrubbers (C534-4004, 4007) and baghouses (C534-4001, 4002, 4003, 4017, 4099), all for particulate control, shall be in operation, and control particulate emissions from their associated facilities, at all times their associated facilities are in operation, except during the following scenarios:
 - (1) During normal operations, the three scrubber systems must be online when scrap charging, hot metal pour, turndown, reblow, tapping, slag splashing, and slagging are being performed. The vessel not in the refining mode cannot enter into a blow cycle.
 - (2) During maintenance, two of the three scrubber systems must be online when scrap charging, hot metal pour, turndown, tapping, slag splashing, and slagging are being performed. The vessel not in the refining mode cannot enter into a blow or reblow cycle.

D.6.13 Particulate Matter (PM) [40 CFR Part 60, Subpart N]

- (a) The Permittee shall maintain a single time-measuring instrument which shall be used in recording daily the time and duration of each steel production cycle, and the time and duration of any diversion of exhaust gases from the main stack (EP534-4017) servicing the BOF.
- (b) The Permittee shall calibrate, maintain, and continuously operate monitoring devices for the BOF Shop vessel No.3 (EU534-07, 11) venturi scrubber emission control equipment (C534-4007) as follows:
 - (1) A monitoring device for the continuous measurement of the pressure loss through the venturi constriction of the control equipment. The monitoring device is to be certified by the manufacturer to be accurate within ± 250 Pa (± 1 inch water).
 - (2) A monitoring device for the continual measurement of the water supply pressure to the control equipment. The monitoring device is to be certified by the manufacturer to be accurate within ± 5 percent of the design water supply pressure. The monitoring device's pressure sensor or pressure tap must be located close to the water discharge point. The Administrator must be consulted for approval in advance of selecting alternative locations for the pressure sensor or tap.
 - (3) All monitoring devices shall be synchronized each day with the time-measuring instrument used under paragraph (a) of this condition. The chart recorder error directly after synchronization shall not exceed 0.08 cm (1/32 inch).
 - (4) All monitoring devices shall use chart recorders which are operated at a minimum chart speed of 3.8 cm/hr (1.5 in/hr).
 - (5) All monitoring devices are to be recalibrated annually, and at other times as the Administrator may require, in accordance with the procedures under 40 CFR 60.13(b).
- (c) The Permittee shall determine compliance with the particulate matter standards in condition D.6.8 as follows:
 - (1) The time-measuring instrument of 40 CFR 60.143 shall be used to document the time and

duration of each steel production cycle and each diversion period during each run.

- (2) 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 1.50 dscm (53 dscf). Sampling shall be discontinued during periods of diversions.
 - (i) The sampling for each run shall continue for an integral number of steel production cycles. A cycle shall start at the beginning of either the scrap preheat or the oxygen blow and shall terminate immediately before tapping.
 - (3) Method 9 and the procedures in 40 CFR 60.11 shall be used to determine opacity. Observations taken during a diversion period shall not be used in determining compliance with the opacity standard. Opacity observations taken at 15-second intervals immediately before and after a diversion of exhaust gases from the stack may be considered to be consecutive for the purpose of computing an average opacity for a 6-minute period.
- (d) To comply with 60.143(c), the Permittee shall use the monitoring devices of 40 CFR 60.143(b)(1) and (2) during the particulate runs to determine the 3-hour averages of the required measurements.

D.6.14 Carbon Monoxide

- (a) Pursuant to PC(64)1788, issued February 14, 1990, the carbon monoxide bearing process gas streams from the vacuum degasser (i.e., degassing/ decarbonization process vacuum system exhaust and the recycled water system carbon monoxide scrubber/stripper exhaust) (C534-4019) shall pass through a stack flare (C534-4020) equipped with a natural gas pilot burner ring.
- (b) To demonstrate compliance with condition D.6.1(c), the carbon content from each batch of steel going into and coming from the Vacuum Degassing process shall be measured showing a carbon removal rate of no more than 0.04% carbon from the steel based on a twelve month period rolled on a monthly basis.

D.6.15 National Emission Standards for Hazardous Air Pollutants from Integrated Iron and Steel Manufacturing - Compliance Requirements for Basic Oxygen Process Furnace (BOPF) Shops [40 CFR 63.7810(a)][40 CFR 63.7825][40 CFR 63.7826][40 CFR 63.7832]

- (a) Pursuant to 40 CFR 63.7810(a), the Permittee shall be in compliance with the emission limitations and operation and maintenance requirements in condition D.6.10 at all times, except during periods of startup, shutdown, and malfunction as defined in 40 CFR 63.2, which is incorporated by reference in 326 IAC 20-1-3.
- (b) The Permittee shall demonstrate initial compliance with the emission limitations that apply to the Basic Oxygen Furnace (BOF) Shop operation in accordance with 40 CFR 63.7825.
- (c) The Permittee shall demonstrate initial compliance with the operation and maintenance requirements that apply to the Basic Oxygen Furnace (BOF) Shop operation in accordance with 40 CFR 63.7826.
- (d) The Permittee shall monitor and collect data to demonstrate continuous compliance with 40 CFR 63, Subpart FFFFFF in accordance with 40 CFR 63.7832.
- (e) The Permittee shall demonstrate continuous compliance with the emission limitations of 40 CFR 63, Subpart FFFFFF that apply to the Basic Oxygen Furnace (BOF) Shop operation and required capture and control equipment in accordance with 40 CFR 63.7833.
- (f) The Permittee shall demonstrate continuous compliance with the operation and maintenance requirements of 40 CFR 63, Subpart FFFFFF that apply to the Basic Oxygen Furnace (BOF) Shop operation and required capture and control equipment in accordance with 40 CFR 63.7834.

D.6.16 National Emission Standards for Hazardous Air Pollutants from Integrated Iron and Steel Manufacturing - Testing Requirements for Basic Oxygen Process Furnace (BOPF) Shops [40 CFR 63.7820 through 63.7824]

- (a) The Permittee shall conduct performance tests and other initial compliance demonstrations that apply to the Basic Oxygen Furnace (BOF) Shop operation in accordance with 40 CFR 63.7820.
- (b) The Permittee shall conduct subsequent performance tests that apply to the Basic Oxygen Furnace (BOF) Shop operation in accordance with 40 CFR 63.7821.

- (c) The Permittee shall use the test methods and other procedures in 40 CFR 63.7822 when demonstrating compliance with the emission limits for particulate matter for the Basic Oxygen Furnace (BOF) Shop operation.
- (d) The Permittee shall use the test methods and other procedures in 40 CFR 63.7823 when demonstrating compliance with the opacity limits for the Basic Oxygen Furnace (BOF) Shop operation.
- (e) The Permittee shall use the test methods and other procedures in 40 CFR 63.7824 to establish and demonstrate initial compliance with operating limits for the Basic Oxygen Furnace (BOF) Shop operation and required capture and control equipment.

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

D.6.17 Visible Emissions Notations

- (a) Visible emission notations of the stack exhausts at the BOF Shop (EP534-4002, 4006, 4008, 4013, 4014, 4015, 4031, 4099) and the Continuous Casters (EP595-4501, 4504), shall be performed once per day during normal daylight operations when exhausting to the atmosphere. A trained employee shall record whether emissions are normal or abnormal.
- (b) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.
- (c) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.
- (d) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.
- (e) If abnormal emissions are observed, the Permittee shall take reasonable response steps in accordance with Section C - Response to Excursions or Exceedances. Failure to take response steps in accordance with Section C - Response to Excursions or Exceedances, shall be considered a deviation from this permit.

D.6.18 Parametric Monitoring

- (a) The Permittee shall record the pressure drop across the baghouses and scrubbers listed in the table below, used in conjunction with the BOF Shop, at least once per day when the processes are in operation. When for any one reading, the pressure drop across any unit is not maintained within its corresponding normal range listed in the table below, or a range established during the latest stack test, the Permittee shall take reasonable response steps in accordance with Section C - Response to Excursions or Exceedances. A pressure reading that is outside the above mentioned range is not a deviation from this permit. Failure to take response steps in accordance with Section C - Response to Excursions or Exceedances, shall be considered a deviation from this permit.

Process and type of PM control	Control Unit ID	Range (inches of water), or flow rate (gallons per minute) for each
hot metal station 1: baghouse	C534-4001	4 to 10 inches of water
hot metal station 2: baghouse	C534-4002	4 to 10 inches of water
hot metal station 3: baghouse	C534-4003	4 to 10 inches of water
bof vessels 1 & 2: three scrubbers (#2, #3, #4)	collectively, C534-4004	greater than 50, or 1700 gpm or greater for each
ladle treatment 4 & 5: two baghouses	C534-4017, 4099	4 to 10

The instrument used for determining the pressure shall comply with Section C - Instrument Specifications, of this permit, and shall be calibrated in accordance with the manufacturer's specifications. The specifications shall be available on site with the Preventive Maintenance Plan.

D.6.19 Control Equipment Failure

- (a) For a single compartment baghouse controlling emissions from a batch process, the feed to the process shall be shut down immediately until the failed unit has been repaired or replaced. The emissions unit shall be shut down no later than the completion of the processing of the material in the line. Operations

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

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

- (b) In the event that scrubber or flare failure has been observed, the 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.6.20 Record Keeping Requirements

- (a) Pursuant to CP 127-2480-00001, issued November 12, 1992, the Permittee shall maintain a log of information (hot iron throughput in tons per month based on a twelve month period rolled on a monthly basis) necessary to document compliance with condition D.6.1(b).
- (b) To document compliance with condition D.6.1(c), the Permittee shall maintain records of steel carbon content and the steel production level based on a twelve month period rolled on a monthly basis.
- (c) To document compliance with conditions D.6.3 and D.6.4, the Permittee shall maintain records in accordance with Section C - Record Keeping and Reporting Requirements, of this permit.
- (d) To document compliance with condition D.6.17, the Permittee shall maintain records of visible emission notations of the stack exhausts specified.
- (e) To document compliance with condition D.6.18, the Permittee shall maintain records of the pressure drop for the units specified during normal operation.
- (f) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

D.6.21 Reporting Requirements

- (a) Pursuant to CP 127-2480-00001, issued November 12, 1992, a quarterly summary of the information to document compliance with condition D.6.1(b) 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. These reports shall include total tonnage of hot iron processed through the three stations. The report submitted by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).
- (b) To document compliance with conditions D.6.3 and D.6.4, the Permittee shall submit reports in accordance with Section C - Record Keeping and Reporting Requirements, of this permit.

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

D.6.22 40 CFR Part 60, Subpart N (Standards of Performance for Primary Emissions From Basic Oxygen Process Furnaces for Which Construction Is Commenced After June 11, 1973) Record Keeping and Reporting Requirements

- (a) To document compliance with condition D.6.13(a), the owner or operator shall record daily the time and duration of each steel production cycle, and the time and duration of any diversion of exhaust gases from the main stack servicing the BOF Shop No.3 vessel (EP534-4017).
- (b) To document compliance with condition D.6.13(b), any owner or operator subject to the requirements of condition D.6.13(b) of this section shall report to the IDEM, OAQ, on a semi-annual basis, all measurements over any 3-hour period that average more than 10 percent below the average levels maintained during the most recent performance test conducted under 40 CFR 60.8 in which the affected facility demonstrated compliance with the mass standards under 40 CFR 60.142(a)(1), (b)(1)(i) or

(b)(2)(i). The accuracy of the respective measurements, not to exceed the values specified in condition D.6.13(b)(1) and (2) of this section, may be taken into consideration when determining the measurement results that must be reported.

D.6.23 National Emission Standards for Hazardous Air Pollutants from Integrated Iron and Steel Manufacturing - Record Keeping Requirements for Basic Oxygen Process Furnace (BOPF) Shops [40 CFR 63.7810(b)][40 CFR 63.7]

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

D.6.24 National Emission Standards for Hazardous Air Pollutants from Integrated Iron and Steel Manufacturing - Reporting Requirements for Basic Oxygen Process Furnace (BOPF) Shops [40 CFR 63.7835][40 CFR 63.7840]

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

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

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

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

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

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

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

D.6.25 Requirement to Submit a Significant Permit Modification Application [326 IAC 2-7-12][326 IAC 2-7-5]

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

- (a) The significant permit modification application shall be consistent with 326 IAC 2-7-12, including information sufficient for IDEM, OAQ to incorporate into the Part 70 permit the applicable requirements of 40 CFR 63, Subpart FFFFF, a description of the affected source and activities subject to the standard, and a description of how the Permittee will meet the applicable requirements of the standard.
- (b) The significant permit modification application shall be submitted nine months prior to May 22, 2006, or the date that the notification of compliance status is submitted, whichever is later.
- (c) The significant permit modification application shall be submitted to:

Indiana Department of Environmental Management
Permits Branch, Office of Air Quality
100 North Senate Avenue
Indianapolis, Indiana 46204-2251

SECTION D.7

FACILITY OPERATION CONDITIONS

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

- (g) One (1) Slab/Plate Mill Complex consisting of the following operations and equipment:
- (1) No.1 Slab Yard operations consisting of one (1) natural gas-fired Flame Cutting Bed, constructed in 1976, identified as EU673-13, with fugitive emissions reporting to roof monitor EP673-6606.
 - (2) No.2 Slab Yard operations consisting of:
 - (A) Three (3) natural gas-fired Slab Preheater Furnaces Nos.1, 2 & 3, constructed in 1964, collectively identified as EU673-10, with capacities of 16 MMBtu/hr heat input each for No.1 & No.2, and 5 MMBtu/hr heat input for No.3, with fugitive emissions from each reporting to roof monitor EP673-6605.
 - (B) One (1) natural gas-fired Flame Cutting Bed and one (1) natural gas-fired Scarfing Bed, constructed in 1964, identified as EU673-11 and EU673-12, respectively, with fugitive emissions from each reporting to roof monitor EP673-6605.
 - (3) No.3 Slab Yard operations consisting of:
 - (A) Three (3) natural gas-fired Slab Preheater Furnaces Nos.4, 5, and 6, constructed in 1968, collectively identified as EU673-06, with capacities of 25 MMBtu/hr heat input for each, with fugitive emissions from each reporting to roof monitor EP673-6604.
 - (B) One (1) natural gas-fired Scarfing Bed, constructed in 1968, identified as EU673-07, with fugitive emissions reporting to roof monitor EP673-6604.
 - (C) One (1) natural gas-fired portable Heavy Gauge Flame Cutting Machine, constructed in 1976, identified as EU673-09, with fugitive emissions reporting to roof monitor EP673-6604.
 - (D) One (1) Slab Grinder, constructed in 1985, identified as EU673-08, with particulate emissions controlled by baghouse C673-6606, exhausting at stack EP673-6603.
 - (4) No.4 Slab Yard operations consisting of two (2) outside natural gas-fired Slab Preheater Furnaces No.7 and No.8, constructed in 1978, collectively identified as EU673-05, with capacities of 25 MMBtu/hr heat input each, with fugitive emissions EP673-6601 and 6602.
 - (5) 160 Inch Plate Mill operations consisting of:
 - (A) One (1) Slab Reheat Furnace No.1 – Continuous Pusher, capable of firing natural gas, coke oven gas, No.2 and No.6 fuel oil, constructed in 1964, identified as EU673-14, with a furnace maximum rated capacity of 500 MMBtu/hr heat input, equipped with low NOx burners, with emissions exhausting at stack EP673-6503.
 - (B) One (1) Slab Reheat Furnace No.2 - Continuous Pusher, capable of firing natural gas, coke oven gas, No.2 and No.6 fuel oil, constructed in 1964, identified as EU673-15, with a furnace maximum rated capacity of 500 MMBtu/hr heat input, equipped with low NOx burners, with emissions exhausting at stack EP673-6504.
 - (C) One (1) In and Out Reheat Furnace No.5, capable of firing natural gas, coke oven gas, No.2 and No.6 fuel oil, constructed in 1964, identified as EU673-17, with maximum rated capacity of 70 MMBtu/hr heat input, with emissions exhausting at stack EP673-6501.
 - (D) Two (2) In and Out Reheat Furnaces No.6 and No.7, capable of firing natural gas, coke oven gas, No.2 and No.6 fuel oil, with No.6 constructed in 1967 and No.7 constructed in 1971, identified as EU673-18 and 19, respectively, each with maximum rated capacities of 70 MMBtu/hr heat input, with emissions collectively exhausting at stack EP673-6502.
 - (E) One (1) Three Zone Pusher Reheat Furnace No.8, capable of firing natural gas, coke oven gas, No.2 and No.6 fuel oil, constructed in 1977, identified as EU673-20, with a maximum rated capacity of 89 MMBtu/hr heat input, with emissions exhausting at stack EP673-6505.
 - (F) One (1) Rolling Process, constructed in 1964, identified as EU673-32, with fugitive emissions reporting to roof monitor EP673-6507.

Steel Plate operations (located in the 160 Inch Plate Mill building) consisting of:

- (G) One (1) natural gas-fired Car Bottom Furnace (Normalizing and Annealing), constructed in 1965, identified as EU673-23, with a maximum capacity of 50 MMBtu/hr heat input, and fugitive emissions reporting to roof monitor EP673-6508.
- (H) One (1) natural gas-fired Continuous Hardening and Normalizing Furnace, constructed in 1966, identified as EU673-24, with a maximum capacity of 100 MMBtu/hr heat input, and fugitive emissions reporting to roof monitor EP673-6508.
- (I) One (1) natural gas-fired Continuous Tempering Furnace, constructed in 1966, identified as EU673-25, with a maximum capacity of 100 MMBtu/hr heat input, and fugitive emissions reporting to roof monitor EP673-6508.
- (6) 110 Inch Plate Mill operations consisting of:
 - (A) Two (2) Slab Reheat Furnaces- Continuous Walking Beam No.1 and No.2, capable of firing natural gas, coke oven gas, No.2 and No.6 fuel oil, both constructed in 1977, identified as EU674-26 and 27, respectively, each with maximum rated capacities of 380 MMBtu/hr heat input, equipped with low NOx burners, with emissions collectively exhausting at stack EP674-7001.
 - (B) One (1) natural gas-fired Normalizing Furnace, capable of firing natural gas, and No.2 and No.6 fuel oil, constructed in 1979, identified as EU674-30, with a maximum capacity of 82 MMBtu/hr heat input, and emissions exhausting to stack EP674-7005.
 - (C) One (1) natural gas-fired Flame Cutting torch operation (Extra Process Building), constructed in 1965, identified as EU674-28, with fugitive emissions reporting to roof monitor EP674-7004.
 - (D) One (1) Rolling Process, constructed in 1977, identified as EU674-33, with fugitive emissions reporting to roof monitor EP674-7003.

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

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

D.7.1 Particulate [326 IAC 6-3-2]

Pursuant to 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes), the allowable particulate emission rate from the slab grinder (EU673-08), the 160 inch plate mill rolling process (EU673-32), and the 110 inch plate mill rolling process (EU674-33) shall each not exceed the pound per hour emission rate established as E in the following formula:

Interpolation and extrapolation of the data for the process weight rate in excess of 60,000 pounds per hour shall be accomplished by use of the equation:

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

D.7.2 Source Specific and Facility Emission Limitations for TSP in Porter County [326 IAC 6-6]

Pursuant to 326 IAC 6-6-4, Bethlehem Steel Corporation (ISG Burns Harbor) specific source and facility TSP emission limits, the annual particulate matter emissions of each of the following facilities shall not exceed the limit listed below for that facility:

- (a) The Plate Mill Furnace No.1 and No.2 (EP673-6503) annual particulate matter emissions shall not exceed 0.082 lb/MMBtu.
- (b) The 160 Inch Plate Mill Boiler No. 2 and No.4 (EP673-6504) annual particulate matter emissions shall not exceed 0.082 lb/MMBtu.
- (c) The 110 Inch Plate Mill Furnaces No.1 and 2 (EP674-7001) annual particulate matter emissions shall not exceed 0.080 lb/MMBtu.
- (d) The 160 Inch Plate Mill In & Out Furnaces No.5, 6 and 7 (EP673-6501 and 6502) annual particulate matter emissions shall not exceed 0.088 lb/MMBtu.
- (e) The 160 Inch Plate Mill In & Out Furnaces No. 8 (EP673-6505) annual particulate matter emissions shall

not exceed 0.081 lb/MMBtu.

- (f) The 110 Inch Plate Mill Normalizing Furnace (EP674-7005) annual particulate matter emissions shall not exceed 0.015 lb/MMBtu.
- (g) The 160 Inch Plate Mill Heat Treating Furnace (EU673-23, 24, and 25) annual particulate matter emissions shall each not exceed 0.005 lb/MMBtu.

This condition is not federally enforceable.

D.7.3 Porter County Sulfur Dioxide Limitations [326 IAC 7-4-14]

- (a) Pursuant to 326 IAC 7-4-14(1)(A)(ii) and (iii), the Continuous Hardening and Annealing Heat Treatment Furnace (Car Bottom Furnace EU673-23, Continuous Hardening and Normalizing Furnace EU673-24, and Continuous Tempering Furnace EU673-25), and the 160 inch Plate Mill Boilers No.2 and 4 (EU673-??), shall burn natural gas only.
- (b) Pursuant to 326 IAC 7-4-14(1)(B)(viii) and (ix), and (xi) through (xv), the following facilities shall comply with the sulfur dioxide emission limitations listed:
 - (1) The Slab Reheat Furnace No.1 (EP673-6503) shall not exceed 1.96 lb/MMBtu and 299 lb/hr of sulfur dioxide.
 - (2) The Slab Reheat Furnace No.2 (EP673-6504) shall not exceed 1.96 lb/MMBtu and 299 lb/hr of sulfur dioxide.
 - (3) The 110 Inch Plate Mill Furnaces No.1 and 2 (EP674-7001) shall not exceed 1.96 lb/MMBtu and 441 lb/hr of sulfur dioxide.
 - (4) The 110 Inch Plate Mill Normalizing Furnace (EP674-7005) shall not exceed 1.07 lb/MMBtu and 88 lb/hr of sulfur dioxide.
 - (5) The 160 Inch Plate Mill In & Out Furnaces No. 4 and 5 (EP673-6501) shall not exceed 1.96 lb/MMBtu and 274 lb/hr of sulfur dioxide.
 - (6) The 160 Inch Plate Mill In and Out Furnaces No. 6 and 7 (EP673-6502) shall not exceed 1.96 lb/MMBtu and 274 lb/hr of sulfur dioxide.
 - (7) The 160 Inch Plate Mill In & Out Furnaces No. 8 (EP673-6505) shall not exceed 1.96 lb/MMBtu and 176 lb/hr of sulfur dioxide.

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

D.7.4 Visible Emissions Notations

- (a) Except for times when natural gas is the sole combustion fuel, visible emission notations of the stack exhausts at the 160 Inch Plate Mill (EP673-6503, 6504, 6501, 6502, 6505), the 110 Inch Plate Mill (EP674-7001, 7005), and visible emissions notations of the Slab Grinder stack (EP673-6603) 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

D.7.5 Parametric Monitoring

The Permittee shall record the pressure drop across the Slab Grinder baghouse at least once per day when the process is in operation. When for any one reading, the pressure drop across the baghouse is outside the normal range of 4.0 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 from this permit.

The instrument used for determining the pressure shall comply with Section C - Instrument Specifications, of this permit, and shall be calibrated in accordance with the manufacturer's specifications. The specifications shall be available on site with the Preventive Maintenance Plan.

D.7.6 Broken or Failed Bag Detection

For a single compartment baghouse controlling emissions from a batch process, the feed to the process shall be shut down immediately until the failed unit has been repaired or replaced. The emissions unit shall be shut down no later than the completion of the processing of the material in the line. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions).

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

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

D.7.7 Record Keeping Requirements

- (a) To document compliance with conditions D.7.2 and D.7.3, the Permittee shall maintain records in accordance with Section C - Record Keeping and Reporting Requirements, of this permit.
- (b) To document compliance with condition D.7.4, the Permittee shall maintain records of visible emission notations of the stack exhausts specified, except for times when natural gas is the sole combustion fuel.
- (c) To document compliance with condition D.7.5, the Permittee shall maintain records of the pressure drop for the units specified during normal operation.
- (d) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

D.7.8 Reporting Requirements

- (a) To determine compliance with conditions D.7.2 and D.7.3, the Permittee shall submit reports in accordance with Section C - Record Keeping and Reporting Requirements, of this permit.
- (b) The natural gas certification 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 its equivalent, within thirty (30) days after the end of the six (6) month period being reported. The natural gas-fired certification does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

SECTION D.8

FACILITY OPERATION CONDITIONS

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

- (h) Hot strip mill (HSM) operations consisting of:
- (1) Various natural gas-fired portable cutting torches and hand scarfers with fugitive emissions reporting to roof monitors EP670-5501, 5502, and 5516.
 - (2) One (1) reheat furnace No.1, capable of firing natural gas, coke oven gas, and/or propane, constructed in 1966, identified as EU670-05, with a maximum capacity of 730 MMBtu/hr of heat input, equipped with low NOx burners, with exhausts at stacks EP670-5504 and 5505.
 - (3) One (1) reheat furnace No.2, capable of firing natural gas, coke oven gas, and/or propane, constructed in 1966, identified as EU670-06, with a maximum capacity of 730 MMBtu/hr of heat input, equipped with low NOx burners, with exhausts at stacks EP670-5506 and 5507.
 - (4) One (1) reheat furnace No.3, capable of firing natural gas, coke oven gas, and/or propane, constructed in 1966, identified as EU670-07, with a maximum capacity of 730 MMBtu/hr of heat input, with exhausts at stacks EP670-5508 and 5509.
 - (5) One (1) hot strip mill rolling process constructed in 1966, identified as EU670-08, with fugitive emissions reporting to roof monitors EP670-5510, 5511, and 5512.

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

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

D.8.1 Particulate Emission Limitations for Manufacturing Processes [326 IAC 6-3-2]

- (a) Pursuant to 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes), the particulate from the Hot Strip Mill Rolling process (EU670-08) shall not exceed the pound per hour emission rate established as E in the following formula:

Interpolation and extrapolation of the data for the process weight rate in excess of 60,000 pounds per hour shall be accomplished by use of the equation:

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

- (b) Pursuant to 326 IAC 6-3-2 (Particulate Emissions Limitations), when the process weight exceeds two hundred (200) tons/hour, the maximum allowable emission may exceed that shown in the table, provided the concentration of particulate matter in the discharge gases to the atmosphere from roof monitors EP670-5510, 5511, and 5512, are less than 0.10 pounds per one thousand (1,000) pounds of gases.

D.8.2 Source Specific and Facility Emission Limitations for TSP in Porter County [326 IAC 6-6]

Pursuant to 326 IAC 6-6-4, Bethlehem Steel Corporation (ISG Burns Harbor) specific source and facility TSP emission limits, the annual particulate matter emissions of each of the following facilities shall not exceed the limit listed below for that facility:

- (a) The 80 inch Hot Strip Mill Furnace No.1 (EP670-5504, 5505) annual particulate matter emissions shall not exceed 0.085 lb/MMBtu.
- (b) The 80 inch Hot Strip Mill Furnace No.2 (EP670-5506, 5507) annual particulate matter emissions shall not exceed the collective limit of 0.084 lb/MMBtu.
- (c) The 80 inch Hot Strip Mill Furnace No.3 (EP670-5508, 5509) annual particulate matter emissions shall not exceed 0.084 lb/MMBtu.

This condition is not federally enforceable.

D.8.3 Porter County Sulfur Dioxide Limitations [326 IAC 7-4-14]

Pursuant to 326 IAC 7-4-14(1)(B)(x), the HSM Reheat Furnaces EU670-05, 06, and 07 sulfur dioxide emissions shall be limited to less than 1.96 lb/MMBtu each, and 79 lb/hr each.

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

D.8.4 Record Keeping Requirements

To document compliance with conditions D.8.2 and D.8.3, the Permittee shall maintain records in accordance with Section C - Record Keeping and Reporting Requirements, of this permit.

D.8.5 Reporting Requirements

To determine compliance with conditions D.8.2 and D.8.3, the Permittee shall submit reports in accordance with Section C - Record Keeping and Reporting Requirements, of this permit.

SECTION D.9

FACILITY OPERATION CONDITIONS

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

- (i) Cold sheet mill operations, with a maximum annual production of 2,300,000 tons of treated steel consisting of:
- (1) Pickle line No.1 constructed in 1965, identified as EU672-01, with emissions controlled by two fume scrubbers, C672-6001 and 6002, both exhausting at stack EP672-6001.
 - (2) Pickle line No.2 constructed in 1968, identified as EU672-02, with emissions controlled by fume scrubber C672-6002, exhausting at stack EP672-6001.
 - (3) Pickle line acid storage tanks constructed in 1968, collectively identified as EU672-03, consisting of:
 - (A) Pickle line No.1- four (4) acid and rinse tanks, each with a storage capacity of 35,000 gallons, collectively controlled by fume scrubber C672-6002.
 - (B) Pickle line No.1- one (1) waste pickle liquor tank, with a storage capacity of 35,000 gallons, controlled by fume scrubber C672-6002.
 - (C) Pickle line No.2- four (4) acid and rinse tanks, each with a storage capacity of 35,000 gallons, collectively controlled by fume scrubber C672-6002.
 - (D) Pickle lines Nos.1 and 2- six (6) HCL acid gravity fed storage tanks vented at EP672-6002.
 - (4) One (1) 80 inch five (5) stand tandem mill constructed in 1965, identified as EU672-04, with emissions controlled by mist eliminator C672-6003, exhausting at stack EP672-6008.
 - (5) One (1) natural gas-fired batch annealing process constructed in 1965, identified as EU672-05, consisting of twenty-four (24) furnaces, with a combined maximum rated capacity of 240 MMBtu/hr heat input, or 10 MMBtu/hr heat input each furnace, with fugitive emissions reporting to roof monitor EP672-6009.
 - (6) Natural gas-fired continuous heat treat line (CHTL) preheat, heat and soak furnaces constructed in 1983, collectively identified as EU672-07, with a combined maximum rated capacity of 76 MMBtu/hr heat input, with preheat emissions exhausting at stack EP672-6014, and heat and soak emissions at stack EP672-6015.
 - (7) One (1) natural gas-fired CHTL reheat furnace constructed in 1983, identified as EU672-08, with a maximum rated capacity of 34 MMBtu/hr heat input, with emissions exhausting at stack EP672-6017.
 - (8) One (1) CHTL pickling tank constructed in 1983, identified as EU672-09, with emissions controlled by fume scrubber C672-6006, exhausting at stack EP672-6022.
 - (9) One (1) hot dip coating line (HDCL) for hot galvanizing, galvannealing, chemical treatment and cleaning of steel, constructed in 1992, identified as EU672-13, with a maximum capacity of 140 tons of steel coil per hour, with cleaning section emissions controlled by fume scrubbers C672-6007, exhausting at stack EP672-6022.
 - (10) One (1) natural gas-fired HDCL radiant tube furnace constructed in 1992, identified as EU672-14, with a maximum capacity of 95 MMBtu/hr heat input, with NOx emissions controlled by selective catalytic reduction (SCR) equipped with a continuous emissions monitoring system (CEMS) C672-6008 measuring NOx and CO₂, exhausting at stack EP672-6023.
 - (11) One (1) temper mill constructed in 1965, identified as EU672-11, with emissions controlled by mist eliminator C672-6010, exhausting at stack EP672-6024.
 - (12) One (1) cold mill finishing process constructed in 1965, identified as EU672-12, with fugitive emissions reporting to roof monitor EP672-6034.

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

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

D.9.1 Particulate Emission Limitations [326 IAC 6-3] [326 IAC 6-6]

- (a) Pursuant to 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes), the allowable particulate emission rate from the Cold Mill operations shall not exceed the pound per hour emission rate established as E in the following formula:

Interpolation and extrapolation of the data for the process weight rate in excess of 60,000 pounds per hour shall be accomplished by use of the equation:

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

- (b) Pursuant to Operating Permits 64-01-93-0234 to 0236, issued January 25, 1989, particulate matter emissions at the CHTL shall be limited pursuant to 326 IAC 6-6-4. The annual particulate matter emissions of each of the following facilities shall not exceed the limit listed below for that facility:
- (1) The Continuous Anneal Furnace (CHTL, EP672-6014) annual particulate matter emissions shall not exceed 0.005 lb/MMBtu.
 - (2) The 24 Batch Annealing Furnaces (EP672-6009) annual particulate matter emissions shall not exceed the collective limit of 0.015 lb/MMBtu.
 - (3) The Continuous Anneal Preheating (CHTL, EP672-6014) annual particulate matter emissions shall not exceed 0.005 lb/MMBtu.
 - (4) The Continuous Anneal Heating and Soaking (CHTL, EP672-6015) annual particulate matter emissions shall not exceed 0.005 lb/MMBtu.
 - (5) The Continuous Anneal Reheating (CHTL, EP672-6017) annual particulate matter emissions shall not exceed 0.005 lb/MMBtu.

Part (b) above is not federally enforceable.

D.9.2 Porter County Sulfur Dioxide Limitations [326 IAC 7-4-14]

- (a) Pursuant to 326 IAC 7-4-14(1)(A)(iv), the 24 Batch Annealing Furnaces (EU672-05), shall burn natural gas only.
- (b) Pursuant to 326 IAC 7-4-14(1)(A)(v), the Continuous Heat Treat line (CHTL) Preheat, Heating, and Soaking, and Reheat (EU672-07 and 08), shall burn natural gas only.

D.9.3 Nitrogen Oxide Emission Limitation

Pursuant to Construction Permit 127-1989-00001, issued February 14, 1992, NOx emissions from the HDCL shall not exceed 2.99 pounds per hour (0.031 pounds per MMBtu).

D.9.4 Particulate

Pursuant to Construction Permit 127-1989-00001, issued February 14, 1992, the particulate matter emissions from the scrubbers (C672-6007) shall not exceed 0.01 grains per cubic foot, and the flow rate for the cleaning section scrubber (C672-6007) shall not exceed 15,000 cfm, and the flow rate for the chemical treatment scrubber (C672-6007) shall not exceed 8,000 cfm.

D.9.5 General Provisions Relating to 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 20-1-1, apply to the emission units described in this section except when otherwise specified in 40 CFR Part 63, Subpart CCC.

D.9.6 National Emission Standards for Hazardous Air Pollutants for Steel Pickling - HCl Process Facilities and Hydrochloric Acid Regeneration Plants [40 CFR Part 63, Subpart CCC][40 CFR Part 63.1157]

Pursuant to 40 CFR Part 63, Subpart CCC, the Permittee shall not cause or allow to be discharged into the atmosphere from the affected pickling lines (EU672-01, 02):

- (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.9.7 NESHAP Maintenance Requirements [40 CFR Part 63.1160, Subpart CCC]

The Permittee shall comply with the operation and maintenance requirements of 40 CFR Part 63.6(e) (Subpart A,

General Provisions) at the affected pickling lines (EU672-01, 02). Pursuant to 40 CFR Part 63.1160, Subpart CCC, the Permittee shall prepare an operation and maintenance plan for each emission control device to be implemented no later than the compliance date. The plan shall be incorporated by reference into the source's Part 70 Operating Permit. All such plans must be consistent with good maintenance practices and, for a scrubber emission control device, must at a minimum:

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

D.9.8 NESHAP Operational and equipment standards [40 CFR Part 63.1159, Subpart CCC]

Pursuant to 40 CFR Part 63.1159, Subpart CCC, the Permittee of an affected vessel (hydrochloric acid storage vessels) shall provide and operate, except during loading and unloading of acid, a closed-vent system for each vessel. Loading and unloading shall be conducted either through enclosed lines or each point where the acid is exposed to the atmosphere shall be equipped with a local fume capture system, ventilated through an air pollution control device.

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

D.9.9 Testing Requirements [326 IAC 2-7-6(1),(6)] [326 IAC 2-1.1-11]

- (a) Within 30 to 36 months following the most recent compliance stack test, or upon issuance of this permit, compliance with the PM and NO_x limitations in conditions D.9.1 and D.9.3 shall be determined by a performance stack test conducted utilizing methods as approved by the Commissioner. This test shall be repeated at least once every five (5) calendar years following this valid compliance demonstration. Testing shall be conducted in accordance with Section C- Performance Testing.

D.9.10 Nitrogen Oxides

Pursuant to Construction Permit 127-1989-00001, issued February 14, 1992;

- (a) In order to ensure eighty percent (80%) destruction efficiency for nitrogen oxides in the proposed selective catalytic reduction/NO_x control device (C672-6008), the following operating parameters shall be maintained:
 - (1) a minimum of 0.8 moles of ammonia per mole of NO_x;
 - (2) the operating temperature of the device shall be maintained between 500F and 900F.
- (b) The continuous emissions monitoring systems shall be calibrated and operated to measure the nitrogen oxides emissions and carbon dioxide emissions from the stack through which the HDCL annealing furnace is exhausted (EP672-6023), pursuant to 326 IAC 3.

D.9.11 Testing Requirements [40 CFR Part 63.1161] [40 CFR Part 63.1162]

- (a) Within twelve (12) months of permit issuance, the Permittee shall conduct a performance test for the Pickling Lines (EU672-01, 02) to determine and demonstrate compliance with the applicable emission limitation according to the requirements of 40 CFR Part 63.7 (Subpart A, General Provisions). This initial performance test shall meet the following minimum requirements:
 - (1) Following approval of the site-specific test plan, the Permittee shall conduct a performance test for each process or control device to either measure simultaneously the mass flows of HCl at the inlet and the outlet of the control device (to demonstrate compliance with the applicable collection efficiency standard) or measure the concentration of HCl in gases exiting the process or the emission control device (to demonstrate 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 as applicable. 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 Part 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 Part 63.1161. Performance tests shall be conducted according to an alternative schedule approved by IDEM, OAQ, every two and half (2.5) years or twice per Part 70 Operating Permit term. If any performance test shows that the HCl emission limitation is being exceeded, the Permittee is in violation of the emission limit.
- (d) Pursuant to 40 CFR Part 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 Part 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 Part 60 shall be used to determine compliance under 40 CFR Part 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.

D.9.12 Monitoring Requirements [40 CFR Part 63.1162]

The Permittee shall:

- (a) In addition to conducting performance tests, if a wet scrubber is used as the emission control device, install, operate and maintain systems for the measurement and recording of the scrubber makeup water flow rate and, if required, recirculation water flow rate. These flow rates must be monitored continuously and recorded at least once per shift while the scrubbers are operating. Operation of the wet scrubbers 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.9.13 Monitoring Requirements [40 CFR Part 63.1162]

Pursuant to 40 CFR Part 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.

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

D.9.14 Visible Emissions Notations

- (a) Visible emission notations of stack exhausts EP672-6008, and 6024 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.

D.9.15 Parametric Monitoring

The Permittee shall record the pressure drop across the Tandem Mill mist eliminator C672-6003 and the Temper Mill mist eliminator C672-6010, at least once per day when their associated facilities are in operation. When for any one reading, the pressure drop across the baghouse is outside the normal range of 4.0 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 from this permit.

The instrument used for determining the pressure shall comply with Section C - Instrument Specifications, of this permit, and shall be calibrated in accordance with the manufacturer's specifications. The specifications shall be available on site with the Preventive Maintenance Plan.

D.9.16 Mist Eliminator Failure

In the event that mist eliminator failure has been observed for C672-6003 and 6010, 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 Requirement [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

D.9.17 Record Keeping Requirements

- (a) To document compliance with conditions D.9.1(b) and D.9.2, the Permittee shall maintain records in accordance with Section C - Record Keeping and Reporting Requirements, of this operating permit.
- (b) Pursuant to Construction Permit 127-1989-00001, issued February 14, 1992, a log of information necessary to document compliance with condition D.9.10 shall be maintained.
- (c) To document compliance with condition D.9.14, the Permittee shall maintain records of visible emission notations for the specified stack exhausts.
- (d) To document compliance with condition D.9.15, the Permittee shall maintain records of the pressure drop during normal operation.
- (e) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

D.9.18 Reporting Requirements

To determine compliance with conditions D.9.1(b) and D.9.2, the Permittee shall submit reports in accordance with Section C - Record Keeping and Reporting Requirements, of this permit.

D.9.19 Record Keeping Requirements [40 CFR 63, Subpart CCC]

- (a) To document compliance with conditions D.9.6 and D.9.7, the Permittee shall maintain the following records pursuant to 40 CFR Part 63.1165:
 - (1) The Permittee, as required by 40 CFR Part 63.10(b)(2) (Subpart A, General Provisions), shall maintain general records for 5 years from the date of each record of:
 - (A) The occurrence and duration of each startup, shutdown, or malfunction of operation;
 - (B) The occurrence and duration of each malfunction of the air pollution control equipment;

- (C) All maintenance performed on the air pollution control equipment;
 - (D) Actions taken during periods of startup, shutdown, and malfunction and the dates of such actions when these actions are different from the procedures specified in the startup, shutdown, and malfunction plan;
 - (E) All information necessary to demonstrate conformance with the startup shutdown, and malfunction plan when all actions taken during periods of startup, shutdown, and malfunction (including corrective actions to restore malfunctioning process and air pollution control equipment to its normal or usual manner of operation) are consistent with the procedures specified in such plan. This information can be recorded in a checklist or similar form (see 40 CFR Part 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 Part 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
 - (D) 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. 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 for 2 years. Records for the 3 years prior to the 2 most recent years may be maintained off site.
- (c) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

- (a) As required by 40 CFR Part 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 by 40 CFR Part 63.1163.
- (b) The Permittee of an affected source who is required to submit progress reports pursuant to 40 CFR Part 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 Part 63.6(e), the Permittee of an affected source shall 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 Part 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.
- (c) Pursuant to 40 CFR Part 63.10(d)(5)(l), 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
- (d) 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 Part 63.10(d)(5)(ii).
- (c) Reports shall be submitted in accordance with Section C – General Reporting Requirements of this permit.
- (d) Reports submitted by the Permittee require the certification by the “responsible official” as defined by 326 IAC 2-7-1(34).

SECTION D.10

FACILITY OPERATION CONDITIONS

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

- (j) One (1) Power Station, consisting of the following boilers:
- (1) No.7 boiler, capable of firing natural gas, coke oven gas, and blast furnace gas, constructed in 1978 and modified in 1990, identified as EU460-01, with a rated capacity of 650 MMBtu/hr heat input, with emissions exhausting at stack EP460-2501;
 - (2) No.8 boiler, capable of firing natural gas, coke oven gas, blast furnace gas, and No.2 and No.6 fuel oil, constructed in 1972, identified as EU460-02, with a rated capacity of 650 MMBtu/hr heat input, with emissions exhausting at stack EP460-2502;
 - (3) No.9 boiler, capable of firing natural gas, coke oven gas, blast furnace gas, and No.2 and No.6 fuel oil, constructed in 1972, identified as EU460-03, with a rated capacity of 650 MMBtu/hr heat input, with emissions exhausting at stack EP460-2503;
 - (4) No.10 boiler, capable of firing natural gas, coke oven gas, blast furnace gas, and No.2 and No.6 fuel oil, constructed in 1971, identified as EU460-04, with a rated capacity of 650 MMBtu/hr heat input, with emissions exhausting at stack EP460-2504;
 - (5) No.11 boiler, capable of firing natural gas, coke oven gas, blast furnace gas, and No.2 and No.6 fuel oil, constructed in 1969, identified as EU460-05, with a rated capacity of 650 MMBtu/hr heat input, with emissions exhausting at stack EP460-2505; and
 - (6) No.12 boiler, capable of firing natural gas, coke oven gas, blast furnace gas, and No.2 and No.6 fuel oil, constructed in 1969, identified as EU460-06, with a rated capacity of 650 MMBtu/hr heat input, with emissions exhausting at stack EP460-2506.

(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 Particulate Matter (PM)

- (a) Pursuant to PC (64) 1831, issued February 14, 1990, boiler No.7 particulate matter/PM10 emissions shall be limited to 0.10 lb/MMBtu heat input.
- (b) Pursuant to 326 IAC 6-2-2 (Particulate Emission Limitations for Sources of Indirect Heating: Emission limitations for facilities specified in 326 IAC 6-2-1(b)), the PM emissions from the boilers No.8 through No.12 (EU460-02 to 06) shall not exceed 0.23 pound per million Btu heat input (lb/MMBtu). This limit is calculated using the total source maximum operating capacity rating of Q, which equals 4570 MMBtu per hour, in the following equation:
$$Pt = \frac{0.87}{Q^{0.16}} \quad \text{where } Pt = \text{Pounds of particulate matter emitted per million Btu (lb/mmBtu) heat input.}$$
$$Q = \text{Total source maximum operating capacity rating in million Btu per hour (mmBtu/hr) heat input which is 4570 MMBtu/hr.}$$
- (c) Pursuant to 326 IAC 6-6-4, Bethlehem Steel Corporation specific source and facility TSP emission limits (ISG Burns Harbor), the annual particulate matter emissions of each of the following facilities shall not exceed the limit listed below for that facility:
 - (1) The Power Station Boiler Nos. 8, 9, 10, 11, and 12 (EP460-2502 to 2506) annual particulate matter emissions shall not exceed the collective limit of 0.088 lb/MMBtu.
 - (2) The Power Station Boiler No.7 (EP460-2501) annual particulate matter emissions shall not exceed 0.10 lb/MMBtu.

This condition part is not federally enforceable.

D.10.2 Porter County Sulfur Dioxide Limitations [326 IAC 7-4-14]

- (a) Pursuant to Pursuant to PC (64) 1831, issued February 14, 1990, and 326 IAC 7-4-14(1)(B)(xvi), the Power Station Boiler No.7 (EU520-01) sulfur dioxide emissions shall not exceed 0.8 lb/MMBtu, and 520 lb/hr.
- (b) Pursuant to 326 IAC 7-4-14(1)(B)(xvii), the Power Station Boilers No.8, No.9, No.10, No.11, and No.12 (EU520-02 to 06) sulfur dioxide emissions shall not exceed 1.45 lb/MMBtu, and 2,798 lb/hr, collectively.

D.10.3 Nitrogen Oxide Reduction Program for Specific Source Categories [326 IAC 10-3]

- (a) Pursuant to 326 IAC 10-3 (Nitrogen Oxide Reduction Program for Specific Source Categories) Section 1(a)(2), this rule applies to affected boilers No.7, No.8, No.9, No.10, No.11, and No.12 (EU460-01 to 06).
- (b) Pursuant to 326 IAC 10-3-3, the Permittee shall comply with the following NO_x emission limits for each ozone control period:
 - (1) NO_x emissions shall be limited to seventeen-hundreds pound of NO_x per million Btus (0.17 lbs/MMBtu) of heat input over the ozone control period from each affected boiler;
 - (2) Ensure that fifty percent (50%) of the heat input shall be derived from blast furnace gas averaged over the ozone control period.
 - (3) During periods of blast furnace reline, startup, and period of malfunction, the affected boilers shall not be required to meet the requirement to derive fifty percent (50%) of the heat input from blast furnace gas.

D.10.4 General Provisions Relating to NSPS [326 IAC 12-1] [40 CFR Part 60, Subpart A]

The provisions of 40 CFR Part 60, Subpart A - General Provisions, which are incorporated by reference in 326 IAC 12-1, apply to boiler No.7 (EU460-01) except when otherwise specified in 40 CFR Part 60, Subpart D.

D.10.5 New Source Performance Standard (NSPS) [326 IAC 12] [40 CFR 60, Subpart D]

Pursuant to 326 IAC 12 and 40 CFR 60, Subpart D (Standards of Performance for Fossil-Fuel-Fired Steam Generators for Which Construction is Commenced After August 17, 1971), emissions from boiler No.7 (EU460-01) shall not exceed the following:

- (a) One-tenth (0.10) pound PM per million Btu (MMBtu) heat input derived from fossil fuel. [40 CFR 60.42(a)(1)]
- (b) Twenty percent (20%) opacity except for one six-minute period per hour of not more than twenty-seven (27%) opacity.[40 CFR 60.42(a)(2)] Pursuant to 40 CFR 60.11(c), this opacity standard is not applicable during periods of startup, shutdown, or malfunction.
- (c) When combusting different fossil fuels simultaneously, the applicable SO₂ limit shall be determined using the formula in 40 CFR 60.43(b).
- (d) Two-tenths (0.20) pound NO_x per million Btu (MMBtu) heat input derived from gaseous fossil fuel. [40 CFR 60.44(a)(1)]

D.10.6 General Provisions Relating to NESHAP [326 IAC 20-1][40 CFR Part 63, Subpart A]

The provisions of 40 CFR 63 Subpart A - General Provisions, which are incorporated as 326 IAC 20-1-1, apply to the affected sources, as designated by 40 CFR 63.7506(b), except when otherwise specified in 40 CFR 63 Subpart DDDDD. The Permittee must comply with these requirements on and after the effective date of 40 CFR 63, Subpart DDDDD.

D.10.7 National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers and Process Heaters [40 CFR Part 63, Subpart DDDDD]

- (a) The affected sources are subject to the National Emission Standards for Hazardous Air Pollutants (NESHAP) for Industrial, Commercial, and Institutional Boilers and Process Heaters, (40 CFR 63, Subpart DDDDD), as of the effective date of 40 CFR 63, Subpart DDDDD. Pursuant to this rule, the Permittee must comply with 40 CFR 63, Subpart DDDDD on and after three years after the date of publication of the final rule for 40 CFR 63, Subpart DDDDD in the Federal Register.

- (c) The following emissions units comprise the affected source for the large liquid fuel subcategory: No.7 boiler (EU460-01), No.8 boiler (EU460-02), No.9 boiler (EU460-03), No.10 boiler (EU460-04), No.11 boiler (EU460-05), and No.12 boiler (EU460-06).
- (d) The definitions of 40 CFR 63, Subpart DDDDD at 40 CFR 63.7575 are applicable to the affected sources.

Compliance Determination Requirements

D.10.8 Testing Requirements [326 IAC 2-7-6(1),(6)] [326 IAC 2-1.1-11]

Within 12 months of issuance of this permit or two and a half (2.5) years from the date of the most recent valid stack test, whichever is earlier, the Permittee shall perform PM and opacity testing using methods as approved by the Commissioner, in order to demonstrate compliance with condition D.10.1 and Section C - Opacity. These tests shall be repeated at least once every two (2) calendar years following this valid compliance demonstration. Testing shall be conducted in accordance with Section C- Performance Testing.

D.10.9 Nitrogen Oxide Reduction Program for Specific Source Categories [326 IAC 10-3]

Pursuant to 326 IAC 10-3-4(c):

- (a) The Permittee shall monitor fuel usage and percentage of heat input derived from each fuel combusted to demonstrate that greater than fifty percent (50%) of the heat input is derived from blast furnace gas for each ozone control period; and
- (b) For purposes of determining the number of violations, if an affected boiler has excess emissions for an ozone control period, each day in the ozone control period constitutes a day in violation unless the Permittee demonstrates that a lesser number of days should be considered.

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

D.10.10 Visible Emissions Notations

- (a) Except for times when natural gas is the sole combustion fuel, visible emission notations of the stack exhausts for boilers No.7, No.8, No.9, No.10, No.11, and No.12 (EP460-2501 to 2506) shall be performed once per day during normal daylight operations while combusting No.2 and/or No.6 fuel oil, including in combination with coke oven, blast furnace, or natural gas. 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.

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

D.10.11 Record Keeping Requirements

- (a) To document compliance with conditions D.10.1(c) and D.10.2, the Permittee shall maintain records in accordance with Section C – Record Keeping and Reporting Requirements, of this permit.
- (b) To document compliance with condition D.10.9, the Permittee shall maintain records of fuel usage and percent heat input.
- (c) To document compliance with condition D.10.10, the Permittee shall maintain records of visible emission notations of the stack exhausts for boilers No.7, No.8, No.9, No.10, No.11, and No.12 (EP460-2501 to

2506) exhaust while combusting permitted fuels, or a combination thereof.

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

D.10.12 Reporting Requirements

- (a) To determine compliance with conditions D.10.1(c) and D.10.2, the Permittee shall submit reports in accordance with Section C - Record Keeping and Reporting Requirements, of this permit.
- (b) The natural gas boiler certification for boilers No.7 to No.12 (EU460-01 to 06) 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 its equivalent, within thirty (30) days after the end of the six (6) month period being reported. The natural gas-fired boiler certification does require the certification by the responsible official as defined by 326 IAC 2-7-1(34).
- (c) To document compliance with conditions D.10.3 and D.10.9, and pursuant to 326 IAC 10-3-5(e), the Permittee shall submit a report to the IDEM, OAQ documenting compliance with all applicable requirements of this rule in accordance with its site specific compliance plan detailed under 326 IAC 10-3-3(c) for the ozone control period of each year by October 31, beginning in 2004 and each year thereafter.

D.10.13 National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers and Process Heaters - Notification Requirements [40 CFR 63, Subpart DDDDD]

- (a) Pursuant to 40 CFR 63.7545(a) and 40 CFR 63.7506(b), the Permittee shall submit an Initial Notification containing the information specified in 40 CFR 63.9(b)(2) not later than 120 days after the date of publication of the final rule for 40 CFR 63, Subpart DDDDD in the Federal Register, as required by 40 CFR 63.7545(b).

- (b) The notification required by paragraph (a) shall be submitted to:

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

The notification requires 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)]:

- (k) Service shops and technical maintenance operations, consisting of:
- (1) No.1 roll shop north shot blast booth constructed in 1967, identified as EU410-01, with particulate controlled by baghouse C410-1001, exhausting to stack EP410-1001, and fugitive emissions reporting to roof monitor EP410-1003.
 - (2) No.1 roll shop south shot blast booth constructed in 1965, identified as EU410-02, with particulate controlled by baghouse C410-1002, exhausting to stack EP410-1002, and fugitive emissions reporting to roof monitor EP410-1003.
 - (3) No.2 roll shop shot blast booth constructed in 1966, identified as EU411-03, with particulate controlled by baghouse C411-1503, exhausting to stack EP411-1502, and fugitive emissions reporting to roof monitor EP411-1501.
 - (4) One (1) locomotive shop paint booth constructed pre-1965, identified as EU420-07, with a maximum capacity of less than one vehicle per hour and less than one gallon of coating sprayed per vehicle, utilizing one HVLP spray gun, with fugitive emissions reporting to wall vent EP420-2021.

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

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

D.11.1 Particulate [326 IAC 6-3-2]

Pursuant to 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes), the allowable particulate emission rate from each shot blast booth (EU410-01, 02, and 03) shall not exceed the pound per hour emission rate established as E in the following formula:

Interpolation and extrapolation of the data for the process weight rate in excess of 60,000 pounds per hour shall be accomplished by use of the equation:

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

D.11.2 Source Specific and Facility Emission Limitations for TSP in Porter County [326 IAC 6-6]

Pursuant to 326 IAC 6-6-4, Bethlehem Steel Corporation (ISG Burns Harbor) specific source and facility TSP emission limits, the annual particulate matter emissions of each of the following facilities shall not exceed the limit listed below for that facility:

- (a) The No.1 Roll Shop Baghouse (EP410-1001, 1002) annual particulate matter emissions shall not exceed the collective limit of 1.7 lb/hr.
- (b) The No.2 Roll Shop Baghouse (EP411-1502) annual particulate matter emissions shall not exceed 0.07 lb/hr.

This condition is not federally enforceable.

D.11.3 Nonapplicability Limitations

The locomotive shop spray paint booth (EU420-07) shall comply with the following:

- (a) VOC emissions from the usage of coating, dilution solvents, and cleaning solvents shall not exceed fifteen (15) pounds per day before add-on controls, in order to exempt it from the applicable provisions of 326 IAC 8-10 (Automobile Refinishing); and
- (b) Usage of coating, dilution solvents, and cleaning solvents shall be limited to less than five (5) gallons per day, in order to exempt this manufacturing process under 326 IAC 6-3-1(b)(15) from the provisions of 326 IAC 6-3 (Particulate Emission Limitations for Manufacturing Processes).

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

D.11.4 Record Keeping Requirements

- (a) To document compliance with condition D.11.2, the Permittee shall keep records in accordance with Section C - Record Keeping and Reporting Requirements, of this permit
- (b) To document compliance with condition D.11.3, the Permittee shall keep records to demonstrate compliance by recording daily consumption (in pounds of VOC per day for 326 IAC 8-1-1(c), and in gallons of coating used per day for 326 IAC 6-3-1), and for 326 IAC 8-1-1(c), certification of VOC emission rates and daily calculation of VOC emissions.
- (c) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

SECTION D.12 FACILITY OPERATION CONDITIONS

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

- (I) Fugitive Dust Emissions Operations
 - (1) Coal and Coke Storage and Handling:
 - (A) Coal piles, identified as EU512-19 and 28, with respective fugitive emissions, EP512-3003 and 3093.
 - (B) Coal preparation process (Blending Building), identified as EU512-01, with particulate emissions controlled by dust suppressant spray identified as C512-3002, reporting to roof monitors EP512-3005 through 3011.
 - (C) Coke handling and screening process, identified as EU512-20 and 22, respectively, with fugitive emissions at EP512-3085 and roof monitor EP512-3034, respectively.
 - (2) Sinter Plant operations:
 - (A) Bay plant piles containing revert materials, identified as EU520-01, with fugitive emissions identified as EP520-3501.
 - (B) Sinter bedding piles, identified as EU520-02, with fugitive emissions identified as EP520-3503.
 - (C) Bedding plant material transfer, material conveyors, and junction houses, collectively identified as EU520-03, with fugitive emissions venting through any of six (6) separate openings in the sides of the building, each identified as EP520-3502, and EP520-3504 through 3508.
 - (3) Blast Furnace operations:
 - (A) C Casthouse Slag Pit fugitive emissions identified as EP520-3546.
 - (B) D Casthouse Slag Pit fugitive emissions identified as EP520-3559.
 - (C) Beach Iron operation fugitive emissions identified as EP520-3550.
 - (D) Ore Dock Unloading fugitive emissions identified as EP520-3517.
 - (E) Ore Field fugitive emissions identified as EP520-3526.
 - (4) Unregulated and regulated roads, consisting of:
 - (A) Paved and unpaved roads, identified as EU420-08, with fugitive emissions EP420-2008.
 - (B) Paved and unpaved slab haul roads, identified as EU420-10, with fugitive emissions EP420-2016.
 - (C) Regulated unpaved roads, identified as EU420-04, with fugitive emissions EP420-2018.
 - (D) Regulated paved roads, identified as EU420-11, with fugitive emissions EP420-2017.
 - (E) One (1) open air clean fill storage area, identified as EU420-20, with fugitive emissions EP420-2020.
 - (F) One (1) open air BOF land farming area for BOF slurry, identified as EU534-39, with fugitive emissions EP534-4050.
 - (G) One (1) open air mill scale piles area, identified as EU670-13, with fugitive emissions EP670-5513.

(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 Fugitive Dust Emissions [326 IAC 6-4]

Pursuant to 326 IAC 6-4-2 (Fugitive Dust Emission Limitations), sources generating fugitive dust shall be in violation of this rule, if any of the criteria listed in the rule are violated.

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

D.12.2 Fugitive Particulate Matter Emission Limitations [326 IAC 6-5]

Pursuant to 326 IAC 6-5-1(b) (Applicability), this rule applies to any new source of fugitive particulate matter emissions located anywhere in the state, requiring a permit as set forth in 326 IAC 2, which has not received all the necessary preconstruction approvals before December 13, 1985.

D.12.3 Bethlehem Steel Corporation fugitive dust control strategy [326 IAC 6-6-5]

- (a) Pursuant to 326 IAC 6-6-5 (Bethlehem Steel Corporation fugitive dust control strategy), part (a)(2), the nontraditional fugitive dust control program, can be adjusted on a daily basis as needed to take into account preceding day and forecasted meteorological conditions (for example, rainfall and temperature).
- (b) Pursuant to 326 IAC 6-6-5 (Bethlehem Steel Corporation fugitive dust control strategy), part (a)(2), Bethlehem (ISG Burns Harbor) shall control its low volatile coal storage piles (EU 512-19) by spraying them at least once per week with a chemical dust retardant.
- (c) Pursuant to 326 IAC 6-6-5, Bethlehem Steel Corporation (ISG Burns Harbor) fugitive dust control strategy, a total of twenty-four (24) miles of paved and unpaved roads as shown in Figure 1 of 326 IAC 6-6-5(b) shall be controlled as described below:
 - (1) A total of 12.7 miles of paved roads shall be cleaned three (3) times per week by water washing using a flusher truck except as indicated in subsection (a)(4) of this section. In addition, at least twice per week, 7.9 miles of these roads in the primary facilities area will also be wet swept using a tractor mounted broom following the flusher truck. Road shoulders on the 12.7 miles of paved roads will be graded as required and treated with a chemical dust retardant at the same frequency specified below for unpaved roads. Accumulated material on road shoulders will be removed at least once per month.
 - (2) A total of 11.3 miles of unpaved roads shall be controlled. This will consist of forming a uniform road surface by road grading to remove large material, and the application of a two (2) to four (4) inch layer of fine slag where necessary. Surfaces shall be sprayed with dust suppressant solution at an application rate consistent with the manufacturer's recommendations. The dust suppressant material and application rate shall be such that a crust will be formed on the road surface that is amenable to cleaning via flushing and sweeping. Road surfaces shall be cleaned twice per week with a flusher truck followed by a tractor mounted broom. Road surfaces shall be resprayed with chemical dust suppressant as necessary to maintain a cleanable surface. The solution strength and application rate will be determined prior to application based upon the condition of the surfaces.

Parts (a), (b) and (c) above are not federally enforceable.

- (d) Pursuant to CP127-2725-00001, issued January 28, 1994, for Coke Battery 2, and pursuant to 6-6-5, the Fugitive Dust Control Plan covering process, material handling fugitives, hoods, ventilation, and outside fugitive emission sources, shall continue to be implemented.

This condition part is federally enforceable because it is a condition of a federally enforceable construction permit.

D.12.4 Operation Condition

In accordance with IDEM letter dated February 17, 1998, (proposed operation condition 14, for CP 127-2725, A127-5804, and Case No. 94-A-J-1017) in lieu of original operation condition 14 of CP127-2725-00001, issued January 28, 1994, for Coke Battery 2, the 8,600 feet of the paved slab haul roads (EU420-10) shall be maintained in good condition. The PM emissions (EP420-2016) shall not exceed 5.4 lbs/VMT. The PM10 emission factor shall not exceed 1.2 lbs/VMT and 1.6 ounces/square yard. The average vehicle weight shall not exceed 157 tons.

Compliance Determination Requirements

D.12.5 Operation Condition Testing

To determine compliance with condition D.12.4, and in accordance with IDEM letter dated February 17, 1998, (proposed operation condition 14, for CP 127-2725, A127-5804, and Case No. 94-A-J-1017) in lieu of original operation condition 14 of CP127-2725-00001, issued January 28, 1994, for Coke Battery 2, the sampling of the 8,600 feet of the paved slab haul roads (EU420-10) shall use the procedure specified in U.S. EPA 600/2/79-103, titled "Iron and Steel Open Source Fugitive Emissions Evaluations," Appendix B. The tests shall be conducted every 14 days April through November except when:

- (a) the road is closed and barricaded;
- (b) there is 0.1 inch of rainfall in a 24 hour period; or
- (c) it is raining on the scheduled test day.

Testing shall be performed on the next available day.

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

D.12.6 Record Keeping Requirements

(a) To document compliance with condition D.12.3(c), and pursuant to 326 IAC 6-6-5(a)(3), Bethlehem Steel Corporation (ISG Burns Harbor) fugitive dust control strategy, records of all fugitive dust control activities shall be maintained. At a minimum, records shall contain the following information:

- (1) number of miles and location of the paved roads cleaned;
- (2) number of miles of unpaved roads which were treated including the type, quantity, and dilution ratio of dust retardant used.

This condition part is not federally enforceable.

(b) To document compliance with D.12.2(c), the Permittee shall keep and maintain records in accordance with 326 IAC 6-5 and Section C – General Record Keeping Requirements, of this permit.

D.12.7 Reporting Requirements

To document compliance with condition D.12.3(c), and pursuant to 326 IAC 6-6-5(a)(3), Bethlehem Steel Corporation (ISG Burns Harbor) fugitive dust control strategy, the information required by this provision shall be summarized into progress reports and submitted to IDEM, OAQ, quarterly.

SECTION D.13

FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)]: Specifically Regulated Insignificant Activities

- (a) A petroleum fuel, other than gasoline, dispensing facility having a storage capacity less than or equal to 10,500 gallons, and dispensing less than or equal to 230,000 gallons per month. [326 IAC 8-9-1]
- (b) The following VOC and HAP storage containers:
 - (1) Storage tanks with capacity less than or equal to 1,000 gallons and annual throughput less than 12,000 gallons.
 - (2) Vessels storing lubricating oils, hydraulic oils, machining oils, and machining fluids. [326 IAC 8-9-1]
- (c) Degreasing operations that do not exceed 145 gallons per 12 months, except if subject to 326 IAC 20-6. [326 IAC 8-3]
- (d) 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 degrees Celsius (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 degrees Celsius (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]
- (e) The following equipment related to manufacturing activities not resulting in the emission of HAPs: brazing equipment, torches, soldering equipment, welding equipment. [326 IAC 6-3-2]
- (f) Any of the following structural steel and bridge fabrication activities:
 - (1) Cutting 200,000 linear feet or less of one (1) inch plate or equivalent.
 - (2) Using 80 tons or less of welding consumables. [326 IAC 6-3-2]
- (g) Conveyors as follows: Covered conveyor for coal or coke conveying of less than or equal to 360 tons per day. [326 IAC 6-3-2]
- (h) Coal bunker and coal scale exhausts and associated dust collector vents. [326 IAC 6-3-2]
- (i) 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 6-3-2]
- (j) Vents from ash transport systems not operated at positive pressure. [326 IAC 6-3-2]

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

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

D.13.1 Particulate Emission Limitations For Processes with Process Weight Rates Less Than One Hundred (100) Pounds per Hour [326 IAC 6-3-2]

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

D.13.2 Insignificant Thresholds [326 IAC 2-7-1]

Pursuant to 326 IAC 2-7-1(21), to remain an insignificant activity, the potential uncontrolled emissions of each of the insignificant activities shall be less than the following:

- | | |
|--|--|
| Lead (Pb)= 0.6 ton/year or 3.29 lbs/day | Carbon Monoxide (CO)= 25 lbs/day |
| Sulfur Dioxide (SO ₂)= 5 lbs/hour or 25 lbs/day | Particulate Matter (PM)= 5 lbs/hour or 25 lbs/day |
| Nitrogen Oxides (NO _x)= 5 lbs/hour or 25 lbs/day | Volatile Organic Compounds (VOC)= 3 lbs/hr or 15 lbs/day |

D.13.3 Volatile Organic Compounds (VOC) [326 IAC 8-3-2]

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

- (a) Equip the cleaner with a cover;
- (b) Equip the cleaner with a facility for draining cleaned parts;
- (c) Close the degreaser cover whenever parts are not being handled in the cleaner;
- (d) Drain cleaned parts for at least fifteen (15) seconds or until dripping ceases;
- (e) Provide a permanent, conspicuous label summarizing the operation requirements;
- (f) Store waste solvent only in covered containers and not dispose of waste solvent or transfer it to another party, in such a manner that greater than twenty percent (20%) of the waste solvent (by weight) can evaporate into the atmosphere.

D.13.4 Volatile Organic Compounds (VOC) [326 IAC 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 of

carbon adsorption. Such systems shall be submitted to the U.S. EPA as a SIP revision.

D.13.5 Volatile Organic Liquid Storage Vessels [326 IAC 8-9-1]

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

Compliance Determination Requirement

D.13.6 Particulate Control

In order to comply with D.13.1, the control equipment for particulate control shall be in operation and control emissions from the grinding and machining operations at all times that the grinding and machining operations are in operation.

D.13.7 Volatile Organic Compounds (VOC) [326 IAC 8-3-8] (Material requirements for cold cleaning degreasers)

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

- (a) On and after November 1, 1999, no person shall Operate a cold cleaning degreaser with a solvent vapor pressure that exceeds two (2) millimeters of mercury (thirty-eight thousandths (0.038) pound per square inch) measured at twenty (20) degrees Celsius (sixty-eight (68) degrees Fahrenheit).
- (b) On and after May 1, 2001, no person shall Operate a cold cleaning degreaser with a solvent vapor pressure that exceeds one (1) millimeter of mercury (nineteen-thousandths (0.019) pound per square inch) measured at twenty (20) degrees Celsius (sixty-eight (68) degrees Fahrenheit).

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

D.13.8 Record Keeping Requirements

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

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

Records shall be maintained for the life of the vessel.

D.13.9 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, 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).
- (b) 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.

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY**

**PART 70 OPERATING PERMIT
CERTIFICATION**

Source Name: ISG Burns Harbor, LLC
Source Location: U.S. Highway 12, Burns Harbor, IN 46304
Mailing Address: P.O. Box 248, Chesterton, IN 46304
Part 70 Permit No.: T127-6301-00001

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

Please check what document is being certified:

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

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

Signature:

Printed Name:

Title/Position:

Phone:

Date:

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE BRANCH
100 North Senate Avenue
Indianapolis, Indiana 46204-2251
Phone: 317-233-5674
Fax: 317-233-5967**

**PART 70 OPERATING PERMIT
EMERGENCY OCCURRENCE REPORT**

Source Name: ISG Burns Harbor, LLC
Source Location: U.S. Highway 12, Burns Harbor, IN 46304
Mailing Address: P.O. Box 248, Chesterton, IN 46304
Part 70 Permit No.: T127-6301-00001

This form consists of 2 pages

Page 1 of 2

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

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

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

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

Page 2 of 2

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

Form Completed by: _____
Title / Position: _____
Date: _____
Phone: _____

A certification is not required for this report.

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

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

[Applicable for boilers greater than 10 MMBtu/hr that can burn both natural gas and other fuels. This certification is not required for boilers that can physically only burn natural gas.]

Source Name: ISG Burns Harbor, LLC
Source Location: U.S. Highway 12, Burns Harbor, IN 46304
Mailing Address: P.O. Box 248, Chesterton, IN 46304
Part 70 Permit No.: T127-6301-00001

Natural Gas Only

Alternate Fuel burned

From: _____ To: _____

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

Signature:

Printed Name:

Title/Position:

Phone:

Date:

A certification by the responsible official as defined by 326 IAC 2-7-1(34) is required for this report.

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

**PART 70 QUARTERLY REPORT
DRY COAL CHARGED**

Source Name: ISG Burns Harbor, LLC
Source Location: U.S. Highway 12, Burns Harbor, IN 46304
Mailing Address: P.O. Box 248, Chesterton, IN 46304
Part 70 Permit No.: T127-6301-00001
Emission Unit: Coke Battery No.2
Limit: 1,279,268.70 tons of dry coal per year, rolled monthly on a 12 month basis, with compliance determined at the end of each month.

Reporting Year: _____ Quarter: _____

Month	Dry Coal Charged Through Coke Battery No. 2		
	This Month (tons/month)	Previous 11 Months	12 Month Total (tons/year)

Form Completed By: _____

Title/Position: _____

Date: _____

Telephone: _____

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

Part 70 Quarterly Report

Source Name: ISG Burns Harbor, LLC
Source Address: U.S. Highway 12, Burns Harbor, Indiana
Mailing Address: P.O. Box 248, Chesterton, IN 46304
Part 70 Permit No.: T127-6301-00001
Facility: Hot Metal Transfer Stations (EU534-01, 02, and 03)
Parameter: Total hot iron throughput
Limit: 455,000 tons per month of hot iron

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: _____

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

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

Source Name: ISG Burns Harbor, LLC
Source Location: U.S. Highway 12, Burns Harbor, IN 46304
Mailing Address: P.O. Box 248, Chesterton, IN 46304
Part 70 Permit No.: T127-6301-00001

Months: _____ to Year: _____

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

NO DEVIATIONS OCCURRED THIS REPORTING PERIOD.

THE FOLLOWING DEVIATIONS OCCURRED THIS REPORTING PERIOD

Permit Requirement (specify permit condition #)

Date of Deviation:

Duration of Deviation:

Number of Deviations:

Probable Cause of Deviation:

Response Steps Taken:

Permit Requirement (specify permit condition #)

Date of Deviation:

Duration of Deviation:

Number of Deviations:

Probable Cause of Deviation:

Response Steps Taken:

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

Form Completed By: _____
Title/Position: _____
Date: _____
Phone: _____

Attach a signed certification to complete this report.

Indiana Department of Environmental Management Office of Air Quality

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

Source Background and Description

Source Name: ISG Burns Harbor, LLC
Source Location: U.S. Highway 12, Burns Harbor, Indiana, 46304
County: Porter
SIC Code: 3312
Operation Permit No.: 127-6301-00001
Permit Reviewer: Melissa Groch

The Office of Air Quality (OAQ) has reviewed a Part 70 Operating Permit application from ISG Burns Harbor, LLC, relating to the operation of a sintering plant, coke ovens, blast furnaces, steelmaking (BOF) and continuous casting, rolling mills, coating and pickling operations, and associated processes for the production of coke, chemical recovery coke oven products, iron, hot rolled steel, steel coils, steel strip, cold rolled and/or coated steel sheet and strip.

Source Definition

This steel works operation consists of a primary source, ISG (Indiana Steel Group) Burns Harbor, LLC (plant ID 00001), located at U.S. Highway 12, Burns Harbor, Indiana, with five contractors:

- (a) Indiana Flame (plant ID 00098);
- (b) Levy Company (plant ID 00026);
- (c) Mid-Continent Coal and Coke (plant ID 00108);
- (d) Oil Technology (plant ID 00074); and
- (e) PSC Metals, Inc. (plant ID 00076).

All are contracted services of ISG Burns Harbor, LLC, which are also located at U.S. Highway 12, Burns Harbor, Indiana.

IDEM has determined that ISG Burns Harbor, LLC, and its contractors, listed above, are one source under the Part 70 operating permit program. This source and its contractors are considered in this manner due to the fact that the contractors are providing ISG Burns Harbor, LLC, with services associated with steel mill operations at the sole permission of ISG Burns Harbor, LLC. Therefore, the term "source" in the Part 70 documents refers to both ISG Burns Harbor, LLC, and its contractors listed in (a) through (e) above.

Separate Part 70 permits will be issued to ISG Burns Harbor, LLC (TV 127-6301-00001), and its contractors solely for administrative purposes. The contractor Part 70 permit numbers are as follows:

- (a) Indiana Flame (TV 127-16202-00098), an on-site contracted service for operating an enclosed steel slab scarfing facility;
- (b) Levy Company (TV 127-7656-00026), a contracted service for a separation and screening plant;
- (c) Mid-Continent Coal and Coke (TV 127-7634-00108), a contracted service for a portable coke fines screening operation;
- (d) Oil Technology (TV 127-7667-00074), an on-site contracted service for waste oil recovery; and
- (e) PSC Metals, Inc. (TV 127-7664-00076), an on-site contracted service for scrap metal reclamation.

Permitted Emission Units and Pollution Control Equipment

(a) A Coke Oven process plant consisting of two (2) Coke Batteries, #1 and #2, with #1 modified in 1983 and a #2 pad-up rebuild (reconstruction) in 1994, each consisting of eighty-two (82) ovens, with maximum capacities of 1,400,000 and 1,371,870 tons per year of coal input respectively, consisting of the following:

(1) Batteries #1 & #2:

- (A) Battery #1 underfire, identified as EU512-08, with a maximum heat input of 465 MMBtu/hr, and opacity measured by a continuous opacity monitor, exhausting at stack EP512-3026.
- (B) Battery #2 underfire, identified as EU512-16, with a maximum heat input of 420 MMBtu/hr, and opacity measured by a continuous opacity monitor, exhausting at stack EP512-3027.
- (C) Pushing operations, identified as EU512-06 and 14, respectively, with particulate emissions for each battery controlled by baghouse C512-3024 exhausting at stack EP512-3024, and scrubber C512-3018 exhausting to stack EP512-3018.
- (D) Battery #1 gas collector main pressure valves, identified as EU512-07, exhausting to four (4) stacks collectively identified as EP512-3086 equipped with four (4) flares collectively identified as C512-3015.
- (E) Battery #2 gas collector main pressure valves, identified as EU512-15, exhausting to six (6) stacks collectively identified as EP512-3087 equipped with six (6) flares collectively identified as C512-3016.
- (F) Quenching operations, identified as EU512-09 and 17, respectively with emissions exiting stations EP512-3081 and 3082, including quench towers (servicing either battery) equipped with baffles and sprays.
- (G) Batteries #1 and #2 fugitive emissions are generated from the following:
 - (1) Charging operations, identified as EU512-04 and 12, respectively, with fugitive emissions EP512-3016 and 3022, respectively;
 - (2) Lids (four on each oven), identified as EU512-03 and 11, respectively, with fugitive emissions EP512-3015 and 3021, respectively;
 - (3) Offtake Systems, identified as EU512-02 and 10, respectively, with fugitive emissions EP512-3014 and 3020, respectively; and
 - (4) Doors, identified as EU512-05 and 13, with fugitive emissions EP512-3017 and 3023.

(b) Coke By-products Recovery plant, identified as EU512-18, constructed in 1969 and modified in 1972, consisting of the following:

(1) Equipment not required to be controlled under the provisions of Subpart L:

- EP512-3012 Tar Loading facility
- EP512-3049 Flushing Liquor Header
- EP512-3054 500 gallon open Surge Tank
- EP512-3055 Flushing Liquor Sump
- EP512-3056 Ammonia Absorber Recirculation Tank
- EP512-3059 Waste Water Sump #8
- EP512-3060 Two (2) Waste Ammonia Liquor Clarifiers [both currently out of service]
- EP512-3070 Ammonia Absorber Gas Drips Sump
- EP512-3080 Crystallizer Hotwell Sump
- EP512-3083 8000 gallon Tar Sludge Batch Tank
- EP512-3084 15000 gallon Tar Sludge Tank
- EP512-3088 No.9 Sump
- EP512-3041 Barometric Condenser
- EP512-3042 30,000 gallon Sulfuric Acid Tank
- EP512-3043 20,000 gallon Sulfuric Acid Tank [currently out of service]
- EP512-3044 Ball Mill

- (2) A gas blanketing system, identified as C512-3013, constructed in 1991, controlling the following associated equipment as required by the provisions of Subpart L, when in service:

EP512-3001 Tar Storage Tank A [currently out of service]
EP512-3002 Tar Precipitator Sump
EP512-3050 Flushing Liquor Decanter A, B, & C and sludge conveyor
EP512-3057 Purifier Muck Storage Tank
EP512-3067 Wash Oil Decanter
EP512-3068 No.5 Sump
EP512-3069 Tar Precipitator Seal Pots
EP512-3072 Tar Transfer Tank
EP512-3073 Flushing Liquor Circulation Tanks, North & South
EP512-3074 Tar Storage Tanks B & C
EP512-3075 Primary Cooler Condensate Tank
EP512-3077 Wash Oil Separation Tank
EP512-3078 Wash Oil Decanter Muck Storage Tank
EP512-3094 Exhauster's Area (Exhausters A, B and C including associated seal pots)

- (3) The following By-products Area Waste Water Treatment Facility emission units are subject to the provisions of Subpart FF:

EP512-3095 Mixing Tank
EP512-3096 Separation Tank
EP512-3097 Intermediate Tank
EP512-3098 Storage Tank
EP512-3099 Neutralization Tank
EP512-3100 1,000,000 gallon Waste Ammonia Liquid Clarifier
EP512-3101 Feed Tank

- (4) One (1) clean coke oven gas export line, identified as EU512-26, constructed in 1969, with a maximum export volume of 75 MMCF gas per day, equipped with emergency bleeder flare C512-3025 on stack EP512-3091.

- (c) One (1) Blast Furnace Granulated Coal Injection (BFGCI) system constructed in 1994, consisting of the following:

- (1) A Coal Storage and Reclaim System consisting of:

- (A) One (1) coal receiving conveyor system with a design rate of 2,300 tons per hour with emission points EP520-3522 and EP520-3565;
(B) One (1) coal delivery conveying system from the reclaim operation to the coal preparation building with emission points EP520-3569 and 3570.

(The two conveyor systems above are components of the material handling transfer stations, EU520-07.)

- (C) One (1) stacker/reclaimer operation, with a bulldozer and reclaim hoppers, identified as EU520-25, with fugitive emission points identified as EP520-3566 through 3568.

- (2) A Coal Preparation System consisting of:

- (A) Two (2) coal preparation systems collectively identified as EU520-60, consisting of two (2) raw coal storage bins with bin filters, identified collectively as C520-3509, exhausting at EP520-3578 and 79, respectively.
(B) Two (2) granulation mills or milling operations, with spinner separators pneumatically transporting coal via piping to the cyclone separators, identified as EU520-62, each with a baghouse for particulate control collectively identified as C520-3511, exhausting at EP520-3580 and 81; and

- (C) Two (2) natural gas-fired burners for the granulation mill dry gas coal heater, each rated at 25 MMBtu/hr.
- (3) Coal Product Storage and Delivery System:
- (A) Four (4) gravity fed Product Storage Bins, with transfer points enclosed and inside a building, which receive coal by enclosed chutes and screw conveyors, collectively identified as EU520-64, each with bin filters for particulate control collectively identified as C520-3513, exhausting at EP520-3582 through 85;
 - (B) Two (2) weigh feeders with no exhaust;
 - (C) Four (4) gravity fed Distribution Bins, with transfer points enclosed and inside a building, receiving coal from weigh hoppers through a slide gate assembly, identified as EU520-68, each with bin filters for particulate control collectively identified as C520-3517, exhausting at EP520-3586 through 89; and
 - (D) Eight (8) gravity fed Lock Hoppers, with transfer points enclosed and inside a building, feeding the blast furnace coal injectors via enclosed piping, identified as EU520-72, each with bin filters for particulate control collectively identified as C520-3521, and exhausting at EP520-90 through 97.
- (d) A Continuous Sintering process plant with a maximum throughput of 535 tons of sinter per hour located in the Blast Furnaces Department consisting of the following:
- (1) One (1) mixing drum identified as EU520-04, with emissions controlled by one (1) venturi wet scrubber identified as C520-3502, exhausting at stack EP520-3512.
 - (2) One (1) sintering operation, consisting of twelve (12) windboxes, collectively identified as EU520-05, with emissions exhausting through one (1) multiclone, consisting of eight (8) cyclones followed in series by one (1) venturi scrubber and mist eliminator, collectively identified as C520-3503, with VOC emissions monitored by a Continuous Emissions Monitor System (CEMS), exhausting at stack EP520-3513.
 - (3) A miscellaneous material handling operation, identified as EU520-06, with particulate emissions controlled by one (1) dedust baghouse, identified as C520-3501, exhausting at stack EP520-3511.
 - (4) A finished sinter cooler operation, identified as EU520-24, with fugitive emissions identified as EP520-3514.
- (e) Two (2) Blast Furnaces, designated as C and D, constructed in 1971 and modified in 1994, with a total maximum production rate of 455,000 tons of iron per month each, consisting of the following:
- (1) One (1) rail car thaw shed and thaw shed natural gas dryer, collectively identified as EU520-11, constructed in 1969, and fugitive emissions from all thaw shed activities reporting to two (2) roof monitors collectively identified as EP520-3564.
 - (2) One (1) car dumper shed, identified as EU520-08, and one (1) truck hopper, identified as EU520-27, with emissions from the car dumper controlled by baghouse C520-3506, and exhausting at stacks EP520-3520 (north) and 3532 (south), and various building openings for fugitive shed emissions collectively identified as EP520-3606.
 - (3) Material handling transfer stations, identified as EU520-07, consisting of conveyors, with fifteen (15) building openings identified as EP520-3516, 3518, 3519, 3523 to 3525, 3527, 3529, and 3571 to 3573.
 - (4) C Stockhouse, identified as EU520-12, reporting to roof monitor EP520-3530.
 - (5) D Stockhouse, identified as EU520-13, reporting to roof monitor EP520-3534.
 - (6) C Casthouses, East and West, identified as EU520-18a and 18b, with particulate emissions controlled by a TREC (Tilting Runner Emissions Control) system baghouse C520-3507 that exhausts at three (3)

- stacks collectively identified as EP520-3544, with fugitive emissions reporting to roof monitors identified as EP520-3543 and 3545.
- (7) D Casthouses, East and West, identified as EU520-19a and 19b, with particulate emissions controlled by a TREC (Tilting Runner Emissions Control) system baghouse C520-3508 that exhausts at three (3) stacks collectively identified as EP520-3557, with fugitive emissions reporting to roof monitors identified as EP520-3556 and 3558.
 - (8) Blast Furnace Offgas C which is conditioned by an integral gas cleaning collection train consisting of a cyclone, a scrubber, a septum valve, a mist eliminator, and a cooler collectively identified as C520-3529, routing conditioned blast furnace gas to the stoves and export line equipped with natural gas piloted flares, collectively identified as EP520-3540.
 - (9) Blast Furnace Offgas D which is conditioned by an integral gas cleaning collection train consisting of a cyclone, a scrubber, a septum valve, a mist eliminator, and a cooler collectively identified as C520-3531, routing conditioned blast furnace gas to the stoves and export line equipped with natural gas piloted flares, collectively identified as EP520-3553.
 - (10) Four (4) Stoves for Blast Furnace C, capable of combusting natural gas, conditioned blast furnace gas, and coke oven gas, with a total heat input rate of 660 MMBtu/hr, identified as EU520-18c, exhausting to EP520-3547.
 - (11) Four (4) Stoves for Blast Furnace D, capable of combusting natural gas, conditioned blast furnace gas, and coke oven gas, with a total heat input rate of 660 MMBtu/hr, identified as EU520-19c, exhausting to EP520-3560.
 - (12) One (1) Flue Dust handling system, identified as EU520-22 with dust catchers EU520-22a and 22b as particulate control for blast furnace C and D gas conditioning systems, respectively, with fugitive emissions EP520-3541 from blast furnace C gas conditioning system, and fugitive emissions EP520-3554 from blast furnace D gas conditioning system.
- (f) A Basic Oxygen Furnace (BOF) Shop operation located in the Steelmaking Department consisting of the following:
- (1) Three (3) Hot Metal Transfer/Desulfurization and Skimming Stations, with a total combined maximum throughput of 455,000 tons of hot metal per month, with #1 & #2 constructed in 1968, and #3 in 1978 and modified in 1992, each identified as EU534-01, 02, and 03, each with particulate emissions controlled by baghouses C534-4001, 4002, and 4003, respectively, exhausting at stacks EP534-4002, 4006, and 4008, respectively.
 - (2) Three (3) BOF Shop vessels, with #1 & #2 constructed in 1968 and #3 in 1978, identified as EU534-06a (No.1), EU534-06b (No.2), and EU534-07 (No.3), with a combined rated capacity of 500 tons per hour of molten steel, with emissions from vessels No.1 and No.2 (EU534-06a, 06b) controlled by three (3) scrubbers, numbered #2, #3, and #4 in parallel, collectively identified as C534-4004, each exhausting at respective stacks EP534-4013, 4014, and 4015, respectively, and emissions from vessel No.3 (EU534-07) controlled by scrubber C534-4007 exhausting to stack EP534-4017, equipped with CO flare C534-4008.
 - (3) Refining Cycles for three BOF Shop vessels, identified as EU534-10 for vessels No.1 and No.2 (EU534-06a, EU534-06b), and EU534-11 for vessel No.3 (EU534-07), using the respective exhausts and emissions control equipment for the associated BOF Shop vessels listed above.
 - (4) Three (3) Molten Steel Ladle Addition Stations consisting of:
 - (A) Station No.1 argon stirring, constructed in 1968, identified as EU534-14, with fugitive emissions reporting to roof monitor EP534-4003; and
 - (B) Stations No.2 and No.3 stirring and desulfurization, constructed in 1978, collectively identified as EU534-15, with particulate emissions from both controlled by baghouse C534-4016, exhausting to stack EP534-4031.

- (5) Two (2) Steel Ladle Treatment Stations No.4 and No.5, constructed in 1986, collectively identified as EU534-16, with particulate emissions controlled by baghouses C534-4017 and 4099, respectively, exhausting at respective stacks EP534-4031 and 4099.
- (6) One (1) Vacuum Degasser, identified as EU534-19, constructed in 1989, with a maximum capacity of 490,071 pounds per hour and 2,146,511 tons per year of hot steel, utilizing a steam ejector identified as C534-4019 for vessel evacuation, with exhausts to stack EP534-4034 which is equipped with a CO flare, identified as C534-4020.
- (7) Two (2) Continuous Casters, each with a maximum capacity of 1000 tons of molten steel per hour, consisting of:
 - (A) Continuous Caster #1 constructed in 1975 and modified in 1984, identified as EU595-24, with particulate emissions controlled by a demister identified as C595-4501, exhausting to stack EP595-4501; and
 - (B) Continuous Caster #2 constructed in 1985, identified as EU595-25, with particulate emissions controlled by three (3) demisters identified as C595-4504, exhausting to two stacks, collectively identified as EP595-4504.
- (8) One (1) natural gas fired FM boiler for the BOF Shop, constructed in 1968, identified as EU534-23, with a rated capacity of 50 MMBtu/hr heat input, exhausting to stack EP534-4018.

Steel making material handling operations consisting of:

- (9) One (1) Track hopper, constructed in 1989, identified as EU 534-21, with particulate emissions controlled by baghouse C534-4013, exhausting to stack EP534-4021.
- (10) Two (2) Junction Houses, constructed in 1968 and modified in 1996, identified as H1 (EU534-31) and H2 (EU534-32), enclosing the transfer points between conveyors L2 and L3, and L3 and L4, respectively, with particulate emissions controlled by two (2) baghouses, identified as C534-4014 and 15, respectively, with each exhausting to respective stacks EP534-4027 and 28.
- (11) Three (3) BOF weigh hoppers constructed in 1968 and modified in 1996, collectively identified as EU534-36, with particulate emissions controlled by two (2) baghouses, collectively identified as C534-4010, exhausting to respective stacks EP534-4020 and 4026.
- (12) Two (2) BOF vessel storage bins, constructed in 1968 and modified in 1996, collectively identified as EU534-33, with particulate emissions from both controlled by baghouse C534-4009, exhausting at stack EP534-4019.
- (13) Vacuum Degasser Material handling for alloy addition, constructed in 1989, identified as EU534-20, with particulate emissions controlled by baghouse C534-4018, exhausting to stack EP534-4033.

Additional steel making activities consisting of:

- (14) Eight (8) steel ladle and sub car dryers (including a torpedo car dryer), constructed in 1982, collectively identified as EU534-17, with fugitive emissions reporting to roof monitor EP534-4003.
 - (15) Teeming Aisles, constructed in 1969, collectively identified as EU534-18, with fugitive emissions reporting to roof monitor EP534-4003.
 - (16) Vacuum Degasser ladle dryers and preheaters, collectively identified as EU534-22, all using natural gas as fuel with maximum capacities of 7 MMBtu/hr for the preheat burner, 9 MMBtu/hr for the refractory dryer burner, and 4.5 MMBtu/hr for the refractory dryer burner, with all collectively exhausting at stack EP534-4036.
 - (17) BOF Auxiliaries, collectively identified as EU534-40, consisting of fugitive emissions EP534-4004, 4005, 4007, and 4051.
- (g) One (1) Slab/Plate Mill Complex consisting of the following operations and equipment:

- (1) No.1 Slab Yard operations consisting of one (1) natural gas-fired Flame Cutting Bed, constructed in 1976, identified as EU673-13, with fugitive emissions reporting to roof monitor EP673-6606.
- (2) No.2 Slab Yard operations consisting of:
 - (A) Three (3) natural gas-fired Slab Preheater Furnaces Nos.1, 2 & 3, constructed in 1964, collectively identified as EU673-10, with capacities of 16 MMBtu/hr heat input each for No.1 & No.2, and 5 MMBtu/hr heat input for No.3, with fugitive emissions from each reporting to roof monitor EP673-6605.
 - (B) One (1) natural gas-fired Flame Cutting Bed and one (1) natural gas-fired Scarfing Bed, constructed in 1964, identified as EU673-11 and EU673-12, respectively, with fugitive emissions from each reporting to roof monitor EP673-6605.
- (3) No.3 Slab Yard operations consisting of:
 - (A) Three (3) natural gas-fired Slab Preheater Furnaces Nos.4, 5, and 6, constructed in 1968, collectively identified as EU673-06, with capacities of 25 MMBtu/hr heat input for each, with fugitive emissions from each reporting to roof monitor EP673-6604.
 - (B) One (1) natural gas-fired Scarfing Bed, constructed in 1968, identified as EU673-07, with fugitive emissions reporting to roof monitor EP673-6604.
 - (C) One (1) natural gas-fired portable Heavy Gauge Flame Cutting Machine, constructed in 1976, identified as EU673-09, with fugitive emissions reporting to roof monitor EP673-6604.
 - (D) One (1) Slab Grinder, constructed in 1985, identified as EU673-08, with particulate emissions controlled by baghouse C673-6606, exhausting at stack EP673-6603.
- (4) No.4 Slab Yard operations consisting of two (2) outside natural gas-fired Slab Preheater Furnaces No.7 and No.8, constructed in 1978, collectively identified as EU673-05, with capacities of 25 MMBtu/hr heat input each, with fugitive emissions EP673-6601 and 6602.
- (5) 160 Inch Plate Mill operations consisting of:
 - (A) One (1) Slab Reheat Furnace No.1 – Continuous Pusher, capable of firing natural gas, coke oven gas, No.2 and No.6 fuel oil, constructed in 1964, identified as EU673-14, with a furnace maximum rated capacity of 500 MMBtu/hr heat input, equipped with low NOx burners, with emissions exhausting at stack EP673-6503.
 - (B) One (1) Slab Reheat Furnace No.2 - Continuous Pusher, capable of firing natural gas, coke oven gas, No.2 and No.6 fuel oil, constructed in 1964, identified as EU673-15, with a furnace maximum rated capacity of 500 MMBtu/hr heat input, equipped with low NOx burners, with emissions exhausting at stack EP673-6504.
 - (C) One (1) In and Out Reheat Furnace No.5, capable of firing natural gas, coke oven gas, No.2 and No.6 fuel oil, constructed in 1964, identified as EU673-17, with maximum rated capacity of 70 MMBtu/hr heat input, with emissions exhausting at stack EP673-6501.
 - (D) Two (2) In and Out Reheat Furnaces No.6 and No.7, capable of firing natural gas, coke oven gas, No.2 and No.6 fuel oil, with No.6 constructed in 1967 and No.7 constructed in 1971, identified as EU673-18 and 19, respectively, each with maximum rated capacities of 70 MMBtu/hr heat input, with emissions collectively exhausting at stack EP673-6502.
 - (E) One (1) Three Zone Pusher Reheat Furnace No.8, capable of firing natural gas, coke oven gas, No.2 and No.6 fuel oil, constructed in 1977, identified as EU673-20, with a maximum rated capacity of 89 MMBtu/hr heat input, with emissions exhausting at stack EP673-6505.
 - (F) One (1) Rolling Process, constructed in 1964, identified as EU673-32, with fugitive emissions reporting to roof monitor EP673-6507.

Steel Plate operations (located in the 160 Inch Plate Mill building) consisting of:

- (G) One (1) natural gas-fired Car Bottom Furnace (Normalizing and Annealing), constructed in 1965, identified as EU673-23, with a maximum capacity of 50 MMBtu/hr heat input, and fugitive emissions reporting to roof monitor EP673-6508.
 - (H) One (1) natural gas-fired Continuous Hardening and Normalizing Furnace, constructed in 1966, identified as EU673-24, with a maximum capacity of 100 MMBtu/hr heat input, and fugitive emissions reporting to roof monitor EP673-6508.
 - (I) One (1) natural gas-fired Continuous Tempering Furnace, constructed in 1966, identified as EU673-25, with a maximum capacity of 100 MMBtu/hr heat input, and fugitive emissions reporting to roof monitor EP673-6508.
- (6) 110 Inch Plate Mill operations consisting of:
- (A) Two (2) Slab Reheat Furnaces- Continuous Walking Beam No.1 and No.2, capable of firing natural gas, coke oven gas, No.2 and No.6 fuel oil, both constructed in 1977, identified as EU674-26 and 27, respectively, each with maximum rated capacities of 380 MMBtu/hr heat input, equipped with low NOx burners, with emissions collectively exhausting at stack EP674-7001.
 - (B) One (1) natural gas-fired Normalizing Furnace, capable of firing natural gas, and No.2 and No.6 fuel oil, constructed in 1979, identified as EU674-30, with a maximum capacity of 82 MMBtu/hr heat input, and emissions exhausting to stack EP674-7005.
 - (C) One (1) natural gas-fired Flame Cutting torch operation (Extra Process Building), constructed in 1965, identified as EU674-28, with fugitive emissions reporting to roof monitor EP674-7004.
 - (D) One (1) Rolling Process, constructed in 1977, identified as EU674-33, with fugitive emissions reporting to roof monitor EP674-7003.
- (h) Hot strip mill (HSM) operations consisting of:
- (1) Various natural gas-fired portable cutting torches and hand scarfers with fugitive emissions reporting to roof monitors EP670-5501, 5502, and 5516.
 - (2) One (1) reheat furnace No.1, capable of firing natural gas, coke oven gas, and/or propane, constructed in 1966, identified as EU670-05, with a maximum capacity of 730 MMBtu/hr of heat input, equipped with low NOx burners, with exhausts at stacks EP670-5504 and 5505.
 - (3) One (1) reheat furnace No.2, capable of firing natural gas, coke oven gas, and/or propane, constructed in 1966, identified as EU670-06, with a maximum capacity of 730 MMBtu/hr of heat input, equipped with low NOx burners, with exhausts at stacks EP670-5506 and 5507.
 - (4) One (1) reheat furnace No.3, capable of firing natural gas, coke oven gas, and/or propane, constructed in 1966, identified as EU670-07, with a maximum capacity of 730 MMBtu/hr of heat input, with exhausts at stacks EP670-5508 and 5509.
 - (5) One (1) hot strip mill rolling process constructed in 1966, identified as EU670-08, with fugitive emissions reporting to roof monitors EP670-5510, 5511, and 5512.
- (i) Cold sheet mill operations, with a maximum annual production of 2,300,000 tons of treated steel consisting of:
- (1) Pickle line No.1 constructed in 1965, identified as EU672-01, with emissions controlled by two fume scrubbers, C672-6001 and 6002, both exhausting at stack EP672-6001.
 - (2) Pickle line No.2 constructed in 1968, identified as EU672-02, with emissions controlled by fume scrubber C672-6002, exhausting at stack EP672-6001.
 - (3) Pickle line acid storage tanks constructed in 1968, collectively identified as EU672-03, consisting of:

- (A) Pickle line No.1- four (4) acid and rinse tanks, each with a storage capacity of 35,000 gallons, collectively controlled by fume scrubber C672-6002.
 - (B) Pickle line No.1- one (1) waste pickle liquor tank, with a storage capacity of 35,000 gallons, controlled by fume scrubber C672-6002.
 - (C) Pickle line No.2- four (4) acid and rinse tanks, each with a storage capacity of 35,000 gallons, collectively controlled by fume scrubber C672-6002.
 - (D) Pickle lines Nos.1 and 2- six (6) HCL acid gravity fed storage tanks vented at EP672-6002.
- (4) One (1) 80 inch five (5) stand tandem mill constructed in 1965, identified as EU672-04, with emissions controlled by mist eliminator C672-6003, exhausting at stack EP672-6008.
 - (5) One (1) natural gas-fired batch annealing process constructed in 1965, identified as EU672-05, consisting of twenty-four (24) furnaces, with a combined maximum rated capacity of 240 MMBtu/hr heat input, or 10 MMBtu/hr heat input each furnace, with fugitive emissions reporting to roof monitor EP672-6009.
 - (6) Natural gas-fired continuous heat treat line (CHTL) preheat, heat and soak furnaces constructed in 1983, collectively identified as EU672-07, with a combined maximum rated capacity of 76 MMBtu/hr heat input, with preheat emissions exhausting to stack EP672-6014, and heat and soak emissions at stack EP672-6015.
 - (7) One (1) natural gas-fired CHTL reheat furnace constructed in 1983, identified as EU672-08, with a maximum rated capacity of 34 MMBtu/hr heat input, with emissions exhausting at stack EP672-6017.
 - (8) One (1) CHTL pickling tank constructed in 1983, identified as EU672-09, with emissions controlled by fume scrubber C672-6006, exhausting at stack EP672-6022.
 - (9) One (1) hot dip coating line (HDCL) for hot galvanizing, galvannealing, chemical treatment and cleaning of steel, constructed in 1992, identified as EU672-13, with a maximum capacity of 140 tons of steel coil per hour, with cleaning section emissions controlled by fume scrubbers C672-6007, exhausting at stack EP672-6022.
 - (10) One (1) natural gas-fired HDCL radiant tube furnace constructed in 1992, identified as EU672-14, with a maximum capacity of 95 MMBtu/hr heat input, with NO_x emissions controlled by selective catalytic reduction (SCR) equipped with a continuous emissions monitoring system (CEMS) C672-6008 measuring NO_x and CO₂, exhausting at stack EP672-6023.
 - (11) One (1) temper mill constructed in 1965, identified as EU672-11, with emissions controlled by mist eliminator C672-6010, exhausting at stack EP672-6024.
 - (12) One (1) cold mill finishing process constructed in 1965, identified as EU672-12, with fugitive emissions reporting to roof monitor EP672-6034.
- (j) One (1) Power Station, consisting of the following boilers:
 - (1) No.7 boiler, capable of firing natural gas, coke oven gas, and blast furnace gas, constructed in 1978 and modified in 1990, identified as EU460-01, with a rated capacity of 650 MMBtu/hr heat input, with emissions exhausting at stack EP460-2501;
 - (2) No.8 boiler, capable of firing natural gas, coke oven gas, blast furnace gas, and No.2 and No.6 fuel oil, constructed in 1972, identified as EU460-02, with a rated capacity of 650 MMBtu/hr heat input, with emissions exhausting at stack EP460-2502;
 - (3) No.9 boiler, capable of firing natural gas, coke oven gas, blast furnace gas, and No.2 and No.6 fuel oil, constructed in 1972, identified as EU460-03, with a rated capacity of 650 MMBtu/hr heat input, with emissions exhausting at stack EP460-2503;

- (4) No.10 boiler, capable of firing natural gas, coke oven gas, blast furnace gas, and No.2 and No.6 fuel oil, constructed in 1971, identified as EU460-04, with a rated capacity of 650 MMBtu/hr heat input, with emissions exhausting at stack EP460-2504;
 - (5) No.11 boiler, capable of firing natural gas, coke oven gas, blast furnace gas, and No.2 and No.6 fuel oil, constructed in 1969, identified as EU460-05, with a rated capacity of 650 MMBtu/hr heat input, with emissions exhausting at stack EP460-2505; and
 - (6) No.12 boiler, capable of firing natural gas, coke oven gas, blast furnace gas, and No.2 and No.6 fuel oil, constructed in 1969, identified as EU460-06, with a rated capacity of 650 MMBtu/hr heat input, with emissions exhausting at stack EP460-2506.
- (k) Service shops and technical maintenance operations, consisting of:
- (1) No.1 roll shop north shot blast booth constructed in 1967, identified as EU410-01, with particulate controlled by baghouse C410-1001, exhausting to stack EP410-1001, and fugitive emissions reporting to roof monitor EP410-1003.
 - (2) No.1 roll shop south shot blast booth constructed in 1965, identified as EU410-02, with particulate controlled by baghouse C410-1002, exhausting to stack EP410-1002, and fugitive emissions reporting to roof monitor EP410-1003.
 - (3) No.2 roll shop shot blast booth constructed in 1966, identified as EU411-03, with particulate controlled by baghouse C411-1503, exhausting to stack EP411-1502, and fugitive emissions reporting to roof monitor EP411-1501.
 - (4) One (1) locomotive shop paint booth constructed pre-1965, identified as EU420-07, with a maximum capacity of less than one vehicle per hour and less than one gallon of coating sprayed per vehicle, utilizing one HVLP spray gun, with fugitive emissions reporting to wall vent EP420-2021.
- (l) Fugitive Dust Emissions Operations
- (1) Coal and Coke Storage and Handling:
 - (A) Coal piles, identified as EU512-19 and 28, with respective fugitive emissions, EP512-3003 and 3093.
 - (B) Coal preparation process (Blending Building), identified as EU512-01, with particulate emissions controlled by dust suppressant spray identified as C512-3002, reporting to roof monitors EP512-3005 through 3011.
 - (C) Coke handling and screening process, identified as EU512-20 and 22, respectively, with fugitive emissions at EP512-3085 and roof monitor EP512-3034, respectively.
 - (2) Sinter Plant operations:
 - (A) Bay plant piles containing revert materials, identified as EU520-01, with fugitive emissions identified as EP520-3501.
 - (B) Sinter bedding piles, identified as EU520-02, with fugitive emissions identified as EP520-3503.
 - (C) Bedding plant material transfer, material conveyors, and junction houses, collectively identified as EU520-03, with fugitive emissions venting through any of six (6) separate openings in the sides of the building, each identified as EP520-3502, and EP520-3504 through 3508.
 - (3) Blast Furnace operations:
 - (A) C Casthouse Slag Pit fugitive emissions identified as EP520-3546.
 - (B) D Casthouse Slag Pit fugitive emissions identified as EP520-3559.
 - (C) Beach Iron operation fugitive emissions identified as EP520-3550.

- (D) Ore Dock Unloading fugitive emissions identified as EP520-3517.
- (E) Ore Field fugitive emissions identified as EP520-3526.
- (4) Unregulated and regulated roads, consisting of:
 - (A) Paved and unpaved roads, identified as EU420-08, with fugitive emissions EP420-2008.
 - (B) Paved and unpaved slab haul roads, identified as EU420-10, with fugitive emissions EP420-2016.
 - (C) Regulated unpaved roads, identified as EU420-04, with fugitive emissions EP420-2018.
 - (D) Regulated paved roads, identified as EU420-11, with fugitive emissions EP420-2017.
 - (E) One (1) open air clean fill storage area, identified as EU420-20, with fugitive emissions EP420-2020.
 - (F) One (1) open air BOF land farming area for BOF slurry, identified as EU534-39, with fugitive emissions EP534-4050.
 - (G) One (1) open air mill scale piles area, identified as EU670-13, with fugitive emissions EP670-5513.

Unpermitted Emission Units and Pollution Control Equipment

There are no known unpermitted facilities operating at this facility during this review process.

Insignificant Activities

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

- (a) Space heaters, process heaters, or boilers using the following fuels:
 - (1) Natural gas-fired combustion sources with heat input equal to or less than ten million (10,000,000) Btu per hour.
 - (2) Propane or liquefied petroleum gas, or butane-fired combustion sources with heat input equal to or less than six million (6,000,000) Btu per hour.
 - (3) 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 less than five-tenths (0.5) percent sulfur by weight.
 - (4) Wood-fired combustion sources with heat input equal to or less than one million (1,000,000) Btu per hour and not burning wood refuse, treated wood, or chemically contaminated wood.
- (b) Equipment powered by internal combustion engines of capacity equal to or less than 500,000 Btu/hour, except where total capacity of equipment operated by one stationary source exceeds 2,000,000 Btu/hour.
- (c) Combustion source flame safety purging on startup.
- (d) A gasoline fuel transfer and dispensing operation handling less than or equal to 1,300 gallons per day, such as filling of tanks, locomotives, automobiles, having a storage capacity less than or equal to 10,500 gallons.
- (e) 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.
- (f) The following VOC and HAP storage containers:
 - (1) Storage tanks with capacity less than or equal to 1,000 gallons and annual throughput less than 12,000 gallons.

- (2) Vessels storing lubricating oils, hydraulic oils, machining oils, and machining fluids.
- (g) Refractory storage not requiring air pollution control equipment.
- (h) Equipment used exclusively for the following:
 - (1) Packaging lubricants or greases.
 - (2) Filling drums, pails or other packaging containers with lubricating oils, waxes, and greases.
- (i) Application of oils, greases, lubricants, or other nonvolatile materials applied as temporary protective coatings.
- (j) Machining where an aqueous cutting coolant continuously floods the machining interface.
- (k) Degreasing operations that do not exceed 145 gallons per 12 months, except if subject to 326 IAC 20-6.
- (l) 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.
- (m) The following equipment related to manufacturing activities not resulting in the emission of HAPs: brazing equipment, cutting torches, soldering equipment, welding equipment.
- (n) Closed loop heating and cooling systems.
- (o) Infrared cure equipment.
- (p) Exposure chambers (towers, columns), for curing of ultraviolet inks and ultra-violet coating where heat is the intended discharge.
- (q) Any of the following structural steel and bridge fabrication activities:
 - (1) Cutting 200,000 linear feet or less of one (1) inch plate or equivalent.
 - (2) Using 80 tons or less of welding consumables.
- (r) Rolling oil recovery systems.
- (s) Groundwater oil recovery wells.
- (t) Solvent recycling systems with batch capacity less than or equal to 100 gallons.
- (u) Activities associated with the treatment of wastewater streams with an oil and grease content less than or equal to 1% by volume.
- (v) Water runoff ponds for petroleum coke-cutting and coke storage piles.
- (w) Activities associated with the transportation and treatment of sanitary sewage, provided discharge to the treatment plant is under the control of the owner/operator, that is, an on-site sewage treatment facility.
- (x) Any operation using aqueous solutions containing less than 1% by weight of VOCs, excluding HAPs.
- (y) Water based adhesives that are less than or equal to 5% by volume of VOCs, excluding HAPs.
- (z) Noncontact cooling tower systems with either of the following:
 - (1) Natural draft cooling towers not regulated under a NESHAP.

- (2) Forced and induced draft cooling tower system not regulated under a NESHAP.
- (aa) Quenching operations used with heat treating processes.
- (bb) Replacement or repair of electrostatic precipitators, bags in baghouses and filters in other air filtration equipment.
- (cc) Heat exchanger cleaning and repair.
- (dd) Process vessel degreasing and cleaning to prepare for internal repairs.
- (ee) Trimmers that do not produce fugitive emissions and that are equipped with a dust collection or trim material recovery device such as a bag filter or cyclone.
- (ff) Stockpiled soils from soil remediation activities that are covered and waiting transportation for disposal.
- (gg) Paved and unpaved roads and parking lots with public access.
- (hh) Conveyors as follows:
 - (1) Covered conveyor for coal or coke conveying of less than or equal to 360 tons per day;
 - (2) Covered conveyors for limestone conveying of less than or equal to 7,200 tons per day for sources other than mineral processing plants constructed after August 31, 1983;
 - (3) Uncovered coal conveying of less than or equal to 120 tons per day.
 - (4) Underground conveyors.
 - (5) Enclosed systems for conveying plastic raw materials and plastic finished goods.
- (ii) Coal bunker and coal scale exhausts and associated dust collector vents.
- (jj) Asbestos abatement projects regulated by 326 IAC 14-10.
- (kk) 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.
- (ll) Flue gas conditioning systems and associated chemicals such as the following: sodium sulfate, ammonia, and sulfur trioxide.
- (mm) 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.
- (nn) Blowdown for any of the following: sight glass; boiler; compressors; pumps; and cooling tower.
- (oo) Furnaces used for melting metals other than beryllium with a brim full capacity of less than or equal to 450 cubic inches by volume.
- (pp) On-site fire and emergency response training approved by the department.
- (qq) Emergency generators as follows:
 - (1) Gasoline generators not exceeding 110 horsepower.
 - (2) Diesel generators not exceeding 1600 horsepower.
 - (3) Natural gas turbines or reciprocating engines not exceeding 16,000 horsepower.
- (rr) Other emergency equipment as follows:

- (1) Stationary fire pumps.
- (ss) 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.
- (tt) Purge double block and bleed valves.
- (uu) Filter or coalescer media changeout.
- (vv) Vents from ash transport systems not operated at positive pressure.
- (ww) Mold release agents using low volatile products (vapor pressure less than or equal to 2 kilopascals measured at 38 degrees C).
- (xx) A laboratory as defined in 326 IAC 2-7(20)(c).
- (yy) Farm Operations.

Existing Approvals

The source has constructed or has been operating under the following previous approvals:

Permit Type and Number	Facility or Units Permitted	Date of Issuance
PC (64) 707	Sinter Plant	June 24, 1974
PC (64) 716	BOF No.3	July 11, 1974
OP 64-01-93-0157	Coke Oven Battery No.1	January 25, 1989
OP 64-01-93-0175	"C" Blast Furnace Operation	January 25, 1989
OP 64-01-93-0176	"D" Blast Furnace Operation	January 25, 1989
OP 64-01-93-0195	36 Slabbing Mill, Soaking Pits	January 25, 1989
OP 64-01-93-0201	80" Hot Strip Mill (HSM), No.1 Continuous Reheat Furnace	January 25, 1989
OP 64-01-93-0202	80" Hot Strip Mill (HSM), No.2 Continuous Reheat Furnace	January 25, 1989
OP 64-01-93-0203	80" Hot Strip Mill (HSM), No.3 Continuous Reheat Furnace	January 25, 1989
OP 64-01-93-0205	Cold Strip Mill and Cold Reduction Mill	January 25, 1989
OP 64-01-93-0206	160" Plate Mill, Continuous Reheat Furnace No.1 and Boiler No.1	January 25, 1989
OP 64-01-93-0207	160" Plate Mill, Continuous Reheat Furnace No.2 and Boiler No.3	January 25, 1989
OP 64-01-93-0208	160" Plate Mill, Boiler No.2	January 25, 1989
OP 64-01-93-0209	160" Plate Mill, Boiler No.4	January 25, 1989
OP 64-01-93-0210	160" Plate Mill, No.4 and No.5 "In and Out" Reheat Furnaces	January 25, 1989
OP 64-01-93-0211	160" Plate Mill, No.6 and No.7 "In and Out" Reheat Furnaces	January 25, 1989
OP 64-01-93-0212	160" Plate Mill, No.8 Continuous Reheat Furnace	January 25, 1989
OP 64-01-93-0213	160" Plate Mill, Continuous Hardening and Annealing Process	January 25, 1989
OP 64-01-93-0214	160" Plate Mill, No.1 through 8 Slab Reheat Furnaces	January 25, 1989
OP 64-01-93-0215	160" Plate Mill, Slab Conditioning Grinder	January 25, 1989
OP 64-01-93-0216	110" Plate Mill, Normalizing Furnace	January 25, 1989
OP 64-01-93-0217	110" Plate Mill, No.1 and No.2 Continuous Reheat Furnaces	January 25, 1989
OP 64-01-93-0218	Coke Ovens Materials Handling Facilities	January 25, 1989
OP 64-01-93-0222	Blast Furnace Car Dumper	January 25, 1989
OP 64-01-93-0225	BOF Shop, No.1 "West Hot Metal Relading/Desulf. Station	January 25, 1989
OP 64-01-93-0226	BOF Shop, Track Hopper Building	January 25, 1989
OP 64-01-93-0227	BOF Shop, Conveyor Junction H1	January 25, 1989
OP 64-01-93-0228	BOF Shop, Conveyor Junction H2	January 25, 1989
OP 64-01-93-0229	BOF Shop, No.1 Vessel Storage Bins	January 25, 1989
OP 64-01-93-0230	BOF Shop, No.2 Vessel Storage Bins	January 25, 1989
OP 64-01-93-0231	BOF Shop, No.1 Vessel Weigh Hopper	January 25, 1989
OP 64-01-93-0232	BOF Shop, No.2 Vessel Weigh Hopper	January 25, 1989
OP 64-01-93-0233	BOF Shop, No.3 Vessel Weigh hopper	January 25, 1989
OP 64-01-93-0234	Batch Annealing Operations 24 Four-Stack Furnaces	January 25, 1989
OP 64-01-93-0235	Cold Strip Mill, Continuous Heat Treat Line Heat and Soak Zone	January 25, 1989
OP 64-01-93-0236	Cold Strip Mill, Continuous Heat Treat Line Reheat Zone	January 25, 1989
OP 64-01-93-0237	Cold Strip Mill, Two Stand Cold Reduction Mill	January 25, 1989

OP 64-01-93-0238	Cold Strip Mill, Continuous Pickle Lines No.1 and No.2	January 25, 1989
OP 64-01-93-0239	Cold Strip Mill, Electro galvanizing Line Cleaning and Pickling Tanks	January 25, 1989
OP 64-01-93-0240	Cold Strip Mill, Electro galv. Line Zinc Plating Bath & Chem. Treat. Sect.	January 25, 1989
OP 64-01-93-0241	Cold Strip Mill, Electro galvanizing Line Zinc/Alloy Plating Bath	January 25, 1989
PC (64) 1788	Vacuum Degasser	February 14, 1990
OP 3420-0001-0258	Vacuum Degasser Process	August 23, 1990
CP 127-2480-00001	Hot Metal Desulfurization	November 12, 1992
CP 127-1989-00001	Hot Dip Coating Line (HDCL)	February 14, 1992
CP 127-2802-00001	Blast Furnace Granulated Coal Injection (BFGCI) System	August 4, 1993
CP 127-2725-00001	Coke Battery No.2 Reconstruction and Operation	January 28, 1994
CP 127-4478-00001	Hot Strip Mill (HSM), Reheat Furnace No.4	September 15, 1995
AA 127-8331-00001	Hot Strip Mill (HSM), Reheat Furnace No.4	April 17, 1997
SSM 127-15656-00001	Modification to CP127-2725-00001	October 17, 2002
127-19106-00001	Modification to CP127-2725-00001, OP condition No.8	July 16, 2004

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

The following terms and conditions from previous approvals have been determined no longer applicable; therefore, were not incorporated into this Part 70 permit:

- (a) All construction conditions from all previously issued permits.

Reason not incorporated: All facilities previously permitted have already been constructed; therefore, the construction conditions are no longer necessary as part of this operating permit. Any facilities that were previously permitted but have not yet been constructed would need to undergo new pre-construction review, under the Part 70 rules, before beginning construction. (An example of this would be the approval for construction of a No.4 reheat furnace at the Hot Strip Mill under permit 127-4478-00001, issued September 15, 1995. This furnace was never built, and as a result, ISG Burns Harbor, LLC, must reapply for approval if they wish to proceed with this project.)

- (b) All permit record keeping conditions from all previously issued permits that specify 24 months.

Reason not incorporated: These conditions are replaced by the Part 70 provision which states that records must be kept for a minimum of five years.

- (c) PC (64) 707 (Sinter Plant), issued June 24, 1974:

Reason not incorporated: The cyclones' provision and reference is not incorporated because the control device for the windbox is the scrubber. There are eight cyclones.

- (d) PC (64) 1559, issued September 17, 1984:

Operation condition 1: The hot metal iron desulfurization equipment at the BOF Shop hot metal reladling station, particulate matter emissions shall be limited to less than 25 tons per year.
 Reason not incorporated: The tons per year limit is not enforceable because it is not a short term PM limit. The hot metal iron desulfurization equipment at the BOF Shop hot metal reladling station (EU534-01, 02, 03) short term PM emission limitations are set by rule 326 IAC 6-3.

- (e) Registered Construction, issued January 5, 1985;

The baghouses (C534-4002, 4003) for hot metal desulfurization, reladling/transfer and skimming stations (EU534-02, 03) to be located at the BOF Shop, emissions shall be at a level acceptable to 326 IAC 6-3.

Reason not incorporated: A short term PM limit is set pursuant to 326 IAC 6-3.

- (f) OP 64-01-93-0195 (36 Slabbing, Mill Soaking Pits), issued January 25, 1989:

Reason not incorporated: The soaking pits are no longer in use, and will not be used in the future.

- (g) OP 64-01-93-0239 (Cold Strip Mill, Electrogalvanizing Line Cleaning and Pickling Tanks), issued January 25, 1989:

Reason not incorporated: These tanks are gone.

- (h) OP 64-01-93-0240 (Cold Strip Mill, Electrogalvanizing Line Zinc Plating Bath and Chemical Treatment Section), issued January 25, 1989:

Reason not incorporated: This process equipment is gone.

- (i) OP 64-01-93-0241 (Cold Strip Mill, Electrogalvanizing Line Zinc/Alloy Plating Bath), issued January 25, 1989:

Reason not incorporated: This process equipment is gone.

- (j) CP 127-2802-00001 (Blast Furnace Granulated Coal Injection (BFGCI) System), issued August 4, 1993:

A third permitted coal preparation system mentioned in the permit was never constructed. The permit stipulated that only two of the three systems should be in operation at one time.

Operation condition 5(d) is not incorporated because there are no baghouses present on the radial stacker, bulldozer assisted reclamation, surge bins, or conveyors and weigh belts.

Operation condition 6 is not incorporated because it is not necessary to continuously record baghouse pressure readings on baghouses that are considered insignificant for the purposes of Part 70. Also, new levels will not be established because small emitting units, such as these, are not required to be stack tested as a requirement for Part 70.

- (k) CP127-2725-00001 (Coke Battery No.2) issued January 28, 1994:

Operation condition 8 is not incorporated because this condition was replaced by a subsequent construction permit amendment (Permit Modification 127-19106-00001, issued July 16, 2004) which stated for Coke Battery No.2, that the amount of coal processed through battery No.2 shall not exceed 1,279,268.70 tons of dry coal per year, rolled monthly on a 12 month basis, with compliance determined at the end of each month.

- (l) CP 127-4478-00001 (HSM, Reheat Furnace No.4) issued September 15, 1995:

Reason not incorporated: Reheat Furnace No.4 was never built.

- (m) AA127-8331-00001 (HSM, Reheat Furnace No.4), April 17, 1997:

Reason not incorporated: Reheat Furnace No.4 was never built.

- (n) 326 IAC 7-4-14(1)(C)(x) - as an alternative to the sulfur dioxide emission limitations specified in 326 IAC 7-4-14(1)(B)(x), the HSM Reheat Furnaces EU670-05, 06, and 07 sulfur dioxide emissions shall be limited to less than 1.78 lb/MMBtu each, and 483 lb/hr each.

Reason not incorporated: The HSM no longer uses fuel oil.

- (o) Per the source Part 70 operating permit application: Pursuant to 326 IAC 6-2-4 (Particulate Emission Limitations for Sources of Indirect Heating: Emission limitations for facilities specified in 326 IAC 6-2-1(d)), the PM emissions from the HDCL radiant tube furnace (EP672-6023) shall not exceed 0.13 pounds per million Btu heat input (lb/MMBtu).

Reason not incorporated: The radiant tube furnace is a direct fired source, therefore 326 IAC 6-2-4 (as cited in the Part 70 application as the requirement for this unit) does not apply, 326 IAC 6-3 does.

Enforcement Issue

At the time of this review, one enforcement case was pending for ISG Burns Harbor, LLC. The case number is 2005-15200-A, and it concerns a violation of 326 IAC 5-1 by the Permittee.

Recommendation

The staff recommends to the Commissioner that the Part 70 permit be approved. This recommendation is based on the following facts and conditions:

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

An administratively complete Part 70 permit application for the purposes of this review was received on July 22, 1996. Additional information has been received on various dates during the course of the Part 70 operating permit review. Copies of this additional information are found in the Permittee's public file for this Part 70 permit.

Potential to Emit

Pursuant to 326 IAC 2-7-1(29), Potential to Emit is defined as "the maximum capacity of a stationary source or emissions unit to emit any air pollutant under its physical and operational design. Any physical or operational limitation on the capacity of a source to emit an air pollutant, including air pollution control equipment and restrictions on hours of operation or type or amount of material combusted, stored, or processed shall be treated as part of its design if the limitation is enforceable by the U.S. EPA, the department, or the appropriate local air pollution control agency."

Pollutant	Potential to Emit (tons/yr)
PM	greater than 100
PM-10	greater than 100
SO ₂	greater than 100
VOC	greater than 25
CO	greater than 100
NO _x	greater than 100
Total HAPs	greater than 25

- (a) The potential to emit (as defined in 326 IAC 2-7-1(29)) of PM-10, SO₂, CO, and NO_x are equal to or greater than 100 tons per year, and the potential to emit (as defined in 326 IAC 2-7-1(29)) of VOC is equal to or greater than 25 tons per year. Therefore, the source is subject to the provisions of 326 IAC 2-7.
- (b) The potential to emit (as defined in 326 IAC 2-7-1(29)) of any single HAP is equal to or greater than ten (10) tons per year and/or the potential to emit (as defined in 326 IAC 2-7-1(29)) of a combination of HAPs is equal to or greater than twenty-five (25) tons per year. Therefore, the source is subject to the provisions of 326 IAC 2-7.
- (c) Fugitive Emissions
 Since this type of operation is one of the twenty-eight (28) listed source categories under 326 IAC 2-2, the fugitive emissions are counted toward determination of PSD and Emission Offset applicability.

Actual Emissions

The following table shows the actual emissions from the source. This information reflects the 2004 OAQ emission data submitted by ISG Burns Harbor, LLC, for the prior year of 2003.

Pollutant	Actual Emissions (tons/year)
PM	2,552
PM-10	2,552
SO ₂	16,597
VOC	569
CO	112,116
NO _x	6,905
Pb	3.44
HAP (specify)	Not reported

County Attainment Status

The source is located in Porter County.

Pollutant	Status

PM 2.5	Nonattainment
PM-10	Attainment
SO ₂	Attainment
NO ₂	Attainment
1-hour Ozone	Severe nonattainment
8-hour Ozone	Moderate nonattainment
CO	Attainment
Lead	Attainment

- (a) Volatile organic compounds (VOC) and Nitrogen Oxides (NOx) are regulated under the Clean Air Act (CAA) for the purposes of attaining and maintaining the National Ambient Air Quality Standards (NAAQS) for ozone.
- (1) On January 26, 1996 in 40 CFR 52.777(i), the U.S. EPA granted a waiver of the requirements of Section 182(f) of the CAA for Lake and Porter Counties, including the lower NOx threshold for nonattainment new source review. Therefore, VOC emissions alone are considered when evaluating the rule applicability relating to the 1-hour ozone standards. Porter County has been designated as nonattainment in Indiana for the 1-hour ozone standard. Therefore, VOC emissions were reviewed pursuant to the requirements for Emission Offset, 326 IAC 2-3. See the State Rule Applicability – Entire Source section.
- (2) VOC and NOx emissions are considered when evaluating the rule applicability relating to the 8-hour ozone standard. Porter County has been designated as nonattainment for the 8-hour ozone standard. Therefore, VOC and NOx emissions were reviewed pursuant to the requirements for nonattainment new source review.
- (b) Porter County has been classified as nonattainment in Indiana for the 8-hour ozone standard. Therefore, these emissions were reviewed pursuant to the requirements for Emission Offset, 326 IAC 2-3. See the State Rule Applicability – Entire Source section.
- (c) U.S. EPA, in Federal Register Notice 70 FR 943 dated January 5, 2005, has designated Porter County as nonattainment for PM 2.5. On March 7, 2005, the Indiana Attorney General's Office, on behalf of IDEM, filed a law suit with the Court of Appeals for the District of Columbia Circuit challenging U.S. EPA's designation of nonattainment areas without sufficient data. However, in order to ensure that sources are not potentially liable for violation of the Clean Air Act, the OAQ is following the U.S. EPA's guidance to regulate PM10 emissions as surrogate for PM 2.5 emissions pursuant to the Nonattainment New Source Review requirements. See the State Rule Applicability - Entire Source section.
- (d) Fugitive Emissions
Since this type of operation is one of the twenty-eight (28) listed source categories under 326 IAC 2-2, the fugitive emissions are counted toward determination of PSD and Emission Offset applicability.

Part 70 Permit Conditions

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

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

Federal Rule Applicability

Coke Batteries (Section D.1): 40 CFR Part 63, Subpart L

- (a) The provisions of 40 CFR Part 63, Subpart A - General Provisions, which are incorporated by reference in 326 IAC 20-3, apply to the Coke Oven Batteries #1 and #2, except when otherwise specified in 40 CFR Part 63, Subpart L.
- (b) The requirements of the National Emission Standards for Hazardous Air Pollutants (NESHAPS), 326 IAC 20, (40 CFR 63, Subpart L) are included in this permit for the Coke Oven Batteries #1 and #2, because these coke oven batteries were owned and operated by an integrated steel mill producer on April 1, 1992, and are listed in Appendix A of 40 CFR 63 Subpart L.

- (c) The requirements of National Emission Standards for Hazardous Air Pollutants (NESHAPS) for Coke Ovens: Pushing, Quenching and Battery Stacks, 40 CFR 63, Subpart CCCCC, are included in this permit for the #1 and #2 coke oven batteries, because they are existing units as of July 13, 2001 and located at an integrated iron and steel manufacturing facility that is a major source of hazardous air pollutants that has the potential to emit 10 tons or more of a single HAP and/or 25 tons or more of a combination of HAPS per year.

See Section D.1 of the operating permit for more detailed requirements.

By-products Plant (Section D.2): 40 CFR Part 61, Subpart L, Subpart V, and Subpart FF

- (a) The provisions of 40 CFR Part 61, Subpart A - General Provisions which are incorporated by reference in 326 IAC 14, apply to the Coke By-Product Recovery Plant, except when otherwise specified in 40 CFR Part 61, Subpart L (National Emission Standards for Benzene from Coke By Product Recovery Plants), 40 CFR Part 61, Subpart V (National Emission Standards for Equipment Leaks (Fugitive Emission Sources), and 40 CFR Part 61, Subpart FF (National Emission Standards for Benzene Waste Operations).
- (b) The requirements of the National Emission Standards for Hazardous Air Pollutants (NESHAPs), 40 CFR 61, Subpart L National Emission Standards for Benzene from Coke By-product Recovery Plants, is included in this operating permit for the Coke By-product Recovery Plant because the coke by-product recovery equipment is located in a coke by-product recovery plant.
- (c) The requirements of the National Emission Standards for Hazardous Air Pollutants (NESHAPs), 40 CFR 61, Subpart V, National Emission Standards for Equipment Leaks (Fugitive Emission Sources) Coke By-product Recovery Plants is included in this operating permit because the coke by-product recovery equipment is located in a coke by-product recovery plant.
- (d) The requirements of the National Emission Standards for Hazardous Air Pollutants (NESHAPs), 40 CFR 61, Subpart FF National Emission Standards for Benzene Waste Operations are included in this operating permit because the coke by-product recovery equipment is located at coke by-product recovery plant.
- (e) The requirements of the National Emission Standards for Hazardous Air Pollutants (NESHAPs), 40 CFR 61, Subpart J Equipment Leaks (Fugitive Emission Sources) of Benzene, are not included in this operating permit because the coke by-product recovery equipment is located in a coke by-product recovery plant.
- (f) The requirements of the National Emission Standards for Hazardous Air Pollutants (NESHAPs) for Benzene Storage Vessels 40 CFR 61, Subpart Y are not included in this operating permit because the coke by-product recovery storage vessels are used for storing benzene at coke by-product recovery facilities.

See Section D.2 of the operating permit for more detailed requirements.

Sinter Plant, Blast Furnace, Basic Oxygen Furnace Shop (Sections D.4, D.5 and D.6): 40 CFR 63, Subpart FFFFF

- (a) The provisions of 40 CFR 63 Subpart A - General Provisions, which are incorporated by reference in 326 IAC 20, apply to the Sinter Plant Windbox exhaust, discharge end, and sinter cooler operation, the Blast Furnace Casthouses (C and D), and the Basic Oxygen Furnace Shop operations, except when otherwise specified in 40 CFR 63 Subpart FFFFF (Integrated Iron and Steel Manufacturing facilities).
- (b) The requirements of National Emission Standards for Hazardous Air Pollutants (NESHAPs) 40 CFR 63, Subpart FFFFF, National Emission Standards for Integrated Iron and Steel Manufacturing Facilities, is included in this permit for the Sinter Plant Windbox exhaust, discharge end, and sinter cooler operation, the Blast Furnace Casthouses (C and D), and the Basic Oxygen Furnace Shop operation. The Sinter Plant Windbox operation is an existing unit as of July 13, 2001 and is located at an integrated iron and steel manufacturing facility that is a major source of Hazardous Air Pollutants that has the potential to emit 10 tons or more of a single HAP and/or 25 tons or more of a combination of HAPS per year.

See Sections D.4, D.5 and D.6 of the operating permit for more detailed requirements.

Basic Oxygen Furnace Shop (Section D.6): 40 CFR Part 60, Subpart N

BOF Shop vessel No.3 (EU534-07, 11) is subject to 40 CFR Part 60, Subpart N (Standards of Performance for Primary Emissions From Basic Oxygen Process Furnaces for Which Construction Is Commenced After June 11, 1973), because it was constructed in 1978.

See Section D.6 of the operating permit for more detailed requirements.

Cold Sheet Mill (Section D.9): 40 CFR Part 63, Subpart CCC

- (a) The requirements of National Emission Standards for Hazardous Air Pollutants (NESHAPs) for Steel Pickling - HCl Process Facilities and Hydrochloric Acid Regeneration Plants (40 CFR 63 Subpart CCC) are included in this permit for the 84-inch and 80-inch Continuous Pickle Lines, because they are existing steel pickling facilities that pickle carbon steel using hydrochloric acid solution that contains 6 percent or more by weight HCl and are at a temperature of 100°F or higher.
- (b) The requirements of National Emission Standards for Hazardous Air Pollutants (NESHAPs) for Steel Pickling HCl Process Facilities and Hydrochloric Acid Regeneration Plants (40 CFR 63 Subpart CCC) are included in this permit for the HCl tanks, because hydrochloric acid storage vessels are considered as part of the affected source.

See Section D.9 of this operating permit for more detailed requirements.

Power Station Boilers (Section D.10): 40 CFR 63, Subpart DDDDD

- (a) Boilers No.7, No.8, No.9, No.10, No.11, and No.12 are subject to the National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers and Process Heaters, 40 CFR 63, Subpart DDDDD. These units comprise one existing affected source for the large liquid fuel subcategory as defined by 40 CFR 63.7506(b), because they meet the criteria in the definition (40 CFR 63.7575) for the limited liquid fuel subcategory. The provisions of 40 CFR 63 Subpart A - General Provisions, which are incorporated as 326 IAC 20-1-1, apply to the affected sources after the effective date of 40 CFR 63, Subpart DDDDD, except when otherwise specified in 40 CFR 63 Subpart DDDDD. This rule is not yet published in the *Federal Register*. A copy of the signed, final rule is available at <http://www.epa.gov/ttn/atw/boiler/boilerpg.html>.
- (b) Boiler No.7 (EU460-01) is subject to the New Source Performance Standard (NSPS), 326 IAC 12 (40 CFR 60.40, Subpart D - Standards of Performance for Fossil-Fuel-Fired Steam Generators for Which Construction is Commenced After August 17, 1971), due to the commencement date of its construction being after 1971. All other construction dates for the remaining boilers at the source commenced prior to 1971.

See Section D.10 of the operating permit for more detailed requirements.

State Rule Applicability - Entire Source

326 IAC 2-2 (PSD) and 326 IAC 2-3 (Emission Offset)

- (a) Pursuant to CP127-2725-00001, issued January 28, 1994, for Coke Battery 2, and the National Emissions Standards for Hazardous Air Pollutants; Coke Oven Batteries, the applicable requirements specified in this NESHAPs shall be achieved. Compliance with these standards will make the requirements of the Prevention of Significant Deterioration rule, 326 IAC 2-2, and the Emission Offset rule 326 IAC 2-3 not applicable for particulate matter (TSP & PM10), sulfur dioxide, carbon monoxide, volatile organic compounds, and nitrogen oxide.
- (b) Pursuant to CP127-2725-00001, issued January 28, 1994, the amount of nitrogen oxide (NOx) emissions from Coke Battery #2 (underfire EP512-27), shall be limited to 650 tons per year based on a twelve month average rolled on a monthly basis in order to make the provisions of 326 IAC 2-2 not applicable.
- (c) Pursuant to Significant Modification 127-15656-00001, issued October 17, 2002, Coke Battery #2 shall generate and supply to the steel manufacturing plant at least 1,793,385,000 cubic feet of coke oven gas

per twelve consecutive months with compliance demonstrated at the end of each month, excluding any hours when the Coke Battery #2 is not in operation.

- (d) Pursuant to CP 127-2480-00001 (BOF), issued November 12, 1992, the particulate emissions from baghouse C534-4003 shall be limited to 0.03 grains per dry standard cubic feet, and flow shall not exceed 135,000 acfm. This is equivalent to an emission rate of 31.3 pounds per hour.
- (e) Pursuant to CP 127-2480-00001 (BOF), issued November 12, 1992, the total hot iron throughput through the three (3) stations (EU534-01, 02, 03) shall be limited to 455,000 tons per month.
- (f) Pursuant to Significant Modification 127-15656-00001, issued October 17, 2002, the Vacuum Degasser (EU534-19) shall not remove more than 0.04% carbon from the steel based on a twelve month period rolled on a monthly basis and the production level shall not exceed 490,071 pounds per hour averaged over a twelve 12 consecutive month period and 2,146,511 tons of hot steel, per twelve consecutive month period with compliance determined at the end of each month. This limit is equivalent to 64.8 tons per year of CO emissions.

The provisions set by the conditions above make the PSD rule (326 IAC 2-2) and the Emission Offset rule (326 IAC 2-3) not applicable.

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

ISG Burns Harbor, LLC, is a major source of HAPs because they operate facilities that emit greater than 10 tons per year of a single HAP, or 25 tons per year of a combination of HAPs. Therefore, 326 IAC 2-4.1 applies. 326 IAC 2-4.1-1(c) incorporates by reference the provisions of 40 CFR 63. See the applicable requirements under the Federal Rule Applicability section of this document for further details.

326 IAC 2-6 (Emission Reporting)

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.

326 IAC 5-1 (Opacity Limitations)

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

- (a) Opacity shall not exceed an average of forty percent (40%) in any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.
- (b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.

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

Pursuant to 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes), the allowable PM emission rate from each manufacturing process shall not exceed the pound per hour emission rate established as E by the applicable formula listed in (a) or (b):

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

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

- (b) Interpolation and extrapolation of the data for the process weight rate in excess of sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

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

Pursuant to 326 IAC 6-3-2(e)(3), when the process weight exceeds two hundred (200) tons/hour, the maximum allowable emission may exceed that shown in the table under 326 IAC 6-3-2(e)(3), provided the concentration of particulate matter in the discharge gases to the atmosphere from the stack is less than one-tenth (0.10) pound per one thousand (1,000) pounds of gases.

The processes regulated by this rule are specified in the D Sections of the operating permit.

326 IAC 6-4 (Fugitive Dust Emissions)

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

326 IAC 6-5 (Fugitive Particulate Matter Emission Limitations)

Pursuant to 326 IAC 6-5-1(b) (Applicability), this rule applies to any new source of fugitive particulate matter emissions located anywhere in the state, requiring a permit as set forth in 326 IAC 2, which has not received all the necessary preconstruction approvals before December 13, 1985.

326 IAC 6-6 (Source Specific and Facility Emission Limitations for TSP in Porter County)

Pursuant to 326 IAC 6-6-4, Bethlehem Steel Corporation (ISG Burns Harbor) specific source and facility TSP emission limits, the annual particulate matter emissions of each of the following facilities shall not exceed the limit listed below for that facility:

Blast Furnace Casting (EU520-18a, 18b, 19a, 19b)	0.6 lb/ton of iron.
Blast Furnace Stoves (EU520-18c, 19c)	0.016 lb/MMBtu.
Blast Furnace Flare (EP520-3540, 3553)	0.017 lb/MMBtu.
Blast Furnace Car Dumper Baghouse (C520-3506)	20.6 lb/hr.
Coke Oven Battery No.1 Underfiring (EU512-08)	0.129 lb/ton of coal.
Coke Oven Battery No.2 Underfiring (EU512-16)	0.129 lb/ton of coal.
Coke Oven Battery Charging, Lids, Offtakes, Collector Mains, Doors, Pushing and Quenching (EU512-02 to 07, 09, 10 to 15, 17)	326 IAC 11-3 applies
Breaker (Blender) Building	1.2lb/hr.
Sinter Plant Windbox Scrubber (EP520-3513)	0.277 lb/ton of sinter
Sinter Plant Dedusting Baghouse (EP 520-3511)	42.9 lb/hr.
Sinter Plant Mixing Drum Scrubber (EP 520-3512)	4.7 lb/hr.
BOF Shop - No. 1 & 2 Vessel Scrubber Stacks (three (3) stacks (EP534-4013, 14, 15) collectively restricted to limit)	0.09 lb/ton liquid steel
BOF Shop - No. 1 and 2 Vessel (EU534-06) Charging and Tapping	0.35 lb/ton of liquid steel
BOF Shop - No.3 Vessel Scrubber Stack (EP534-4017)	0.022 grains/dscf
BOF Shop - No.3 Vessel Charging and Tapping (EU534-07)	0.05 lb/ton of liquid steel
BOF Shop FM Boiler (EP534-4018)	0.005 lb/MMBtu
BOF Shop Teeming (EU534-18)	0.07 lb/ton of liquid steel
BOF Reladling Baghouses (C534-4001, 02, 03)	23.1 lb/hr.
BOF Desulfurization Baghouse (C534-4016)	6.0 lb/hr.
BOF Shop Material Handling Baghouses:	
Track Hopper Building Baghouse (C534-4013)	1.2 lb/hr.
H1 (C534-4014)	0.6 lb/hr.
H2 (C534-4015)	0.6 lb/hr.
No.1 Furnace Bin Baghouse (C534-4009)	1.7 lb/hr.
No.2 Furnace Bin Baghouse (C534-4009)	1.7 lb/hr.
No.1 Furnace Weigh Hopper Baghouse (C534-4010a, 10b)	2.2 lb/hr.
No.2 Furnace Weigh Hopper Baghouse (C534-4010a, 10b)	2.2 lb/hr.
Continuous Casters (EU595-24 and 25)	0.015 lb/ton of liquid steel cast
Plate Mill Furnace No.1 (EP673-6503) and Boiler No.1	0.082 lb/MMBtu
Plate Mill Furnace No.2 (EP673-6504) and Boiler No.3	0.082 lb/MMBtu
160 Inch Plate Mill Boiler No. 2	0.082 lb/MMBtu
160 Inch Plate Mill Boiler No. 4	0.082 lb/MMBtu
110 Inch Plate Mill Furnaces No.1 and 2 (EP674-7001)	0.080 lb/MMBtu
160 Inch Plate Mill In & Out Furnace 5 (EP673-6501)	0.088 lb/MMBtu
160 Inch Plate Mill In and Out Furnaces No. 6 and 7 (EP673-6502)	0.088 lb/MMBtu
160 Inch Plate Mill In & Out Furnaces No. 8 (EP673-6505)	0.081 lb/MMBtu.
110 Inch Plate Mill Normalizing Furnace (EP674-7005)	0.015 lb/MMBtu.
160 Inch Plate Mill Heat Treating Furnace (EU673-23, 24, and 25)	0.005 lb/MMBtu.
80 Inch Hot Strip Mill Furnace No. 1 (EP670-5504, 5505)	0.085 lb/MMBtu

80 Inch Hot Strip Mill Furnace No. 2 (EP670-5506, 5507)	0.084 lb/MMBtu
80 Inch Hot Strip Mill Furnace No. 3 (EP670-5508, 5509)	0.084 lb/MMBtu
Continuous Anneal Furnace (EP672-6014)	0.005 lb/MMBtu
Batch Annealing Furnaces (24) (EP672-6009)	0.015 lb/MMBtu
Continuous Anneal Preheating (EP672-6014)	0.005 lb/MMBtu
Continuous Anneal Heating & Soaking (EP672-6015)	0.005 lb/MMBtu
Continuous Anneal Reheating (EP672-6017)	0.005 lb/MMBtu
Power Station Boiler Nos. 8, 9, 10, 11, and 12 (EP460-2502 to 2506)	Collective limit of 0.088 lb/MMBtu
Power Station Boiler No. 7 (EP460-2501)	0.10 lb/MMBtu

Methods to Determine Compliance

Pursuant to 326 IAC 6-6-2, Methods to Determine Compliance, the Permittee shall demonstrate compliance with the emission limitations contained in 326 IAC 6-6-4, utilizing the methods in 326 IAC 6-6-2, as follows:

- (a) All lb/ton (pound per ton) emission factor limits are expressed as “pounds of particulate emissions per ton of product” unless otherwise stated. By-products which may be sold as product shall not be included under the term “product.”
- (b) All lb/MMBtu (pounds per million Btu) emission factor limits are expressed as “pounds of particulate emissions per million Btu of fuel(s) fired in the source” unless otherwise stated.
- (c) Fuel usage data may be used to determine compliance for any non-fossil-fuel-fired source and any fossil fuel-fired source that does not have a gas cleaning device which is used to reduce particulate emissions to the atmosphere, provided that the procedures under 326 IAC 6-6-2(d) are followed.
- (d) The sampling and test methodologies used must be approved by the commissioner. The most recent No.6 fuel oil emission factor obtained using the procedure in shall be used in emission rate calculations. The emission factors used for fuels other than No.6 fuel oil shall be as listed in 326 IAC 6-6-2(d)(4).
- (e) For each monthly monitoring period, the Permittee shall calculate the pounds of particulate matter emitted per hour, or lb/MMBtu as applicable from each source using the equation given in 326 IAC 6-6-2(d). An equivalent alternate method may be used with the prior approval of the commissioner.
- (f) A list of those sources relying on fuel usage data to determine compliance with their particulate emission limitations is shown in 326 IAC 6-6-2(d)(6), Table 2.
- (g) If a compliance determination based on fuel usage data does not agree with a compliance determination based on stack test data, the determination based on stack test data shall govern. Stack test data may reflect a total sampling time of less than twenty-four (24) hours and be acceptable for such a compliance determination.
- (h) Application for an alternative source-specific opacity limit may not be based on fuel usage data.
- (i) Compliance with applicable particulate emission limitations for stack sources for which compliance is not based on fuel monitoring shall be determined on the basis of opacity observations performed in accordance with 326 IAC 5-1 and the exceptions to 326 IAC 5-1, as listed in 326 IAC 6-6-2(j).

Testing

- (a) Pursuant to 326 IAC 6-6-2(j)(4), the commissioner may require stack tests in addition to the specific requirements of 326 IAC 6-6, Source Specific and Facility Emission Limitations for TSP in Porter County. When such testing is required, the Permittee shall permit the performance of stack tests in accordance with 40 CFR 60, Appendix A, Methods 1-5.
- (b) Pursuant to 326 IAC 6-6-2(o), testing required by the commissioner to determine the amount of particulate matter emitted from any non-stack source or facility subject to the requirements of 326 IAC 6-6 shall be conducted in accordance with procedures approved by the commissioner.

Record Keeping and Reporting Requirements

Pursuant to 326 IAC 6-6-2, Methods to Determine Compliance, the Permittee shall demonstrate compliance with the emission limitations contained in 326 IAC 6-6-4, by keeping the following records and/or submitting the required report, as applicable:

- (a) Fuel usage data may be used to determine compliance for any non-fossil-fuel-fired source and any fossil fuel-fired source that does not have a gas cleaning device which is used to reduce particulate emissions to the atmosphere, provided that the following procedures are followed:
- (1) The Permittee shall collect fuel usage data at least once per month and shall record them in a log which is readily available for inspection. Records must be retained for two (2) years from the date of collection.
 - (2) The following fuel usage data shall be recorded for each source monthly:
 - (A) number of hours in operation;
 - (B) cubic feet of each gaseous fuel fired;
 - (C) gallons of each liquid fuel fired;
 - (D) pounds of each solid fuel fired.
 - (3) Once each calendar quarter the Permittee shall conduct sampling and analysis to determine the heat content factors (i.e., Hi) contained in the equations set forth in 326 IAC 6-6-2(d)(4).
 - (4) Once each calendar quarter the Permittee shall conduct sampling and analysis to determine the sulfur content of No.6 fuel oil and shall calculate the emission factor for this fuel using the equation in 326 IAC 6-6-2(d)(4).
 - (5) Within thirty (30) days of the end of each calendar quarter the Permittee shall submit to the commissioner a written report of any emissions exceeding the applicable limits and the nature and cause of the excess emissions, if known.
 - (6) Results of the calculations performed and documented for 326 IAC 6-6-2(d)(4) within thirty (30) days of the end of each monthly monitoring period must be retained for two (2) years. An equivalent alternate frequency may be used with the prior approval of the commissioner.

Fugitive Dust Control Strategy

Pursuant to 326 IAC 6-6-5 (Bethlehem Steel Corporation fugitive dust control strategy), part (a)(2);

- (a) The nontraditional fugitive dust control program, can be adjusted on a daily basis as needed to take into account preceding day and forecasted meteorological conditions (for example, rainfall and temperature);
- (b) Bethlehem (ISG Burns Harbor) shall control its low volatile coal storage piles (EU 512-19) by spraying them at least once per week with a chemical dust retardant;
- (c) A total of twenty-four (24) miles of paved and unpaved roads as shown in Figure 1 of 326 IAC 6-6-5(b) shall be controlled as described below:
 - (1) A total of 12.7 miles of paved roads shall be cleaned three (3) times per week by water washing using a flusher truck except as indicated in subsection (a)(4) of this section. In addition, at least twice per week, 7.9 miles of these roads in the primary facilities area will also be wet swept using a tractor mounted broom following the flusher truck. Road shoulders on the 12.7 miles of paved roads will be graded as required and treated with a chemical dust retardant at the same frequency specified below for unpaved roads. Accumulated material on road shoulders will be removed at least once per month.
 - (2) A total of 11.3 miles of unpaved roads shall be controlled. This will consist of forming a uniform road surface by road grading to remove large material, and the application of a two (2) to four (4) inch layer of fine slag where necessary. Surfaces shall be sprayed with dust suppressant solution at an application rate consistent with the manufacturer's recommendations. The dust suppressant material and application rate shall be such that a crust will be formed on the road surface that is amenable to cleaning via flushing and sweeping. Road surfaces shall be cleaned twice per week with a flusher truck followed by a tractor mounted broom. Road surfaces shall be resprayed with chemical dust suppressant as necessary to maintain a cleanable surface. The solution strength and application rate will be determined prior to application based upon the condition of the surfaces. Pursuant to 326 IAC 6-6-5 (Bethlehem Steel Corporation fugitive dust

control strategy), part (a)(2), Bethlehem (ISG Burns Harbor) shall control its low volatile coal storage piles (EU 512-19) by spraying them at least once per week with a chemical dust retardant.

Record Keeping Requirements

Pursuant to 326 IAC 6-6-5(a)(3), Bethlehem Steel Corporation (ISG Burns Harbor) fugitive dust control strategy, records of all fugitive dust control activities shall be maintained. At a minimum, records shall contain the following information:

- (1) number of miles and location of the paved roads cleaned;
- (2) number of miles of unpaved roads which were treated including the type, quantity, and dilution ratio of dust retardant used.

Reporting

Pursuant to 326 IAC 6-6-5(a)(3), Bethlehem Steel Corporation (ISG Burns Harbor) fugitive dust control strategy, the information required by this provision shall be summarized into progress reports and submitted to IDEM, OAQ, quarterly.

Rule 326 IAC 6-6 (Source Specific and Facility Emission Limitations for TSP in Porter County) is not federally enforceable.

326 IAC 7-4-14 (Porter County Sulfur Dioxide Limitations)

Pursuant to 326 IAC 7-4-14(1)(A), the BOF FM Boiler (EU534-23), the Continuous Hardening and Annealing Furnace (EU673-24), the 160 inch Plate Mill Boilers No.2 and 4, the 24 Batch Annealing Furnaces (EU672-05), and the Continuous Heat Treat line (CHTL) Preheat, Heating, and Soaking, and Reheat (EU672-07 and 08), shall burn natural gas only.

Pursuant to 326 IAC 7-4-14(1)(B), the following facilities shall comply with the sulfur dioxide emission limitations and other requirements:

Facility	SO ₂ Emission Limitations	
	lb/MMBtu	lb/hr
Blast Furnace C Stoves (EP520-3547)	0.83	545
Blast Furnace D Stoves (EP520-3560)	0.83	545
Blast Furnace Flare (EP520-3540, 3553)	0.07	
Sinter Plant Windbox (EP520-3513)	1.0 lb/ton	400
No.1 Coke Battery Underfire (EU512-08)	1.73	803
No.2 Coke Battery Underfire (EU512-16)	1.96	911
160 Inch Plate Mill Continuous Reheat Furnace No.1 (EP673-6503)	1.96	299
160 Inch Plate Mill Continuous Reheat Furnace No.2 (EP673-6504)	1.96	299
80 Inch Hot Strip Mill Furnace No.1, 2 and 3 (EP670-5504 to 5509)	1.96	79 each
110 Inch Plate Mill Furnaces No.1 and 2 (EP674-7001)	1.07	88
110 Inch Plate Mill Furnaces No.1 and 2 (EP674-7001)	1.07	88
160 Inch Plate Mill In & Out Furnaces No. 4 and 5 (EP673-6501)	1.96	274
160 Inch Plate Mill In and Out Furnaces No. 6 and 7 (EP673-6502)	1.96	274
160 Inch Plate Mill In & Out Furnaces No. 8 (EP673-6505)	1.96	176
Power Station Boiler No.7 (EP460-2501)	0.8	520
Power Station Boilers No.8, 9, 10, 11, and 12 (EP460-2502 to 2506)	1.45	2,798

Pursuant to CP127-2725-00001, issued January 28, 1994, for Coke Battery 2, the sulfur dioxide emissions from the coke batteries, Nos. 1 & 2 underfire (EU512-08, 16), shall be limited pursuant to 326 IAC 7-4-14(1)(B), as listed below.

- (a) Pursuant to 326 IAC 7-4-14(1)(B)(v), the sulfur dioxide emissions from the Coke Battery #1 Underfire (EU512-08) shall be limited to less than 1.73 lb/MMBtu and 803 lb/hr.
- (b) Pursuant to 326 IAC 7-4-14(1)(B)(vi), the sulfur dioxide emissions from the Coke Battery #2 Underfire (EU512-16) shall be limited to less than 1.96 lb/MMBtu and 911 lb/hr.

Pursuant to CP127-2725-00001, issued January 28, 1994, for Coke Battery 2, the sulfur dioxide emissions from other facilities burning coke oven gas shall be limited pursuant to 326 IAC 7-4-14(1)(D), as listed below:

Coke oven gas usage at facilities other than the No.1 and 2 Coke Battery Underfire Stacks shall be restricted to no more than seventy-five (75) million cubic feet per day. Total sulfur dioxide emissions from the facilities listed in 326 IAC 7-4-14(1)(B)(i) through (iv), (viii) through (xi), and (xiii) through (xvii) shall not exceed four thousand four hundred twenty-nine (4,429) pounds per hour.

State Rule Applicability - Individual Facilities

Coke Batteries (Section D.1):

For the MACT requirements, see the Federal Rule Applicability Section of this document.

For the following rules, Particulate (326 IAC 6-3-2), Source Specific and Facility Emission Limitations for TSP in Porter County (326 IAC 6-6), and Porter County Sulfur Dioxide Limitations (326 IAC 7-4-14), see the State Rule Applicability - Entire Source section of this document.

Coke Battery #2 Underfire Particulate Matter Emissions

In accordance with IDEM letter dated February 17, 1998, (proposed condition 9a, for CP 127-2725, A127-5804, and Case No. 94-A-J-1017) in lieu of original operation condition 9(a) of CP127-2725-00001, issued January 28, 1994, for Coke Battery 2, the underfiring (EU512-16) particulate matter emissions shall not exceed 0.23 lbs/MMBtu.

Operation Conditions

(a) Pursuant to Permit Modification 127-19106-00001, issued July 16, 2004, for Coke Battery No.2, the amount of coal processed through battery No.2 shall not exceed 1,279,268.70 tons of dry coal per year, rolled monthly on a 12 month basis, with compliance determined at the end of each month.

(1) The Permittee shall determine and document the moisture content of coal charged through the Coke Battery No.2 by following these coal sampling and analysis procedures:

(A) The coal sample acquisition point shall be at a location where representative samples of the total coal flow to be charged to the ovens may be obtained.

(B) The sample collected shall be analyzed in accordance with the methods specified in ASTM D 3173 using a moisture determination balance analyzer.

(C) Coal samples shall be collected for analysis at a minimum of once per day, five times per 7-day week.

For days that no samples were collected, the moisture content to be used for determination shall be the average of the moisture content of the 5 most recent consecutive samples taken.

(D) The daily dry tons calculated above will be summed each month for a monthly total.

(2) The Permittee shall determine and document the actual amount of dry coal charged through the Coke Battery No.2.

(3) The Permittee shall submit a quarterly report of the actual amount of dry coal charged through the Coke Battery No.2, using the Quarterly Report of Dry Coal Charged, or its equivalent.

(b) Pursuant to CP127-2725-00001, issued January 28, 1994, for Coke Battery No.2, the total dissolved solids (TDS) shall not exceed an average of 500 milligrams per liter when evaporated at a temperature of 103 to 105 degrees centigrade and the quench tower baffles shall cover 95% or more of the cross sectional area of the exhaust to ensure emissions do not exceed 0.31 lb/ton of coal.

326 IAC 11-3 (Coke Oven Batteries)

(a) Pursuant to CP127-2725-00001, issued January 28, 1994, for Coke Battery 2, the visible emissions for Coke Battery #2 shall be limited as required by 326 IAC 11-3-2, and pursuant to 326 IAC 11-3-2, Coke Battery #1 shall also be limited as follows:

(1) Pursuant to 326 IAC 11-3-2(b)(4), emissions from the charging system (EU512-04, 52) including any open charge port, offtake system (EP512-3014), 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. One charge out of twenty (20) consecutive charges shall be exempt from the total seconds of charging using procedures set forth in 326 IAC 11-3-4(a).
- (2) Pursuant to 326 IAC 11-3-2(c)(4), no visible emissions shall be permitted from more than three percent (3%) of the total charge port lids (EU512-03, 11).
 - (3) Pursuant to 326 IAC 11-3-2(d)(4), no visible emissions shall be permitted from more than ten percent (10%) of the total offtake piping (EU512-02, 10).
 - (4) Pursuant to 326 IAC 11-3-2(e)(4), no visible emissions shall be permitted from more than three (3) points on the gas collect main (EU512-07, 15), excluding the connection with the standpipes.
 - (5) Pursuant to 326 IAC 11-3-2(f)(4), no emissions shall be permitted from more than ten percent (10%) of the total coke oven doors (EU512-05, 13), plus four doors, on any coke oven battery.
- (b) Pursuant to 326 IAC 11-3-2(g), Coke Battery #1 and #2 pushing emission 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, and in addition, pursuant to CP127-2725-00001, issued January 28, 1994, for Coke Battery #2, the effluent gas particulate emissions shall not exceed 0.04 lbs/ton of the coke pushed after control.
 - (2) Such device 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 (90%) of the pushing emissions. The permit shall be submitted to U.S. EPA as a SIP revision.
- (c) Pursuant to 326 IAC 11-3-2(h), quenching emissions requirements shall be as follows:
- (1) Quench towers serving coke oven batteries No.1 and No.2 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 particulates into the atmosphere (EP512-3081 and 3082). 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.
 - (2) The quench tower makeup must contain a total dissolved solids content of no more than one thousand five hundred (1,500) milligrams per liter. If an individual facility or source is required to comply with conflicting Indiana water pollution control requirements, the commissioner may revise quenching requirements of this subsection on a case-by-case basis.
- (d) Pursuant to 326 IAC 11-3-2(i), underfire particulate and sulfur dioxide emissions requirements shall be as follows:
- (1) Particulate and sulfur dioxide emissions from underfire stacks shall be limited by the emission limitations determined under 326 IAC 6-1, 326 IAC 6-2, and 326 IAC 7-1.1, respectively.
 - (2) In accordance with IDEM letter dated February 17, 1998, proposed condition 9c, for CP 127-2725, A127-5804, and Case No. 94-A-J-1017, in lieu of original operation condition 9c of CP127-2725-00001, issued January 28, 1994, for Coke Battery 2, visible emissions from the underfire combustion stack (EP512-3027) for Coke Battery #2 shall comply with 326 IAC 5-1.
- (e) Pursuant to 326 IAC 11-3-3 (Identification of coke oven), the identity of each coke oven shall be maintained 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.

In accordance with IDEM letter dated February 17, 1998, proposed condition 5(b) and 5(c), for CP 127-2725, A127-5804, and Case No. 94-A-J-1017, in lieu of original operation conditions 5(b) and 5(c), issued January 28, 1994, for Coke Battery 2:

- (a) The instantaneous opacity at the pushing emission control baghouse stack shall not exceed ten percent (10%) opacity for an aggregate of six (6) minutes within any six (6) hour period. Twenty-four (24) instantaneous opacity readings greater than ten percent (10%) within any six (6) hour period shall be considered a six (6) minute aggregate. There shall be no instantaneous opacity readings equal to or greater than forty percent (40%) opacity exiting the baghouse stack during the operation of the baghouse.
- (b) Visible emissions during the pushing operation shall not exceed an average of twenty percent (20%) opacity during twenty-four (24) consecutive readings.

Agreed Order A-481 (Coke Oven Battery Door Emissions Control Program)

Pursuant to Agreed Order A-481, issued January 30, 1992, Orders 11 and 12, a "Coke Oven Battery Door Emissions Control Program" for Coke Batteries #1 and #2 shall be executed, and shall contain the minimum elements:

- (a) All new welded steel doors purchased for either Coke Oven Battery shall be stress relieved prior to installation.
- (b) All door machines shall have brush-type door cleaners to clean the entire vertical sealing ring gas channel that is adjacent to the knife-edge surface of each door, after such door has been removed for the purpose of pushing its oven.
- (c) All coke side shall have laser spotters utilized in the cleaning of each coke side door jamb after the oven is pushed.

Coke Byproducts Recovery Plant (Section D.2):

All requirements for these units are found under the Federal Rule Applicability Section of this document.

Blast Furnace Granulated Coal Injection System (Section D.3):

Construction Permit Particulate Matter and Opacity Limitations

Pursuant to CP127-2802-00001, issued August 4, 1993, emissions from points numbered EP520-3522, EP520-3565, EP520-3566 through 3569, EP520-3578 through 3589, and EP520-3590 to 3597, and their corresponding operations, shall be considered in compliance with 326 IAC 6-6 provided that:

- (a) the raw coal bins (EP520-3578, 79), cyclone separators (EP520-80, 81), product storage bins (EP520-3582 to 3585) and the lock hopper vents (EP520-3590 to 3597) shall be controlled with bin filters or baghouses;
- (b) emissions from the following vents shall not exceed:
 - (1) 0.020 grains/dscf at an air flow of 240 scfm for each of the 2 raw coal bin vent (EP520-3578, 3579) units.
 - (2) 0.005 grains/dscf at an air flow of 16,700 scfm for each of the 2 cyclone separators filter vents (EP520-3580, 3581).
 - (3) 0.020 grains/dscf at an air flow of 200 scfm for each of the 4 bin filter vent (EP520-3582 to 3585) units.
 - (4) 0.020 grains/dscf at an air flow of 200 scfm for each of the 4 distribution bin filter vent (EP520-3586 to 3589) units.
 - (5) 0.020 grains/dscf at an air flow of 440 scfm for each of the 8 lock hopper filter vent (EP520-3590 to 3597) units.

- (c) the visible emissions from the baghouses and bin filters (C520-3509, 3511, 3513, 3517, 3521) shall be limited to 20% opacity or levels established during stack tests;
- (d) the opacity from EP520-3566 to EP520-3568 shall not exceed 20%; and
- (e) the baghouses and bin filters referenced in part (a) of this condition shall be in operation when the associated process is operating.

Fuel Usage

Pursuant to CP127-2725-00001, issued January 28, 1994, the heaters (BFGCI milling operations 1 and 2, EU520-62) installed in Construction Permit 127-2802 for the blast furnace granulated coal injection system shall be restricted to the use of natural gas only.

Sinter Plant (Section D.4):

For the MACT requirements, see the Federal Rule Applicability Section of this document.

For the following rules, Particulate (326 IAC 6-3-2), Source Specific and Facility Emission Limitations for TSP in Porter County (326 IAC 6-6), and Porter County Sulfur Dioxide Limitations (326 IAC 7-4-14), see the State Rule Applicability - Entire Source section of this document.

326 IAC 8-13 (Sinter Plants)

- (a) Pursuant to 326 IAC 8-13-3 (Emission Limit), sinter plant windbox exhaust gas VOC emissions shall not exceed the following VOC emission limits:

- (1) During the period of May 1 through September 30, the total VOC emissions (the seasonal cap) shall not exceed the VOC emission limit of 447,410 pounds of VOC.
- (2) 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 3,150 pounds of VOC.
- (3) 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 the VOC emission limit of 2,924 pounds of VOC.

A high ozone level day shall be predicted by the Permittee in accordance with a high ozone day action plan (submitted November 24, 1998) developed by the source and submitted to the IDEM, OAQ as part of the report required by 326 IAC 8-13-4(b).

- (4) 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.
- (b) Pursuant to 326 IAC 8-13-4(b)(8) and the approval letter for the Permittee's High Ozone Day Action Plan, dated September 1, 1999, the Permittee shall complete the plan's requirements, which includes, but is not limited to, the following:
 - (1) Seek to limit mill scale in the five-day bedded pile to less than one percent (1%) free oil and grease;
 - (2) Monitor pounds of emissions on an hourly basis; and
 - (3) If it appears that emissions for the day may exceed allowable pounds, operating parameters will be adjusted by the Permittee, including potentially curtailing production, to ensure demonstrating compliance with the allowable pounds.

Blast Furnace (Section D.5):

For the MACT requirements, see the Federal Rule Applicability Section of this document.

For the following rules, Particulate (326 IAC 6-3-2), Source Specific and Facility Emission Limitations for TSP in Porter County (326 IAC 6-6), and Porter County Sulfur Dioxide Limitations (326 IAC 7-4-14), see the State Rule Applicability - Entire Source section of this document.

Particulate Matter (PM) [326 IAC 6-2]

Pursuant to 326 IAC 6-2-2 (Emission limitations for facilities specified in 326 IAC 6-2-1(a)), the particulate emissions from the C and D Blast Furnace stoves (EU520-18c and 19c) rated at a total combined maximum operating capacity of 1320 MMBtu per hour shall not exceed 0.23 pounds per MMBtu of heat input when calculated using the total source maximum operating capacity rating of Q, which equals 4570 MMBtu per hour, as determined by the following equation:

$$Pt = \frac{0.87}{Q^{0.16}}$$

where Pt = Pounds of particulate matter emitted per million Btu (lb/MMBtu) heat input.

Q = Total source maximum operating capacity rating in million Btu per hour (MMBtu/hr) heat input.

The above condition is federally enforceable, because rule 326 IAC 6-6 (Source Specific and Facility Emission Limitations for TSP in Porter County) is not federally approved.

Construction Permit Conditions

- (a) Pursuant to CP127-2802-00001, issued August 4, 1993, operation condition 5(b), the point source and fugitive emissions from the car dump (EU520-08) shall comply with Rule 326 IAC 6-6, and be considered in compliance with this rule provided that the emissions from the following shall not exceed the following:

0.007 grains/dscf at an air flow of 120,000 scfm for the coal (car) dump hopper baghouse (C520-3506).

- (b) Pursuant to CP127-2802-00001, issued August 4, 1993, operation condition 5, parts (a) and (d);
- (1) The point source and fugitive emissions from the car dump (EU520-08) and all conveyors and weigh belts shall comply with Rule 326 IAC 6-6, and be considered in compliance with this rule provided that the car dump hopper is controlled with bagfilters or baghouses (C520-3506).
 - (2) The point source and fugitive emissions from the car dump (EU520-08), all conveyors and weigh belts shall comply with Rule 326 IAC 6-6 and emissions shall be considered in compliance with 326 IAC 6-6 provided that the bagfilters and baghouses (C520-3506) are in operation at all times that the point source is operating.

Although the rule 326 IAC 6-6 (Source Specific and Facility Emission Limitations for TSP in Porter County) has not been federally approved, conditions (1) and (2) above are federally enforceable because they are conditions from a federally enforceable construction permit.

Operation Condition

Pursuant to CP127-2802-00001, issued August 4, 1993, operation condition 7, the total production rate of blast furnaces C and D (EU520-18, 19) shall be limited to 455,000 tons of hot metal per month.

Basic Oxygen Furnace Shop (Section D.6):

For the MACT requirements, see the Federal Rule Applicability Section of this document.

For the following rules, Particulate (326 IAC 6-3-2), Source Specific and Facility Emission Limitations for TSP in Porter County (326 IAC 6-6), and Porter County Sulfur Dioxide Limitations (326 IAC 7-4-14), see the State Rule Applicability - Entire Source section of this document.

Particulate Matter (PM) and Particulate Matter Less Than 10 Microns (PM10)

- (a) Pursuant to the Registered Construction approval, issued January 5, 1985, the No.1 "West" Hot Metal Desulfurization, Reladling/Transfer and Skimming Station (EU534-01) particulate matter emissions shall be limited to 0.01 grains per dry standard cubic foot.
- (b) Pursuant to PC(64)1788, issued February 14, 1990, the Vacuum Degasser facility particulate matter emissions from the vacuum degasser steam ejector discharge flare stack (EP534-4034) shall be limited

to 0.02 gr/dscf and 9.0 tons per year, and the PM10 emissions shall be limited to 0.01 gr/dscf and 4.5 tons per year.

- (c) One hundred percent (100%) of the particulate matter generated by the vacuum degasser alloy additive material handling equipment consisting of 18 alloy storage bins (EU534-20), 3 weigh hoppers (EU534-36) and conveyor transfer points shall be captured and vented to the vacuum degasser material handling baghouse (C534-4018) and particulate matter emissions shall be limited to 0.02 gr/dscf and 10.1 tons per year, and PM10 emissions shall be limited to 0.01 gr/dscf and 5.1 tons per year.

Carbon Monoxide

Pursuant to 326 IAC 9-1-2(2), no carbon monoxide shall be discharged from the No.3 BOF shop vessel (EU534-07, 11), unless the waste 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 one (1) hour Indiana ambient air quality value for carbon monoxide.

Operation Conditions

- (a) Pursuant to PC(64)1788, issued February 14, 1990, the refractory drying and preheating burners (EU534-22) shall burn only natural gas and be limited to the following maximum heat input rates:
 - (1) Vessel preheat burner 7 million Btu per hour
 - (2) Refractory dryer burner 9 million Btu per hour
 - (3) Refractory dryer burner 4.5 million Btu per hour
- (b) The visible emissions from any stack, other process exhaust, building roof monitor, or building opening due to the operations of the vacuum degasser process (EU534-19), the alloy material handling system (EU534-20) and the vessel preheat and refractory dryer burners (EU534-22) shall not exceed five percent (5%) opacity, as determined by 40 CFR 60 appendix A, Method 9 and 326 IAC 5-1.
- (c) The vacuum degassing equipment shall be operated and maintained in accordance with the manufacturer's specifications.

Slab/Plate Mill Complex (Section D.7):

For the following rules, Particulate (326 IAC 6-3-2), Source Specific and Facility Emission Limitations for TSP in Porter County (326 IAC 6-6), and Porter County Sulfur Dioxide Limitations (326 IAC 7-4-14), see the State Rule Applicability - Entire Source section of this document.

Hot Strip Mill (Section D.8)

For the following rules, Particulate (326 IAC 6-3-2), Source Specific and Facility Emission Limitations for TSP in Porter County (326 IAC 6-6), and Porter County Sulfur Dioxide Limitations (326 IAC 7-4-14), see the State Rule Applicability - Entire Source section of this document.

Cold Mill (Section D.9)

For the following rules, Source Specific and Facility Emission Limitations for TSP in Porter County (326 IAC 6-6), and Porter County Sulfur Dioxide Limitations (326 IAC 7-4-14), see the State Rule Applicability - Entire Source section of this document.

Power Station (Section D.10)

For the following rules, Source Specific and Facility Emission Limitations for TSP in Porter County (326 IAC 6-6) and Porter County Sulfur Dioxide Limitations (326 IAC 7-4-14), see the State Rule Applicability - Entire Source section of this document.

Particulate Matter (PM)

- (a) Pursuant to PC (64) 1831, issued February 14, 1990, boiler No.7 particulate matter/PM10 emissions shall be limited to 0.10 lb/MMBtu heat input.

- (b) Pursuant to 326 IAC 6-2-2 (Particulate Emission Limitations for Sources of Indirect Heating: Emission limitations for facilities specified in 326 IAC 6-2-1(b)), the PM emissions from the boilers No.8 through No.12 (EU460-02 to 06) shall not exceed 0.23 pound per million Btu heat input (lb/MMBtu). This limit is calculated using the total source maximum operating capacity rating of Q, which equals 4570 MMBtu per hour, in the following equation:

$$Pt = \frac{0.87}{Q^{0.16}} \quad \text{where } Pt = \text{Pounds of particulate matter emitted per million Btu (lb/mmBtu) heat input.}$$

Q = Total source maximum operating capacity rating in million Btu per hour (mmBtu/hr) heat input which is 4570 MMBtu/hr.

Nitrogen Oxide Reduction Program for Specific Source Categories [326 IAC 10-3]

- (a) Pursuant to 326 IAC 10-3 (Nitrogen Oxide Reduction Program for Specific Source Categories) Section 1(a)(2), this rule applies to affected boilers No.7, No.8, No.9, No.10, No.11, and No.12 (EU460-01 to 06).
- (b) Pursuant to 326 IAC 10-3-3, the Permittee shall comply with the following NOx emission limits for each ozone control period:
- (1) NOx emissions shall be limited to seventeen-hundreds pound of NOx per million Btus (0.17 lbs/MMBtu) of heat input over the ozone control period from each affected boiler;
 - (2) Ensure that fifty percent (50%) of the heat input shall be derived from blast furnace gas averaged over the ozone control period.
 - (3) During periods of blast furnace reline, startup, and period of malfunction, the affected boilers shall not be required to meet the requirement to derive fifty percent (50%) of the heat input from blast furnace gas.

Service Shops and Technical Maintenance Operations (Section D.11)

For the following rule, Source Specific and Facility Emission Limitations for TSP in Porter County (326 IAC 6-6), see the State Rule Applicability - Entire Source section of this document.

Nonapplicability Limitations

The locomotive shop spray paint booth (EU420-07) shall comply with the following:

- (a) VOC emissions from the usage of coating, dilution solvents, and cleaning solvents shall not exceed fifteen (15) pounds per day before add-on controls, in order to exempt it from the applicable provisions of 326 IAC 8-10 (Automobile Refinishing); and
- (b) Usage of coating, dilution solvents, and cleaning solvents shall be limited to less than five (5) gallons per day, in order to exempt this manufacturing process under 326 IAC 6-3-1(b)(15) from the provisions of 326 IAC 6-3 (Particulate Emission Limitations for Manufacturing Processes).

Fugitive Dust Emissions Operations (Section D.12)

For the following rule, Source Specific and Facility Emission Limitations for TSP in Porter County (326 IAC 6-6), see the State Rule Applicability - Entire Source section of this document.

Fugitive Dust Emissions [326 IAC 6-4]

Pursuant to 326 IAC 6-4-2 (Fugitive Dust Emission Limitations), sources generating fugitive dust shall be in violation of this rule, if any of the criteria listed in the rule are violated.

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

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

Pursuant to 326 IAC 6-5-1(b) (Applicability), this rule applies to any new source of fugitive particulate matter emissions located anywhere in the state, requiring a permit as set forth in 326 IAC 2, which has not received all the necessary preconstruction approvals before December 13, 1985.

Construction Permit Condition

Pursuant to CP127-2725-00001, issued January 28, 1994, for Coke Battery 2, and pursuant to 6-6-5, the Fugitive Dust Control Plan covering process, material handling fugitives, hoods, ventilation, and outside fugitive emission sources, shall continue to be implemented.

Operation Condition

In accordance with IDEM letter dated February 17, 1998, (proposed operation condition 14, for CP 127-2725, A127-5804, and Case No. 94-A-J-1017) in lieu of original operation condition 14 of CP127-2725-00001, issued January 28, 1994, for Coke Battery 2, the 8,600 feet of the paved slab haul roads (EU420-10) shall be maintained in good condition. The PM emissions (EP420-2016) shall not exceed 5.4 lbs/VMT. The PM10 emission factor shall not exceed 1.2 lbs/VMT and 1.6 ounces/square yard. The average vehicle weight shall not exceed 157 tons.

Operation Condition Testing

In accordance with IDEM letter dated February 17, 1998, (proposed operation condition 14, for CP 127-2725, A127-5804, and Case No. 94-A-J-1017) in lieu of original operation condition 14 of CP127-2725-00001, issued January 28, 1994, for Coke Battery 2, the sampling of the 8,600 feet of the paved slab haul roads (EU420-10) shall use the procedure specified in U.S. EPA 600/2/79-103, titled "Iron and Steel Open Source Fugitive Emissions Evaluations," Appendix B. The tests shall be conducted every 14 days April through November except when:

- (a) the road is closed and barricaded;
- (b) there is 0.1 inch of rainfall in a 24 hour period; or
- (c) it is raining on the scheduled test day.

Testing shall be performed on the next available day.

Specifically Regulated Insignificant Activities (Section D.13)

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

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

Insignificant Thresholds [326 IAC 2-7-1]

Pursuant to 326 IAC 2-7-1(21), to remain an insignificant activity, the potential uncontrolled emissions of each of the insignificant activities shall be less than the following:

Lead (Pb)= 0.6 ton/year or 3.29 lbs/day	Carbon Monoxide (CO)= 25 lbs/day
Sulfur Dioxide (SO ₂)= 5 lbs/hour or 25 lbs/day	Particulate Matter (PM)= 5 lbs/hour or 25 lbs/day
Nitrogen Oxides (NO _x)= 5 lbs/hour or 25 lbs/day	Volatile Organic Compounds (VOC)= 3 lbs/hr or 15 lbs/day

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

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

- (a) Equip the cleaner with a cover;
- (b) Equip the cleaner with a facility for draining cleaned parts;
- (c) Close the degreaser cover whenever parts are not being handled in the cleaner;
- (d) Drain cleaned parts for at least fifteen (15) seconds or until dripping ceases;

- (e) Provide a permanent, conspicuous label summarizing the operation requirements;
- (f) Store waste solvent only in covered containers and not dispose of waste solvent or transfer it to another party, in such a manner that greater than twenty percent (20%) of the waste solvent (by weight) can evaporate into the atmosphere.

Volatile Organic Compounds (VOC) [326 IAC 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.

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).

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

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

Testing Requirements

Unit	Pollutants	Frequency
Sinter Plant		
Sinter Plant Windbox Scrubber C520-3503; stack EP520-3513	PM, Opacity	Part 70: every 2 years for PM and Opacity 326 IAC 6-6-2(e)(1): every 2 years for PM
Dedust Baghouse C520-3501; stack EP520-3511	PM	326 IAC 6-6-2(e)(1): every 2 years for PM
Coke Batteries		
Coke Battery #1 and #2 pushing scrubber stack EP512-3018, and baghouse stack EP512-3024	PM	326 IAC 6-6-2(e)(1): every 4 years for PM
Underfire stack exhausts EP512-3026 and 3027	PM, SO ₂ , Opacity	Part 70: every 5 years for PM, SO ₂ , and Opacity 326 IAC 6-6-2(e)(1): every 4 years for PM
Blast Furnace		
Car Dumper Shed baghouse stack EP520-3606, C casthouse TREC baghouse stack EP520-3544, D casthouse TREC baghouse stack EP520-3557	PM, PM-10	Part 70: every 2½ years for PM and PM-10
Basic Oxygen Furnace Shop		
hot metal stations 1, 2, and 3 baghouses' stacks EP534-4002, 4006, 4008	PM, PM-10, Opacity	Part 70: every 2½ years for PM, PM-10, and Opacity 326 IAC 6-6-2(e)(1): scrubbers every 4 years for PM
vessels 1 & 2 collective scrubbers' (#2, #3, #4) stacks EP534-4013, 4014, 4015		
Cold Sheet Mill		
HDCL radiant tube furnace stack EP672-6023	PM, NOx	Part 70: every 5 years for PM and NOx
Continuous anneal and preheating furnace EP672-6014, batch annealing furnaces EP672-6009, continuous anneal heating and soaking EP672-6015, continuous anneal reheating EP672-6017	PM	Part 70: every 5 years for PM
Pickling lines' stack EP672-6001	HCL	40 CFR 63.1161 and 1162
Paved Slab Haul Roads		
Paved slab haul roads fugitive emissions EP420-2016	Fugitive PM	IDEM letter dated 2/17/98: approximately every 14 days from April through November including noted exceptions
Power Station		
Boilers No.7 to No.12: stacks EP460-2501 to 2506	PM, Opacity	Part 70: every 2 years

Where testing is required for more than one provision (i.e. Part 70 and 326 IAC 6-6-2) on one single unit, one valid test may fulfill various testing requirements, when performed accordingly.

Compliance Requirements

Permits issued under 326 IAC 2-7 are required to ensure that sources can demonstrate compliance with applicable state and federal rules on a more or less continuous basis. All state and federal rules contain compliance provisions, however, these provisions do not always fulfill the requirement for a more or less continuous demonstration. When this occurs IDEM, OAQ in conjunction with the source, must develop specific conditions to satisfy 326 IAC 2-7-5. As a result, compliance requirements are divided into two sections: Compliance Determination Requirements and Compliance Monitoring Requirements.

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

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

Unit	Visible Emission Notations	Pressure Drop Range (inches of water)	Flow rate (gallons per minute)
Coke Battery #1 and #2 pushing scrubber C512-3018: stack EP512-3018	Required	60 to 70	n/a
Coke Battery #1 and #2 pushing baghouse C512-3024: stack EP512-3024	Required	5 to 10	n/a
Granulation mill baghouses C520-3511: stacks EP520-3580, 3581	Required	Less than 0.5	n/a
Sinter Plant Windbox Scrubber C520-3503; stack EP520-3513	Required	Under 59, or under 43 during one fan operation	Under 5500
Dedust Baghouse C520-3501; stack EP520-3511	Required	5 to 15	n/a
Car Dumper Shed baghouse C520-3506: stack EP520-3606	Required	5 to 15	n/a
C casthouse TREC baghouse C520-3507: stack EP520-3544	Required	6 to 9	n/a
D casthouse TREC baghouse C520-3508: stack EP520-3557	Required	6 to 9	n/a
hot metal station 1 baghouse C534-4001: stack EP534-4002	Required	4 to 10	n/a
hot metal station 2 baghouse C534-4002: stack EP534-4006	Required	4 to 10	n/a
hot metal station 3 baghouse C534-4003: stack EP534-4008	Required	4 to 10	n/a
vessels 1 & 2 collective scrubbers (#2, #3, #4) C534-4004: stacks EP534-4013, 4014, 4015	Required	greater than 50	each 1700 or greater
ladle treatment 4 & 5 baghouses C534-4017, 4099: stacks EP534-4031, 4099	Required	4 to 10	n/a
casters: four demisters C595-4501, 04: stacks EP595-4501, 4504	Required	3 to 6	n/a
160" plate mill furnace stacks EP673-6503, 6504, 6501, 6502, 6505	Required	n/a	n/a
110" plate mill furnace stacks EP673-7001, 7005	Required	n/a	n/a
slab grinder baghouse C673-6606: stack EP673-6603	Required	4 to 10	n/a
tandem mill mist eliminator C672-6003: stack EP672-6008, 6024	Required	4 to 10	n/a
temper mill mist eliminator C672-6010: stack EP672-6024	Required	4 to 10	n/a
Boilers No.7 to No.12: stacks EP460-2501 to 2506	Required (except when natural gas is the sole combustion fuel)	n/a	n/a

Where applicable, monitoring required by NESHAPs, NSPS, or MACT rules will also fulfill Part 70 monitoring requirements.

Conclusion

The operation of this stationary steel works plant shall be subject to the conditions of this Part 70 operating permit 127-6301-00001.