Indiana Department of Environmental Management
We Protect Hoosiers and Our Environment.
100 N. Senate Avenue • Indianapolis, IN 46204
(800) 451-6027 • (317) 232-8603 • www.idem.IN.gov

Michael R. Pence
Governor

Carol S. Comer
Commissioner

NOTICE OF 30-DAY PERIOD
FOR PUBLIC COMMENT

Preliminary Findings Regarding a
Signficant Modification to a
Part 70 Operating Permit

for U.S. Steel - Gary Works in Lake County

Significant Permit Modification No.: 089-37377-00121

The Indiana Department of Environmental Management (IDEM) has received an application from U.S. Steel - Gary Works, located at One North Broadway, Gary, Indiana 46402, for a significant modification of its Part 70 Operating Permit issued on December 20, 2013. If approved by IDEM's Office of Air Quality (OAQ), this proposed modification would allow U.S. Steel - Gary Works to make certain changes at its existing source. U.S. Steel - Gary Works has applied to remove the stack testing for the pulverized coal storage reservoir stack SS-7.

This draft Significant Permit Modification 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. These corrections, changes, and removals may include Title I changes (e.g., changes that add or modify synthetic minor emission limits). This notice fulfills the public notice procedures to which those conditions are subject. IDEM has reviewed this application and has developed preliminary findings, consisting of a draft permit and several supporting documents, which would allow for these changes.

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

Gary Public Library
1835 Broadway Avenue
Gary, IN 46407

and

IDEM Northwest Regional Office
330 W. US Highway 30, Suites E & F
Valparaiso, IN 46385

A copy of the preliminary findings is available on the Internet at: http://www.in.gov/ai/appfiles/idem-caats/.

How can you participate in this process?

The date that this notice is published in a newspaper marks the beginning of a 30-day public comment period. If the 30th 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 will decide whether or not to hold a public hearing. IDEM could also decide to hold a public meeting instead of, or in addition to, a public hearing. If a public hearing or meeting is held, IDEM will

make a separate announcement of the date, time, and location of that hearing or meeting. At a hearing, you would have an opportunity to submit written comments and make verbal comments. At a meeting, you would have an opportunity to submit written 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 at the address below. If you comment via e-mail, please include your full U.S. mailing address so that you can be added to IDEM's mailing list to receive notice of future action related to this permit. If you do not want to comment at this time, but would like to receive notice of future action related to this permit application, please contact IDEM at the address below. Please refer to permit number SPM 089-37377-00121 in all correspondence.

Comments should be sent to:

Kelsey Bonhivert
IDEM, Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251
(800) 451-6027, ask for extension 3-1782
Or dial directly: (317) 233-1782
Fax: (317) 232-6749 attn: Kelsey Bonhivert
E-mail: KBonhive@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.

For additional information about air permits and how the public and interested parties can participate, refer to the IDEM Permit Guide on the Internet at: http://www.in.gov/idem/5881.htm; and the Citizens' Guide to IDEM on the Internet at: http://www.in.gov/idem/6900.htm.

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 Regional Office indicated above, and the IDEM public file room on the 12th floor of the Indiana Government Center North, 100 N. Senate Avenue, Indianapolis, Indiana 46204-2251.

If you have any questions, please contact Kelsey Bonhivert of my staff at the above address.

Jenny Acker, Section Chief
Permits Branch
Office of Air Quality

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DRAFT

Kevin M. Dalton
U.S. Steel - Gary Works
One North Broadway, Mail Station 70A
Gary, Indiana 46402

Re: 089-37377-00121
Significant Permit Modification to
Part 70 Renewal No.: T089-29907-00121

Dear Kevin M. Dalton:

U.S. Steel - Gary Works was issued Part 70 Operating Permit Renewal No. T089-29907-00121 on December 20, 2013 for a stationary integrated steel mill located at One North Broadway, Gary, Indiana 46402. An application requesting changes to this permit was received on July 6, 2016. Pursuant to the provisions of 326 IAC 2-7-12, a Significant Permit Modification to this permit is hereby approved as described in the attached Technical Support Document.

Please find attached the entire Part 70 Operating Permit as modified, including the following new attachment(s):

Attachment E 40 CFR 60, Subpart Y- Standards of Performance for Coal Preparation and Processing Plants

The permit references the below listed attachment(s). Since these attachments have been provided in previously issued approvals for this source, IDEM OAQ has not included a copy of these attachments with this modification:

Attachment A Preventive Maintenance Plan General Plant Fugitive Dust Emissions
Attachment B 40 CFR 60, Subpart Dc - Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units
Attachment C 40 CFR 60, Subpart IIII - Standards of Performance for Stationary Compression Ignition Internal Combustion Engines
Attachment D 40 CFR 60, Subpart D- Standards of Performance for Fossil-Fuel-Fired Steam Generators
Attachment F 40 CFR 63, Subpart ZZZZ - National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines
Attachment G RESERVED
Attachment H RESERVED
Attachment I RESERVED
Attachment J 40 CFR 63, Subpart FFFFF - National Emission Standards for Hazardous Air Pollutants for Integrated Iron and Steel Manufacturing Facilities
Attachment K 40 CFR 63, Subpart CCC - National Emission Standards for Hazardous Air Pollutants for Steel Pickling—HCl Process Facilities and Hydrochloric Acid Regeneration Plants
Attachment L RESERVED
Attachment M RESERVED
Attachment N 40 CFR 61, Subpart FF - National Emission Standard for Benzene Waste Operations
Attachment O 40 CFR 63, Subpart DDDDD – National Emission Standards for Industrial, Commercial, and Institutional Boilers and Process Heaters

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Previously issued approvals for this source containing these attachments are available on the Internet at: http://www.in.gov/ai/appfiles/idem-caats/.

Federal rules under Title 40 of United States Code of Federal Regulations may also be found on the U.S. Government Printing Office's Electronic Code of Federal Regulations (eCFR) website, located on the Internet at: http://www.ecfr.gov/cgi-bin/text-idx?tpl=/ecfrbrowse/Title40/40tab_02.tpl.

A copy of the permit is available on the Internet at: http://www.in.gov/ai/appfiles/idem-caats/. For additional information about air permits and how the public and interested parties can participate, refer to the IDEM Permit Guide on the Internet at: http://www.in.gov/idem/5881.htm; and the Citizens' Guide to IDEM on the Internet at: http://www.in.gov/idem/6900.htm.

This decision is subject to the Indiana Administrative Orders and Procedures Act - IC 4-21.5-3-5.

If you have any questions on this matter, please contact Kelsey Bonhivert, of my staff, OAQ, 100 North Senate Avenue, MC 61-53 IGCN 1003, Indianapolis, Indiana, 46204-2251 at 317-233-1782 or 1-800-451-6027, and ask for extension 3-1782.

Sincerely,

Jenny Acker, Section Chief
Permits Branch
Office of Air Quality

Attachments: Modified Permit and Technical Support Document
cc: File - Lake County
Lake County Health Department
U.S. EPA, Region 5
Compliance and Enforcement Branch
IDEM Northwest Regional Office

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Part 70 Operating Permit Renewal
OFFICE OF AIR QUALITY

U.S. Steel - Gary Works
One North Broadway
Gary, Indiana 46402

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

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

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

Operation Permit No.: T089-29907-00121	
Issued by: *Original Signed* Chrystal Wagner, Section Chief Permits Branch, Office of Air Quality	Issuance Date: December 20, 2013 Expiration Date: December 20, 2018

Significant Permit Modification No. 089-33651-00121, issued on March 20, 2014.
Significant Permit Modification No. 089-34611-00121, issued on September 8, 2014.
Administrative Amendment No. 089-34973-00121, issued on December 3, 2014.
Administrative Amendment No.: 089-35392-00121, issued on February 23, 2015.
Significant Permit Modification 089-35695-00121, issued on July 10, 2015.
Administrative Amendment No.: T089-37337-00121, issued on August 22, 2016.
Administrative Amendment No.: T089-37442-00121, issued on September 1, 2016.

Significant Permit Modification No.: T089-37377-00121	
Issued by: Jenny Acker, Section Chief Permits Branch Office of Air Quality	Issuance Date: Expiration Date: December 20, 2018

TABLE OF CONTENTS

Attachment L RESERVED

Attachment M RESERVED

Attachment N RESERVED

Attachment O 40 CFR 63, Subpart DDDDD – National Emission Standards for Industrial, Commercial, and Institutional Boilers and Process Heaters

SECTION A SOURCE SUMMARY

This permit is based on information requested by the Indiana Department of Environmental Management (IDEM), Office of Air Quality (OAQ). The information describing the source contained in conditions A.1 through A.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(14)][326 IAC 2-7-1(22)]

The Permittee owns and operates a stationary integrated steel mill.

Source Address:	One North Broadway, Gary, Indiana 46402
General Source Phone Number:	(219) 888-2464
SIC Code:	3312 (Steel Works, Blast Furnaces (Including Coke Ovens), and Rolling Mills)
County Location:	Lake
Source Location Status:	Nonattainment for 8-hour ozone standard Attainment for all other criteria pollutants
Source Status:	Part 70 Operating Permit Program Major Source, under PSD and Emission Offset Rules Major Source, Section 112 of the Clean Air Act 1 of 28 Source Categories

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

US Steel - Gary Works is an integrated steel mill that includes the primary operation, U.S. Steel – Gary Works (Source ID 089-00121), at One North Broadway, Gary, Indiana, collocated with on-site contractors:

	Company Name	Source ID	Operation Description
1	U.S. Steel - Gary Works	089-00121	integrated steel mill
	On-Site Contractors		
2	TMS International, LLC	089-00132	slag processing/metal recovery
3	South Shore Slag LLC	089-00133	slag crushing, screening and conveying
4	Tube City IMS, LLC	089-00170	iron ore screening operation
5	Central Teaming Company Inc	089-00172	material handling
6	Mid-Continent Coal & Coke	089-00173	coke screening operation
7	Tube City IMS LLC	089-00174	scrap metal processing
8	Fritz Enterprises, Inc.	089-00578	iron and slag processing operation
9	Crister Companies	089-05333	slag crushing and screening operation

A Part 70 permit has been issued to U.S. Steel – Gary Works (Source ID 089-00121). Separate Administrative Part 70 permits will be issued to each of the on-site contractors, solely for administrative purposes. The companies may maintain separate reporting and compliance certification.

A.3 Emission Units and Pollution Control Equipment Summary [326 IAC 2-7-4(c)(3)][326 IAC 2-7-5(14)]

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

Number 3 Sinter Plant

(a) Three (3) Sinter Strands, constructed in 1958 , identified as ISS10379, ISS20380 and ISS30381, each with 50 MMBtu per hour reheat burners combusting natural gas and

coke oven gas identified as ISB001, ISB002 and ISB003 and a maximum capacity of 225 tons of sinter per hour each, each with ignition hood burners with a combined heat input of 50 MMBtu/hr combusting natural gas and coke oven gas, controlled by two (2) Windbox Gas Cleaning Systems IS3203 and IS3204, installed in 1996, each comprised of a Quench Reactor, Dry Venturi Scrubber, a baghouse operated in series, exhausting to Windbox stacks IS6198 and IS6199 which are equipped with VOC CEMS.

(b) One (1) Cold Screen Station, identified as ISR00389, constructed in 1958, with a maximum capacity of 450 tons per hour, using a Baghouse IS3209 as a control device and exhausting to stack IS6207.

(c) One (1) S1/S2 Conveyer System, identified as ISY00388, constructed in 1979, with a maximum capacity of 450 tons per hour, that transfers sinter from the sinter coolers to the cold screening station, using a baghouse IS3208 as a control device and exhausting to stack IS6206.

(d) Three (3) Sinter Coolers, identified as ISC10385, ISC20386, and ISC30387, constructed in 1958, with a maximum capacity of 225 ton per hour each, with emissions exhausting to stacks IS6203, IS6204, and IS6205 respectively.

(e) Three (3) Sinter Strand Discharge End Areas, identified as ISS10379, ISS20380 and ISS0381, constructed in 1958, using three (3) baghouses as control devices, designated as IS3205, IS3206, and IS3207, exhausting to stacks IS6200, IS6201, and IS6202 respectively.

(f) Blended Material Storage Bin Building, identified as ISB00377, constructed in 1979, including bins, feeders and conveyors, with a maximum capacity of 1,000 tons per hour, using a baghouse IS3196 as a control device and exhausting to stack IS6197.

(g) Storage and Blending Piles, identified as ISBP0376, with fugitive emissions.

Blast Furnaces

(a) Raw materials shipped to the ore yard identified as IAOYO366, are transferred to the Highline, identified as IAHL0307, from which raw material shipments and coke are sent through the Stockhouse.

(b) The No. 14 Blast Furnace Stockhouse, constructed in 1979, modified in 2009 with the addition of a baghouse for particulate control, identified Blast Furnace No. 14 Stockhouse Baghouse, exhausting to stack IDSH0367, servicing Blast Furnace 14. The No 4 Blast Furnace Stockhouse constructed in 1979, controlled by dust suppression, services Blast Furnace No. 4.

(c) The No 6 Blast Furnace Stockhouse constructed in 1979, controlled by dust suppression, services Blast Furnace No. 6. The No. 8 Blast Furnace Stockhouse constructed in 1979, controlled by dust suppression, services Blast Furnace No. 8.

(d) No. 4 Blast Furnace, constructed in 1917, with a maximum capacity of 200 tons per hour, identified as IABF0308, using a Blast Furnace Gas Distribution System to collect the blast furnace gas and using natural gas injection and pulverized coal at a rate of 26 tons per hour, oil (from on-site contractor when it meets specifications) at a rate of 70 gallons per minute and/or coal tar (when the on-site contractor tar centrifuge is not operating) at a rate of 70 gallons per minute.

(1) Three (3) No. 4 Blast Furnace Stoves identified as IAST0360, replaced in 1947, with a maximum heat input capacity of 350 MMBtu per hour total combusting

blast furnace gas (BFG) and natural gas, exhausting to the combustion stack IA6160.

(2) No. 4 Blast Furnace Casthouse, identified as IABF0308, constructed in 1917, with emissions from tapping and runners controlled by a natural gas iron oxide fume suppression system IA3177, exhausting to casthouse roof monitor IA6010.

(3) One (1) Slag Pit, identified as IASP0311, with fugitive emissions.

(e) No. 6 Blast Furnace, constructed in 1910, with a maximum capacity of 200 tons per hour, identified as IABFO341, using a Blast Furnace Gas Distribution System to collect the blast furnace gas and using natural gas injection and pulverized coal injected at a rate of 26 tons per hour, oil at a rate of 70 gallons per minute and /or coal tar at a rate of 70 gallons per minute.

(1) Four (4) No. 6 Blast Furnace Stoves identified as IBST0361, replaced in 1997, with a maximum heat input capacity of 350 MMBtu per hour total, combusting Blast Furnace Gas (BFG) and natural gas exhausting to the combustion stack IB6168.

(2) No. 6 Blast Furnace Casthouse, identified as IBBF0341, constructed in 1910, with emissions from tapping and runners controlled by a natural gas iron oxide fume suppression system IB3178, exhausting to casthouse roof monitor IB6011.

(3) One (1) Slag Pit, identified as IBSP0335, with fugitive emissions.

(f) No. 8 Blast Furnace, constructed in 1909, with a maximum capacity of 183 tons per hour, identified as ICBFO354, using a Blast Furnace Gas Distribution System to collect the blast furnace gas and using natural gas injection and pulverized coal injected at a rate of 26 ton per hour, oil at a rate of 70 gallons per minute and/or coal tar at a rate of 70 gallons per minute.

(1) Four (4) No. 8 Blast Furnace Stoves, identified as ICST0362, replaced in 1999, with a maximum heat input capacity of 325 MMBtu per hour total, combusting Blast Furnace Gas and natural gas, exhausting to the combustion stack IC6175.

(2) No. 8 Blast Furnace Casthouse, identified as ICBF0354, constructed in 1909, with emissions from tapping and runners controlled by a natural gas iron oxide fume suppression system IC3179, exhausting to cast house roof monitor IC6012.

(3) One (1) Slag Pit, identified as ICSP0363, with fugitive emissions.

(g) No. 14 Blast Furnace, constructed in 1974, with a maximum capacity of 450 tons per hour, identified as IDBF0369, using a Blast Furnace Gas Distribution System to collect the blast furnace gas and using natural gas injection and pulverized coal injected at a rate of 80 tons per hour, oil at a rate of 150 gallons per minute and/or coal tar at a rate of 150 gallons per minute.

(1) Three (3) No. 14 Blast Furnace Stoves identified as IDST0359, constructed in 1974, with a maximum heat input capacity of 700 MMBtu per hour total, combusting blast furnace gas and natural gas, exhausting to the combustion stack ID6184;

(2) No. 14 Blast Furnace Casthouse, identified as IDBF0369, constructed in 1974 with emissions controlled by a baghouse, identified as ID3185, exhausting to

stack ID6187 and fugitive emissions exhausting through the casthouse roof monitor ID6013;

(3) One (1) Slag Pit, identified as IDSP0371, with fugitive emissions.

(4) Pursuant to Significant Source Modification 089-20118-00121, issued October 20, 2005, the following activities involved in the No. 14 Blast Furnace Reline Project were approved for construction:

(A) Replacement of furnace refractory lining with new and thinner refractory brick.

(B) Replacement of furnace shell.

(C) Removal and replacement of the top charging system with a new "bell-less" charging system.

(D) Placement of new copper staves in the mantle area of the furnace.

(E) Installation of copper cooling plates and a new bustle pipe.

(F) Repair of the checker work brick in the stoves and various structural, mechanical and electrical repairs.

(G) Enlargement of the slag granulator and addition of a stack.

(H) Changes to the casthouse and casthouse emissions control system to improve capture efficiency of hoods at the tap holes, iron troughs and runners.

(I) Removal and replacement of the existing system for cleaning blast furnace gas with a more efficient scrubbing system.

(h) One (1) No. 14 Blast Furnace Slag Granulation Plant owned by U.S. Steel - Gary Works and operated by U.S. Steel - Gary Works as part of the slag processing operation. The granulation plant has a maximum capacity of 1,704,000 tons of steel mill slag per year, consisting of the following:

(1) One (1) hot slag quenching operation, constructed in 1991, directed to a hooded exhaust stack.

(2) Two (2) silos, constructed in 1991, for temporary slag storage.

(3) Two (2) belt conveyers, constructed in January 1995.

(4) One (1) storage silo and loadout bay, constructed in May 1995, with a capacity of 400,000 tons per year.

(i) One (1) blast furnace gas distribution system consisting of instrumentation and valves designed to limit the maximum pressure through the distribution system by venting excess blast furnace gas to the three (3) bleeder stacks equipped with Flare No. 1 identified as BG6073, constructed before 1920, Flare No. 2, identified as BG6074 constructed before 1920 and Flare No. 4 identified as BG6075, constructed in 1974.

(j) One (1) iron beaching process, constructed prior to 1965, identified as IMIB0378.

(k) One (1) transfer ladle maintenance operation, constructed prior to 1965, identified as, IMVM0375.

Number One Basic Oxygen Process (BOP) Shop

(a) Two (2) Stations, identified as No. 1 and No. 2, Hot Metal Transfer and Desulfurization Stations. The Desulfurization Stations were originally constructed in 1981 and the Hot Metal Transfer Stations were originally constructed in 1965, and replaced in 1998. Each station consists of Hot Metal Desulfurization, SSDS0201, Hot Metal Transfer SSMT0203 and Slag Skimming SSSS0205. Hot metal from the blast furnaces is desulfurized and skimmed prior to charging in the steel making vessels. The maximum capacity of each station is 456 tons per hour. Each station is equipped with a local exhaust ventilation hood to capture emissions ducted to the Hot Metal Desulfurization/Skimming Stations Baghouse SS3100. The desulfurization units are equipped with nitrogen suppression around where the desulfurization lance penetrates the hood hole.

(b) One (1) Flux handling system, identified as SSFH0206, constructed in 1965, used for unloading, temporary storage, and transfer of fluxing agents to the steel making vessels, with a maximum capacity of 80 tons per hour. Emissions are controlled by No. 1, No. 2 and No. 3 baghouses SS3058, SS3059, and SS3053. Nos. 1 and 2 exhaust inside the building and No. 3 discharges through stack SS6056.

(c) Basic Oxygen Process (BOP) Vessels, constructed in 1965, consisting of BOP vessel M, identified as SSVM0234, vessel E, identified as SSVE0235 and vessel D, identified as SSVD0236, with a maximum capacity of 250 tons per hour each. Emissions are controlled by open combustion hoods and an exhaust emission hood collection system, which exhausts emissions to the Gas Cleaning Systems SS3103 and SS3104.

(d) Two (2) gas cleaning systems SS3103 and SS3104 that process the exhaust gases from the three (3) steel making vessels consisting of three (3) quenchers, two (2) scuppers, two (2) Venturi scrubbers, two (2) separators, two (2) gas coolers fitted with internal mist eliminators and two (2) induced draft fans. Emissions exhaust through stacks SS6102 and SS6103.

(e) CASbell/OB Lancing Stations M, D and E, include the controlled argon stirring process and blowing of oxygen to maintain temperature and chemistry. Constructed in 1981, Station M, identified as SSCM0231, Station E identified as SSCE0232, and Station D identified as SSCD0233 with a maximum capacity of 250 tons per hour each. Emissions are controlled by the CASbell/OB Lancing baghouse SS3105, exhausting through Stack SS6104 and uncaptured emissions venting to the roof monitor SS6636.

(f) One (1) Slingot Moulding Station, including the casting of bottom-poured steel ingots, identified as SSMS0227, constructed in 1965, exhausting to the roof monitor SS6637.

(g) Nine (9) natural gas fired Ladle Preheaters and Dryers identified as No. 1 through 9, with 1 through 4, constructed in 1983, 5 and 6 constructed in 1982 and 7 through 9 construction unknown. Six (6) Preheaters with a capacity of 14 MMBtu/hr each and three (3) Dryers with a capacity of 10 MMBtu/hr each, identified as SSLD0230, exhausting through Roof Monitor SS6637.

(h) One (1) Continuous Caster, identified as SCSC0274, constructed in 1967, including a Tundish dryer with a heating capacity of 7.0 MMBtu/hr per hour, continuously casting steel slabs with a maximum capacity of 275 tons per hour. Emissions exhaust through Roof Monitor SC6638.

(i) One (1) fugitive emissions mitigation system at the No. 1 BOP Shop, constructed in June 2002, consisting of a capture hood system ducted to a 99% efficient baghouse with a flow rate of 11,500 acfm.

(j) One emergency slag skimming station with a maximum capacity of 456 tons per hour with emissions ducted to the Hot Metal Transfer Station and Desulfurization/Skimming Stations Baghouse SS3100.

Number Two Q-BOP Shop

(a) Two (2) Hot Metal Transfer and Desulfurization Stations, identified as NSDS0246, constructed in 1987, with a maximum capacity of 510 tons per hour. These stations included: two (2) Hot Metal Mixers, identified as NSMM0264 and two (2) Hot Metal Mixer Heaters, identified as NSMH0251, constructed in 1973, with a maximum capacity of 255 tons per hour. The natural gas fired mixer heaters have a heat input capacity of 10 MMBtu/hr each. Emissions from the hot metal transfer and desulfurization stations, mixers and heaters are controlled by the Hot Metal Transfer and Desulfurization Stations Baghouse NS3115, discharging through NS6144 and the uncontrolled emissions go through roof monitor NS6631.

(b) Q-Basic Oxygen Process (BOP) vessels, constructed in 1973, consisting of BOP vessel T identified as NSVT0268, vessel W, identified as NSVW0269, and vessel Y, identified as NSVY0270, with a maximum capacity of 250 tons per hour each. Primary emissions are controlled by open combustion hood and two (2) Gas Cleaning Systems, secondary emissions are controlled by the Secondary Emissions Baghouse NS3124, exhausting to stack NS6123, and uncontrolled emissions exhaust through Roof Monitor NS6632.

(c) Two (2) Gas Cleaning Systems, identified as NS3125 and NS3126 located in the gas cleaner facility, constructed in 1973, process the exhaust gases from the three (3) steel making vessels through three (3) quenchers, two (2) scuppers (tank like structures that remove excess quench water and solids from the gas stream), two (2) Venturi scrubbers, two (2) separators, two (2) gas coolers with mist eliminators, and two (2) induced draft fans exhausting to Stacks NS6124 and NS6125.

(d) Three (3) Flux Bins T, W, and Y, identified as NSVT0265, NSVW0266 and NSVY0267, constructed in 1973, with a maximum capacity of 141 tons per hour each. Emissions are controlled by five (5) baghouses. Three (3) Flux Transfer Baghouses at 166' level identified as NS3112, NS3108, and NS3107, exhausting through Stacks NS6623, NS6627and NS6628 recycling captured material back to the process; One (1) North Flux Handling Baghouse at 116' level identified as NS3109 and one (1) South Flux Handling Baghouse at 116' level identified as NS3110, exhausting through stacks NS6626 and NS6625. Uncontrolled emissions exhaust through the roof monitor NS6632.

(e) Three (3) Ladle Metallurgical Facilities, LMF1 identified as NSL10293, LMF 2 identified as NSL20294 were constructed in 1986 and LMF 3 identified as NSL30295, constructed in 1991 with a maximum capacity of 348 tons per hour each. Hot fume emissions from LMF 1 and 2 are controlled by Nos. 1 and 2 LMF Hot Fume Exhaust baghouses NS3135 and NS3136, exhausting through stacks NS6146 and NS6147. Material handling emissions at LMF 1 and 2 are controlled by the LMF Nos. 1 and 2 Material Handling baghouse NS3052, exhausting through stack NS6055. The LMF 3 Hot Fume Exhaust and Material Handling emissions are controlled by the LMF 3 Hot Fume and Material Handling Baghouse NS3137, exhausting to stack NS6148. All uncontrolled emissions exhaust through the roof monitor NS6634.

(f) One (1) Capped Argon Bubbling (CAB) Station with oxygen blowing, approved in 2014 for construction, identified as NSC40296, with a maximum capacity of 477,000 tons per

year, using the No. 3 LMF Hot Fume and Material Handling Baghouse NS3137 as control, and exhausting to stack NS6148. All uncontrolled emissions exhaust through the roof monitor NS6634.

(g) One (1) R-H Vacuum Degasser, identified as NSVD0271, constructed in 1989, with a maximum capacity of 297.1 tons of steel per hour consisting of two (2) natural gas fired heaters, one (1) active and one (1) spare, identified as NSAB0276 and NSSB0275, with heat input capacities of 12 MMBtu per hour and 3 MMBtu per hour, respectively. Carbon monoxide and other combustible gas emissions are controlled with a flare that exhausts through Stack NS6145 and uncontrolled emissions exhaust through the Roof Monitor NS6634.

(h) One (1) Slag Conditioning Station servicing the RH Vacuum Degasser, constructed in 1997, with a maximum capacity of 297.1 tons of steel per hour.

(1) PM_{10} emissions from the station are controlled by a baghouse exhausting through Stacks S-1 through S-6 and recycling captured material back to the process.

(2) PM_{10} emissions from the material handling of slag conditioning and metallurgical agents are exhausted through the RH Vacuum Degasser Slag Conditioning Baghouse NS3207, exhausting through Stack NS6636.

(i) One (1) Daytank Lime Silo at the lime dumping station, identified as NSDS0250 constructed in 1971. Emissions are controlled by the Daytank Lime Silo baghouse NS3106, exhausting through the stack, NS6629.

(j) Three (3) Continuous Casting Lines, identified as Lines A, B and C identified as, NCCA0284, NCCB0285 and NCCC0286, with a total maximum capacity of 800 tons per hour combined. Lines A and B were constructed in 1986. Line C was constructed in 1991. Emissions from the continuous casters go to the Roof Monitor NC6635.

(k) Fourteen (14) natural gas fired Ladle Preheaters, identified as NBLD0262, eleven (11) with a heat input capacity of 9 MMBtu per hour each and three (3) with a heat input of 10 MMBtu per hour each. Emissions go through Roof Monitor NS6633.

(l) Two (2) Hot Metal Ladle Skimmers, identified as NSLS0248, constructed in 1973. Emissions go through Roof Monitor NS6631.

(m) Two (2) Steel Slag Skimming Stations, consisting of slag skimmers, identified as NSS10292 and NSS20287. Both were constructed in 1973. Emissions go through Roof Monitor NS6633.

(n) One (1) Slingot Station, identified as NSST0290, constructed in 1986. Emissions go through Roof Monitor NS6634.

(o) Eight (8) natural gas fired Tundish Preheaters located at the No. 2 Caster, with a heat input capacity of 6 MMBtu per hour each. Emissions go through Roof Monitor NC6635.

Hot Rolling Mill

(a) Four (4) reheat furnaces Nos. 1, 2, 3 and 4, identified as RMF10500, RMF20501, RMF30502 and RMF40503 commenced operation in 1967, with heat input capacity of 600 MMBtu per hour each. Each furnace is equipped to combust natural gas and coke oven gas with emissions exhausting through Stacks RM6500, RM6501, RM6502 and RM6503.

(b) Two (2) waste heat boilers Nos. 1 and 2 , identified as RB1B0508 and RB2B0509, commenced operation in 1967, with a heat input capacity of 226 MMBtu per hour each. The heat input capacity from fuel from these boilers is derived from a combination of waste heat ducted from the reheat furnaces and the combustion of natural gas and coke oven gas. Emissions exhaust through the waste heat boiler stacks HB6504 and HB6505.

(c) One (1) 84-inch Hot Strip Mill, identified as RMV00504, commenced operation in 1967, with a maximum capacity of 856 tons per hour, 5 roughing mills and a 7-stand finishing mill with fugitive emissions through a Roof Monitor RM6630.

Continuous Pickling Lines

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

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

Sheet Products Division

(a) North Sheet Mill

(1) One (1) 5-Stand Cold Reduction Mill, identified as H5M50637, constructed in 1964, with a maximum capacity of 400 tons per hour, consisting of 5 Mill Stands. Emissions are controlled by fume collection H53547, exhausting to Stack H56527.

(2) Twenty-six (26) 4-Stack A Box Annealing Furnaces and 50 bases, identified as HTAF0813 through HTAF0838, constructed in 1964, with a heat input capacity of 12 MMBtu per hour each. These furnaces are direct fired with emissions exhausting through vent pipes HT6530 through HT6555.

Under 40 CFR 63, Subpart DDDDD, this is considered an existing process heater.

(3) One (1) 80-inch temper mill, constructed in 1964, with a maximum capacity of 250 tons per hour, with fugitive emissions.

(4) One (1) 80-inch Recoil Line, constructed in 1964, with a maximum capacity 120 tons per hour, with fugitive emissions.

(b) South Sheet Mill

(1) Seventeen (17) 8-Stack A Box Annealing furnaces and 66 bases, identified as HXBA0560 through HXBA0576, constructed in 1948. Eleven (11) furnaces have a heat input capacity of 15 MMBtu per hour each and the remaining six (6) are rated at 18 MMBtu per hour each. Emissions from these furnaces exhaust through the Roof Monitor HX6003.

Under 40 CFR 63, Subpart DDDDD, this is considered an existing process heater.

(2) One (1) 2-Stand Temper Mill, identified as H2M00579, constructed in 1974, with a maximum capacity of 89 tons per hour, with fugitive emissions through Roof Monitor H26004.

(3) One (1) No. 6 East Galvanizing Line, constructed in 1962, with a maximum capacity of 48 tons an hour, with one (1) annealing furnace identified as H6F10527 with a heat input of 45 MMBtu per hour and emissions through stack H66516. Also, contains one (1) Galvanneal Furnace identified as HF20529 with a heat input capacity of 20.0 MMBtu per hour and emissions exhausting through Roof Monitor H66006.

Under 40 CFR 63, Subpart DDDDD, this is considered an existing process heater.

(4) Two (2) hydrogen atmosphere batch annealing furnaces, with a total heat input capacity of 10.26 MMBtu per hour, constructed in 1997, consisting of three (3) fixed bases and two (2) movable cooling hoods.

Under 40 CFR 63, Subpart DDDDD, this is considered an existing process heater.

(5) One (1) 84-inch Hot Roll Temper Mill, constructed in 1967, with a maximum capacity of 124 tons per hour, with fugitive emissions.

(6) One (1) coil prep line, constructed in 1968, with a maximum capacity of 73 tons per hour, with fugitive emissions.

(c) Electro-galvanizing Line (EGL)

(1) One (1) Electro-galvanizing Line (EGL), with one HCl pickle tank, No. 1 Pickle tank, identified as HET20685, a cleaner section, a plating section and associated scrubber, with a maximum capacity of 60.5 tons per hour. Fumes from the Pickle Section are controlled by a fume scrubber HE3583 exhausting through stack HE6563. The single sided process for this coating line was constructed in 1977 and was modified in 1993 to a double sided process for coating.

(2) One (1) natural gas fired Boiler No. 1 in the EGL Boiler House, identified as HBB10675, constructed in 1978 and modified in 2001, with a heat input capacity of 39.147 MMBtu per hour, exhausting through stack HB6559.

Under 40 CFR 63, Subpart DDDDD, this is considered an existing industrial boiler.

Tin Division

(a) One (1) 6-Stand Cold Reduction Mill, identified as TRM00709, constructed in 1967, with a maximum capacity of 150 tons per hour. Emissions are controlled by a mist eliminator TR3600, exhausting to stack TR6575.

(b) One (1) cleaning line, identified as No. 7 Cleaning Line, constructed in 1967, with a maximum capacity of 80 tons per hour. Fumes are controlled by a fume scrubber exhausting to a stack.

(c) Two (2) Annealing Lines, No. 1 and No. 2, each containing an annealing furnace, identified as T1AF0794 and T2AF0799, No. 1 constructed in 1950 and No. 2 constructed

in 1959, with a maximum heat input capacities of 32 and 35 MMBtu per hour, respectively. Emissions exhaust to stacks T16609 and T26610. The No. 2 Continuous Anneal Line has a cleaning section with fumes collected in a fume scrubber exhausting through a stack.

Under 40 CFR 63, Subpart DDDDD, this is considered an existing process heater.

(d) Five (5) 4-Stack A Box Annealing Furnaces and 12 bases, identified as TXAF0765 through TXAF0769, constructed in 1968. All furnaces have a heat input of 10.5 MMBtu per hour each. Emissions exhaust to stacks TX6580 through TX6584.

Under 40 CFR 63, Subpart DDDDD, this is considered an existing process heater.

(e) One (1) 48-inch Temper Mill, constructed in 1958, with a maximum capacity of 150 tons per hour, with fugitive emissions. This unit has a dust filter that exhausts inside the building.

(f) One (1) Double Reduction Mill with two (2) mill stands, identified as TDMO0742, constructed in 1963, with a maximum capacity of 75 tons per hour. Emissions are controlled by a mist eliminator D3603, exhausting to stack TD6595.

(g) One (1) No. 1 Tin Free Steel Line (TFS), constructed in 1950, with a maximum capacity of 24 tons per hour. The chemical treatment rinse section, TFR00753 exhaust through stack TF6597 and all other fugitive emissions from the line to roof monitor TF6661.

(h) One (1) No. 5 Electrolytic Tinning Line 5 (ETL), constructed in 1957, and with a maximum capacity of 50 tons per hour. The No. 5 ETL contains a Plating and Chemical Treatment Tank, identified as TFR00777, with fugitive emissions through Roof Monitor T56071.

(i) One (1) No. 6 Electrolytic Tinning Line (6 ETL), constructed in 1966, with a maximum capacity of 120 tons per hour. The 6 ETL also contains a Plating and Chemical Treatment Tank, identified as T6H00786, with fugitive emissions through Roof Monitor T56071.

(j) One (1) Tin Anode Caster, constructed in 1965, with a maximum capacity of 0.57 tons per hour, with fugitive emissions through roof monitor.

(k) One (1) Tin Mill Recoil and inspection Line, constructed in 1967, with a maximum capacity of 14.8 tons per hour.

(l) One (1) 45” Side Trimmer, constructed in 1961, with fugitive emissions through the roof monitor.

No. 4 Boiler House

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

(b) One (1) Boiler, No. 3, identified as O4B30461, constructed in 1967, equipped to combust blast furnace gas and natural gas, with a maximum heat input of 500 MMBtu per hour, exhausting through Stack O46270.

Turboblower Boiler House (TBBH)

(a) Three (3) Boilers, No. 1, No. 2 and No. 3, identified as OTB10462, OTB20463 and OTB30464, constructed in 1948, equipped to combust blast furnace gas, coke oven gas, fuel oil and natural gas, with a maximum heat input of 410 MMBtu per hour each, exhausting through Stacks OT6271, OT6272 and OT6273, respectively.

(b) One (1) Boiler No. 5, identified as OTB50466, constructed in 1958, equipped to combust blast furnace gas, coke oven gas, fuel oil and natural gas, with a maximum heat input of 410 MMBtu per hour, exhausting through Stack OT6275.

(c) One (1) boiler, No. 6, identified as OTB60467, constructed after August 17, 1971, equipped to combust blast furnace gas and natural gas, with a maximum heat input capacity of 710 MMBtu per hour, exhausting through Stack OT6276.

Coal Pulverization and Air Preheater System (East PCI Coal Pulverization)

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

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

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

Under 40 CFR 60, Subpart Y these units are considered affected facilities.

Pulverized Coal Storage and Feed System (West PCI Coal Pulverization)

(a) One (1) Pulverized coal Transport, identified as Line A, constructed in 1993, with a maximum capacity of 210 tons per hour, ducted to a baghouse (A) exhausting to stack (SS-5).

(b) One (1) Pulverized coal Transport, identified as Line B, constructed in 1993, with a maximum capacity of 210 tons per hour, ducted to a baghouse (B) exhausting to stack (SS-6).

(c) One (1) Pulverized coal storage reservoir, constructed in 1993, with a maximum capacity of 600 tons, blanketed with nitrogen and ducted to a baghouse (vent filter house) exhausting to stack (SS-7).

Under 40 CFR 60, Subpart Y these units are considered affected facilities.

Railcar Heater (PCI Coal Handling Thaw Shed)

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

Coal Handling Operations

Coal Handling System

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

(b) One (1) Reclaim Hopper, identified as RCH-1, constructed in 1993, with a maximum capacity of 300 tons per hour, ducted to baghouse DC-6 and exhausting to stack DC-6.

(c) One (1) Car Dump Hopper 1/C1, identified as FS-8, constructed in 1993, with a maximum capacity of 200 tons per hour, ducted to baghouse DC-1 exhausting to stack F1.

(d) One (1) Car dump Hopper 2/C1, identified as FS-9, constructed in 1993, with a maximum capacity of 200 tons per hour, ducted to a baghouse DC-2 exhausting to stack F2.

(e) One (1) Car Dump Hopper 3/C1, identified as FS-10, constructed in 1993, with a maximum capacity of 200 tons per hour, ducted to a baghouse DC-3 exhausting to stack F3.

(f) One (1) Transfer Point C1/C2, identified as FS-2, constructed in 1993, with a maximum capacity of 600 tons per hour, ducted to a baghouse DC-4 exhausting to stack F4.

(g) One (1) Reclaim Hopper/C2, identified as FS-14, constructed in 1993, with a maximum capacity of 300 tons per hour, ducted to a baghouse DC-5 exhausting to stack F5.

(h) One (1) Screen Transfer/C2, identified as FS-3, constructed in 1993, with a maximum capacity of 600 tons per hour, ducted to a baghouse DC-7 exhausting to stack F7.

(i) One (1) Screen/C3 Gate Transfer identified as FS-11, constructed in 1993, ducted to a baghouse DC-8 exhausting to stack F.

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

(k) One (1) Transfer Point C4/C5, identified as FS-4, constructed in 1993, ducted to a baghouse DC-10 exhausting to stack F10.

Under 40 CFR 60, Subpart Y these units are considered affected facilities.

East Building – Coal handling

(a) One (1) Transfer Point C5/C6, identified as FS-5, constructed in 1993, with a maximum capacity of 600 tons per hour, ducted to a baghouse DC-11 exhausting to stack F11.

(b) One (1) Transfer Point C6/Bin 1, identified as FS-7, constructed in 1993, ducted to baghouse DC-12 exhausting to stack F12.

(c) One (1) Transfer Point C5/Bin 2, identified as FS-6, constructed in 1993, ducted to baghouse DC-13 exhausting to stack F13.

(d) One (1) Transfer Point C6/Bin 3, identified as FS-13, constructed in 1993, with a maximum capacity of 600 tons per hour, ducted to baghouse DC-14 exhausting to stack F14.

Under 40 CFR 60, Subpart Y these units are considered affected facilities.

Coal Piles and Haul Roads

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

(b) Haul Roads - Vehicle Traffic

Corrective Action Management Unit (CAMU)

(a) One (1) CAMU Evaporative Spray System, with a maximum throughput capacity of 250 gallons per minute (gpm), consisting of 16 spray heads, each with a rated capacity of 14.4 gpm, located on the floor of CAMU Unit 2. The system is fed from a single pump drawing water from the CAMU Unit 1 leachate collection system, which contains non-native materials dredged from the Calumet River.

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

(a) Paved Roads and Parking Lots

(b) Unpaved Roads and Parking Lots

(c) Batch Transfer-Loading and Unloading Operations

(d) Continuous Transfer In and Out of Storage Piles

(e) Batch Transfer Operations-Slag and Kish Handling

(f) Wind Erosion from Storage Piles and Open Areas

(g) In Plant Transfer by Truck or Rail

(h) In Plant Transfer by Front End Loader or Skip Hoist

(i) Material Processing Facility

(j) Crusher Fugitive Emissions

(k) Material Processing Facility Building Openings

(l) Dust Handling Equipment

Coke Receiving and Handling

(a) One (1) coke rail car unloading station, approved in 2014 for construction, identified as CPS0001, with a maximum capacity of 10,126,560 tons per year, consisting of the following:

(1) One (1) unloading station.

(2) One (1) conveyor, with a maximum rated capacity of 1,156 tons per hour.

Iron Ore Screening

(a) One (1) iron ore pellet screening plant, identified as North Plant unit 01, constructed in 1974, with a nominal capacity of 600 tons per hour, using screens and conveyers to process iron ore pellets.

(b) One (1) iron ore pellet screening plant, identified as South Plant unit 02, constructed in July 1981, with a nominal capacity of 600 tons per hour, using screens and conveyers to process iron ore pellets.

(c) Loaders for loading/unloading and transporting iron ore pellets on unpaved roads.

Coke Screening

(a) One (1) coke screening operation, approved in 2015 for construction, identified as Area Three Screening Station (CPS002), consisting of the following equipment:

(1) One (1) Dock Unloading storage pile, approved in 2015 for construction, with a nominal capacity of 74,669 ft^2.

(2) One (1) Area Three Coke pre-Screen storage pile, approved in 2015 for construction, with a nominal capacity of 475 ft^2.

(3) One (1) mobile screening unit, approved in 2015 for construction, with a maximum rated capacity of 250 tons per hour, consisting of the following:

(A) One (1) feed hopper
(B) One (1) feed conveyor
(C) One (1) single deck screener, equipped with an enclosure (full boot) covering the screen area and screen transfer points
(D) One (1) oversize discharge conveyor
(E) One (1) undersize discharge conveyor
(F) One (1) diesel engine, identified as CPS002-E1, with a maximum rated output of 111 horsepower, model year 2014 or later. Under 40 CFR 60, Subpart IIII this is considered an affected engine. Under 40 CFR 63, Subpart ZZZZ this is considered an affected engine.

(4) One (1) Area Three undersize storage pile, approved in 2015 for construction, with a nominal capacity of 475 ft^2.

(5) One (1) Area Three oversize stacker conveyor for loading railcars, approved in 2015 for construction, with a maximum rated capacity of 400 tons per hour, driven by one (1) diesel engine, identified as CPS002-E2, with a maximum rated output of 38 horsepower, model year 2014 or later. Under 40 CFR 60, Subpart IIII this is considered an affected engine. Under 40 CFR 63, Subpart ZZZZ this is considered an affected engine.

(b) One (1) coke screening operation, approved in 2015 for construction, identified as N-Yard Screening Station (CPS003), consisting of the following equipment:

(1) One (1) mobile screening unit, approved in 2015 for construction, with a maximum rated capacity of 250 tons per hour, consisting of the following:

(A) One (1) feed hopper
(B) One (1) feed conveyor
(C) One (1) single deck screener, equipped with an enclosure (full boot) covering the screen area and screen transfer points

(D) One (1) oversize discharge conveyor
(E) One (1) fines discharge conveyor
(F) One (1) diesel engine, identified as CPS003-E1, with a maximum rated output of 111 horsepower, model year 2014 or later. Under 40 CFR 60, Subpart IIII this is considered an affected engine. Under 40 CFR 63, Subpart ZZZZ this is considered an affected engine.

(2) One (1) N-Yard oversize stacker for loading railcars, approved in 2015 for construction, with a maximum rated capacity of 400 tons per hour, driven by one (1) diesel engine identified as CPS003-E2, with a maximum rated output of 38 horsepower, model year 2014 or later. Under 40 CFR 60, Subpart IIII this is considered an affected engine. Under 40 CFR 63, Subpart ZZZZ this is considered an affected engine.

(c) One (1) coke screening operation, approved in 2015 for construction, identified as Undersize Coke Screening Station (CPS004), consisting of the following equipment:

(1) One (1) mobile screening unit, approved in 2015 for construction, with a maximum rated capacity of 200 tons per hour, consisting of the following:

(A) One (1) feed hopper
(B) One (1) feed conveyor
(C) One (1) double deck screener, equipped with an enclosure (full boot) covering the screen area and screen transfer points
(D) One (1) oversize discharge conveyor
(E) One (1) buckwheat discharge conveyor
(F) One (1) undersize discharge conveyor
(G) One (1) diesel engine, identified as CPS004-E1, with a maximum rated output of 111 horsepower, model year 2014 or later. Under 40 CFR 60, Subpart IIII this is considered an affected engine. Under 40 CFR 63, Subpart ZZZZ this is considered an affected engine.

A.4 Specifically Regulated Insignificant Activities [326 IAC 2-7-1(21)][326 IAC 2-7-4(c)][326 IAC 2-7-5(14)]

This stationary source also includes the following insignificant activities which are specifically regulated, as defined in 326 IAC 2-7-1(21):

(a) Specifically regulated insignificant activities:

(1) Degreasing operations that do not exceed 145 gallons per 12 months, except if subject to 326 IAC 20-6. [326 IAC 8-3-5][326 IAC 8-3-6][326 IAC 8-9-1]

(2) Cleaners and solvents characterized as follows:

(A) Having a vapor pressure equal to or less than 2 kPa; 15 mm Hg; or 0.3 psi measured at 38^{O}C (100^{O}F) or;

(B) Having a vapor pressure equal to or less than 0.7 kPA; 5mm Hg; or 0.1 psi measured at 20^{O}C (68^{O}F); the use of which for all cleaners and solvents combined does not exceed 145 gallons per 12 months.[326 IAC 8-3-5][326 IAC 8-3-6][326 IAC 8-9-1]

(3) The following VOC and HAP storage containers:

(A) Storage tanks with capacity less than or equal to 1,000 gallons and annual throughput less than 12,000 gallons. [326 IAC 8-9-1]

(B) Vessels storing lubricating oils, hydraulic oils, machining oils, and machining fluids. [326 IAC 8-9-1]

(4) The following equipment related to manufacturing activities not resulting in the emission of HAPs: brazing equipment, cutting torches, soldering equipment, welding equipment. [326 IAC 6.8-10-3]

(5) Any of the following structural steel and bridge fabrication activities:

(A) Cutting 200,000 linear feet or less of one inch (10) plate or equivalent.

(B) Using 80 tons or less of welding consumables. [326 IAC 6.8-10-3]

(6) Conveyors as follows:

(A) Covered conveyor for coal or coke conveying of less than or equal to 360 tons per day; [326 IAC 6.8-10-3]

(B) Uncovered coal conveying of less than or equal to 120 tons per day. [326 IAC 6.8-10-3]

Under 40 CFR 60, Subpart Y these units are considered affected facilities.

(7) Coal bunker and coal scale exhausts and associated dust collector vents. [326 IAC 6.8-10-3]

(8) Grinding and machining operations controlled with fabric filters, scrubbers, mist collectors, wet collectors and electrostatic precipitators with a design grain loading of less than or equal to 0.03 grains per actual cubic foot and a gas flow rate less than or equal to 4000 actual cubic feet per minute, including the following: deburring; buffing; polishing; abrasive blasting; pneumatic conveying; and woodworking operations. [326 IAC 6.8-10-3]

(9) Vents from ash transport systems not operated at positive pressure. [326 IAC 6.8-10-3)]

(10) Fuel dispensing activities, including the following:

(A) A gasoline fuel transfer dispensing operation handling less than or equal to one thousand three hundred (1,300) gallons per day and filling storage tanks having a capacity equal to or less than ten thousand five hundred (10,500) gallons. Such storage tanks may be in a fixed location or on mobile equipment. [326 IAC 8-9-1]

(B) A petroleum fuel other than gasoline dispensing facility, having a storage tank capacity less than or equal to ten thousand five hundred (10,500) gallons, and dispensing three thousand five hundred (3,500) gallons per day or less. A petroleum fuel, other than gasoline, dispensing facility having a storage capacity less than or equal to 10,500 gallons, dispensing less than or equal to 230,000 gallons per month. [326 IAC 8-9-1]

(b) Specifically regulated insignificant activities (former Gary Coal Processing, LP):

(1) Degreasing operations that do not exceed 145 gallons per 12 months, except if subject to 326 IAC 20-6.[326 IAC 8-3-5][326 IAC 8-3-8]

(2) Cleaners and solvents characterized as follows:

(A) Having a vapor pressure equal to or less than 2 kPa; 15 mm Hg; or 0.3 psi measured at $38^{O}C$ ($100^{O}F$) or;

(B) Having a vapor pressure equal to or less than 0.7 kPa; 5mm Hg; or 0.1 psi measured at $20^{O}C$ ($68^{O}F$); the use of which for all cleaners and solvents combined does not exceed 145 gallons per 12 months. [326 IAC 8-3-2][326 IAC 8-3-5][326 IAC 8-3-8]

(3) One (1) 5, 000 gallon #2 diesel fuel tank - A petroleum fuel, other than gasoline, dispensing facility having a storage capacity less than or equal to 10,500 gallons, and dispensing less than or equal to 230,000 gallons per month. [326 IAC 8-9-1]

(c) Other Insignificant Activities

(1) Space heaters, process heaters, or boilers using the following fuels:

(A) Natural gas-fired combustion sources with heat input equal to or less than ten million (10,000,000) Btu per hour.

(B) Fuel oil-fired combustion sources with heat input equal to or less than two million (2,000,000) Btu per hour and firing fuel containing equal or less than five-tenths percent (0.5%) sulfur by weight.

(2) Equipment powered by diesel fuel fired or natural gas fired internal combustion engines of capacity equal to or less than five hundred thousand (500,000) British thermal units per hour except where total capacity of equipment operated by one (1) stationary source as defined by subdivision (38) exceeds two million (2,000,000) British thermal units per hour.

(3) Combustion source flame safety purging on startup.

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

(5) Equipment used exclusively for the following:

(A) Packaging lubricants and greases.

(B) Filling drums, pails, or other packaging containers with the following: Lubricating oils, Waxes and Greases.

(6) Application of: oils; greases; lubricants; and nonvolatile material; as temporary protective coatings.

(7) Closed loop heating and cooling systems.

(8) Rolling oil recovery systems.

(9) Groundwater oil recovery wells.

(10) Activities associated with the treatment of wastewater streams with an oil and grease content less than or equal to 1% by volume.

(11) Water runoff ponds for petroleum coke-cutting and coke storage piles.

(12) Any operation using aqueous solutions containing less than 1% by weight of VOCs, excluding HAPS.

(13) Water based adhesives that are less than or equal to 5% by volume of VOCs excluding HAPs.

(14) Noncontact cooling tower systems with forced or induced draft cooling tower system not regulated under a NESHAP.

(15) Quenching operations used with heat treating operations.

(16) Replacement or repair of electrostatic precipitators, bags in baghouses and filters in other air filtration equipment.

(17) Heat exchanger cleaning and repair.

(18) Process vessel degassing and cleaning to prepare for internal repairs.

(19) Stockpiled soils from soil remediation activities that are covered and waiting transport for disposal.

(20) Paved and unpaved roads and parking lots with public access.

(21) Underground conveyors.

(22) Asbestos abatement projects regulated by 326 IAC 14-10.

(23) Purging of gas lines and vessels that is related to routing maintenance and repair of buildings, structures, or vehicles at the source where air emissions from those activities would not be associated with any production process.

(24) Flue gas conditioning systems and associated chemicals, such as the following: sodium sulfate, ammonia and sulfur trioxide.

(25) Equipment used to collect any material that might be released during a malfunction, process upset, or spill cleanup, including catch tanks, temporary liquid separators, tanks, and fluid handling equipment.

(26) Blow down for any of the following: sight glass; boiler; compressors; pumps; and cooling tower.

(27) Activities associated with emergencies, including the following:

(A) On-site fire training approved by the department.

(B) Emergency generators as follows: Gasoline generators not exceeding one hundred ten (110) horsepower, Diesel generators not exceeding one thousand six hundred (1,600) horsepower and natural gas turbines or reciprocating engines not exceeding one thousand six hundred (1,600) horsepower.

(C) Stationary fire pumps.

(28) Purge double block and bleed valves.

(29) A laboratory as defined in 326 IAC 2-7-1(21)(G).

(30) RCRA groundwater remediation system, identified as GWRP-1 which includes eleven (11) recirculation wells to remove benzene from groundwater through a combination of in-situ air sparging, air stripping and vapor extraction.

(d) RESERVED

(e) Specifically regulated insignificant activities (Iron Ore Screening):

(1) Degreasing operations that do not exceed 145 gallons per 12 months, except if subject to 326 IAC 20-6.[326 IAC 8-3-2][326 IAC 8-3-8]

(2) Cleaners and solvents characterized as follows:

(A) Having a vapor pressure equal to or less than 2 kPa; 15 mm Hg; or 0.3 psi measured at 38°C (100°F) or;

(B) Having a vapor pressure equal to or less than 0.7 kPa; 5mm Hg; or 0.1 psi measured at 20°C (68°F); the use of which for all cleaners and solvents combined does not exceed 145 gallons per 12 months. [326 IAC 8-3-2][326 IAC 8-3-8]

(3) 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. [326 IAC 8-9-1]

(4) 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]

(5) The following VOC and HAP storage containers: Storage tanks with capacity less than or equal to 1,000 gallons and annual throughput less than 12,000 gallons. [326 IAC 8-9-1]

(f) Two natural gas-fired boilers, identified as ETF-1 and ETF-2, permitted in 2016, each with a maximum capacity of 6.27 MMBtu/hr, equipped with low NOx burners and flue gas recirculation, and exhausting to stack ETF-1a and ETF-2a, respectively.

Under 40 CFR 63, Subpart DDDDD, these units are considered new industrial boilers.

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, T089-29907-00121, is issued for a fixed term of five (5) years from the issuance date of this permit, as determined in accordance with IC 4-21.5-3-5(f) and IC 13-15-5-3. Subsequent revisions, modifications, or amendments of this permit do not affect the expiration date of this permit.

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

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

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

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

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

B.4 Enforceability [326 IAC 2-7-7][IC 13-17-12]

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. 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) A certification required by this permit meets the requirements of 326 IAC 2-7-6(1) if:

(1) it contains a certification by a "responsible official" as defined by 326 IAC 2-7-1(35), and

(2) the certification states that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.

(b) The Permittee may use the attached Certification Form, or its equivalent 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(35).

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

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

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

and

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

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

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

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

(2) The compliance status;

(3) Whether compliance was continuous or intermittent;

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

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

The submittal by the Permittee does require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(35).

B.10 Preventive Maintenance Plan [326 IAC 2-7-5(12)][326 IAC 1-6-3]

(a) A Preventive Maintenance Plan meets the requirements of 326 IAC 1-6-3 if it includes, at a minimum:

(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.

The Permittee shall implement the PMPs.

(b) If required by specific condition(s) in Section D of this permit where no PMP was previously required, the Permittee shall prepare and maintain Preventive Maintenance Plans (PMPs) no later than ninety (90) days after issuance of this permit or ninety (90) days after initial start-up, whichever is later, including the following information on each facility:

(1) Identification of the individual(s) responsible for inspecting, maintaining, and repairing emission control devices;

(2) A description of the items or conditions that will be inspected and the inspection schedule for said items or conditions; and

(3) Identification and quantification of the replacement parts that will be maintained in inventory for quick replacement.

If, due to circumstances beyond the Permittee's control, the PMPs cannot be prepared and maintained within the above time frame, the Permittee may extend the date an additional ninety (90) days provided the Permittee notifies:

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

The PMP extension notification does not require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(35).

The Permittee shall implement the PMPs.

(c) A copy of the PMPs shall be submitted to IDEM, OAQ upon request and within a reasonable time, and shall be subject to review and approval by IDEM, OAQ. IDEM, OAQ may require the Permittee to revise its PMPs whenever lack of proper maintenance causes or is the primary contributor to an exceedance of any limitation on emissions. The PMPs and their submittal do not require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(35).

(d) 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 or 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 and Enforcement Branch), or
Telephone Number: 317-233-0178 (ask for Office of Air Quality, Compliance and Enforcement Branch)
Facsimile Number: 317-233-6865
Northwest Regional Office phone: (219) 464-0233; fax: (219) 464-0553**.**

(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 and Enforcement Branch, Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251

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

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

(A) A description of the emergency;

(B) Any steps taken to mitigate the emissions; and

(C) Corrective actions taken.

The notification which shall be submitted by the Permittee does not require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(35).

(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)(8) 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.

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

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

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

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

(c) No permit shield shall apply to any permit term or condition that is determined after issuance of this permit to have been based on erroneous information supplied in the permit application. Erroneous information means information that the Permittee knew to

be false, or in the exercise of reasonable care should have been known to be false, at the time the information was submitted.

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

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

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

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

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

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

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

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

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

(a) All terms and conditions of permits established prior to T089-29907-00121 and issued pursuant to permitting programs approved into the state implementation plan have been either:

(1) incorporated as originally stated,

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

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

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

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

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

B.15 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 Operating 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 a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(35).

(b) This permit shall be reopened and revised under any of the circumstances listed in IC 13-15-7-2 or if IDEM, OAQ determines any of the following:

(1) That this permit contains a material mistake.

(2) That inaccurate statements were made in establishing the emissions standards or other terms or conditions.

(3) That this permit must be revised or revoked to assure compliance with an applicable requirement. [326 IAC 2-7-9(a)(3)]

(c) Proceedings by IDEM, OAQ to reopen and revise this permit shall follow the same procedures as apply to initial permit issuance and shall affect only those parts of this permit for which cause to reopen exists. Such reopening and revision shall be made as expeditiously as practicable. [326 IAC 2-7-9(b)]

(d) The reopening and revision of this permit, under 326 IAC 2-7-9(a), shall not be initiated before notice of such intent is provided to the Permittee by IDEM, OAQ at least thirty (30) days in advance of the date this permit is to be reopened, except that IDEM, OAQ may provide a shorter time period in the case of an emergency. [326 IAC 2-7-9(c)]

B.16 Permit Renewal [326 IAC 2-7-3][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(42). The renewal application does require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(35).

Request for renewal shall be submitted to:

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

(b) A timely renewal application is one that is:

(1) Submitted at least nine (9) months prior to the date of the expiration of this permit; and

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

(c) If the Permittee submits a timely and complete application for renewal of this permit, the source's failure to have a permit is not a violation of 326 IAC 2-7 until IDEM, OAQ takes final action on the renewal application, except that this protection shall cease to apply if, subsequent to the completeness determination, the Permittee fails to submit by the deadline specified, pursuant to 326 IAC 2-7-4(a)(2)(D), in writing by IDEM, OAQ any additional information identified as being needed to process the application.

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

(a) Permit amendments and modifications are governed by the requirements of 326 IAC 2-7-11 or 326 IAC 2-7-12 whenever the Permittee seeks to amend or modify this permit.

(b) Any application requesting an amendment or modification of this permit shall be submitted to:

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

Any such application does require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(35).

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

(a) No Part 70 permit revision or notice shall be required under any approved economic incentives, marketable Part 70 permits, emissions trading, and other similar programs or processes for changes that are provided for in a Part 70 permit.

(b) Notwithstanding 326 IAC 2-7-12(b)(1) and 326 IAC 2-7-12(c)(1), minor Part 70 permit modification procedures may be used for Part 70 modifications involving the use of economic incentives, marketable Part 70 permits, emissions trading, and other similar approaches to the extent that such minor Part 70 permit modification procedures are explicitly provided for in the applicable State Implementation Plan (SIP) or in applicable requirements promulgated or approved by the U.S. EPA.

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

(a) The Permittee may make any change or changes at the source that are described in 326 IAC 2-7-20(b) or (c) 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
Permit Administration and Support Section, Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251

and

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

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

(5) The Permittee maintains records on-site, on a rolling five (5) year basis, which document all such changes and emission trades that are subject to 326 IAC 2-7-20(b)(1) and (c)(1). 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) and (c)(1).

(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(37)) 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 a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(35).

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

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

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

(f) This condition does not apply to emission trades of SO_2 or NO_X under 326 IAC 21 or 326 IAC 10-4.

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

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

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

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

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

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

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

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

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

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

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

(b) Any application requesting a change in the ownership or operational control of the source shall contain a written agreement containing a specific date for transfer of permit responsibility, coverage and liability between the current and new Permittee. The application shall be submitted to:

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

Any such application does require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(35).

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

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

(a) The Permittee shall pay annual fees to IDEM, OAQ within thirty (30) calendar days of receipt of a billing. Pursuant to 326 IAC 2-7-19(b), if the Permittee does not receive a bill from IDEM, OAQ the applicable fee is due April 1 of each year.

(b) Except as provided in 326 IAC 2-7-19(e), failure to pay may result in administrative enforcement action or revocation of this permit.

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

B.24 Credible Evidence [326 IAC 2-7-5(3)][326 IAC 2-7-6][62 FR 8314][326 IAC 1-1-6]

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

SECTION C SOURCE OPERATION CONDITIONS

Entire Source

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

C.1 Opacity [326 IAC 5-1]

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

(a) Opacity shall not exceed an average of twenty percent (20%) in any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.

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

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

The Permittee shall not open burn any material except as provided in 326 IAC 4-1-3, 326 IAC 4-1-4 or 326 IAC 4-1-6. The previous sentence notwithstanding, the Permittee may open burn in accordance with an open burning approval issued by the Commissioner under 326 IAC 4-1-4.1.

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

The Permittee shall not operate an incinerator except as provided in 326 IAC 4-2 or in this permit. The Permittee shall not operate a refuse incinerator or refuse burning equipment except as provided in 326 IAC 9-1-2 or in this permit.

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

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

C.5 Fugitive Particulate Matter Emissions [326 IAC 6.8-10-3]

Pursuant to 326 IAC 6.8-10-3 (formerly 326 IAC 6-1-11.1) (Lake County Fugitive Particulate Matter Control Requirements), the particulate matter emissions from source wide activities shall meet the following requirements:

(a) The average instantaneous opacity of fugitive particulate emissions from a paved road shall not exceed ten percent (10%).

(b) The average instantaneous opacity of fugitive particulate emissions from an unpaved road shall not exceed ten percent (10%).

(c) The opacity of fugitive particulate emissions from exposed areas shall not exceed ten percent (10%) on a six (6) minute average.

(d) The opacity of fugitive particulate emissions from continuous transfer of material onto and out of storage piles shall not exceed ten percent (10%) on a three (3) minute average.

(e) The opacity of fugitive particulate emissions from storage piles shall not exceed ten percent (10%) on a six (6) minute average.

(f) There shall be a zero (0) percent frequency of visible emission observations of a material during the inplant transportation of material by truck or rail at any time.

(g) The opacity of fugitive particulate emissions from the inplant transportation of material by front end loaders and skip hoists shall not exceed ten percent (10%).

(h) Material processing facilities shall include the following:

(1) There shall be a zero (0) percent frequency of visible emission observations from a building enclosing all or part of the material processing equipment, except from a vent in the building.

(2) The PM_{10} emissions from building vents shall not exceed twenty-two thousandths (0.022) grains per dry standard cubic foot and ten percent (10%) opacity.

(3) The PM_{10} stack emissions from a material processing facility shall not exceed twenty-two thousandths (0.022) grains per dry standard cubic foot and ten percent (10%) opacity.

(4) The opacity of fugitive particulate emissions from the material processing facilities, except a crusher at which a capture system is not used, shall not exceed ten percent (10%) opacity.

(5) The opacity of fugitive particulate emissions from a crusher at which a capture system is not used shall not exceed fifteen percent (15%).

(i) The opacity of particulate emissions from dust handling equipment shall not exceed ten percent (10%).

(j) Material transfer limits shall be as follows:

(1) The average instantaneous opacity of fugitive particulate emissions from batch transfer shall not exceed ten percent (10%).

(2) Where adequate wetting of the material for fugitive particulate emissions control is prohibitive to further processing or reuse of the material, the opacity shall not exceed ten percent (10%), three (3) minute average.

(3) Slag and kish handling activities at integrated iron and steel plants shall comply with the following particulate emissions limits:

(A) The opacity of fugitive particulate emissions from transfer from pots and trucks into pits shall not exceed twenty percent (20%) on a six (6) minute average.

(B) The opacity of fugitive particulate emissions from transfer from pits into front end loaders and from transfer from front end loaders into trucks shall comply with the fugitive particulate emission limits in 326 IAC 6.8-10-3(9).

(k) Any facility or operation not specified in 326 IAC 6.8-10-3 shall meet a twenty percent (20%), three (3) minute average opacity standard.

The Permittee shall achieve these limits by controlling fugitive particulate matter emissions according to the attached Fugitive Dust Control Plan.

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

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

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

(a) Notification requirements apply to each owner or operator. If the combined amount of regulated asbestos containing material (RACM) to be stripped, removed or disturbed is at least 260 linear feet on pipes or 160 square feet on other facility components, or at least thirty-five (35) cubic feet on all facility components, then the notification requirements of 326 IAC 14-10-3 are mandatory. All demolition projects require notification whether or not asbestos is present.

(b) The Permittee shall ensure that a written notification is sent on a form provided by the Commissioner at least ten (10) working days before asbestos stripping or removal work or before demolition begins, per 326 IAC 14-10-3, and shall update such notice as necessary, including, but not limited to the following:

(1) When the amount of affected asbestos containing material increases or decreases by at least twenty percent (20%); or

(2) If there is a change in the following:

(A) Asbestos removal or demolition start date;

(B) Removal or demolition contractor; or

(C) Waste disposal site.

(c) The Permittee shall ensure that the notice is postmarked or delivered according to the guidelines set forth in 326 IAC 14-10-3(2).

(d) The notice to be submitted shall include the information enumerated in 326 IAC 14-10-3(3).

All required notifications shall be submitted to:

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

The notice shall include a signed certification from the owner or operator that the information provided in this notification is correct and that only Indiana licensed workers and project supervisors will be used to implement the asbestos removal project. The notifications do not require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(35).

(e) Procedures for Asbestos Emission Control
The Permittee shall comply with the applicable emission control procedures in 326 IAC 14-10-4 and 40 CFR 61.145(c). Per 326 IAC 14-10-1, emission control requirements are applicable for any removal or disturbance of RACM greater than three (3) linear feet on

pipes or three (3) square feet on any other facility components or a total of at least 0.75 cubic feet on all facility components.

(f) Demolition and Renovation
The Permittee shall thoroughly inspect the affected facility or part of the facility where the demolition or renovation will occur for the presence of asbestos pursuant to 40 CFR 61.145(a).

(g) Indiana Licensed Asbestos Inspector
The Permittee shall comply with 326 IAC 14-10-1(a) that requires the owner or operator, prior to a renovation/demolition, to use an Indiana Licensed Asbestos Inspector to thoroughly inspect the affected portion of the facility for the presence of asbestos. The requirement to use an Indiana Licensed Asbestos inspector is not federally enforceable.

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

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

(a) For performance testing required by this permit, a test protocol, except as provided elsewhere in this permit, shall be submitted to:

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

no later than thirty-five (35) days prior to the intended test date. The protocol submitted by the Permittee does not require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(35).

(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 a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(35).

(c) Pursuant to 326 IAC 3-6-4(b), all test reports must be received by IDEM, OAQ not later than forty-five (45) days after the completion of the testing. An extension may be granted by IDEM, OAQ if the Permittee submits to IDEM, OAQ a reasonable written explanation not later than five (5) days prior to the end of the initial forty-five (45) day period.

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

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

(a) The protocol shall contain a description of planned procedures for:

(1) sampling of sulfur-bearing fuels and materials;

(2) analysis of the sulfur content; and

(3) any planned direct measurement of sulfur dioxide emissions vented to the atmosphere; and

(b) Specify the frequency of sampling, analysis, and measurement for each fuel and material and for each emissions unit.

(c) The protocol may be revised as necessary with approval by IDEM-OAQ.

(d) IDEM, OAQ may also require that a source conduct a stack test at any facility listed in this permit within sixty (60) days of written notification by the IDEM-OAQ.

Compliance Requirements [326 IAC 2-1.1-11]

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

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

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

C.11 Compliance Monitoring [326 IAC 2-7-5(3)][326 IAC 2-7-6(1)][40 CFR 64][326 IAC 3-8]

(a) For new units:
Unless otherwise specified in the approval for the new emission unit(s), compliance monitoring for new emission units shall be implemented on and after the date of initial start-up.

(b) For existing units:
Unless otherwise specified in this permit, for all monitoring requirements not already legally required, the Permittee shall be allowed up to ninety (90) days from the date of permit issuance to begin such monitoring. If, due to circumstances beyond the Permittee's control, any monitoring equipment required by this permit cannot be installed and operated no later than ninety (90) days after permit issuance, the Permittee may extend the compliance schedule related to the equipment for an additional ninety (90) days provided the Permittee notifies:

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

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

The notification which shall be submitted by the Permittee does require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(35).

(c) For monitoring required by CAM, at all times, the Permittee shall maintain the monitoring, including but not limited to, maintaining necessary parts for routine repairs of the monitoring equipment.

(d) For monitoring required by CAM, except for, as applicable, monitoring malfunctions, associated repairs, and required quality assurance or control activities (including, as applicable, calibration checks and required zero and span adjustments), the Permittee shall conduct all monitoring in continuous operation (or shall collect data at all required intervals) at all times that the pollutant-specific emissions unit is operating. Data recorded during monitoring malfunctions, associated repairs, and required quality assurance or control activities shall not be used for purposes of this part, including data averages and calculations, or fulfilling a minimum data availability requirement, if applicable. The owner

or operator shall use all the data collected during all other periods in assessing the operation of the control device and associated control system. A monitoring malfunction is any sudden, infrequent, not reasonably preventable failure of the monitoring to provide valid data. Monitoring failures that are caused in part by poor maintenance or careless operation are not malfunctions.

C.12 Continuous Compliance Plan [326 IAC 6.8-8-1][326 IAC 6.8-8-8]

(a) Pursuant to 326 IAC 6.8-8-1, the Permittee shall submit to IDEM and maintain at source a copy of the Continuous Compliance Plan (CCP). The Permittee shall perform the inspections, monitoring and record keeping in accordance with the information in 326 IAC 6.8-8-5 through 326 IAC 6.8-8-7 or applicable procedures in the CCP.

(b) Pursuant to 326 IAC 6.8-8-8, the Permittee shall update the CCP, as needed, retain a copy of any changes and updates to the CCP at the source and make the updated CCP available for inspection by the department. The Permittee shall submit the updated CCP, if required to IDEM, OAQ within thirty (30) days of the update.

(c) Pursuant to 326 IAC 6.8-8, failure to submit a CCP, maintain all information required by the CCP at the source, or submit update to a CCP is a violation of 326 IAC 6.8-8.

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

(a) When required by any condition of this permit, an analog instrument used to measure a parameter related to the operation of an air pollution control device shall have a scale such that the expected maximum reading for the normal range shall be no less than twenty percent (20%) of full scale. The analog instrument shall be capable of measuring values outside of the normal range.

(b) The Permittee may request that the IDEM, OAQ approve the use of an instrument that does not meet the above specifications provided the Permittee can demonstrate that an alternative instrument specification will adequately ensure compliance with permit conditions requiring the measurement of the parameters.

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

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

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

(a) The Permittee shall maintain the most recently submitted written emergency reduction plans (ERPs) consistent with safe operating procedures.

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

C.15 Risk Management Plan [326 IAC 2-7-5(11)][40 CFR 68]

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

C.16 Response to Excursions or Exceedances [40 CFR 64][326 IAC 3-8][326 IAC 2-7-5][326 IAC 2-7-6]

(l) Upon detecting an excursion where a response step is required by the D Section, or an exceedance of a limitation, not subject to CAM, in this permit:

(a) The Permittee shall take reasonable response steps to 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 excess emissions.

(b) The response shall include minimizing the period of any startup, shutdown or malfunction. The response may include, but is not limited to, the following:

(1) initial inspection and evaluation;

(2) recording that operations returned or are returning 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 normal or usual manner of operation.

(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; and/or

(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 record the reasonable response steps taken.

(II)

(a) CAM *Response to excursions or exceedances.*

(1) Upon detecting an excursion or exceedance, subject to CAM, the Permittee shall restore operation of the pollutant-specific emissions unit (including the 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. 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). Such actions may include initial inspection and evaluation, recording that operations returned to normal without operator action (such as through response by a computerized distribution control system), or 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.

(2) 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, monitoring results, review of operation and maintenance procedures and records, and inspection of the control device, associated capture system, and the process.

(b) If the Permittee identifies a failure to achieve compliance with an emission limitation, subject to CAM, or standard, subject to CAM, for which the approved monitoring did not provide an indication of an excursion or exceedance while providing valid data, or the results of compliance or performance testing document a need to modify the existing indicator ranges or designated conditions, the Permittee shall promptly notify the IDEM, OAQ and, if necessary, submit a proposed significant permit modification to this permit to address the necessary monitoring changes. Such a modification may include, but is not limited to, reestablishing indicator ranges or designated conditions, modifying the frequency of conducting monitoring and collecting data, or the monitoring of additional parameters.

(c) Based on the results of a determination made under paragraph (II)(a)(2) of this condition, the EPA or IDEM, OAQ may require the Permittee to develop and implement a Quality Improvement Plan (QIP). The Permittee shall develop and implement a QIP if notified to in writing by the EPA or IDEM, OAQ.

(d) Elements of a QIP:
The Permittee shall maintain a written QIP, if required, and have it available for inspection. The plan shall conform to 40 CFR 64.8 b (2).

(e) If a QIP is required, the Permittee shall develop and implement a QIP as expeditiously as practicable and shall notify the IDEM, OAQ if the period for completing the improvements contained in the QIP exceeds 180 days from the date on which the need to implement the QIP was determined.

(f) Following implementation of a QIP, upon any subsequent determination pursuant to paragraph (II)(c) of this condition the EPA or the IDEM, OAQ may require that the Permittee make reasonable changes to the QIP if the QIP is found to have:

(1) Failed to address the cause of the control device performance problems; or

(2) Failed to provide adequate procedures for correcting control device performance problems as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions.

(g) Implementation of a QIP shall not excuse the Permittee from compliance with any existing emission limitation or standard, or any existing monitoring, testing, reporting or recordkeeping requirement that may apply under federal, state, or local law, or any other applicable requirements under the Act.

(h) *CAM recordkeeping requirements.*

(1) The Permittee shall maintain records of monitoring data, monitor performance data, corrective actions taken, any written quality improvement plan required pursuant to paragraph (II)(c) of this condition and any activities undertaken to implement a quality improvement plan, and other supporting information required to be maintained under this condition (such as data used to document the adequacy of monitoring, or records of monitoring maintenance or corrective actions). Section C - General Record Keeping Requirements of this permit contains the Permittee's obligations with regard to the records required by this condition.

(2) Instead of paper records, the owner or operator may maintain records on alternative media, such as microfilm, computer files, magnetic tape disks, or microfiche, provided that the use of such alternative media allows for

expeditious inspection and review, and does not conflict with other applicable recordkeeping requirements

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

(a) When the results of a stack test performed in conformance with Section C - Performance Testing, of this permit exceed the level specified in any condition of this permit, the Permittee shall submit a description of its response actions to IDEM, OAQ no later than seventy-five (75) days after the date of the test.

(b) A retest to demonstrate compliance shall be performed no later than one hundred eighty (180) days after the date of the test. Should the Permittee demonstrate to IDEM, OAQ that retesting in one hundred eighty (180) 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 a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(35).

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

C.18 Emission Statement [326 IAC 2-7-5(3)(C)(iii)][326 IAC 2-7-5(7)][326 IAC 2-7-19(c)][326 IAC 2-6]

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(33) (“Regulated pollutant, which is used only for purposes of Section 19 of this rule”) from the source, for purpose of fee assessment.

The statement must be submitted to:

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

The emission statement does require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(35).

C.19 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. Support information includes the following, where applicable:

(AA) All calibration and maintenance records.
(BB) All original strip chart recordings for continuous monitoring instrumentation.
(CC) Copies of all reports required by the Part 70 permit.

Records of required monitoring information include the following, where applicable:

(AA) The date, place, as defined in this permit, and time of sampling or measurements.
(BB) The dates analyses were performed.
(CC) The company or entity that performed the analyses.
(DD) The analytical techniques or methods used.
(EE) The results of such analyses.
(FF) The operating conditions as existing at the time of sampling or measurement.

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, for all record keeping requirements not already legally required, the Permittee shall be allowed up to ninety (90) days from the date of permit issuance or the date of initial start-up, whichever is later, to begin such record keeping.

(c) If there is a reasonable possibility (as defined in 326 IAC 2-2-8 (b)(6)(A), 326 IAC 2-2-8 (b)(6)(B), 326 IAC 2-3-2 (l)(6)(A), and/or 326 IAC 2-3-2 (l)(6)(B)) that a "project" (as defined in 326 IAC 2-2-1(oo) and/or 326 IAC 2-3-1(jj)) at an existing emissions unit, other than projects at a source with a Plantwide Applicability Limitation (PAL), which is not part of a "major modification" (as defined in 326 IAC 2-2-1(dd) and/or 326 IAC 2-3-1(y)) may result in significant emissions increase and the Permittee elects to utilize the "projected actual emissions" (as defined in 326 IAC 2-2-1(pp) and/or 326 IAC 2-3-1(kk)), the Permittee shall comply with following:

(1) Before beginning actual construction of the "project" (as defined in 326 IAC 2-2-1(oo) and/or 326 IAC 2-3-1(jj)) 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(pp)(2)(A)(iii) and/or 326 IAC 2-3-1 (kk)(2)(A)(iii); and

(iv) An explanation for why the amount was excluded, and any netting calculations, if applicable.

(d) If there is a reasonable possibility (as defined in 326 IAC 2-2-8 (b)(6)(A) and/or 326 IAC 2-3-2 (l)(6)(A)) that a "project" (as defined in 326 IAC 2-2-1(oo) and/or 326 IAC 2-3-1(jj)) at an existing emissions unit, other than projects at a source with a Plantwide Applicability Limitation (PAL), which is not part of a "major modification" (as defined in 326 IAC 2-2-1(dd) and/or 326 IAC 2-3-1(y)) may result in significant emissions increase

and the Permittee elects to utilize the “projected actual emissions” (as defined in 326 IAC 2-2-1(pp) and/or 326 IAC 2-3-1(kk)), the Permittee shall comply with following:

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

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

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

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

(a) Identification of the applicable limit.

(b) The amount and type each fuel used for each facility for each calendar day of operation.

(c) The operating scenario chosen for the U.S. Steel – Gary Works.

(d) The hourly sulfur dioxide emission rate in pounds of sulfur dioxide per hour calculated by dividing the total daily sulfur dioxide emissions in pounds of sulfur dioxide per day by twenty-four (24) hours.

(e) The hourly sulfur dioxide emission rate in pounds of sulfur dioxide per MMBtu for those facilities with a pound per MMBtu limit in this rule calculated by dividing the total daily sulfur dioxide emissions in pounds of sulfur dioxide per day by the total heat input per day in MMBtu.

C.21 General Reporting Requirements [326 IAC 2-7-5(3)(C)][326 IAC 2-1.1-11][326 IAC 2-2][326 IAC 2-3][40 CFR 64][326 IAC 3-8]

(a) The Permittee shall submit the attached Quarterly Deviation and Compliance Monitoring Report or its equivalent. Proper notice submittal under Section B –Emergency Provisions satisfies the reporting requirements of this paragraph. Any deviation from permit requirements, the date(s) of each deviation, the cause of the deviation, and the response steps taken must be reported except that 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. This report shall be submitted not later than thirty (30) days after the end of the reporting period. The Quarterly Deviation and Compliance Monitoring Report shall include a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(35). A deviation is an exceedance of a permit limitation or a failure to comply with a requirement of the permit.

On and after the date by which the Permittee must use monitoring that meets the requirements of 40 CFR Part 64 and 326 IAC 3-8, the Permittee shall submit CAM reports to the IDEM, OAQ.

A report for monitoring under 40 CFR Part 64 and 326 IAC 3-8 shall include, at a minimum, the information required under paragraph (a) of this condition and the following information, as applicable:

(1) Summary information on the number, duration and cause (including unknown cause, if applicable) of excursions or exceedances, as applicable, and the corrective actions taken;

(2) Summary information on the number, duration and cause (including unknown cause, if applicable) for monitor downtime incidents (other than downtime associated with zero and span or other daily calibration checks, if applicable); and

(3) A description of the actions taken to implement a QIP during the reporting period as specified in Section C-Response to Excursions or Exceedances. Upon completion of a QIP, the owner or operator shall include in the next summary report documentation that the implementation of the plan has been completed and reduced the likelihood of similar levels of excursions or exceedances occurring.

The Permittee may combine the Quarterly Deviation and Compliance Monitoring Report and a report pursuant to 40 CFR 64 and 326 IAC 3-8.

(b) The address for report submittal is:

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

(c) Unless otherwise specified in this permit, any notice, report, or other submission required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ on or before the date it is due.

(d) 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.

(e) If the Permittee is required to comply with the recordkeeping provisions of (d) in Section C - General Record Keeping Requirements for any “project” (as defined in 326 IAC 2-2-1 (oo) and/or 326 IAC 2-3-1 (jj)) 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 (ww) and/or 326 IAC 2-3-1 (pp), 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).

(f) The report for project at an existing emissions unit shall be submitted no later than sixty (60) days after the end of the year and contain the following:

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

(2) The annual emissions calculated in accordance with (d)(1) and (2) in Section C - General Record Keeping Requirements.

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

(4) Any other information that the Permittee wishes to include in this report such as an explanation as to why the emissions differ from the preconstruction projection.

Reports required in this part shall be submitted to:

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

(g) 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.22 Sulfur Dioxide (SO2) Reporting Requirements (Entire Source) [326 IAC 7-4.1-20(c)(2)]

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

(a) Identification of the applicable limit or limits being exceeded.

(b) Identification of any emissions unit exceeding the applicable limit and the dates when the limits were exceeded.

(c) The calculated sulfur dioxide emission rate in pounds per hour for each facility exceeding the limitations for the days that the pounds per hour limitations were exceeded.

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

(e) The actual daily fuel usage for each combustion unit, furnace, boiler, or process operation for each facility exceeding the limitations for the days that the limitations were exceeded.

Stratospheric Ozone Protection

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

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

SECTION D.1 **RESERVED**

SECTION D.2 **RESERVED**

SECTION D.3 **RESERVED**

SECTION D.4 **RESERVED**

SECTION D.5 **RESERVED**

SECTION D.6 EMISSIONS UNIT OPERATION CONDITIONS

Emissions Unit Description:

Number 3 Sinter Plant

(a) Three (3) Sinter Strands, constructed in 1958 , identified as ISS10379, ISS20380 and ISS30381, each with 50 MMBtu per hour reheat burners combusting natural gas and coke oven gas identified as ISB001, ISB002 and ISB003 and a maximum capacity of 225 tons of sinter per hour each, each with ignition hood burners with a combined heat input of 50 MMBtu/hr combusting natural gas and coke oven gas, controlled by two (2) Windbox Gas Cleaning Systems IS3203 and IS3204, installed in 1996, each comprised of a Quench Reactor, Dry Venturi Scrubber, a baghouse operated in series, exhausting to Windbox stacks IS6198 and IS6199 which are equipped with VOC CEMS.

(b) One (1) Cold Screen Station, identified as ISR00389, constructed in 1958, with a maximum capacity of 450 tons per hour, using a Baghouse IS3209 as a control device and exhausting to stack IS6207.

(c) One (1) S1/S2 Conveyer System, identified as ISY00388, constructed in 1979, with a maximum capacity of 450 tons per hour, that transfers sinter from the sinter coolers to the cold screening station, using a baghouse IS3208 as a control device and exhausting to stack IS6206.

(d) Three (3) Sinter Coolers, identified as ISC10385, ISC20386, and ISC30387, constructed in 1958, with a maximum capacity of 225 ton per hour each, with emissions exhausting to stacks IS6203, IS6204, and IS6205 respectively.

(e) Three (3) Sinter Strand Discharge End Areas, identified as ISS10379, ISS20380 and ISS0381, constructed in 1958, using three (3) baghouses as control devices, designated as IS3205, IS3206, and IS3207, exhausting to stacks IS6200, IS6201, and IS6202 respectively.

(f) Blended Material Storage Bin Building, identified as ISB00377, constructed in 1979, including bins, feeders and conveyors, with a maximum capacity of 1,000 tons per hour, using a baghouse IS3196 as a control device and exhausting to stack IS6197.

(g) Storage and Blending Piles, identified as ISBP0376, with fugitive emissions.

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

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

D.6.1 Particulate Emissions Offset [326 IAC 2-3]

Pursuant to the significant source modification 089-12880-00121, issued July 26, 2001, the natural gas usage shall be less than 95.5 million standard cubic feet (MMSCF) or the coke oven gas usage shall be less than 1,637.4 MMSCF in the No. 3 Sinter Plant Sinter Strand Windbox reheat burners ISB001, ISB002 and ISB003 per 12-consecutive month period, with compliance demonstrated at the end of each month. Compliance with this limit makes 326 IAC 2-3 (Emissions Offset) not applicable.

D.6.2 Lake County PM_{10} Emission Requirements [326 IAC 6.8-2-38]

Pursuant to 326 IAC 6.8-2-38, PM_{10} emissions from the No. 3 Sinter Plant shall comply with the following:

(a) The PM_{10} emissions from the No. 3 Sinter Plant Strand Windbox gas cleaning system stacks IS6198 and IS6199 emissions shall not exceed 0.020 grains per dry standard cubic foot and a total of 200.0 pounds per hour.

(b) The PM_{10} emissions from the No. 3 Sinter Plant Cold Screen Station Baghouse Stack IS6207 shall not exceed 0.0100 grains per dry standard cubic foot and 10.89 pounds per hour.

(c) The PM_{10} emissions from the No. 3 Sinter Plant S1/S2 Conveyor System Baghouse Stack IS6206 shall not exceed 0.0100 grains per dry standard cubic foot and 1.29 pounds per hour.

(d) The PM_{10} emissions from the No. 3 Sinter Plant Sinter Coolers Stacks IS6203, IS6204 and IS6205 shall not exceed 0.0300 grains per dry standard cubic foot and a total of 272.57 pounds per hour.

(e) The PM_{10} emissions from the No. 3 Sinter Plant Discharge Ends Area Baghouse Stacks IS6200, IS6201 and IS6202 shall not exceed 0.0100 grain per dry standard cubic foot and total of 20.57 pounds per hour.

(f) The PM_{10} emissions from the No. 3 Sinter Plant Blended Material Storage Bins Building Baghouse Stack IS6197 shall not exceed 0.0100 grain per dry standard cubic foot and 0.43 pounds per hour.

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

D.6.3 Sulfur Dioxide (SO_2) Limitations [326 IAC 7-4.1-20]

Pursuant to 326 IAC 7-4.1-20 the SO_2 emissions from the Sinter Plant Windbox gas cleaning systems stacks IS6198 and IS6199 shall not exceed the following:

(a) Pursuant to 326 IAC 7-4.1-20(a)(1)(G), the SO_2 emissions from the Sinter Plant Windbox gas cleaning systems stacks IS6198 and IS6199 shall not exceed a total of 260.0 pounds per hour when the coke oven gas desulfurization plant is not in operation.

(b) Pursuant to 326 IAC 7-4.1-20(b)(7), the SO_2 emissions from the Sinter Plant Windbox gas cleaning systems stacks IS6198 and IS6199 shall not exceed a total of 200.0 pounds per hour when the coke oven gas desulfurization plant is in operation.

D.6.4 Volatile Organic Compounds (VOC) Limitations [326 IAC 8-13-3]

Pursuant to 326 IAC 8-13-3(b) and (c), the No. 3 Sinter Plant windbox gas cleaning system stacks (IS6198 and IS6199) shall not exceed the VOC emission limits as follows:

(a) During the period May 1 through September 30, the total VOC emissions (the seasonal cap) shall not exceed 256,948 pounds of VOC emissions. This is based on the following equation:

VOC (pounds) = 0.25 lb of VOC per ton of sinter produced x average daily sinter production rate of 6717.59 tons per day x 153 days

(b) Except as provided in 326 IAC 8-13-3(b)(3), on any day from May 1 through September 30, the sinter plant windbox exhaust VOC emissions (the maximum daily limit) shall not exceed 2,096 pounds of VOC emissions. This is based on the following equation:

VOC (pounds per day) = 0.25 lb of VOC per ton of sinter produced x maximum actual daily sinter production rate 8384 tons per day

(c) On any day from May 1 through September 30 when ozone levels in Lake, Porter, or LaPorte Counties are expected to exceed the national ambient air quality standard for ozone (either one (1) hour or eight (8) hour), the sinter plant windbox exhaust VOC emissions (the lower daily limit) shall not exceed 1,679 pounds of VOC emissions. This is based on the following equation:

VOC (pounds per day) = 0.25 lb of VOC per ton of sinter produced x maximum actual daily sinter production rate of 6716 tons per day

A high ozone level day shall be predicted in accordance with item (g)(4) of this condition.

(d) The maximum actual daily sinter production (tons per day) is equal to the maximum actual sinter produced on an operating day during the period from 1990 to 1997.

(e) The average daily sinter production equals either of the following:

(1) The annual average sinter production in tons divided by the annual average number of operating days in the period 1990 through 1994.

(2) In the event sinter production in 1990 to 1994 is not representative of the current sinter production due to factors, such as, but not limited to, routine repair, maintenance, or replacement, a source may elect to use the average actual sinter production in tons per day during a calendar year up to the year 1997, which represents current sinter production. The averaging period must include and not be less than the ozone season (May 1 through September 30).

(f) From October 1 through April 30, sinter plant windbox exhaust gas VOC emissions shall be limited to thirty-six hundredths (0.36) pound per ton of sinter produced. The limit shall be complied with on an operating day average basis.

(g) Pursuant to 326 IAC 8-13-4(b)(8) and an Ozone Action Plan dated August 2, 1999, the Permittee shall do the following:

(1) Control the sinter burden oil and grease content by regulating the amount of mill scale in the sinter burden.

(2) Use a continuous emissions monitoring system to ensure compliance with the applicable limits.

(3) Implement the following sequence of events upon discovery and initial internal notification of an actual or projected VOC emission limit, exceedance.

(A) Verify the exceedance.

(B) Determine the exceedance status: ceased or on-going.

(C) Implement corrective measures if a verified on-going exceedance condition exists. The feed rate of mill scale to the sinter burden from the

dedicated mill scale bin is reduced or terminated. Incremental reductions in the mill scale feed rate may be utilized.

(4) To predict high ozone days: the Permittee is a participant in IDEM's Partners for Clean Air Program and receives notification of Ozone Action Days from IDEM - OAQ. The Permittee will initiate the ozone action plan. A high ozone level day shall be predicted by the Permittee by using notification from IDEM, OAQ of an ozone action day.

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

D.6.5 Testing Requirements [326 IAC 2-7-6(1),(6)][326 IAC 2-1.1-11]

(a) Within 2.5 years after the most recent valid compliance demonstration, the Permittee shall perform simultaneous sampling and analysis of both non-condensable (front half) and condensable (back half) PM_{10} on Sinter Plant Windbox Gas Cleaning Systems Stacks IS6198 and IS6199 for the purpose of determining compliance with Condition D.6.2(a), utilizing methods approved by the Commissioner. This test shall be repeated at least once every 2.5 years from the date of the most recent valid compliance demonstration.

(b) Within 2.5 years after the most recent valid compliance demonstration, the Permittee shall perform PM_{10} testing on the Discharge Ends Area Baghouse Stacks IS6200, IS6201 and IS6202 for the purpose of determining compliance with Condition D.6.2(e), utilizing methods approved by the Commissioner. This test shall be repeated at least once every 2.5 years from the date of the most recent valid compliance demonstration.

(c) Within 2.5 years after the most recent valid compliance demonstration, the Permittee shall perform PM_{10} testing of the three (3) Sinter Coolers Stacks IS6203, IS6204 and IS6205 for the purpose of determining compliance with Condition D.6.2(d), utilizing methods approved by the Commissioner. This test shall be repeated at least once every 2.5 years from the date of the most recent valid compliance demonstration.

(d) Within 2.5 years after the most recent valid compliance demonstration, the Permittee shall perform SO_2 testing on Sinter Windbox Gas Cleaning Systems Stacks IS6198 and IS6199 for the purpose of determining compliance with Condition D.6.3, utilizing methods approved by the Commissioner. This test shall be repeated at least once every 2.5 years from the date of the most recent valid compliance demonstration.

(e) Testing shall be conducted in accordance with the provisions of 326 IAC 3-6 (Source Sampling Procedures). Section C - Performance Testing contains the Permittee's obligation with regard to the performance testing required by this condition.

D.6.6 Particulate Matter Control

(a) Except as otherwise provided by statue, rule or this permit the control devices as listed in (1) through (5) below shall be in operation at all times the associated processes are in operation to control particulate emissions.

(1) Sinter Plant Windbox Gas Cleaning System each comprised of a Quench Reactor, Dry Venturi Scrubber, and a Baghouse in series, identified as emission units IS3203 and IS3204, shall be in operation at all times when the No. 3 Sinter Plant Sinter Windbox is in operation.

(2) The Cold Screen Station Baghouse, identified as control device IS3209, shall be in operation at all times when the No. 3 Sinter Plant Cold Screen Station is in operation.

(3) The S1/S2 Conveyor System Baghouse, identified as control device IS3208, shall be in operation at all times material is conveyed by the No. 3 Sinter Plant S1/S2 conveyor system.

(4) The Sinter Strand Discharge Ends Area Baghouses, identified as control devices IS3205, IS3206, IS3207, shall be in operation at all times when the associated No. 3 Sinter Plant Sinter Strand Discharge Ends Area and Sinter Coolers are in operation.

(5) The Blended Material Storage Bins Baghouse, identified as control device IS3196, shall be in operation at all times when material is being transferred in the building.

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

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

D.6.7 Visible Emissions Notations

(a) Visible emission notations of the Sinter Strand Windbox Gas Cleaning System stacks IS6198 and IS6199, Cold Screen Station Stack IS6207, Sinter Cooler Stacks IS6203, IS6204 and IS6205 and Discharge Ends Area Stacks IS6200, IS6201 and IS6202, shall be performed once per day during normal daylight operations when the No. 3 Sinter Plant Sinter Strand Windbox Gas Cleaning System, Cold Screen Station, Sinter Coolers and Discharge Ends Area are in operation. A trained employee shall record whether emissions are normal or abnormal.

(b) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.

(c) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.

(d) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.

(e) If abnormal emissions are observed, the Permittee shall take a reasonable response. Section C - Response to Excursions or Exceedances contains the Permittee's obligation with regard to the reasonable response steps required by this condition. Failure to take response steps shall be considered a deviation of this permit.

(f) The Permittee shall comply with the most current Continuous Compliance Plan visible emission evaluation program. Section C - Continuous Compliance Plan contains the Permittee's obligation with regard to the visible emission evaluation program required by this condition.

D.6.8 Parametric Monitoring

(a) The Permittee shall record the pressure drop and liquid reagent flow rate of the dry venturi scrubbers used in conjunction with the No. 3 Sinter Plant Sinter Strand Windbox Gas Cleaning Systems at least once per day when the No. 3 Sinter Plant Sinter Strand

Windbox units are in operation. When for any one reading, the pressure drop or flow rate across the scrubbers is outside the normal range, the Permittee shall take a reasonable response. The normal range for this unit is a range of 3 to 8 inches of water and the normal flow rate of the scrubber is 400 to 600 gallons per minute (gpm) unless a different upper-bound or lower-bound value for these ranges is determined during the latest stack test. Section C - Response to Excursions or Exceedances contains the Permittee's obligation with regard to the reasonable response steps required by this condition. A pressure drop or flow rate that is outside the above mentioned ranges is not a deviation from this permit. Failure to take response steps shall be considered a deviation of this permit.

(b) The Permittee shall record the pressure drop of the baghouse used in conjunction with the No. 3 Sinter Plant Discharge Ends Area at least once per day when the No. 3 Sinter Plant Discharge Ends Area is in operation. When for any one reading, the pressure drop across the baghouse is outside the range, the Permittee shall take a reasonable response. The normal range for this unit is a pressure drop between 3 and 8 inches of water unless a different upper-bound or lower-bound value for this range is determined during the latest stack test. Section C - Response to Excursions or Exceedances contains the Permittee's obligation with regard to the reasonable response steps required by this condition. A pressure reading that is outside the above mentioned range is not a deviation from this permit. Failure to take response shall be considered a deviation of this permit.

(c) The Permittee shall record the pressure drop of the baghouse used in conjunction with the No. 3 Sinter Plant Cold Screen Station at least once per day when the No. 3 Sinter Plant Cold Screen Station is in operation. When for any one reading, the pressure drop across the baghouse is outside the range the Permittee shall take a reasonable response. The normal range for this unit is a pressure drop between 3 and 8 inches of water unless a different upper-bound or lower-bound value for this range is determined during the latest stack test. Section C - Response to Excursions or Exceedances contains the Permittee's obligation with regard to the reasonable response steps required by this condition. A pressure reading that is outside the above mentioned range is not a deviation from this permit. Failure to take response steps shall be considered a deviation of this permit.

(d) The Permittee shall comply with the most current Continuous Compliance Plan for the baghouse operation, recording and maintenance. Section C - Continuous Compliance Plan contains the Permittee's obligation with regards to the baghouse operation, recording and maintenance required by this condition.

(e) The instruments used for determining the pressure drop and flow rate shall comply with Section C - Instrument Specifications, of this permit, shall be subject to approval by IDEM, OAQ and shall be calibrated or replaced at least once every six (6) months or other time period specified by the manufacturer. The Permittee shall maintain records of the manufacturer specifications, if used.

D.6.9 Scrubber Failure Detection

In the event, a scrubber failure has been observed:

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

D.6.10 Continuous Emissions Monitoring (VOC)[326 IAC 8-13-8][326 IAC 3-5]

The Permittee shall operate the continuous emissions monitoring system (CEMS) for the measurement of VOC emissions discharged into the atmosphere from the No. 3 Sinter Plant Sinter Windbox gas cleaning system stacks IS6198 and IS6199, in accordance with 326 IAC 8-13-8, and 326 IAC 3-5.

(a) The continuous emissions monitoring system (CEMS) shall measure VOC emission rate in pounds per hour.

(b) The Permittee shall demonstrate compliance with Condition D.6.4 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) In the event of an exceedance of VOC emissions, the Permittee shall implement the corrective action plan requirements in 326 IAC 8-13-4(b)(5).

D.6.11 VOC Monitoring Downtime [326 IAC 2-7-6][326 IAC 2-7-5(3)]

Whenever the VOC continuous emission monitoring system is malfunctioning or down for repairs or adjustments for more than four (4) hours, the following method shall be used to provide information related to VOC emissions:

(a) The Permittee shall not include additional oily scale in the sinter plant burden raw materials, and

(b) Sample and analyze the sinter burden blend for oil and grease utilizing the methods and calculations in 326 IAC 8-13-5(d).

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

D.6.12 Record Keeping Requirements

(a) To document the compliance status with Condition D.6.1 and pursuant to Significant Source Modification 089-12880-00121, issued on July 26, 2001, the Permittee shall maintain records of the Coke oven gas and natural gas usage in the No. 3 Sinter Plant Strand Windbox gas reheat burners ISB001, ISB002 and ISB003.

(b) To document the compliance status with Condition D.6.3, the Permittee shall maintain records in accordance with Section C – Sulfur Dioxide (SO_2) Record Keeping (Entire Source).

(c) To document the compliance status with Condition D.6.4, the Permittee shall maintain the following records:

(1) Records of the VOC emissions monitoring data for the period May 1 through September 30, as follows:

(A) The VOC emitted each day.

(B) The cumulative total of VOC emitted.

(C) The sinter produced each operating day.

(2) Maintain records of the VOC continuous emissions monitor system (CEMS) as required in 326 IAC 3-5.

(d) To document the compliance status with Condition D.6.7 the Permittee shall maintain records of once per day visible emission notations of the Sinter Cooler Stacks IS6203, IS6204 and IS6205 exhausts. The Permittee shall include in its daily record when a visible emission notation is not taken and the reason for the lack of visible emission notation (e.g. the process did not operate that day).

(e) To document the compliance status with Condition D.6.8 the Permittee shall maintain the records of the Sinter Plant Windbox Gas Cleaning system pressure drop across the baghouse; pressure drop and flow rate of the Sinter Plant Windbox Gas Cleaning Scrubbers; pressure drop across the Cold Screen Station Baghouse and pressure drop across the Discharge Ends Area baghouse during normal operation on at least a once per day basis. The Permittee shall include in its daily record when a pressure drop reading is not taken and the reason for the lack of pressure drop reading (e.g. the process did not operate that day).

(f) Section C - General Record Keeping Requirements contains the Permittee's obligations with regard to the records required by this condition.

D.6.13 Reporting Requirements

(a) Pursuant to Significant Source modification 089-12880-00121, a quarterly summary of the natural gas and coke oven gas usage at the No. 3 Sinter Plant Sinter Strands Windbox recirculating burners per 12-consecutive month period with compliance demonstrated at the end of each month to document the compliance status with Conditions D.6.1, shall be submitted not later than thirty (30) days after the end of the quarter being reported.

(b) Pursuant to 326 IAC 8-13-8(a)(3), reports to document the compliance status with Condition D.6.4, shall be as follows:

(1) For VOC Continuous Emissions Monitoring System (CEMS), the following reports shall be submitted:

(A) A report shall be submitted within thirty (30) days of an exceedance of VOC emission limits in D.6.4 containing the following information:

(i) The name and location of the source.

(ii) The nature of the exceedance.

(iii) The date of the occurrence.

(iv) The cause of the exceedance, such as, but not limited to, production rates or characteristics of the sinter burden.

(v) The corrective action taken according to the corrective action plan in 326 IAC 8-13-4(b)(5).

(B) Submit the CEM certification reports according to the procedures and schedule in 326 IAC 3-5.

(c) A quarterly summary report to document the compliance status with condition D.6.3 shall be not later than thirty (30) days after the end of the quarter being reported. Section C – Sulfur Dioxide (SO_2) Reporting Requirements (Entire Source) contains the Permittee's obligation with regard to the reporting required by this condition.

(d) The reports submitted by the Permittee do require a certification that meets the requirements of 326 IAC 2-7-6(1) by a “responsible official” as defined by 326 IAC 2-7-1(35).

SECTION D.7 EMISSIONS UNIT OPERATION CONDITIONS

Emissions Unit Description: Four (4) Blast Furnaces, designated as Blast Furnace No. 4, Blast Furnace No. 6, Blast Furnace No. 8 and Blast Furnace No. 14

Blast Furnaces

(a) Raw materials shipped to the ore yard identified as IAOYO366, are transferred to the Highline, identified as IAHL0307, from which raw material shipments and coke are sent through the Stockhouse.

(b) The No. 14 Blast Furnace Stockhouse, constructed in 1979, modified in 2009 with the addition of a baghouse for particulate control, identified Blast Furnace No. 14 Stockhouse Baghouse, exhausting to stack IDSH0367, servicing Blast Furnace 14. The No 4 Blast Furnace Stockhouse constructed in 1979, controlled by dust suppression, services Blast Furnace No. 4.

(c) The No 6 Blast Furnace Stockhouse constructed in 1979, controlled by dust suppression, services Blast Furnace No. 6. The No. 8 Blast Furnace Stockhouse constructed in 1979, controlled by dust suppression, services Blast Furnace No. 8.

(d) No. 4 Blast Furnace, constructed in 1917, with a maximum capacity of 200 tons per hour, identified as IABF0308, using a Blast Furnace Gas Distribution System to collect the blast furnace gas and using natural gas injection and pulverized coal at a rate of 26 tons per hour, oil (from on-site contractor when it meets specifications) at a rate of 70 gallons per minute and/or coal tar (when the on-site contractor tar centrifuge is not operating) at a rate of 70 gallons per minute.

(1) Three (3) No. 4 Blast Furnace Stoves identified as IAST0360, replaced in 1947, with a maximum heat input capacity of 350 MMBtu per hour total combusting blast furnace gas (BFG) and natural gas, exhausting to the combustion stack IA6160.

(2) No. 4 Blast Furnace Casthouse, identified as IABF0308, constructed in 1917, with emissions from tapping and runners controlled by a natural gas iron oxide fume suppression system IA3177, exhausting to casthouse roof monitor IA6010.

(3) One (1) Slag Pit, identified as IASP0311, with fugitive emissions.

(e) No. 6 Blast Furnace, constructed in 1910, with a maximum capacity of 200 tons per hour, identified as IABFO341, using a Blast Furnace Gas Distribution System to collect the blast furnace gas and using natural gas injection and pulverized coal injected at a rate of 26 tons per hour, oil at a rate of 70 gallons per minute and /or coal tar at a rate of 70 gallons per minute.

(1) Four (4) No. 6 Blast Furnace Stoves identified as IBST0361, replaced in 1997, with a maximum heat input capacity of 350 MMBtu per hour total, combusting Blast Furnace Gas (BFG) and natural gas exhausting to the combustion stack IB6168.

(2) No. 6 Blast Furnace Casthouse, identified as IBBF0341, constructed in 1910, with emissions from tapping and runners controlled by a natural gas iron oxide fume suppression system IB3178, exhausting to casthouse roof monitor IB6011.

(3) One (1) Slag Pit, identified as IBSP0335, with fugitive emissions.

(f) No. 8 Blast Furnace, constructed in 1909, with a maximum capacity of 183 tons per hour, identified as ICBFO354, using a Blast Furnace Gas Distribution System to collect the blast furnace gas and using natural gas injection and pulverized coal injected at a rate of 26 ton per hour, oil at a rate of 70 gallons per minute and/or coal tar at a rate of 70 gallons per minute.

(1) Four (4) No. 8 Blast Furnace Stoves, identified as ICST0362, replaced in 1999, with a maximum heat input capacity of 325 MMBtu per hour total, combusting Blast Furnace Gas and natural gas, exhausting to the combustion stack IC6175.

(2) No. 8 Blast Furnace Casthouse, identified as ICBF0354, constructed in 1909, with emissions from tapping and runners controlled by a natural gas iron oxide fume suppression system IC3179, exhausting to cast house roof monitor IC6012.

(3) One (1) Slag Pit, identified as ICSP0363, with fugitive emissions.

(g) No. 14 Blast Furnace, constructed in 1974, with a maximum capacity of 450 tons per hour, identified as IDBF0369, using a Blast Furnace Gas Distribution System to collect the blast furnace gas and using natural gas injection and pulverized coal injected at a rate of 80 tons per hour, oil at a rate of 150 gallons per minute and/or coal tar at a rate of 150 gallons per minute.

(1) Three (3) No. 14 Blast Furnace Stoves identified as IDST0359, constructed in 1974, with a maximum heat input capacity of 700 MMBtu per hour total, combusting blast furnace gas and natural gas, exhausting to the combustion stack ID6184;

(2) No. 14 Blast Furnace Casthouse, identified as IDBF0369, constructed in 1974 with emissions controlled by a baghouse, identified as ID3185, exhausting to stack ID6187 and fugitive emissions exhausting through the casthouse roof monitor ID6013;

(3) One (1) Slag Pit, identified as IDSP0371, with fugitive emissions.

(4) Pursuant to Significant Source Modification 089-20118-00121, issued October 20, 2005, the following activities involved in the No. 14 Blast Furnace Reline Project were approved for construction:

(A) Replacement of furnace refractory lining with new and thinner refractory brick.

(B) Replacement of furnace shell.

(C) Removal and replacement of the top charging system with a new “bell-less” charging system.

(D) Placement of new copper staves in the mantle area of the furnace.

(E) Installation of copper cooling plates and a new bustle pipe.

(F) Repair of the checker work brick in the stoves and various structural, mechanical and electrical repairs.

(G) Enlargement of the slag granulator and addition of a stack.

(H) Changes to the casthouse and casthouse emissions control system to improve capture efficiency of hoods at the tap holes, iron troughs and runners.

(I) Removal and replacement of the existing system for cleaning blast furnace gas with a more efficient scrubbing system.

(h) One (1) No. 14 Blast Furnace Slag Granulation Plant owned by U.S. Steel - Gary Works and operated by U.S. Steel - Gary Works as part of the slag processing operation. The granulation plant has a maximum capacity of 1,704,000 tons of steel mill slag per year, consisting of the following:

(1) One (1) hot slag quenching operation, constructed in 1991, directed to a hooded exhaust stack.

(2) Two (2) silos, constructed in 1991, for temporary slag storage.

(3) Two (2) belt conveyers, constructed in January 1995.

(4) One (1) storage silo and loadout bay, constructed in May 1995, with a capacity of 400,000 tons per year.

(i) One (1) blast furnace gas distribution system consisting of instrumentation and valves designed to limit the maximum pressure through the distribution system by venting excess blast furnace gas to the three (3) bleeder stacks equipped with Flare No. 1 identified as BG6073, constructed before 1920, Flare No. 2, identified as BG6074 constructed before 1920 and Flare No. 4 identified as BG6075, constructed in 1974.

(j) One (1) iron beaching process, constructed prior to 1965, identified as IMIB0378.

(k) One (1) transfer ladle maintenance operation, constructed prior to 1965, identified as, IMVM0375.

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

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

D.7.1 Emission Offset Minor Limitation [326 IAC 2-3]

Pursuant to Construction Permit 089-2936-00133, issued July 2, 1993 and 326 IAC 2-3 (Emission Offset), the total granulation plant throughput shall not exceed 1,704,000 tons per 12 consecutive month period with compliance demonstrated at the end of each month. Therefore, the emission offset rule 326 IAC 2-3 does not apply.

D.7.2 PSD Minor Limit PM/PM_{10} [326 IAC 2-2]

In order render the requirements of PSD (Prevention of Significant Deterioration) not applicable for PM and PM_{10}, the Blast Furnace No. 14 Stockhouse Baghouse shall achieve 90% capture efficiency and the exhaust from stack IDSH0367 shall not exceed 2.57 lbs of PM per hour and 2.57 lbs of PM_{10} per hour.

Compliance with these limits will ensure that the PM and PM_{10} emissions increase from the modification permitted in Significant Permit Modification 089-27690-00121 shall be less than twenty-five (25) and fifteen (15) tons per year, respectively. Therefore, the requirements of 326 IAC 2-2 (PSD) are rendered not applicable to this modification.

D.7.3 Nonattainment New Source Review (NSR) Minor Limit [326 IAC 2-1.1-5]

In order render the requirements of Nonattainment NSR not applicable for $PM_{2.5}$, the Blast Furnace No. 14 Stockhouse Baghouse shall achieve 90% capture efficiency and the exhaust from stack IDSH0367 shall not exceed 2.19 lbs of $PM_{2.5}$ per hour.

Compliance with this limit will ensure that the $PM_{2.5}$ emissions increase from the modification permitted in Significant Permit Modification 089-27690-00121 shall be less than ten (10) tons per year and shall render the requirements of 326 IAC 2-1.1-5-2 (Nonattainment New Source Review (NSR)) not applicable to this modification.

D.7.4 Particulate Emission Limitation [326 IAC 6.8-1-2(a)]

Pursuant to Construction Permit 089-1953-00133, issued March 18, 1991 and 326 IAC 6.8-1-2(a) (Particulate Matter Limitations for Lake County), the particulate matter emissions from the slag granulation process quenching hooded exhaust stack shall not exceed 0.03 grain per dry standard cubic foot (dscf).

D.7.5 Lake County PM_{10} Emission Requirements [326 IAC 6.8-2-38]

Pursuant to 326 IAC 6.8-2-38, PM_{10} emissions shall comply with the following:

(a) The PM_{10} emissions from the Blast Furnace No. 4 stoves Stack IA6160 shall not exceed 0.033 pound per MMBtu of heat input and a total of 11.70 pounds per hour.

(b) The PM_{10} emissions from the Blast Furnace No. 6 stoves Stack IB6168 shall not exceed 0.033 pound per MMBtu of heat input and a total of 11.70 pounds per hour.

(c) The PM_{10} emissions from the Blast Furnace No. 8 stoves Stack IC6175 shall not exceed 0.033 pound per MMBtu of heat input and a total of 11.70 pounds per hour.

(d) The PM_{10} emissions from the Blast Furnace No. 14 stoves Stack ID6184 shall not exceed 0.029 pound per MMBtu of heat input and a total of 20.40 pounds per hour.

(e) The PM_{10} emissions from the Number 14 Blast Furnace Casthouse Baghouse Stack ID6187 shall not exceed 0.0090 grains per dry standard cubic feet and 38.57 pounds per hour.

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

D.7.6 Fugitive Dust Emission Limitations [326 IAC 6-4-2][326 IAC 6.8-10-3]

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

(1) The iron beaching and ladle maintenance generating fugitive dust shall be in violation of this rule (326 IAC 6-4) if any of the following criteria are violated:

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

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

Where
P = Percentage increase
R = Number of particles of fugitive dust measured at downward receptor site
U = Number of particles of fugitive dust measured at upwind or background site

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

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

Where
N = Fraction of fugitive dust that is reparable dust;
PR = allowable percentage increase in dust concentration above background; and
P = no value greater than sixty-seven percent (67%).

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

(D) If fugitive dust is visible crossing the boundary or property line of a source. This subdivision may be refuted by factual data expressed in subdivisions (1), (2) or (3) of this section. 326 IAC 6-4-2(4) is not federally enforceable.

(2) Pursuant to 326 IAC 6-4-6(6) (Exceptions), fugitive dust from a source caused by adverse meteorological conditions will be considered an exception to this rule (326 IAC 6-4) and therefore not in violation.

(b) Pursuant to 326 IAC 6.8-10-3 Lake County Fugitive Particulate Matter Emissions Limitations, fugitive emissions from iron beaching and ladle maintenance generating fugitive emissions shall comply with the emissions limitations in Section C.5 - Fugitive Dust Emissions.

(c) Pursuant to 326 IAC 6.8-10-3(7)(A), the PM_{10} emissions from Blast Furnace No. 14 Stockhouse Baghouse Stack IDSH0367 shall not exceed 0.022 grain per dry standard cubic foot (dscf) and ten percent (10%) opacity.

D.7.7 Sulfur Dioxide (SO_2) Limitations [326 IAC 7-4.1-20(a)(1)(I)(J) and (K)

(a) Pursuant to 326 IAC 7-4.1-20(a)(1)(I)(J), and (K), the SO_2 emissions from the No. 4 Blast Furnace Stoves IAST0360, No. 6 Blast Furnace Stoves IBST0361, No. 8 Blast Furnace Stoves ICST0362 and No. 14 Blast Furnace Stoves IDST0359 shall comply with the following when the coke oven gas desulfurization unit is not operating:

Furnace	Emission Limit lbs/MMBtu	Emission Limit lbs/hr
Blast Furnace No. 4 Stove Stack	0.115	40.25 total
Blast Furnace No. 6 Stove Stack	0.115	40.25 total
Blast Furnace No. 8 Stove Stack	0.115	37.38 total

Furnace	Emission Limit lbs/MMBtu	Emission Limit lbs/hr
Blast Furnace No. 14 Stove Stack during periods when combusting blast furnace gas	0.134	93.50 total
Blast Furnace No. 14 Casthouse Baghouse Stack during periods when Blast Furnace No. 14 Stoves are combusting blast furnace gas.	---	115.0

(b) Pursuant to 326 IAC 7-4.1-20(b)(5) and (9), the SO_2 emissions from the No. 4 Blast Furnace Stoves IAST0360, No. 6 Blast Furnace Stoves IBST0361, No. 8 Blast Furnace Stoves ICST0362 and No. 14 Blast Furnace Stoves IDST0359 shall comply with the following when the coke oven gas desulfurization unit is operating:

Furnace	Emission Limit lbs/MMBtu	Emission Limit lbs/hr
Blast Furnace No. 4 Stove Stack	0.115	40.25 total
Blast Furnace No. 6 Stove Stack	0.115	40.25 total
Blast Furnace No. 8 Stove Stack	0.115	37.38 total
Blast Furnace No. 14 Stove Stack	0.134	93.50 total
Blast Furnace No. 14 Casthouse Baghouse Stack	---	115.0

D.7.8 Carbon Monoxide (CO) Limitations [326 IAC 9-1-2(2)]

Pursuant to 326 IAC 9-1-2(2), no carbon monoxide shall be discharged from the No. 14 Blast Furnace IDBF0369, waste gas stream, unless the gas stream is burned in one of the following: a direct-flame afterburner, boiler or recuperative incinerator. In instances where carbon monoxide destruction is not required, carbon monoxide emissions shall be released at such elevation that the maximum ground level concentration from a single source shall not exceed twenty percent (20%) of the maximum ground one hour Indiana ambient air quality value for carbon monoxide.

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

D.7.9 Testing Requirements [326 IAC 2-7-6(1),(6)][326 IAC 2-1.1-11]

(a) Within 2.5 years after the most recent valid compliance demonstration, the Permittee shall perform PM_{10} testing on the No. 14 Blast Furnace Casthouse Baghouse Stack ID6187 for the purpose of determining compliance with Condition D.7.6, utilizing methods as listed in 326 IAC 6.8-4-1(5) or a testing method approved by the Commissioner. This test shall be repeated at least once every 2.5 years from the date of the most recent valid compliance demonstration.

(b) Within 5 years after the most recent valid compliance demonstration, the Permittee shall perform PM, PM_{10}, and $PM_{2.5}$ testing on the Blast Furnace No. 14 Stockhouse Baghouse for the purpose of determining compliance with Condition D.7.2 and D.7.6(c), utilizing methods as listed in 326 IAC 6.8-4-1(5) or a testing method approved by the Commissioner. This test shall be repeated at least once every 5 years from the date of the most recent valid compliance demonstration.

Testing shall be conducted in accordance with the provisions of 326 IAC 3-6 (Source Sampling Procedures). Section C - Performance Testing contains the Permittee's obligation with regard to the performance testing required by this condition.

D.7.10 Sulfur Fuel Sampling and Analysis [326 IAC 7-4-1.1(d)]

To demonstrate compliance with condition D.7.7, the Permittee shall perform Sulfur Fuel Sampling and Analysis. Section C - Sulfur Fuel Sampling and Analysis contains the Permittee's obligation with regard to the sampling and analysis required by this condition.

D.7.11 Particulate Matter and CO Control [326 IAC 2-7-6(6)]

(a) Except as otherwise provided by statute, rule or this permit, the baghouses for particulate control shall be in operation and control emissions at all times the associated coal processing or drop point conveyors are in operation.

(1) Nos. 4, 6 and 8 Blast Furnace natural gas iron oxide fume suppression systems IA3177, IB3178, IC3179, shall be in operation in order minimize particulate matter emissions as follows:

(A) The iron and slag runners at the No. 4 Blast Furnace shall be equipped with a natural gas fired lance for fume suppression during the cast to minimize particulate matter emissions.

(B) The iron and slag runners at the No. 6 Blast Furnace shall be equipped with a natural gas fired lance for fume suppression during the cast to minimize particulate matter emissions.

(C) The iron and slag runners at the No. 8 Blast Furnace shall be equipped with a natural gas fired lance for fume suppression during the cast to minimize particulate matter emissions.

(2) The No. 14 blast furnace Casthouse Baghouse ID3185 shall be in operation at all times during casting operations at the No. 14 Blast Furnace Casthouse is in operation.

(3) The Blast Furnace No. 14 Stockhouse Baghouse shall be in operation at all times when material conveying and/or sizing operations at the Blast Furnace No. 14 Stockhouse are in operation.

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

(b) Carbon Monoxide Emissions Control

The Blast Furnace Gas Distribution System Flare controls GC3629, GC3628 and GC3627 and bleeder stack Flare No. 1 BG6073, Flare No. 2 BG6074 and Flare No. 4 BG6075 shall be in operation and the pilot flame shall be present at all times when the No. 14 Blast Furnace, No. 4 Blast Furnace, No. 6 Blast Furnace and No. 8 Blast Furnace are in operation in order to minimize CO emissions.

D.7.12 Fugitive Dust Control

The dust suppression used as control for the fugitive particulate emissions from the granulation plant shall be applied as often as necessary to control fugitive dust.

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

D.7.13 Visible Emissions Notations

(a) Visible emission notations of the No. 14 Blast Furnace Casthouse Baghouse Stack ID6187, Blast Furnace No. 14 Stockhouse Baghouse Stack IDSH0367, iron beaching,

quenching hooded exhaust, transferring, conveying operations, and loadout bay shall be performed once per day during normal daylight operations when exhausting to the atmosphere. A trained employee shall record whether emissions are normal or abnormal.

(b) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.

(c) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.

(d) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.

(e) If abnormal emissions are observed, the Permittee shall take a reasonable response. Section C - Response to Excursions or Exceedances contains the Permittee's obligation with regard to the reasonable response steps required by this condition. Failure to take response steps shall be considered a deviation of this permit.

(f) The Permittee shall comply with the most current Continuous Compliance Plan visible emission evaluation program. Section C - Continuous Compliance Plan contains the Permittee's obligation with regard to the visible emission evaluation program required by this condition.

D.7.14 Parametric Monitoring

(a) The Permittee shall record the pressure drop across the No. 14 Blast Furnace Cast house baghouse ID3185, at least once per day when the No. 14 Blast Furnace Casthouse is in operation. When for any one reading, the pressure drop across the baghouses is outside the normal range, the Permittee shall take a reasonable response. The normal range for this unit is a pressure drop between 3 and 9 inches of water unless a different upper-bound or lower-bound value for this range is determined during the latest stack test. Section C - Response to Excursions and Exceedances contains the Permittee's obligation with regard to the reasonable response steps required by this condition. A pressure reading that is outside the above mentioned range is not a deviation from this permit. Failure to take response steps shall be considered a deviation of this permit.

(b) The Permittee shall record the pressure drop across the Blast Furnace No. 14 Stockhouse Baghouse, at least once per day when the No. 14 Blast Furnace Stockhouse processes are in operation. When for any one reading, the pressure drop across the baghouses is outside the normal range, the Permittee shall take a reasonable response. The normal range for this unit is a pressure drop between 3 and 9 inches of water unless a different upper-bound or lower-bound value for this range is determined during the latest stack test. Section C - Response to Excursions and Exceedances contains the Permittee's obligation with regard to the reasonable response steps required by this condition. A pressure reading that is outside the above mentioned range is not a deviation from this permit. Failure to take response steps shall be considered a deviation of this permit.

(c) The Permittee shall comply with the most current Continuous Compliance Plan for the baghouse operation, recording and maintenance. Section C - Continuous Compliance Plan contains the Permittee's obligation with regard to the baghouse operation, recording and maintenance required by this condition.

(d) The instrument used for determining the pressure shall comply with Section C - Instrument Specifications, of this permit, shall be subject to approval by IDEM, OAQ, and shall be calibrated or replaced at least once every six (6) months or other time period specified by the manufacturer. The Permittee shall maintain records of the manufacturer specifications, if used.

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

D.7.15 Record Keeping Requirements

(a) To document the compliance status with Condition D.7.1, the Permittee shall maintain records at the plant of the total tons of slag processed in the granulation plant per twelve (12) consecutive month period.

(b) To document the compliance status with Condition D.7.7, the Permittee shall maintain records in accordance with Section C – Sulfur Dioxide SO_2 Record Keeping (Entire Source).

(c) To document the compliance status with Condition D.7.13, the Permittee shall maintain records of once per day visible emission notations of the No. 14 Casthouse Baghouse Stack (ID6187), the Blast Furnace No. 14 Stockhouse Baghouse exhaust stack (IDSH0367), the iron beaching facility, quenching hooded exhaust, transferring, conveying operations, and loadout bay when in operation. The Permittee shall include in its daily record when a visible emission notation is not taken and the reason for the lack of visible emission notation (e.g. the process did not operate that day).

(d) To document the compliance status with Condition D.7.14, the Permittee shall maintain the records of the once per day pressure drop of the No. 14 Casthouse Baghouse and the Blast Furnace No. 14 Stockhouse Baghouse during normal operation. The Permittee shall include in its daily record when a pressure drop reading is not taken and the reason for the lack of pressure drop reading (e.g. the process did not operate that day).

(e) Section C - General Record Keeping Requirements contains the Permittee's obligations with regard to the records required by this condition.

D.7.16 Reporting Requirements

A quarterly summary report to document the compliance status with condition D.7.1 and D.7.7 shall be submitted not later than thirty (30) days after the end of the quarter being reported. Section C - General Reporting contains the Permittee's obligation with regard to the reporting required by this condition. The report submitted by the Permittee does require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(35).

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

(a) Pursuant to SSM 089-20118-00121, issued October 20, 2005, 326 IAC 2-2-2(d) and 326 IAC 2-3-2(c), the No. 14 Blast Furnace Reline Project shall not cause a significant net emission increase for any of the pollutants listed in 326 IAC 2-2-1(ww) and 326 IAC 2-3-1(pp).

The significant net emission increase shall be determined using the Actual to Projected Actual Applicability Test.

Therefore, the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration) and 326 IAC 2-3 (Emission Offset) are not applicable.

(b) Unless otherwise specified in this permit, all record keeping requirements not already legally required shall be implemented when the new or modified equipment begins normal operation.

(c) If there is a reasonable possibility that the No. 14 Blast Furnace Reline Project may result in a significant emission increase and the Permittee elects to utilize the "projected actual emissions" (as defined in 326 IAC 2-2-1(pp) and 326 IAC 2-3-1 (kk)), the Permittee shall comply with the following:

(1) Before beginning actual construction of the "project" (as defined in 326 IAC 2-2-1(qq) and 326 IAC 2-3-1(ll)) at an existing emission unit, document and maintain the following records:

(A) A description of the project;

(B) Identification of any emission unit whose emissions of a regulated new source review (NSR) pollutant could be affected by the project;

(C) A description of the applicability test used to determine that the project is not a major modification for any regulated NSR pollutant, including:

(i) Baseline actual emissions;

(ii) Projected actual emissions;

(iii) Amount of emissions excluded under section 326 IAC 2-2-1(pp)(2)(A)(iii); and

(iv) An explanation for why the amount was excluded, and any netting calculations, if applicable.

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

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

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

Pursuant to SSM 089-20118-00121, issued October 20, 2005 and 326 IAC 2-3-2(b), the VOC emissions increases for the five (5) calendar year period January 2000 to December 2005 plus the net emission increase from the No. 14 Blast Furnace Reline Project resulted in an emission increase less than the VOC de minimis level (25 tons per year).

SECTION D.8 EMISSIONS UNIT OPERATION CONDITIONS

Emissions Unit Description:

Number One Basic Oxygen Process (BOP) Shop

(a) Two (2) Stations, identified as No. 1 and No. 2, Hot Metal Transfer and Desulfurization Stations. The Desulfurization Stations were originally constructed in 1981 and the Hot Metal Transfer Stations were originally constructed in 1965, and replaced in 1998. Each station consists of Hot Metal Desulfurization, SSDS0201, Hot Metal Transfer SSMT0203 and Slag Skimming SSSS0205. Hot metal from the blast furnaces is desulfurized and skimmed prior to charging in the steel making vessels. The maximum capacity of each station is 456 tons per hour. Each station is equipped with a local exhaust ventilation hood to capture emissions ducted to the Hot Metal Desulfurization/Skimming Stations Baghouse SS3100. The desulfurization units are equipped with nitrogen suppression around where the desulfurization lance penetrates the hood hole.

(b) One (1) Flux handling system, identified as SSFH0206, constructed in 1965, used for unloading, temporary storage, and transfer of fluxing agents to the steel making vessels, with a maximum capacity of 80 tons per hour. Emissions are controlled by No. 1, No. 2 and No. 3 baghouses SS3058, SS3059, and SS3053. Nos. 1 and 2 exhaust inside the building and No. 3 discharges through stack SS6056.

(c) Basic Oxygen Process (BOP) Vessels, constructed in 1965, consisting of BOP vessel M, identified as SSVM0234, vessel E, identified as SSVE0235 and vessel D, identified as SSVD0236, with a maximum capacity of 250 tons per hour each. Emissions are controlled by open combustion hoods and an exhaust emission hood collection system, which exhausts emissions to the Gas Cleaning Systems SS3103 and SS3104.

(d) Two (2) gas cleaning systems SS3103 and SS3104 that process the exhaust gases from the three (3) steel making vessels consisting of three (3) quenchers, two (2) scuppers, two (2) Venturi scrubbers, two (2) separators, two (2) gas coolers fitted with internal mist eliminators and two (2) induced draft fans. Emissions exhaust through stacks SS6102 and SS6103.

(e) CASbell/OB Lancing Stations M, D and E, include the controlled argon stirring process and blowing of oxygen to maintain temperature and chemistry. Constructed in 1981, Station M, identified as SSCM0231, Station E identified as SSCE0232, and Station D identified as SSCD0233 with a maximum capacity of 250 tons per hour each. Emissions are controlled by the CASbell/OB Lancing baghouse SS3105, exhausting through Stack SS6104 and uncaptured emissions venting to the roof monitor SS6636.

(f) One (1) Slingot Moulding Station, including the casting of bottom-poured steel ingots, identified as SSMS0227, constructed in 1965, exhausting to the roof monitor SS6637.

(g) Nine (9) natural gas fired Ladle Preheaters and Dryers identified as No. 1 through 9, with 1 through 4, constructed in 1983, 5 and 6 constructed in 1982 and 7 through 9 construction unknown. Six (6) Preheaters with a capacity of 14 MMBtu/hr each and three (3) Dryers with a capacity of 10 MMBtu/hr each, identified as SSLD0230, exhausting through Roof Monitor SS6637.

(h) One (1) Continuous Caster, identified as SCSC0274, constructed in 1967, including a Tundish dryer with a heating capacity of 7.0 MMBtu/hr per hour, continuously casting

steel slabs with a maximum capacity of 275 tons per hour. Emissions exhaust through Roof Monitor SC6638.

(i) One (1) fugitive emissions mitigation system at the No. 1 BOP Shop, constructed in June 2002, consisting of a capture hood system ducted to a 99% efficient baghouse with a flow rate of 11,500 acfm.

(j) One emergency slag skimming station with a maximum capacity of 456 tons per hour with emissions ducted to the Hot Metal Transfer Station and Desulfurization/Skimming Stations Baghouse SS3100.

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

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

D.8.1 Lake County PM_{10} Emission Requirements [326 IAC 6.8-2-38]

Pursuant to 326 IAC 6.8-2-38, PM_{10} emissions from the No. 1 Basic Oxygen Process Shop operations shall comply with the following:

(a) The PM_{10} emissions from the No. 1 BOP Shop Hot Metal Transfer and Desulfurization Stations Baghouse discharge shall not exceed 0.007 grains per dry standard cubic foot of exhaust air and 15.0 pounds per hour.

(b) The PM_{10} emissions from the No. 1 BOP Shop Gas Cleaning System Stacks SS6102 and SS6103 shall not exceed 0.011 grains per dry standard cubic foot of exhaust air and a total of 46.0 pounds per hour.

(c) The PM_{10} emissions from the No. 1 BOP CASBell/OB Lancing Baghouse Stack SS6104 shall not exceed 0.0070 grains per dry standard cubic foot of exhaust air and 5.10 pounds per hour.

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

D.8.2 Particulate Emissions Limitations [326 IAC 6.8-1-2(a)]

Pursuant to 326 IAC 6.8-1-2(a), the particulate emissions from the roof monitors SS6636, NS6637 and SS6638 shall not exceed three-hundredths (0.03) grain per dry standard cubic foot (dscf).

D.8.3 Sulfur Dioxide (SO_2) Limitations [326 IAC 7-4.1-20(c)(3)]

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

(a) If it is not listed in this rule; or

(b) under any operating condition not specifically listed in this rule.

D.8.4 Sulfur Dioxide (SO_2) Limitations Hot Metal Transfer and Desulfurization Stations [326 IAC 7-4.1-20]

(a) Pursuant to the U.S. EPA Administrative Consent Order, issued January 2, 2004, the Permittee shall comply with the following:

(1) The SO_2 emissions from the Nos. 1 and 2 Hot Metal Transfer and Desulfurization Stations Baghouse as measured during all hot metal processing activities shall not exceed 0.05 pound per ton of hot metal. Hot metal processing will include hot metal transfer, hot metal desulfurization reagent injection and hot metal skimming, as applicable.

(2) The SO_2 emissions from the Nos. 1 and 2 Hot Metal Transfer and Desulfurization Stations Baghouse as measured during hot metal desulfurization reagent injection only shall not exceed 0.01 pound per ton of hot metal.

(b) Pursuant to 326 IAC 7-4.1-20(a)(1)(M) and ((b)(11), the SO_2 emissions from the Nos. 1 and 2 Hot Metal Transfer and Desulfurization Stations Baghouse shall not exceed 0.05 pounds per ton of hot metal and 28.54 pounds per hour.

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

D.8.5 Particulate Matter Testing Requirements [326 IAC 2-7-6(1),(6)][326 IAC 2-1.1-11]

(a) Within 2.5 years after the most recent valid compliance demonstration, the Permittee shall perform PM_{10} testing on the No. 1 BOP Desulfurization Baghouse discharge for the purpose of determining compliance with Condition D.8.1(a), utilizing methods approved by the Commissioner. This test shall be repeated at least once every 2.5 years from the date of the most recent valid compliance demonstration.

(b) Within 2.5 years after the most recent compliance demonstration, the Permittee shall perform PM_{10} testing on the No. 1 BOP Gas Cleaning Systems Stacks SS6102 and SS610 for the purpose of determining compliance with Condition D.8.1(b), utilizing methods approved by the Commissioner. This test shall be repeated at least once every 2.5 years from the date of the most recent valid compliance demonstration.

(c) Testing shall be conducted in accordance with the provisions of 326 IAC 3-6 (Source Sampling Procedures). Section C - Performance Testing contains the Permittee's obligation with regard to the performance testing required by this condition.

D.8.6 Sulfur Dioxide Testing Requirements

(a) Pursuant to the U.S. EPA Administrative Consent Order, issued January 2, 2004, within 2.5 years from the date of the most recent valid compliance test, the Permittee shall perform SO_2 emission testing on the No. 1 and No. 2 Hot Metal Desulfurization station baghouse discharge utilizing the test method 40 CFR 60, Appendix A Method 6C or other methods as submitted in accordance with the U.S. EPA Administrative Consent Order, issued January 2, 2004, for the purpose of determining compliance with condition D.8.4(a). This test shall be repeated at least once every 2.5 years from the date of the most recent valid compliance demonstration.

(b) Pursuant to the U.S. EPA Administrative Consent Order, issued January 2, 2004, within 2.5 years from the date of the most recent valid compliance test, the Permittee shall perform SO_2 emission testing on the No. 1 and No. 2 Hot Metal Desulfurization Station Baghouse discharge utilizing the test method 40 CFR 60, Appendix A Method 6C or other methods as submitted in accordance with the U.S. EPA Administrative Consent Order, issued January 2, 2004, for the purpose of determining compliance with condition D.8.4(b) during the desulfurization reagent injection only. This test shall be repeated at least once every two and one-half (2 ½) years from the date of the most recent valid compliance demonstration.

(c) Pursuant to the U.S. EPA Administrative Consent Order, issued January 2, 2004 demonstration of compliance by performance testing per D.8.6 (b) above shall not fulfill the compliance demonstration requirement for D.8.6(a).

(d) Testing shall be conducted in accordance with the provisions of 326 IAC 3-6 (Source Sampling Procedures). Section C - Performance Testing contains the Permittee's obligation with regard to the performance testing required by this condition.

D.8.7 Particulate Matter Control [326 IAC 2-7-6(6)]

(a) Except as otherwise provided by statue, rule or this permit, the control devices listed below shall be in operation for particulate emissions control at all times the associated process is in operation. The control devices are as follows:

(1) The Hot Metal Desulfurization/Skimming Baghouse SS3100,

(2) Flux Handling System Baghouses SS3053, SS3058 and SS3059,

(3) BOP Gas Cleaning systems SS3103 and SS3104; and

(4) CASBell/OB Lancing Station Baghouse SS3105.

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

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

D.8.8 Visible Emissions Notations

(a) Visible emission notations of the BOP Operations Gas Cleaning System stacks SS6102 and SS6103, and CASBell/OB Lancing Station Baghouse stack SS6104, shall be performed once per day during normal daylight operations. A trained employee shall record whether emissions are normal or abnormal.

(b) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.

(c) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.

(d) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.

(e) If abnormal emissions are observed, the Permittee shall take a reasonable response. Section C - Response to Excursions or Exceedances contains the Permittee's obligation with regard to the reasonable response steps required by this condition. Failure to take response steps shall be considered a deviation from this permit.

(f) The Permittee shall comply with the most current Continuous Compliance Plan visible emission evaluation program. Section C - Continuous Compliance Plan contains the Permittee's obligation with regard to the visible emission evaluation program required by this condition.

D.8.9 Parametric Monitoring

(a) The Permittee shall record the pressure drop across the CASBell/OB Lancing Stations baghouse SS3105 used in conjunction with the CASBell/OB Lancing Stations, at least once per day when the CASBell/OB Lancing Stations are in operation. When for any one reading, the pressure drop across the baghouse is outside the normal, the Permittee shall take a reasonable response. The normal range for this unit is a pressure drop between 2 and 10 inches of water unless a different upper-bound or lower-bound value for this range is determined during the latest stack test Section C - Response to Excursions or Exceedances contains the Permittee's obligation with regard to the reasonable response steps required by this condition. A pressure reading that is outside the above mentioned range is not a deviation from this permit. Failure to take response steps shall be considered a deviation of this permit.

(b) The Permittee shall record the pressure drop and flow rate of the scrubbers used in conjunction with the three (3) BOP vessels M, E, and D, at least once per day when the three (3) BOP vessels M, E, and D units are in operation. When for any one reading, the pressure drop or flow rate across the scrubbers is outside the normal range, the Permittee shall take a reasonable response. The normal range for this unit is a range of 50 and 90 inches of water and the normal flow rate of the scrubber is 2500 to 4500 gallons per minute (gpm) unless a different upper-bound or lower-bound value for these ranges is determined during the latest stack test. Section C - Response to Excursions or Exceedances contains the Permittee's obligation with regard to the reasonable response steps required by this condition. A reading that is outside the above mentioned ranges for respective parameters is not a deviation from this permit. Failure to take response steps shall be considered a deviation of this permit.

(c) The Permittee shall record the pressure drop across the Hot Metal Transfer and Desulfurization Baghouse SS3100 used in conjunction with the No. 1 BOP Hot Metal Desulfurization stations, at least once per day when the No. 1 BOP Hot Metal Desulfurization Stations are in operation. When for any one reading, the pressure drop across the baghouse is outside the normal range, the Permittee shall take a reasonable response. The normal range for this unit is a pressure drop between 2 and 10 inches of water unless a different upper-bound or lower-bound value for this range is determined during the latest stack test Section C - Response to Excursions or Exceedances contains the Permittee's obligation with regard to the reasonable response steps required by this condition. A pressure reading that is outside the above mentioned range is not a deviation from this permit. Failure to take response steps shall be considered a deviation of this permit.

(d) The Permittee shall comply with the most current Continuous Compliance Plan for the baghouse operation, recording and maintenance. Section C - Continuous Compliance Plan contains the Permittee's obligation with regard to the baghouse operation, recording and maintenance required by this condition.

(e) The instruments used for determining the pressure and flow rate shall comply with Section C – Instrument Specifications, of this permit, shall be subject to approval by IDEM, OAQ, and shall be calibrated or replaced at least once every six (6) months or other time period specified by the manufacturer. The Permittee shall maintain records of the manufacturer specifications, if used.

D.8.10 Scrubber Failure Detection

In the event that a scrubber failure has been observed:

Failed units and the associated process will be shut down immediately until the failed units have been repaired or replaced. Operations may continue only if the event qualifies as an emergency

and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions).

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

D.8.11 Record Keeping Requirements

(a) Pursuant to the U.S. EPA Administrative Consent Order, issued January 2, 2004, and in order to document the compliance status with Condition D.8.4, the Permittee shall keep records of the monthly hot metal throughput for the No. 1 and No. 2 Hot Metal Transfer and Desulfurization Stations.

(b) To document the compliance status with Visible Emission Notations, Condition D.8.8, the Permittee shall maintain records of once per day visible emission notations of the Hot Metal Desulfurization Baghouse Stack SS6101, the BOP Gas Cleaning System Stacks SS6102 and SS6103 and the CASBell/OB Lancing Station Baghouse Stacks SS6104 exhausts. The Permittee shall include in its daily record when a visible emission notation is not taken and the reason for the lack of visible emission notation (e.g. the process did not operate that day).

(c) To document the compliance status with Condition D.8.9, the Permittee shall maintain records of the parametric monitoring CASBell/OB Lancing Station Baghouse SS3105 and Hot Metal Transfer and Desulfurization Baghouse SS3100 total static pressure drop, and No. 1 BOP Shop Gas Cleaning System scrubbers, pressure drop across the venturi throats and scrubber supply water flow rate once per day during normal operation. The Permittee shall include in its daily record when a pressure drop reading and/or flow rate reading is not taken and the reason for the lack of pressure drop reading and/or flow rate reading (e.g. the process did not operate that day).

(d) Section C - General Record Keeping Requirements contains the Permittee's obligations with regard to the records required by this condition.

SECTION D.9 EMISSIONS UNIT OPERATION CONDITIONS

Emissions Unit Description:

Number Two Q-BOP Shop

(a) Two (2) Hot Metal Transfer and Desulfurization Stations, identified as NSDS0246, constructed in 1987, with a maximum capacity of 510 tons per hour. These stations included: two (2) Hot Metal Mixers, identified as NSMM0264 and two (2) Hot Metal Mixer Heaters, identified as NSMH0251, constructed in 1973, with a maximum capacity of 255 tons per hour. The natural gas fired mixer heaters have a heat input capacity of 10 MMBtu/hr each. Emissions from the hot metal transfer and desulfurization stations, mixers and heaters are controlled by the Hot Metal Transfer and Desulfurization Stations Baghouse NS3115, discharging through NS6144 and the uncontrolled emissions go through roof monitor NS6631.

(b) Q-Basic Oxygen Process (BOP) vessels, constructed in 1973, consisting of BOP vessel T identified as NSVT0268, vessel W, identified as NSVW0269, and vessel Y, identified as NSVY0270, with a maximum capacity of 250 tons per hour each. Primary emissions are controlled by open combustion hood and two (2) Gas Cleaning Systems, secondary emissions are controlled by the Secondary Emissions Baghouse NS3124, exhausting to stack NS6123, and uncontrolled emissions exhaust through Roof Monitor NS6632.

(c) Two (2) Gas Cleaning Systems, identified as NS3125 and NS3126 located in the gas cleaner facility, constructed in 1973, process the exhaust gases from the three (3) steel making vessels through three (3) quenchers, two (2) scuppers (tank like structures that remove excess quench water and solids from the gas stream), two (2) Venturi scrubbers, two (2) separators, two (2) gas coolers with mist eliminators, and two (2) induced draft fans exhausting to Stacks NS6124 and NS6125.

(d) Three (3) Flux Bins T, W, and Y, identified as NSVT0265, NSVW0266 and NSVY0267, constructed in 1973, with a maximum capacity of 141 tons per hour each. Emissions are controlled by five (5) baghouses. Three (3) Flux Transfer Baghouses at 166' level identified as NS3112, NS3108, and NS3107, exhausting through Stacks NS6623, NS6627and NS6628 recycling captured material back to the process; One (1) North Flux Handling Baghouse at 116' level identified as NS3109 and one (1) South Flux Handling Baghouse at 116' level identified as NS3110, exhausting through stacks NS6626 and NS6625. Uncontrolled emissions exhaust through the roof monitor NS6632.

(e) Three (3) Ladle Metallurgical Facilities, LMF1 identified as NSL10293, LMF 2 identified as NSL20294 were constructed in 1986 and LMF 3 identified as NSL30295, constructed in 1991 with a maximum capacity of 348 tons per hour each. Hot fume emissions from LMF 1 and 2 are controlled by Nos. 1 and 2 LMF Hot Fume Exhaust baghouses NS3135 and NS3136, exhausting through stacks NS6146 and NS6147. Material handling emissions at LMF 1 and 2 are controlled by the LMF Nos. 1 and 2 Material Handling baghouse NS3052, exhausting through stack NS6055. The LMF 3 Hot Fume Exhaust and Material Handling emissions are controlled by the LMF 3 Hot Fume and Material Handling Baghouse NS3137, exhausting to stack NS6148. All uncontrolled emissions exhaust through the roof monitor NS6634.

(f) One (1) Capped Argon Bubbling (CAB) Station with oxygen blowing, approved in 2014 for construction, identified as NSC40296, with a maximum capacity of 477,000 tons per year, using the No. 3 LMF Hot Fume and Material Handling Baghouse NS3137 as

control, and exhausting to stack NS6148. All uncontrolled emissions exhaust through the roof monitor NS6634.

(g) One (1) R-H Vacuum Degasser, identified as NSVD0271, constructed in 1989, with a maximum capacity of 297.1 tons of steel per hour consisting of two (2) natural gas fired heaters, one (1) active and one (1) spare, identified as NSAB0276 and NSSB0275, with heat input capacities of 12 MMBtu per hour and 3 MMBtu per hour, respectively. Carbon monoxide and other combustible gas emissions are controlled with a flare that exhausts through Stack NS6145 and uncontrolled emissions exhaust through the Roof Monitor NS6634.

(h) One (1) Slag Conditioning Station servicing the RH Vacuum Degasser, constructed in 1997, with a maximum capacity of 297.1 tons of steel per hour.

(1) PM_{10} emissions from the station are controlled by a baghouse exhausting through Stacks S-1 through S-6 and recycling captured material back to the process.

(2) PM_{10} emissions from the material handling of slag conditioning and metallurgical agents are exhausted through the RH Vacuum Degasser Slag Conditioning Baghouse NS3207, exhausting through Stack NS6636.

(i) One (1) Daytank Lime Silo at the lime dumping station, identified as NSDS0250 constructed in 1971. Emissions are controlled by the Daytank Lime Silo baghouse NS3106, exhausting through the stack, NS6629.

(j) Three (3) Continuous Casting Lines, identified as Lines A, B and C identified as, NCCA0284, NCCB0285 and NCCC0286, with a total maximum capacity of 800 tons per hour combined. Lines A and B were constructed in 1986. Line C was constructed in 1991. Emissions from the continuous casters go to the Roof Monitor NC6635.

(k) Fourteen (14) natural gas fired Ladle Preheaters, identified as NBLD0262, eleven (11) with a heat input capacity of 9 MMBtu per hour each and three (3) with a heat input of 10 MMBtu per hour each. Emissions go through Roof Monitor NS6633.

(l) Two (2) Hot Metal Ladle Skimmers, identified as NSLS0248, constructed in 1973. Emissions go through Roof Monitor NS6631.

(m) Two (2) Steel Slag Skimming Stations, consisting of slag skimmers, identified as NSS10292 and NSS20287. Both were constructed in 1973. Emissions go through Roof Monitor NS6633.

(n) One (1) Slingot Station, identified as NSST0290, constructed in 1986. Emissions go through Roof Monitor NS6634.

(o) Eight (8) natural gas fired Tundish Preheaters located at the No. 2 Caster, with a heat input capacity of 6 MMBtu per hour each. Emissions go through Roof Monitor NC6635.

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

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

D.9.1 PSD Minor Limit [326 IAC 2-2]

In order to render the requirements of 326 IAC 2-2 (PSD) not applicable, the Permittee shall comply with the following:

(a) The PM emission rate from the Capped Argon Bubbling (CAB) Station, identified as NSC40296, controlled by the No. 3 LMF Hot Fume and Material Handling Baghouse NS3137, shall not exceed 2.7 pounds per hour.

(b) The PM_{10} emission rate from the Capped Argon Bubbling (CAB) Station, identified as NSC40296, controlled by the No. 3 LMF Hot Fume and Material Handling Baghouse NS3137, shall not exceed 2.7 pounds per hour.

(c) The $PM_{2.5}$ emission rate from the Capped Argon Bubbling (CAB) Station, identified as NSC40296, controlled by the No. 3 LMF Hot Fume and Material Handling Baghouse NS3137, shall not exceed 2.0 pounds per hour.

Compliance with these emission limits will ensure that the potential to emit from this modification is less than twenty-five (25) tons of PM per year, fifteen (15) tons of PM_{10} per year, and less than ten (10) tons of $PM_{2.5}$ per year and therefore will render the requirements of 326 IAC 2-2 not applicable.

D.9.2 Lake County PM_{10} Emission Requirements [326 IAC 6.8-2-38]

Pursuant to 326 IAC 6.8-2-38, the PM_{10} emissions from the Number 2 Q-BOP Shop operations shall comply with the following:

(a) The PM_{10} emissions from the Number 2 Q-BOP Hot Metal Transfer and Desulfurization Baghouses discharge NS6144 shall not exceed to 0.007 grains per dry standard cubic foot of exhaust air and 13.0 pounds per hour.

(b) The PM_{10} emissions from the Number 2 Q-BOP Secondary Emissions Baghouse stack NS6123 shall not exceed 0.007 grains per dry standard cubic foot of exhaust air and 27.0 pounds per hour.

(c) The PM_{10} emissions from the Number 2 Q-BOP Gas Cleaning System stacks NS6124 and NS6125 shall not exceed 0.0153 grains per dry standard cubic foot of exhaust air and a total of 44.40 pounds per hour.

(d) The PM_{10} emissions from the Number 2 Q-BOP North Flux Handling System Baghouse stack NS6626 shall not exceed to 0.0070 grains per dry standard cubic foot of exhaust air and 1.80 pounds per hour.

(e) The emissions from the Number 2 Q-BOP South Flux Handling System Baghouse stack NS6625, shall not exceed 0.0070 grains per dry standard cubic foot of exhaust air and 1.80 pounds per hour.

(f) The PM_{10} emissions from the Number 2 Q-BOP LMF Number 1 Hot Fume Exhaust Baghouse Stack NS6146 shall not exceed 0.007 grains per dry standard cubic foot of exhaust air and 5.1 pounds per hour.

(g) The PM_{10} emissions from the Number 2 Q-BOP LMF Number 2 Hot Fume Exhaust Baghouse Stack NS6147 shall not exceed 0.007 grains per dry standard cubic foot of exhaust air and 5.1 pounds per hour.

(h) The PM_{10} emissions from the Number 2 Q-BOP LMF Number 3 Hot Fume Exhaust and Material Handling Baghouse Stack NS6148 shall not exceed 0.0070 grains per dry standard cubic foot of exhaust air and 2.70 pounds per hour.

(i) The PM_{10} emissions from the Number 2 Q-BOP LMF Numbers 1 and 2 Material Handling Baghouse Stack NS6055, shall not exceed 0.007 grains per dry standard cubic foot of exhaust air and 3.83 pounds per hour.

(j) The PM_{10} emissions from the Number 2 Q-BOP RH Vacuum Degasser Slag Conditioning Baghouse stacks S-1 through S-6 shall not exceed 0.007 grains per dry standard cubic foot of exhaust air and 5.49 pounds per hour.

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

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

Pursuant to 326 IAC 6.8-1-2(a), the particulate emissions from the roof monitors NS6631, NS6632, NS6633 and NS6634 shall not exceed three-hundredths (0.03) grain per dry standard cubic foot (dscf).

D.9.4 Sulfur Dioxide (SO_2) Limitations [326 IC 7-4.1-20(c)(3)]

Pursuant to 326 IAC 7-4.1-20(c)(3) gaseous fuel sources shall burn natural gas only:

(a) if it is not listed in 326 IAC 7-4.1-20; or

(b) under an operating condition not specifically listed in 326 IAC 7-4.1-20.

D.9.5 Sulfur Dioxide (SO_2 Limitations – Hot Metal Transfer and Desulfurization Stations [326 IAC 7-4.1-20]

(a) Pursuant to the U.S. EPA Administrative Consent Order, issued January 2, 2004, the Permittee shall comply with the following:

(1) The SO_2 emissions from the Hot Metal Transfer and Desulfurization Stations baghouse as measured during all hot metal processing activities shall not exceed 0.05 pound per ton of hot metal. Hot metal processing will include hot metal transfer, hot metal desulfurization reagent injection and hot metal skimming, as applicable.

(2) The SO_2 emissions from the Hot Metal Transfer and Desulfurization Stations Baghouse as measured during hot metal desulfurization reagent injection only shall not exceed 0.01 pound per ton of hot metal.

(b) Pursuant to 326 IAC 7-4.1-20(a)(1)(L) and (b)(10), the SO_2 emissions from the No. 2 QBOP Shop Hot Metal Transfer and Desulfurization Stations Baghouse shall not exceed 0.05 pounds per ton of hot metal and 28.54 pounds per hour.

D.9.6 Carbon Monoxide (CO) Limitations 326 IAC 9-1-2

Pursuant to 326 IAC 9-1-2(2), no carbon monoxide shall be discharged from the Number 2 Q-BOP furnace waste gas stream, unless the gas stream is burned in one of the following: a direct-flame afterburner, boiler or recuperative incinerator. In instances where carbon monoxide destruction is not required, carbon monoxide emissions shall be released at such elevation that the maximum ground level concentration from a single source shall not exceed twenty percent (20%) of the maximum ground one hour Indiana ambient air quality value for carbon monoxide.

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

D.9.7 Particulate Testing Requirements [326 IAC 2-7-6(1),(6)][326 IAC 2-1.1-11]

(a) Within 2.5 years from the date of the most recent compliance demonstration, the Permittee shall perform PM_{10} testing on the Number 2 Q-BOP Hot Metal Transfer and Desulfurization Stations Baghouse discharge for the purpose of determining compliance with Condition D.9.2(a), utilizing methods approved by the Commissioner. This test shall be repeated at least once every 2.5 years from the date of the most recent valid compliance demonstration.

(b) Within 2.5 years from the date of the most recent compliance demonstration, the Permittee shall perform PM_{10} testing on the Number 2 Q-BOP Gas Cleaning System stacks NS6124 and NS6125 for the purpose of determining compliance with Condition D.9.2 (c), utilizing methods approved by the Commissioner. This test shall be repeated at least once every 2.5 years from the date of the most recent valid compliance demonstration.

(c) Within 2.5 years from the date of the most recent compliance demonstration, the Permittee shall perform PM_{10} testing on the Number 2 Q-BOP Secondary Emissions Baghouse Stack NS6123 for the purpose of determining compliance with Condition D.9.2 (b), utilizing methods approved by the Commissioner. This test shall be repeated at least once every 2.5 years from the date of the most recent valid compliance demonstration.

(d) Not later than 180 days after the startup of the Capped Argon Bubbling (CAB) Station, identified as NSC40296, the Permittee shall perform PM, PM10, and PM2.5 testing of the LMF 3 Hot Fume and Material Handling Baghouse NS3137 utilizing methods approved by the commissioner at least once every 5.0 years from the date of the most recent valid compliance demonstration. PM10 and PM2.5 includes filterable and condensable PM.

(e) Testing shall be conducted in accordance with the provisions of 326 IAC 3-6 (Source Sampling Procedures). Section C - Performance Testing contains the Permittee's obligation with regard to the performance testing required by this condition.

D.9.8 Sulfur Dioxide (SO_2) Testing Requirements

(a) Pursuant to the U.S. EPA Administrative Consent Order, issued January 2, 2004 , within 2.5 years from the date of the most recent valid compliance test, the Permittee shall perform SO_2 emission testing on the No. 2 QBOP Shop Hot Metal Transfer and Desulfurization Stations Baghouse discharge during hot metal transfer, hot metal desulfurization, reagent injection and hot metal skimming operations for the purpose of determining compliance with Condition D.9.5(a)(1), utilizing the test protocol submitted in accordance with the U.S. EPA Administrative Consent Order, issued January 2, 2004.. This test shall be repeated at least once every 2.5 years from the date of the most recent valid compliance demonstration.

(b) Pursuant to the U.S. EPA Administrative Consent Order, issued January 2, 2004, within 2.5 years from the date of the most recent valid compliance test, the Permittee shall perform SO_2 emission testing on the No. 2 QBOP Shop Hot Metal Transfer and desulfurization station baghouse discharge during reagent injection operations only for the purpose of determining compliance with Condition D.9.5(a)(2), utilizing methods approved by the Commissioner. This test shall be repeated at least once every 2.5 years from the date of the most recent valid compliance demonstration.

(c) Pursuant to the U.S. EPA Administrative Consent Order, issued January 2, 2004, demonstration of compliance by performance testing per D.9.9(b) above shall not fulfill the compliance demonstration requirement for D.9.9(a).

(d) Testing shall be conducted in accordance with the provisions of 326 IAC 3-6 (Source Sampling Procedures). Section C - Performance Testing contains the Permittee's obligation with regard to the performance testing required by this condition.

D.9.9 Particulate Matter Control [326 IAC 2-7-6(6)]

(a) Except as otherwise provided by statute, rule or this permit, the control devices listed below shall be in operation for particulate emissions control at all times the associated operations at the No. 2 Q-BOP Shop are in operation. The control devices are as follows:

(1) Hot Metal Transfer and Desulfurization Baghouse NS3115

(2) No. 2 QBOP Secondary Emissions Baghouse NS3124

(3) The two (2) No. 2 QBOP Gas Cleaning Systems NS3125 and NS3126

(4) No. 1 LMF Hot Fume Exhaust Baghouse NS3135

(5) No. 2 LMF Hot Fume Exhaust Baghouse NS3136

(6) No. 1 and No. 2 LMF Material Handling Baghouse NS3052

(7) No. 3 LMF Hot Fume and Material Handling Baghouse NS3137

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

D.9.10 Carbon Monoxide (CO) Control

The R-H Vacuum Degasser Flare NS6145 shall be in operation at all times the R-H Vacuum Degasser is in operation to control the CO emissions.

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

D.9.11 Visible Emissions Notations

(a) Visible emission notations of the Desulfurization Stations baghouse stack NS6144, Secondary Baghouse stack NS6123, No. 2 Q-BOP Gas Cleaning System Stacks NS6124 and NS6125, and the LMF 3 Hot Fume and Material Handling Baghouse stack NS6148, 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 a reasonable response. Section C - Response to Excursions or Exceedances contains the Permittee's obligation with regard to the reasonable response steps required by this condition. Failure to take response steps shall be considered a deviation of this permit.

(f) The Permittee shall comply with the most current Continuous Compliance Plan visible emission evaluation program. Section C - Continuous Compliance Plan contains the Permittee's obligation with regard to the visible emission evaluation program required by this condition.

D.9.12 Parametric Monitoring

(a) The Permittee shall record the pressure drop across the No. 2 QBOP Secondary Emissions baghouse NS3124 used in conjunction with the secondary emissions from the three (3) Q-BOP vessels T, W, and Y, at least once per day, when any of the three (3) Q-BOP vessels T, W, and Y, is in operation. When for any one reading, the pressure drop across the baghouse is outside the normal range, the Permittee shall take a reasonable response. The normal range for this unit is a pressure drop between 2 and 10 inches of water unless a different upper-bound or lower-bound value for this range is determined during the latest stack test. Section C - Response to Excursions or Exceedances contains the Permittee's obligation with regard to the reasonable response steps required by this condition. A pressure reading that is outside the above mentioned range is not a deviation from this permit. Failure to take response steps shall be considered a deviation of this permit.

(b) The Permittee shall record the pressure drop across the venturi scrubber throats and scrubber total supply water flow rate of the No. 2 Q-BOP gas cleaning Systems scrubbers NS3125 and NS3126 used in conjunction with the 3 No. 2 Q-BOP vessels at least once per day when either the three (3) Q-BOP vessels T, W, and Y units is operating. For each scrubber system, when for any one reading across the venturi scrubber throats is outside the normal range, the Permittee shall take a reasonable response. The normal range for this unit is a pressure drop between 50 and 70 inches of water and the normal flow rate of the scrubber is 2,000 to 4,500 gallons per minute (gpm) unless a different upper-bound or lower-bound value for this range is determined during the latest stack test. Section C - Response to Excursions or Exceedances contains the Permittee's obligation with regard to the reasonable response steps required by this condition. A reading that is outside the above mentioned ranges for respective parameters is not a deviation from this permit. Failure to take response steps shall be considered a deviation of this permit.

(c) The Permittee shall record the pressure drop across the Hot Metal Desulfurization baghouse NS3115 used in conjunction with the No, 2 Q-BOP Hot Metal Desulfurization stations and mixers, at least once per day when the desulfurization stations and mixers are in operation. When for any one reading, the pressure drop across the baghouse is outside the normal range, the Permittee shall take a reasonable response. The normal range for this unit is a pressure drop between 2 and 10 inches of water unless a different upper-bound or lower-bound value for this range is determined during the latest stack test. Section C - Response to Excursions or Exceedances contains the Permittee's obligation with regard to the reasonable response steps required by this condition. A pressure reading that is outside the above mentioned range is not a deviation from this permit. Failure to take response steps shall be considered a deviation of this permit.

(d) The Permittee shall comply with the most current Continuous Compliance Plan for the baghouse operation, recording and maintenance. Section C - Continuous Compliance Plan contains the Permittee's obligation with regard to the baghouse operation, recording and maintenance required by this condition.

(e) The instrument used for determining the pressure and flow rate shall comply with Section C – Instrument Specifications, of this permit, shall be subject to approval by IDEM, OAQ, and shall be calibrated or replaced at least once every six (6) months or other time period specified by the manufacturer. The Permittee shall maintain records of the manufacturer specifications, if used.

D.9.13 Scrubber Failure Detection

In the event that a scrubber failure has been observed:

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

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

D.9.14 Record Keeping Requirements

(a) Pursuant to the U.S. EPA Administrative Consent Order, issued January 2, 2004, and to document the compliance status with Condition D.9.5, the Permittee shall keep records of the monthly hot metal throughput for the No. 1 and No. 2 Hot Metal Desulfurization Stations.

(b) To document the compliance status with Condition D.9.11 the Permittee shall maintain the records of once per day visible emission notations of the Hot Metal Transfer and Desulfurization Stations baghouse discharge NS6144, No. 2 QBOP Secondary Emissions Baghouse Stack NS6123, No. 2 Q-BOP Gas Cleaning System Stacks NS6124 and NS6125, and the LMF 3 Hot Fume and Material Handling Baghouse stack NS6148 exhausts. The Permittee shall include in its daily record when a visible emission notation is not taken and the reason for the lack of visible emission notation (e.g. the process did not operate that day).

(c) To document the compliance status with Condition D.9.12, the Permittee shall maintain records of the once per day of the pressure drop of the No. 2 QBOP secondary emissions baghouse NS3124, pressure drop across the venturi scrubber throats and supply water flow rate of the No. 2 QBOP Gas cleaning systems scrubbers NS3125 and NS3126, and pressure drop of the Hot Metal Transfer and Desulfurization baghouse NS3115, during normal operation. The Permittee shall include in its daily record when a pressure drop reading and/or flow rate reading is not taken and the reason for the lack of pressure drop reading and/or flow rate reading (e.g. the process did not operate that day).

(d) Section C - General Record Keeping Requirements contains the Permittee's obligations with regard to the records required by this condition.

SECTION D.10 EMISSIONS UNIT OPERATION CONDITIONS

Emissions Unit Description:

Hot Rolling Mill

(a) Four (4) reheat furnaces Nos. 1, 2, 3 and 4, identified as RMF10500, RMF20501, RMF30502 and RMF40503 commenced operation in 1967, with heat input capacity of 600 MMBtu per hour each. Each furnace is equipped to combust natural gas and coke oven gas with emissions exhausting through Stacks RM6500, RM6501, RM6502 and RM6503.

(b) Two (2) waste heat boilers Nos. 1 and 2 , identified as RB1B0508 and RB2B0509, commenced operation in 1967, with a heat input capacity of 226 MMBtu per hour each. The heat input capacity from fuel from these boilers is derived from a combination of waste heat ducted from the reheat furnaces and the combustion of natural gas and coke oven gas. Emissions exhaust through the waste heat boiler stacks HB6504 and HB6505.

(c) One (1) 84-inch Hot Strip Mill, identified as RMV00504, commenced operation in 1967, with a maximum capacity of 856 tons per hour, 5 roughing mills and a 7-stand finishing mill with fugitive emissions through a Roof Monitor RM6630.

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

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

D.10.1 Lake County PM_{10} Emission Requirements [326 IAC 6.8-2-38]

(a) Pursuant to Significant Source Modification 089-19709-00121, issued May 2, 2005 and 326 IAC 6.8-2-38, PM_{10} emissions from the 84" Hot Strip Mill Reheat Furnaces Nos. 1, 2, 3 and 4 Stacks RM6500, RM6501, RM6502 and RM 6503 shall not exceed 0.017 pound per MMBtu of heat input and a total of 40.80 pounds per hour.

(b) Pursuant to 326 IAC 6.8-2-38, PM_{10} emissions from the 84" Hot Strip Mill Waste Heat Boilers Nos. 1 and 2 shall comply with the following:

(1) The PM_{10} emissions from the 84" Hot Strip Mill Waste Heat Boiler No. 1 Stack HB6504 shall not exceed 0.043 pound per MMBtu of heat input and 10.0 pounds per hour.

(2) The PM_{10} emissions from the 84" Hot Strip Mill Waste Heat Boiler No. 2 Stack HB6505 shall not exceed 0.043 pound per MMBtu of heat input and 10.0 pounds per hour.

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

D.10.2 Sulfur Dioxide (SO_2) Limitations [326 IAC 7-4.1-20]

Pursuant to 326 IAC 7-4.1-20, SO_2 emissions from the Reheat Furnace Nos. 1, 2, 3 and 4, RMF10500, RMF20501, RMF30502 and RMF40503 and Waste Heat Boilers Nos. 1 and 2, RB1B0508 and RB2B0509 shall comply with the following:

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

Emission Unit Operating Scenarios		Emission Limit lbs/MMBtu	Emission Limit lbs/hr
During periods when Reheat Furnace Nos. 1, 2, 3 and 4 are not combusting coke oven gas	Waste Heat Boiler Nos. 1 or 2	1.270	287.0
	Remaining Waste Heat Boiler	0.704	159.0
Reheat Furnace Nos. 1, 2, 3 and 4 during periods when combusting coke oven gas.	When four (4) furnaces are operating	0.256	615.0
	When three (3) furnaces are operating	0.342	615.0
	When two (2) furnaces are operating	0.513	615.0
	When one (1) furnace is operating	1.025	615.0

(b) Pursuant to 326 IAC 7-4.1-20(b)(6)(A) and (B), during periods when the coke oven gas desulfurization unit is operating:

Emission Unit Operating Scenarios		Emission Limit lbs/MMBtu	Emission Limit lbs/hr
Waste Heat Boiler Nos. 1 and 2	NA	0.260	58.8 each
Continuous Reheat Furnace Nos. 1, 2, 3 and 4	When four (4) furnaces are operating	0.182	436.5
	When three (3) furnaces are operating	0.243	436.5
	When two (2) furnaces are operating	0.354	436.5
	When one (1) furnace is operating	0.728	436.5

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

D.10.3 Testing Requirements [326 IAC 2-7-6(1),(6)][326 IAC 2-1.1-11]

Within 5 years after the most recent valid compliance demonstration, the Permittee shall perform PM_{10} testing on one of the Nos. 1, 2, 3 and 4 Continuous Reheat Furnace stacks RM6500, RM6501, RM6502 or RM6503 for the purpose of determining compliance with Condition D.10.1(a), using methods approved by the Commissioner. This test shall be repeated at least once every 5 years from the date of the most recent valid compliance demonstration. Testing shall be performed in accordance with provisions of 326 IAC 3-6 (Source Sampling Procedures).

Section C - Performance Testing contains the Permittee's obligation with regard to the performance testing required by this condition.

D.10.4 Lake County PM10 Emissions

Compliance with the PM10 limit in Condition D.10.1(b) shall be determined with the following equation:

For PM10 Emissions limit in pounds per hour:

NG PM10 Emissions (lb/hr) = NG usage (MMCF/day) x NG PM10 EF (lb/MMCF) x 1 day/24 hours

COG PM10 Emissions (lb/hr) = COG usage (MMCF/day) x COG PM10 EF (lb/MMCF) x 1day/24 hours

Combined Fuel Total PM10 Emissions (lb/hr) = NG PM10 Emissions (lb/hr) + COG PM10 Emissions (lb/hr)

For PM10 Emissions limit in pound per MMBtu:

NG PM10 Emissions (lb/MMBtu) = NG PM10 EF (lb/MMCF) / NG heating value (MMBTU/MMCF)

COG PM10 Emissions (lb/MMBtu) = COG PM10 EF (lb/MMCF) / COG heating value (MMBTU/MMCF)

Combined Fuel Total PM10 Emissions (lb/MMBtu) = [NG Emissions (lb/MMBTU) x NG Usage (MMBTU/day) + COG Emissions (lb/MMBTU) x COG Usage (MMBTU/day)] / [NG Usage (MMBTU/day) + COG Usage (MMBTU/day)]

where:
NG = pertains to natural gas
COG = pertains to coke oven gas
EF = emission factors, using Emission Factors from AP-42, U.S. EPA FIRE, and U.S. Steel Gary Works Annual Emission Statement Report

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

Pursuant to 326 IAC 7-4.1-2, and in order to comply with conditions D.10.2, the Permittee shall perform Sulfur Fuel Sampling and Analysis. Section C - Sulfur Fuel Sampling and Analysis contains the Permittee's obligation with regard to the sampling and analysis required by this condition.

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

D.10.6 Record Keeping Requirements

(a) To document the compliance status with Condition D.10.2, the Permittee shall maintain records in accordance with Section C - Sulfur Dioxide (SO_2) Record Keeping Requirements (Entire Source).

(b) To document the compliance status with Condition D.10.4, the Permittee shall maintain records and make available to IDEM, upon request, process and fuel use information pertaining to each emissions unit, process, or combustion unit identified in this section, including the following:

(1) Identification of the applicable limit.
(2) The amount and type of each fuel used for each facility for each

calendar day of operation.

(3) The PM10 emission rate in pounds per hour (combined for all fuels).

(4) The PM10 emission rate in pounds per MMBtu (combined for all fuels).

(c) Section C - General Record Keeping Requirements contains the Permittee's obligations with regard to the records required by this condition.

D.10.7 Reporting Requirements

A quarterly summary report to document the compliance status with condition D.10.2 shall be submitted not later than thirty (30) days after the end of the quarter being reported. Section C – Sulfur Dioxide SO_2 Reporting Requirements (Entire Source) contains the Permittee's obligation with regard to the reporting required by this condition. The report submitted by the Permittee does require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(35).

SECTION D.11 EMISSIONS UNIT OPERATION CONDITIONS

Emissions Unit Description:

Continuous Pickling Lines

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

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

(The information describing the process contained in this emissions unit 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 (PM) Limitation [326 IAC 6.8-1-2(a)]

Pursuant to 326 IAC 6.8-1-2(a), the pickle lines shall not discharge to the atmosphere any gases which contain particulate in excess of 0.03 grains per dry standard cubic feet.

SECTION D.12 EMISSIONS UNIT OPERATION CONDITIONS

Emissions Unit Description:

Sheet Products Division

(a) North Sheet Mill

(1) One (1) 5-Stand Cold Reduction Mill, identified as H5M50637, constructed in 1964, with a maximum capacity of 400 tons per hour, consisting of 5 Mill Stands. Emissions are controlled by fume collection H53547, exhausting to Stack H56527.

(2) Twenty-six (26) 4-Stack A Box Annealing Furnaces and 50 bases, identified as HTAF0813 through HTAF0838, constructed in 1964, with a heat input capacity of 12 MMBtu per hour each. These furnaces are direct fired with emissions exhausting through vent pipes HT6530 through HT6555.

Under 40 CFR 63, Subpart DDDDD, this is considered an existing process heater.

(3) One (1) 80-inch temper mill, constructed in 1964, with a maximum capacity of 250 tons per hour, with fugitive emissions.

(4) One (1) 80-inch Recoil Line, constructed in 1964, with a maximum capacity 120 tons per hour, with fugitive emissions.

(b) South Sheet Mill

(1) Seventeen (17) 8-Stack A Box Annealing furnaces and 66 bases, identified as HXBA0560 through HXBA0576, constructed in 1948. Eleven (11) furnaces have a heat input capacity of 15 MMBtu per hour each and the remaining six (6) are rated at 18 MMBtu per hour each. Emissions from these furnaces exhaust through the Roof Monitor HX6003.

Under 40 CFR 63, Subpart DDDDD, this is considered an existing process heater.

(2) One (1) 2-Stand Temper Mill, identified as H2M00579, constructed in 1974, with a maximum capacity of 89 tons per hour, with fugitive emissions through Roof Monitor H26004.

(3) One (1) No. 6 East Galvanizing Line, constructed in 1962, with a maximum capacity of 48 tons an hour, with one (1) annealing furnace identified as H6F10527 with a heat input of 45 MMBtu per hour and emissions through stack H66516. Also, contains one (1) Galvanneal Furnace identified as HF20529 with a heat input capacity of 20.0 MMBtu per hour and emissions exhausting through Roof Monitor H66006.

Under 40 CFR 63, Subpart DDDDD, this is considered an existing process heater.

(4) Two (2) hydrogen atmosphere batch annealing furnaces, with a total heat input capacity of 10.26 MMBtu per hour, constructed in 1997, consisting of three (3) fixed bases and two (2) movable cooling hoods.

Under 40 CFR 63, Subpart DDDDD, this is considered an existing process heater.

(5) One (1) 84-inch Hot Roll Temper Mill, constructed in 1967, with a maximum capacity of 124 tons per hour, with fugitive emissions.

(6) One (1) coil prep line, constructed in 1968, with a maximum capacity of 73 tons per hour, with fugitive emissions.

(c) Electro-galvanizing Line (EGL)

(1) One (1) Electro-galvanizing Line (EGL), with one HCl pickle tank, No. 1 Pickle tank, identified as HET20685, a cleaner section, a plating section and associated scrubber, with a maximum capacity of 60.5 tons per hour. Fumes from the Pickle Section are controlled by a fume scrubber HE3583 exhausting through stack HE6563. The single sided process for this coating line was constructed in 1977 and was modified in 1993 to a double sided process for coating.

(2) One (1) natural gas fired Boiler No. 1 in the EGL Boiler House, identified as HBB10675, constructed in 1978 and modified in 2001, with a heat input capacity of 39.147 MMBtu per hour, exhausting through stack HB6559.

Under 40 CFR 63, Subpart DDDDD, this is considered an existing industrial boiler.

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

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

D.12.1 Lake County PM_{10} Emission Requirements [326 IAC 6.8-2-38]

Pursuant to 326 IAC 6.8-2-38, the PM_{10} emissions from the EGL Boiler House shall not exceed 0.0033 pounds per MMBtu of heat input and a total of 0.13 pound per hour.

D.12.2 Particulate Emissions Limitations [326 IAC 6.8-1-2(a)]

Pursuant to 326 IAC 6.8-1-2(a), the particulate emissions from the North Sheet Mill: 5-Stand Cold Reduction Mill Stack H56527 and the South Sheet Mill: No. 6 East Galvanize Line Stack H66516 shall not exceed three-hundredths (0.03) grain per dry standard cubic foot (dscf).

D.12.3 Nitrogen Dioxide (NO_X) Emissions Offset Limitations [326 IAC 2-3]

Pursuant to CP 089-8606-00121, issued October 20, 1997, the natural gas usage in the two (2) hydrogen atmosphere batch annealing furnaces shall not exceed 37.2 million cubic feet (MMCF) per 12 consecutive month period with compliance demonstrated at the end of each month. This production limitation is equivalent to NO_X emissions of 2.64 tons per 12 consecutive month period with compliance demonstrated at the end of each month. Therefore, the Emission Offset rule, 326 IAC 2-3, does not apply.

D.12.4 Sulfur Dioxide (SO_2) Limitations [326 IAC 7-4.1-20(c)(3)]

Pursuant to 326 IAC 7-4.1-20(c)(3) gaseous fuel sources shall burn natural gas only:

(a) if it is not listed in 326 IAC 7-4.1-20; or

(b) under an operating condition not specifically listed in 326 IAC 7-4.1-20.

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

D.12.5 Record Keeping Requirements

(a) Pursuant to Minor Source Modification 089-14424-00121, issued August 2, 2001 (modified by MSM 089-15694-00121, issued August 21, 2002), and 40 CFR 60.40c the Permittee shall record and maintain monthly records of the amounts of fuel combusted for the one (1) 39.147 million British thermal units per hour (MMBtu/hr) natural gas fired boiler, identified as EGL-1 boiler.

(b) Pursuant to Minor Source Modification 089-8606-00121, issued October 20, 1997 and to document the compliance status with Condition D.12.3 the Permittee shall maintain monthly records of the natural gas usage in the two (2) hydrogen atmosphere batch annealing furnaces.

(c) Section C - General Record Keeping Requirements contains the Permittee's obligations with regard to the records required by this condition.

D.12.6 Reporting Requirements

(a) Pursuant to Minor Source Modification 089-8606-00121, issued October 20, 1997 and to document the compliance status with Condition D.12.3 the Permittee shall submit not later than thirty (30) days after the end of the quarter being reported, the hydrogen atmosphere batch annealing furnaces monthly natural gas usage.

(b) Section C - General Reporting Requirements contains the Permittee's obligation with regard to the reporting required by this condition.

(c) The reports submitted by the Permittee do require a certification that meets the requirements of 326 IAC 2-7-6(1) by a “responsible official” as defined by 326 IAC 2-7-1(35).

SECTION D.13 EMISSIONS UNIT OPERATION CONDITIONS

Emissions Unit Description:

Tin Division

(a) One (1) 6-Stand Cold Reduction Mill, identified as TRM00709, constructed in 1967, with a maximum capacity of 150 tons per hour. Emissions are controlled by a mist eliminator TR3600, exhausting to stack TR6575.

(b) One (1) cleaning line, identified as No. 7 Cleaning Line, constructed in 1967, with a maximum capacity of 80 tons per hour. Fumes are controlled by a fume scrubber exhausting to a stack.

(c) Two (2) Annealing Lines, No. 1 and No. 2, each containing an annealing furnace, identified as T1AF0794 and T2AF0799, No. 1 constructed in 1950 and No. 2 constructed in 1959, with a maximum heat input capacities of 32 and 35 MMBtu per hour, respectively. Emissions exhaust to stacks T16609 and T26610. The No. 2 Continuous Anneal Line has a cleaning section with fumes collected in a fume scrubber exhausting through a stack.

Under 40 CFR 63, Subpart DDDDD, this is considered an existing process heater.

(d) Five (5) 4-Stack A Box Annealing Furnaces and 12 bases, identified as TXAF0765 through TXAF0769, constructed in 1968. All furnaces have a heat input of 10.5 MMBtu per hour each. Emissions exhaust to stacks TX6580 through TX6584.

Under 40 CFR 63, Subpart DDDDD, this is considered an existing process heater.

(e) One (1) 48-inch Temper Mill, constructed in 1958, with a maximum capacity of 150 tons per hour, with fugitive emissions. This unit has a dust filter that exhausts inside the building.

(f) One (1) Double Reduction Mill with two (2) mill stands, identified as TDMO0742, constructed in 1963, with a maximum capacity of 75 tons per hour. Emissions are controlled by a mist eliminator D3603, exhausting to stack TD6595.

(g) One (1) No. 1 Tin Free Steel Line (TFS), constructed in 1950, with a maximum capacity of 24 tons per hour. The chemical treatment rinse section, TFR00753 exhaust through stack TF6597 and all other fugitive emissions from the line to roof monitor TF6661.

(h) One (1) No. 5 Electrolytic Tinning Line 5 (ETL), constructed in 1957, and with a maximum capacity of 50 tons per hour. The No. 5 ETL contains a Plating and Chemical Treatment Tank, identified as TFR00777, with fugitive emissions through Roof Monitor T56071.

(i) One (1) No. 6 Electrolytic Tinning Line (6 ETL), constructed in 1966, with a maximum capacity of 120 tons per hour. The 6 ETL also contains a Plating and Chemical Treatment Tank, identified as T6H00786, with fugitive emissions through Roof Monitor T56071.

(j) One (1) Tin Anode Caster, constructed in 1965, with a maximum capacity of 0.57 tons per hour, with fugitive emissions through roof monitor.

(k) One (1) Tin Mill Recoil and inspection Line, constructed in 1967, with a maximum capacity of 14.8 tons per hour.

(l) One (1) 45" Side Trimmer, constructed in 1961, with fugitive emissions through the roof monitor.

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

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

D.13.1 Particulate Emissions Limitations [326 IAC 6.8-1-2(a)]

Pursuant to 326 IAC 6.8-1-2(a), the particulate emissions shall not exceed three-hundredths (0.03) grain per dry standard cubic feet (gr/dscf) from the following:

(a) 6-Stand Cold Reduction Mill Stack TR6575,

(b) One (1) Double Reduction Mill Stack TD6595, and

(c) No. 1 Tin Free Steel Line Chemical Treatment Rinse Stack TF6597.

D.13.2 Sulfur Dioxide (SO_2) Limitations [326 IAC 7-4.1-20(c)(3)]

Pursuant to 326 IAC 7-4.1-20(c)(3) gaseous fuel sources shall burn natural gas only:

(a) if it is not listed in 326 IAC 7-4.1-20; or

(b) under an operating condition not specifically listed in 326 IAC 7-4.1-20.

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

D.13.3 Record Keeping Requirements

(a) In order to document the compliance status with conditions D.13.1 and D.13.2, the Permittee shall maintain records of the natural gas usage of the furnaces.

(b) Section C - General Record Keeping Requirements contains the Permittee's obligations with regard to the records required by this condition.

SECTION D.14 EMISSIONS UNIT OPERATION CONDITIONS

Emissions Unit Description:

No. 4 Boiler House

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

(b) One (1) Boiler, No. 3, identified as O4B30461, constructed in 1967, equipped to combust blast furnace gas and natural gas, with a maximum heat input of 500 MMBtu per hour, exhausting through Stack O46270.

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

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

D.14.1 Lake County PM_{10} Emission Requirements [326 IAC 6.8-2-38]

Pursuant to 326 IAC 6.8-2-38, the PM_{10} emissions from the No. 4 Boiler House Boilers Nos. 1, 2 and 3 Stacks O46268, O46269 and O46270 shall comply with the following:

(a) The PM_{10} emissions from the Number 4 Boiler House Boilers, when one or two boilers are operating shall not exceed 0.054 pounds per MMBtu of heat input and a total of 54.1 pounds per hour.

(b) The PM_{10} emissions from the Number 4 Boiler House Boilers, when three boilers are operating shall not exceed 0.036 pounds per MMBtu of heat input and a total of 54.1 pounds per hour.

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

D.14.2 Sulfur Dioxide (SO_2) Limitations [326 IAC 7-4.1-20]

Pursuant to 326 IAC 7-4.1-20, the SO_2 emissions from the No. 4 Boiler House Boilers Nos. 1, 2 and 3 Stacks O46268, O46269 and O46270 shall not exceed the following limitations:

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

Emission Unit Operating Scenarios		Emission Limit lbs/MMBtu	Emission Limit lbs/hr
During periods when No. 14 Blast Furnace Stoves are combusting blast furnace gas	When three (3) boilers are operating:	0.115	172.5 total
	When two (2) boilers are operating:	0.173	172.5 total
	When one (1) boiler is operating:	0.345	172.5 total

Emission Unit Operating Scenarios		Emission Limit lbs/MMBtu	Emission Limit lbs/hr
During periods when No. 14 Blast Furnace Stoves are not combusting blast furnace gas and the Hot Strip Mill Waste Heat Boilers Nos. 1 and 2 are combusting coke oven gas :	When three (3) boilers are operating:	0.200	300.0 total
	When two (2) boilers are operating:	0.300	300.0 total
	When one (1) boiler is operating:	0.600	300.0 total
During periods when No. 14 Blast Furnace Stoves are not combusting blast furnace gas and the Hot Strip Mill Waste Heat Boilers Nos. 1 and 2 are not combusting coke oven gas :	When three (3) boilers are operating:	0.195	293.0 total
	When two (2) boilers are operating:	0.293	293.0 total
	When one (1) boiler is operating:	0.586	293.0 total

(b) Pursuant to 326 IAC 7-4.1-20(b)(2), during periods when the coke oven gas desulfurization unit is operating:

Emission Limit lbs/hr	Emission Limit lbs/MMBtu	Emission Limit lbs/hr
When three (3) boilers are operating:	0.353	529.0 total
When two (2) boilers are operating:	0.529	529.0 total
When one (1) boiler is operating:	1.058 total	529.0 total

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

D.14.3 Sulfur Fuel Sampling and Analysis [326 IAC 7-4.1-2]

Pursuant to 326 IAC 7-4.1-2, and in order to comply with conditions D.14.1, the Permittee shall perform Sulfur Fuel Sampling and Analysis. Section C - Sulfur Fuel Sampling and Analysis contains the Permittee's obligation with regard to the sampling and analysis required by this condition.

D.14.4 Lake County PM10 Emissions

Compliance with the PM10 limit in Condition D.14.1 shall be determined with the following equation:

For PM10 Emissions limit in pound per hour:

NG PM10 Emissions (lb/hr) = NG usage (MMCF/day) x NG PM10 EF (lb/MMCF) x 1 day/24 hours

FO PM10 Emissions (lb/hr) = FO usage (kgal/day) x FO PM10 EF (lb/kgal) x 1day/24 hours

BFG PM10 Emissions (lb/hr) = BFG input (MMBtu/day) x BFG PM10 EF (lb/MMBtu) x 1day/24 hours

Combined Fuel Total PM10 Emissions (lb/hr) = NG PM10 Emissions (lb/hr) + FO PM10 Emissions (lb/hr) + BFG PM10 Emissions (lb/hr)

For PM10 Emissions limit in pound per MMBtu:

NG PM10 Emissions (lb/MMBtu) = NG PM10 EF (lb/MMCF) / NG heating value (MMBTU/MMCF)

FO PM10 Emissions (lb/MMBtu) = FO PM10 EF (lb/kgal) / FO heating value (MMBTU/kgal)

BFG PM10 Emissions (lb/MMBtu) = BFG PM10 EF (lb/MMCF) / BFG heating value (MMBTU/MMCF)

Combined Fuel Total PM10 Emissions (lb/MMBtu) = [NG Emissions (lb/MMBTU) x NG Usage (MMBTU/day) + FO Emissions (lb/MMBTU) x FO Usage (MMBTU/day) + BFG Emissions (lb/MMBTU) x BFG Usage (MMBTU/day)] / [NG Usage (MMBTU/day) + FO Usage (MMBTU/day) + BFG Usage (MMBTU/day)]

where:
NG = pertains to natural gas
FO = pertains to fuel oil
BFG = pertains to blast furnace gas
EF = emission factors, using Emission Factors from AP-42, U.S. EPA FIRE and U.S. Steel Gary Works Annual Emission Statement Report

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

D.14.5 Visible Emission Notations

When Boilers No. 1 and/or No. 2 combust fuel oil or any combination of fuel oil and natural gas or blast furnace gas:

(a) Visible emission notations of the Boilers No. 1 stack O46268 and/or No. 2 stack O46269 shall be performed once per day during normal daylight operations when exhausting to the atmosphere. A trained employee shall record whether emissions are normal or abnormal.

(b) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.

(c) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.

(d) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.

(e) If abnormal emissions are observed, the Permittee shall take a reasonable response. Section C - Response to Excursions or Exceedances contains the Permittee's obligation with regard to the reasonable response steps required by this condition. Failure to take response steps shall be considered a deviation of this permit.

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

D.14.6 Record Keeping Requirements

(a) To document the compliance status with Condition D.14.2, the Permittee shall maintain records in accordance with Section C - Sulfur Dioxide (SO_2) Record Keeping Requirements (Entire Source).

(b) To document the compliance status with Condition D.14.4, the Permittee shall maintain records and make available to IDEM, upon request, process and fuel use information pertaining to each emissions unit, process, or combustion unit identified in this section, including the following:

(1) Identification of the applicable limit.
(2) The amount and type of each fuel used for each facility for each calendar day of operation.
(3) The hourly PM10 emission rate in pounds per hour (combined for all fuels).
(4) The hourly PM10 emission rate in pounds per MMBtu (combined for all fuels).

(c) To document the compliance status with Conditions D.14.5, the Permittee shall maintain records of the once per day visible emission notations when Boilers No. 1 and/or No. 2 combust fuel oil or any combination of fuel oil and natural gas or blast furnace gas.

(d) Section C - General Record Keeping Requirements contains the Permittee's obligations with regard to the records required by this condition.

D.14.7 Reporting Requirements

A quarterly summary report to document the compliance status with conditions D.14.2 shall be submitted in accordance with Section C – Sulfur Dioxide Reporting Requirements (Entire Source) of this permit. Section C - General Reporting contains the Permittee's obligation with regard to the reporting required by this condition. This report does require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(35).

SECTION D.15 EMISSIONS UNIT OPERATION CONDITIONS

Emissions Unit Description:

Turboblower Boiler House (TBBH)

(a) Three (3) Boilers, No. 1, No. 2 and No. 3, identified as OTB10462, OTB20463 and OTB30464, constructed in 1948, equipped to combust blast furnace gas, coke oven gas, fuel oil and natural gas, with a maximum heat input of 410 MMBtu per hour each, exhausting through Stacks OT6271, OT6272 and OT6273, respectively.

(b) One (1) Boiler No. 5, identified as OTB50466, constructed in 1958, equipped to combust blast furnace gas, coke oven gas, fuel oil and natural gas, with a maximum heat input of 410 MMBtu per hour, exhausting through Stack OT6275.

(c) One (1) boiler, No. 6, identified as OTB60467, constructed after August 17, 1971, equipped to combust blast furnace gas and natural gas, with a maximum heat input capacity of 710 MMBtu per hour, exhausting through Stack OT6276.

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

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

D.15.1 Lake County PM_{10} Emissions Requirements [326 IAC 6.8-2-38]

Pursuant to 326 IAC 6.8-2-38, the PM_{10} emissions from the TBBH Boilers Nos. 1, 2, 3, 5 and 6 Stacks OT6271, OT6272, OT6273, OT6275 and OT6276 shall comply with the following:

(a) The PM_{10} emissions from the TBBH Boilers Nos. 1, 2, 3 and 5: OT6271, OT6272, OT6273 and OT6275, when four boilers are operating, shall not exceed 0.037 pound per MMBtu of heat input each and a total of 61.0 pounds per hour.

(b) The PM_{10} emissions from the TBBH Boilers Nos. 1, 2, 3 and 5: OT6271, OT6272, OT6273 and OT6275, when three boilers are operating, shall not exceed 0.050 pound per MMBtu of heat input each and a total of 61.0 pounds per hour.

(c) The PM_{10} emissions from the TBBH Boilers Nos. 1, 2, 3 and 5: OT6271, OT6272, OT6273 and OT6275, when one or two boilers are operating, shall not exceed 0.074 pound per MMBtu of heat input each and a total of 61.0 pounds per hour.

(d) The PM_{10} emissions from the TBBH Boiler No. 6 Stack OT6276, shall not exceed 0.039 pound per MMBtu of heat input and 27.80 pounds per hour.

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

D.15.2 Sulfur Dioxide (SO_2) Limitations [326 IAC 7-4.1-20]

Pursuant to 326 IAC 7-4.1-20, the SO_2 emissions from each of the TBBH Boilers Nos. 1, 2, 3, 5 and 6 Stacks OT6271, OT6272, OT6273, OT6275 and OT6276 shall not exceed the following limitations:

(a) Pursuant to 326 IAC 7-4.1-20(a)(1)(A) and (b)(1)(B), the sulfur dioxide emissions from the No. 6 Boiler Stack shall not exceed 0.115 lbs/MMBtu and 81.7 lbs/hr.

(b) Pursuant to 326 IAC 7-4.1-20(a)(2)(A)(i), the sulfur dioxide emissions from the Nos. 1, 2, 3 and 5 Boiler stacks shall not exceed the following during periods when the coke oven gas desulfurization unit is not operating and the Hot Strip Mill Waste Heat Boiler Nos. 1 and 2 are not combusting coke oven gas:

Emission Unit Operating Scenarios		Emission Limit lbs/MMBtu	Emission Limit lbs/hr
Jan - Apr	When four (4) boilers are operating:	0.594	974.5 total
	When three (3) boilers are operating:	0.792	974.5 total
	When two (2) boilers are operating:	1.188	974.5 total
May - Oct	When four (4) boilers are operating:	1.006	1650.0 total
	When three (3) boilers are operating:	1.341	1650.0 total
	When two (2) boilers are operating:	2.012	1650.0 total
Nov - Dec	When four (4) boilers are operating:	0.384	630.0 total
	When three (3) boilers are operating:	0.512	630.0 total
	When two (2) boilers are operating:	0.768	630.0 total

(c) Pursuant to 326 IAC 7-4.1-20(a)(2)(A)(ii), the sulfur dioxide emissions from the Nos. 1, 2, 3 and 5 Boiler stacks shall not exceed the following during periods when the coke oven gas desulfurization unit is not operating and the Hot Strip Mill Waste Heat Boiler Nos. 1 and 2 are combusting coke oven gas:

Emission Unit Operating Scenarios		Emission Limit lbs/MMBtu	Emission Limit lbs/hr
Jan - Apr	When four (4) boilers are operating:	0.625	1025.00 total
	When three (3) boilers are operating:	0.833	1025.00 total
	When two (2) boilers are operating:	1.250	1025.00 total

Emission Unit Operating Scenarios		Emission Limit lbs/MMBtu	Emission Limit lbs/hr
May - Oct	When four (4) boilers are operating:	0.994	1630.0 total
	When three (3) boilers are operating:	1.325	1630.0 total
	When two (2) boilers are operating:	1.988	1630.0 total
Nov - Dec	When four (4) boilers are operating:	0.351	575.0 total
	When three (3) boilers are operating:	0.467	575.0 total
	When two (2) boilers are operating:	0.701	575.0 total

(d) Pursuant to 326 IAC 7-4.1-20(b)(1)(A), the sulfur dioxide emissions from the Nos. 1, 2, 3 and 5 Boiler stacks shall not exceed the following during periods when the coke oven gas desulfurization unit is operating:

Emission Limit lbs/hr	Emission Limit lbs/MMBtu	Emission Limit lbs/hr
When four (4) boilers are operating:	0.427	700.0 total
When three(3) boilers are operating:	0.569	700.0 total
When two (2) boilers are operating:	0.854	700.0 total

D.15.3 PSD Nitrogen Oxides (NO_X) Emission Offset Limitations [326 IAC 2-2][326 IAC 2-3]

Pursuant to the Minor Source Modification 089-10160-00121 issued, January 13, 2000, 326 IAC 2-2 and 326 IAC 2-3, the NO_X emissions for the TBBH Boiler No. 6 Stack OT6276 shall be limited to the following:

(a) Boiler No. 6 NO_X emissions shall not exceed 0.14 pounds of NO_X per MMBtu of heat input.

(b) Natural gas usage shall be limited to 1,059.7 million cubic feet (MMCF) per twelve (12) consecutive month period with compliance demonstrated at the end of each month. Compliance with this limit will also preclude the Permittee from the requirement to install a continuous emissions monitor (CEM) for NO_X.

(c) Blast furnace gas and natural gas shall be the only fuels combusted in TBBH Boiler No. 6, unless the Permittee receives prior approval from IDEM, OAQ to combust coke oven gas or fuel oil.

(d) These limitations will ensure that the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration) and 326 IAC 2-3 (Emission Offset) do not apply.

D.15.4 Nitrogen Oxides (NO_X) Limitations

Pursuant to Minor Source Modification 089-10160-00121, issued January 13, 2000, 326 IAC 12 and 40 CFR 60, Subpart D (Standards of Performance for Fossil-Fuel-Fired Steam Generators for Which Construction or modification is Commenced After August 17, 1971), NO_X emissions from the Turboblower Boiler House (TBBH) Boiler No. 6 Stack OT6276 shall not exceed 0.20 pound per MMBtu of heat input, when the boiler is burning natural gas only.

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

D.15.5 Lake County PM10 Emissions

Compliance with the PM10 limit in Condition D.15.1 shall be determined with the following equation:

For PM10 Emissions limit in pound per hour:

NG PM10 Emissions (lb/hr) = NG throughput/usage (MMCF/day) x NG PM10 EF (lb/MMCF) x 1 day/24 hours

FO PM10 Emissions (lb/hr) = FO throughput/usage (kgal/day) x FO PM10 EF (lb/kgal) x 1day/24 hours

BFG PM10 Emissions (lb/hr) = BFG input (MMBtu/day) x BFG PM10 EF (lb/MMBtu) x 1day/24 hours

COG PM10 Emissions (lb/hr) = COG throughput/usage (MMCF/day) x COG PM10 EF (lb/MMCF) x 1 day/24 hrs

Combined Fuel Total PM10 Emissions (lb/hr) = NG PM10 Emissions (lb/hr) + FO PM10 Emissions (lb/hr) + BFG PM10 Emissions (lb/hr) + COG PM10 Emissions (lb/hr)

For PM10 Emissions limit in pound per MMBtu:

NG PM10 Emissions (lb/MMBtu) = NG PM10 EF (lb/MMCF) / NG heating value (MMBTU/MMCF)

FO PM10 Emissions (lb/MMBtu) = FO PM10 EF (lb/kgal) / FO heating value (MMBTU/kgal)

BFG PM10 Emissions (lb/MMBtu) = BFG PM10 EF (lb/MMCF) / BFG heating value (MMBTU/MMCF)

COG PM10 Emissions (lb/MMBtu) = COG PM10 EF (lb/MMCF) / COG heating value (MMBTU/MMCF)

Combined Fuel Total PM10 Emissions (lb/MMBtu) = [NG Emissions (lb/MMBTU) x NG Usage (MMBTU/day) + FO Emissions (lb/MMBTU) x FO Usage (MMBTU/day) + BFG Emissions (lb/MMBTU) x BFG Usage (MMBTU/day) + COG Emissions (lb/MMBTU) x COG Usage (MMBTU/day)] / [NG Usage (MMBTU/day) + FO Usage (MMBTU/day) + BFG Usage (MMBTU/day) + COG Usage (MMBTU/day)]

where:
NG = pertains to natural gas
FO = pertains to fuel oil
BFG = pertains to blast furnace gas
COG = pertains to coke oven gas
EF = emission factors, using Emission Factors from AP-42, U.S. EPA FIRE and U.S. Steel Gary Works Annual Emission Statement Report

D.15.6 Sulfur Fuel Sampling and Analysis [326 IAC 7-4.1-2]

Pursuant to 326 IAC 7-4.1-2, and in order to comply with conditions D.15.2, the Permittee shall perform Sulfur Fuel Sampling and Analysis. Section C - Sulfur Fuel Sampling and Analysis contains the Permittee's obligation with regard to the sampling and analysis required by this condition.

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

D.15.7 Visible Emission Notations

When any one or combination of Boilers No. 1, No. 2, No. 3 and No. 5 combust fuel oil or any combination of fuel oil, and natural gas, blast furnace gas or coke oven gas:

(a) Visible emission notations of the Boilers No. 1, No. 2, No. 3 and/or No. 5 stacks OT6271, OT6372, OT6273 and OT6275 shall be performed once per day during normal daylight operations when exhausting to the atmosphere. A trained employee shall record whether emissions are normal or abnormal.

(b) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.

(c) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.

(d) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.

(e) If abnormal emissions are observed, the Permittee shall take a reasonable response. Section C - Response to Excursions or Exceedances contains the Permittee's obligation with regard to the reasonable response steps required by this condition. Failure to take response steps shall be considered a deviation of this permit.

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

D.15.8 Record Keeping Requirements

(a) To document the compliance status with Condition D.15.2, the Permittee shall maintain records in accordance with Section C - Sulfur Dioxide (SO_2) Record Keeping Requirements (Entire Source).

(b) To document the compliance status with condition D.15.3(b), the Permittee shall maintain records of the TBBH Boiler No. 6, natural gas usage.

(c) To document the compliance status with Condition D.15.5, the Permittee shall maintain records and make available to IDEM, upon request, process and fuel use information pertaining to each emissions unit, process, or combustion unit identified in this section, including the following:

(1) Identification of the applicable limit.
(2) The amount and type of each fuel used for each facility for each calendar day of operation.
(3) The hourly PM10 emission rate in pounds per hour (combined for all fuels).
(4) The hourly PM10 emission rate in pounds per MMBtu (combined for all fuels).

(d) To document the compliance status with Conditions D.15.7, the Permittee shall maintain records of once per day visible emission notations when any one or combination of Boilers No. 1, No. 2, No. 3 and/or No. 5 combust fuel oil or any combination of fuel oil and natural gas, blast furnace gas or coke oven gas.

(e) Section C - General Record Keeping Requirements contains the Permittee's obligations with regard to the records required by this condition.

D.15.9 Reporting Requirements

(a) To document the compliance status with conditions D.15.2, the Permittee shall submit a quarterly summary report as specified in Section C – Sulfur Dioxide Reporting (Entire Source) in this permit.

(b) To document the compliance status with condition D.15.3(b), the Permittee shall submit a report not later than thirty (30) days of the end of the quarter containing the TBBH Boiler No. 6, natural gas usage using the form at the end of this permit or its equivalent.

(c) Section C - General Reporting Requirements contains the Permittee's obligation with regard to the reporting required by this condition.

(d) These reports do require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(35).

SECTION D.16 EMISSIONS UNIT OPERATION CONDITIONS

Emissions Unit Description:

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

(a) Paved Roads and Parking Lots

(b) Unpaved Roads and Parking Lots

(c) Batch Transfer-Loading and Unloading Operations

(d) Continuous Transfer In and Out of Storage Piles

(e) Batch Transfer Operations-Slag and Kish Handling

(f) Wind Erosion from Storage Piles and Open Areas

(g) In Plant Transfer by Truck or Rail

(h) In Plant Transfer by Front End Loader or Skip Hoist

(i) Material Processing Facility

(j) Crusher Fugitive Emissions

(k) Material Processing Facility Building Openings

(l) Dust Handling Equipment

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

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

D.16.1 Particulate Matter (PM) Lake County Fugitive Dust Limits [326 IAC 6.8-10-4]

Pursuant to 326 IAC 6.8-10-4 (1) (Lake County Fugitive Particulate Matter Control Requirements), compliance with the opacity limits specified in Section C - Fugitive Dust Emissions shall be achieved by controlling fugitive particulate matter emissions according to the revised Fugitive Dust Control Plan (FDCP) submitted on March 1, 2003 (See Attachment A). If it is determined that the control procedures specified in the FDCP do not demonstrate compliance with the fugitive emission limitations, IDEM, OAQ may request that the FDCP be revised and submitted for approval.

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

D.16.2 Particulate Matter Control

Pursuant to 326 IAC 6.8-10-3 (Lake County Fugitive Particulate Matter Control Requirements), opacity from the activities shall be determined as follows:

(a) Paved Roads and Parking Lots
The average instantaneous opacity shall be the average of twelve (12) instantaneous opacity readings, taken for four (4) vehicle passes, consisting of three (3) opacity

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

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

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

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

The three (3) readings shall be taken at the point of maximum opacity. The observer shall stand approximately fifteen (15) feet from the plume and at approximately right angles to the plume. Each reading shall be taken approximately four (4) feet above the surface of the roadway or parking area.

(b) Unpaved Roads and Parking Lots
The fugitive particulate emissions from unpaved roads shall be controlled by the implementation of a work program and work practice under the fugitive dust control plan.

(c) Batch Transfer
The average instantaneous opacity shall consist of the average of three (3) opacity readings taken five (5) seconds, ten (10) seconds, and fifteen (15) seconds after the end of one (1) batch loading or unloading operation. The three (3) readings shall be taken at the point of maximum opacity. The observer shall stand approximately fifteen (15) feet from the plume and at approximately right angles to the plume.

(d) Continuous Transfer
The opacity shall be determined using 40 CFR 60, Appendix A, Method 9. The opacity readings shall be taken at least four (4) feet from the point of origin.

(e) Wind Erosion from Storage Piles and Exposed Areas
The opacity shall be determined using 40 CFR 60, Appendix A, Method 9, except that the opacity shall be observed at approximately four (4) feet from the surface at the point of maximum opacity. The observer shall stand approximately fifteen (15) feet from the plume and at approximately right angles to the plume. The limitations may not apply during periods when application of fugitive particulate control measures is either ineffective or unreasonable due to sustained very high wind speeds. During such periods, the company must continue to implement all reasonable fugitive particulate control measures and maintain records documenting the application of measures and the basis for a claim that meeting the opacity limitation was not reasonable given prevailing wind conditions.

(f) Material Transported by Truck or Rail
Compliance with this limitation shall be determined by 40 CFR 60, Appendix A, Method 22, except that the observation shall be taken at approximately right angles to the prevailing wind from the leeward side of the truck or railroad car. Material transported by truck or rail that is enclosed and covered shall be considered in compliance with the in plant transportation requirement.

(g) Material Transported by Front End Loader or Skip Hoist
Compliance with this limitation shall be determined by the average of three (3) opacity readings taken at five (5) second intervals. The three (3) opacity readings shall be taken as follows:

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

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

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

The three (3) readings shall be taken at the point of maximum opacity. The observer shall stand at least fifteen (15) feet from the plume approximately and at right angles to the plume. Each reading shall be taken approximately four (4) feet above the surface of the roadway or parking area.

(h) Material Processing Limitations

(1) Compliance with stack opacity limitations from material processing facilities shall be determined using 40 CFR 60, Appendix A, Method 9.

(2) Compliance with the opacity limitations for fugitive particulate emissions from material processing equipment, except from a crusher at which a capture system is not used, shall be determined using 40 CFR 60, Appendix A, Method 9.

(3) Compliance with the opacity limitations for fugitive particulate emissions from a crusher at which a capture system is not used, shall be determined using 40 CFR 60, Appendix A, Method 9.

(4) Compliance with the opacity limitations for fugitive particulate emissions from a building enclosing all or part of the material processing equipment, except from a vent in the building shall be determined using 40 CFR 60, Appendix A, Method 22.

(5) Compliance with the opacity limitations for fugitive particulate emissions from building vents shall be determined using 40 CFR 60, Appendix A, Method 5 or 17 or 40 CFR 60, Appendix A, Method 9.

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

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

D.16.3 Record Keeping Requirements

Pursuant to 326 IAC 6.8-10-4(4) (Lake County Fugitive Particulate Matter Control Requirements):

(a) The source shall keep the following documentation to show compliance with each of its control measures and control practices:

(1) A map or diagram showing the location of all emission sources controlled, including the location, identification, length, and width of roadways.

(2) For each application of water or chemical solution to roadways, the following shall be recorded:

(A) The name and location of the roadway controlled

(B) Application rate

(C) Time of each application

(D) Width of each application

(E) Identification of each method of application

(F) Total quantity of water or chemical used for each application

(G) For each application of chemical solution, the concentration and identity of the chemical

(H) The material data safety sheets for each chemical

(3) For application of physical or chemical control agents not covered by clause (B), the following:

(A) The name of the agent

(B) Location of application

(C) Application rate

(D) Total quantity of agent used

(E) If diluted, percent of concentration

(F) The material data safety sheets for each chemical

(4) A log recording incidents when control measures were not used and a statement of explanation.

(5) Copies of all records required by this section shall be submitted to the department within twenty (20) working days of a written request by the department.

(b) Section C - General Record Keeping Requirements contains the Permittee's obligations with regard to the records required by this condition.

D.16.4 Reporting Requirements

(a) Pursuant to 326 IAC 6.8-10-4(4)(G) (Lake County Fugitive Particulate Matter Control Requirements), a quarterly report shall be submitted to the department stating the following:

(1) The dates any required control measures were not implemented

(2) A listing of those control measures

(3) The reasons that the control measures were not implemented

(4) Any corrective action taken

(b) These reports shall be submitted not later thirty (30) calendar days following the end of the quarter being reported. Section C – General Reporting Requirements contains the Permittee's obligation with regard to the reporting required by this condition.

SECTION D.17 EMISSIONS UNIT OPERATION CONDITIONS

Emissions Unit Description:

Insignificant activities:

(a) Specifically regulated insignificant activities:

(1) Degreasing operations that do not exceed 145 gallons per 12 months, except if subject to 326 IAC 20-6. [326 IAC 8-3-5][326 IAC 8-3-6][326 IAC 8-9-1]

(2) Cleaners and solvents characterized as follows:

(A) Having a vapor pressure equal to or less than 2 kPa; 15 mm Hg; or 0.3 psi measured at 38^{O}C (100^{O}F) or;

(B) Having a vapor pressure equal to or less than 0.7 kPA; 5mm Hg; or 0.1 psi measured at 20^{O}C (68^{O}F); the use of which for all cleaners and solvents combined does not exceed 145 gallons per 12 months.[326 IAC 8-3-5][326 IAC 8-3-6][326 IAC 8-9-1]

(3) The following VOC and HAP storage containers:

(A) Storage tanks with capacity less than or equal to 1,000 gallons and annual throughput less than 12,000 gallons. [326 IAC 8-9-1]

(B) Vessels storing lubricating oils, hydraulic oils, machining oils, and machining fluids. [326 IAC 8-9-1]

(4) The following equipment related to manufacturing activities not resulting in the emission of HAPs: brazing equipment, cutting torches, soldering equipment, welding equipment. [326 IAC 6.8-10-3]

(5) Any of the following structural steel and bridge fabrication activities:

(A) Cutting 200,000 linear feet or less of one inch (10) plate or equivalent.

(B) Using 80 tons or less of welding consumables. [326 IAC 6.8-10-3]

(6) Conveyors as follows:

(A) Covered conveyor for coal or coke conveying of less than or equal to 360 tons per day; [326 IAC 6.8-10-3]

(B) Uncovered coal conveying of less than or equal to 120 tons per day. [326 IAC 6.8-10-3]

Under 40 CFR 60, Subpart Y these units are considered affected facilities.

(7) Coal bunker and coal scale exhausts and associated dust collector vents. [326 IAC 6.8-10-3]

(8) Grinding and machining operations controlled with fabric filters, scrubbers, mist collectors, wet collectors and electrostatic precipitators with a design grain loading of less than or equal to 0.03 grains per actual cubic foot and a

gas flow rate less than or equal to 4000 actual cubic feet per minute, including the following: deburring; buffing; polishing; abrasive blasting; pneumatic conveying; and woodworking operations. [326 IAC 6.8-10-3]

(9) Vents from ash transport systems not operated at positive pressure. [326 IAC 6.8-10-3)]

(10) Fuel dispensing activities, including the following:

(A) A gasoline fuel transfer dispensing operation handling less than or equal to one thousand three hundred (1,300) gallons per day and filling storage tanks having a capacity equal to or less than ten thousand five hundred (10,500) gallons. Such storage tanks may be in a fixed location or on mobile equipment. [326 IAC 8-9-1]

(B) A petroleum fuel other than gasoline dispensing facility, having a storage tank capacity less than or equal to ten thousand five hundred (10,500) gallons, and dispensing three thousand five hundred (3,500) gallons per day or less. A petroleum fuel, other than gasoline, dispensing facility having a storage capacity less than or equal to 10,500 gallons, dispensing less than or equal to 230,000 gallons per month. [326 IAC 8-9-1]

(b) Specifically regulated insignificant activities (former Gary Coal Processing, LP):

(1) Degreasing operations that do not exceed 145 gallons per 12 months, except if subject to 326 IAC 20-6.[326 IAC 8-3-5][326 IAC 8-3-8]

(2) Cleaners and solvents characterized as follows:

(A) Having a vapor pressure equal to or less than 2 kPa; 15 mm Hg; or 0.3 psi measured at 38^{O}C (100^{O}F) or;

(B) Having a vapor pressure equal to or less than 0.7 kPa; 5mm Hg; or 0.1 psi measured at 20^{O}C (68^{O}F); the use of which for all cleaners and solvents combined does not exceed 145 gallons per 12 months. [326 IAC 8-3-2][326 IAC 8-3-5][326 IAC 8-3-8]

(3) One (1) 5, 000 gallon #2 diesel fuel tank - A petroleum fuel, other than gasoline, dispensing facility having a storage capacity less than or equal to 10,500 gallons, and dispensing less than or equal to 230,000 gallons per month. [326 IAC 8-9-1]

(c) Other Insignificant Activities

(1) Space heaters, process heaters, or boilers using the following fuels:

(A) Natural gas-fired combustion sources with heat input equal to or less than ten million (10,000,000) Btu per hour.

(B) Fuel oil-fired combustion sources with heat input equal to or less than two million (2,000,000) Btu per hour and firing fuel containing equal or less than five-tenths percent (0.5%) sulfur by weight.

(2) Equipment powered by diesel fuel fired or natural gas fired internal combustion

engines of capacity equal to or less than five hundred thousand (500,000) British thermal units per hour except where total capacity of equipment operated by one (1) stationary source as defined by subdivision (38) exceeds two million (2,000,000) British thermal units per hour.

(3) Combustion source flame safety purging on startup.

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

(5) Equipment used exclusively for the following:

(A) Packaging lubricants and greases.

(B) Filling drums, pails, or other packaging containers with the following: Lubricating oils, Waxes and Greases.

(6) Application of: oils; greases; lubricants; and nonvolatile material; as temporary protective coatings.

(7) Closed loop heating and cooling systems.

(8) Rolling oil recovery systems.

(9) Groundwater oil recovery wells.

(10) Activities associated with the treatment of wastewater streams with an oil and grease content less than or equal to 1% by volume.

(11) Water runoff ponds for petroleum coke-cutting and coke storage piles.

(12) Any operation using aqueous solutions containing less than 1% by weight of VOCs, excluding HAPS.

(13) Water based adhesives that are less than or equal to 5% by volume of VOCs excluding HAPs.

(14) Noncontact cooling tower systems with forced or induced draft cooling tower system not regulated under a NESHAP.

(15) Quenching operations used with heat treating operations.

(16) Replacement or repair of electrostatic precipitators, bags in baghouses and filters in other air filtration equipment.

(17) Heat exchanger cleaning and repair.

(18) Process vessel degassing and cleaning to prepare for internal repairs.

(19) Stockpiled soils from soil remediation activities that are covered and waiting transport for disposal.

(20) Paved and unpaved roads and parking lots with public access.

(21) Underground conveyors.

(22) Asbestos abatement projects regulated by 326 IAC 14-10.

(23) Purging of gas lines and vessels that is related to routing maintenance and repair of buildings, structures, or vehicles at the source where air emissions from those activities would not be associated with any production process.

(24) Flue gas conditioning systems and associated chemicals, such as the following: sodium sulfate, ammonia and sulfur trioxide.

(25) Equipment used to collect any material that might be released during a malfunction, process upset, or spill cleanup, including catch tanks, temporary liquid separators, tanks, and fluid handling equipment.

(26) Blow down for any of the following: sight glass; boiler; compressors; pumps; and cooling tower.

(27) Activities associated with emergencies, including the following:

(A) On-site fire training approved by the department.

(B) Emergency generators as follows: Gasoline generators not exceeding one hundred ten (110) horsepower, Diesel generators not exceeding one thousand six hundred (1,600) horsepower and natural gas turbines or reciprocating engines not exceeding one thousand six hundred (1,600) horsepower.

(C) Stationary fire pumps.

(28) Purge double block and bleed valves.

(29) A laboratory as defined in 326 IAC 2-7-1(21)(G).

(30) RCRA groundwater remediation system, identified as GWRP-1 which includes eleven (11) recirculation wells to remove benzene from groundwater through a combination of in-situ air sparging, air stripping and vapor extraction.

(d) RESERVED

(e) Specifically regulated insignificant activities (Iron Ore Screening):

(1) Degreasing operations that do not exceed 145 gallons per 12 months, except if subject to 326 IAC 20-6.[326 IAC 8-3-2][326 IAC 8-3-8]

(2) Cleaners and solvents characterized as follows:

(A) Having a vapor pressure equal to or less than 2 kPa; 15 mm Hg; or 0.3 psi measured at 38°C (100°F) or;

(B) Having a vapor pressure equal to or less than 0.7 kPa; 5mm Hg; or 0.1 psi measured at 20°C (68°F); the use of which for all cleaners and solvents combined does not exceed 145 gallons per 12 months. [326 IAC 8-3-2][326 IAC 8-3-8]

(3) 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. [326 IAC 8-9-1]

(4) 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]

(5) The following VOC and HAP storage containers: Storage tanks with capacity less than or equal to 1,000 gallons and annual throughput less than 12,000 gallons. [326 IAC 8-9-1]

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

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

D.17.1 Fugitive Dust Emission Limitations [326 IAC 6-4-2][326 IAC 6.8-10-3]

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

(1) The brazing equipment, cutting torches, soldering equipment, welding equipment, structural steel and bridge fabrication, covered conveyors, dust collector vents associated with coal bunkers and coal scale, grinding and machining operations and ash transport systems vents generating fugitive dust shall be in violation of this rule (326 IAC 6-4) if any of the following criteria are violated:

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

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

Where
P = Percentage increase
R = Number of particles of fugitive dust measured at downward receptor site
U = Number of particles of fugitive dust measured at upwind or background site

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

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

Where
N = Fraction of fugitive dust that is respirable dust;
PR = allowable percentage increase in dust concentration above background; and
P = no value greater than sixty-seven percent (67%).

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

(D) If fugitive dust is visible crossing the boundary or property line of a source. This subdivision may be refuted by factual data expressed in subdivisions (1), (2) or (3) of this section. 326 IAC 6-4-2(4) is not federally enforceable.

(2) Pursuant to 326 IAC 6-4-6(6) (Exceptions), fugitive dust from a source caused by adverse meteorological conditions will be considered an exception to this rule (326 IAC 6-4) and therefore not in violation.

(b) Pursuant to 326 IAC 6.8-10-3 Lake County Fugitive Particulate Matter Emissions Limitations, fugitive emissions from the brazing equipment, cutting torches, soldering equipment, welding equipment, structural steel and bridge fabrication, covered conveyors, dust collector vents associated with coal bunkers and coal scale, grinding and machining operations, and ash transport systems vents generating fugitive dust shall comply with the emissions limitations in Section C.5 - Fugitive Dust Emissions.

D.17.2 Cold Cleaner Degreaser Control Equipment and Operating Requirements [326 IAC 8-3-2]

Pursuant to 326 IAC 8-3-2 (Cold Cleaner Degreaser Control Equipment and Operating Requirements), the Permittee shall:

(a) Ensure the following control equipment and operating requirements are met:

(1) Equip the degreaser with a cover.

(2) Equip the degreaser with a device for draining cleaned parts.

(3) Close the degreaser cover whenever parts are not being handled in the degreaser.

(4) Drain cleaned parts for at least fifteen (15) seconds or until dripping ceases;

(5) Provide a permanent, conspicuous label that lists the operating requirements in subdivisions (3), (4), (6), and (7).

(6) Store waste solvent only in closed containers.

(7) Prohibit the disposal or transfer of waste solvent in such a manner that could allow greater than twenty percent (20%) of the waste solvent (by weight) to evaporate into the atmosphere.

D.17.3 Open To Vapor Degreaser Operation [326 IAC 8-3-3]

Pursuant to 326 IAC 8-3-3 (Open Top Vapor Degreasing Operation), the Permittee shall:

(a) Ensure the following control equipment and operating requirements are met:

(1) Equip the vapor degreaser with a cover that can be opened and closed easily without disturbing the vapor zone.

(2) Keep the cover closed at all times except when processing workloads through the degreaser.

(3) Minimize solvent carryout by:

(A) racking parts to allow complete drainage;

(B) moving parts in and out of the degreaser at less than three and three-

tenths (3.3) meters per minute (eleven (11) feet per minute);

(C) degreasing the workload in the vapor zone at least thirty (30) seconds or until condensation ceases;

(D) tipping out any pools of solvent on the cleaned parts before removal;

(E) allowing parts to dry within the degreaser for at least fifteen (15) seconds or until visually dry.

(4) Prohibit the entrance into the degreaser of porous or absorbent materials, such as cloth, leather, wood or rope.

(5) Prohibit the occupation of more than one-half (1/2) of the degreaser's open top area with the workload.

(6) Prohibit the loading of the degreaser in a manner that causes the vapor level to drop more than fifty percent (50%) of the vapor depth when the workload is removed.

(7) Prohibit solvent spraying above the vapor level.

(8) Repair solvent leaks immediately, or shut down the degreaser if leaks cannot be repaired immediately.

(9) Store waste solvent only in closed containers.

(10) Prohibit the disposal or transfer of waste solvent in a manner that could allow greater than twenty percent (20%) of the waste solvent (by weight) to evaporate into the atmosphere.

(11) Prohibit the use of workplace fans near the degreaser opening.

(12) Prohibit visually detectable water in the solvent exiting the water separator.

(13) Provide the degreaser with a permanent, conspicuous label that lists the operating requirements in subdivisions (2) through (12).

D.17.4 Conveyorized Degreaser Control Equipment and Operating Requirements [326 IAC 8-3-4]

Pursuant to 326 IAC 8-3-4 (Conveyorized Degreaser Control Equipment and Operating Requirements), the Permittee shall:

(a) Ensure the following control equipment and operating requirements have been met:

(1) Minimize carryout emissions by:

(A) Racking parts for best drainage;

(B) Maintaining the vertical conveyor speed at less than 3.3 meters per minute (eleven (11) feet per minute);

(2) Store waste solvent only in closed containers.

(3) Prohibit the disposal or transfer of waste solvent in a manner that could allow greater than twenty percent (20%) of the waste solvent (by weight) to evaporate into the atmosphere.

(4) Repair solvent leaks immediately, or shut down the degreaser if leaks cannot be repaired immediately.

(5) Prohibit the use of workplace fans near the degreaser opening.

(6) Prohibit visually detectable water in the solvent from exiting the water separator.

(7) Equip the degreaser with a permanent, conspicuous label that lists the operating requirements in subdivisions (1) through (6).

D.17.5 Material Requirements for Cold Cleaner Degreasers [326 IAC 8-3-8]

Pursuant to 326 IAC 8-3-8 (Material Requirements for Cold Cleaner Degreasers), the Permittee shall not operate a cold cleaning degreaser with a solvent that has a VOC composite partial 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).

D.17.6 Volatile Organic Liquid Storage Vessels [326 IAC 8-9-1]

(a) Pursuant to 326 IAC 8-9-1(a) and (b) (Volatile Organic Liquid Storage Vessels), on and after October 1, 1995, stationary vessels used to store volatile organic liquids (VOL), that are located in Clark, Floyd, Lake or Porter County with a capacity of less than thirty nine thousand (39,000) gallons are subject to the reporting and record keeping requirements of this rule. The VOL storage vessels are exempted from all other provisions of this rule.

(b) Pursuant to 326 IAC 8-9-6(a) and (b), the Permittee shall maintain the following records for the life of the stationary storage vessels and submit a report to IDEM, OAQ containing the following for each vessel:

(1) The vessel identification number,

(2) The vessel dimensions, and

(3) The vessel capacity.

D.17.7 Preventive Maintenance Plan [326 IAC 2-7-5(12)]

A Preventive Maintenance Plan is required for these facilities and their associated control devices. Section B - Preventive Maintenance Plan contains the Permittee's obligation with regard to the preventive maintenance plan required by this condition.

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

D.17.8 Record Keeping Requirements

(a) To document the compliance status with Condition D.17.5, the Permittee shall maintain the following records for each purchase of solvent used in the cold cleaner degreasing operations. These records shall be retained on-site or accessible electronically for the most recent three (3) year period and shall be reasonably accessible for an additional two (2) year period.

(1) The name and address of the solvent supplier.

(2) The date of purchase (or invoice/bill dates of contract servicer indicating service date).

(3) The type of solvent purchased.

(4) The total volume of the solvent purchased.

(5) The true vapor pressure of the solvent measured in millimeters of mercury at twenty (20) degrees Celsius (sixty-eight (68) degrees Fahrenheit).

(b) Section C - General Record Keeping Requirements contains the Permittee's obligations with regard to the records required by this condition.

SECTION D.18 EMISSIONS UNIT OPERATION CONDITIONS

Emissions Unit Description:

Coke Screening

(a) One (1) coke screening operation, approved in 2015 for construction, identified as Area Three Screening Station (CPS002), consisting of the following equipment:

(1) One (1) Dock Unloading storage pile, approved in 2015 for construction, with a nominal capacity of 74,669 ft^2.

(2) One (1) Area Three Coke pre-Screen storage pile, approved in 2015 for construction, with a nominal capacity of 475 ft^2.

(3) One (1) mobile screening unit, approved in 2015 for construction, with a maximum rated capacity of 250 tons per hour, consisting of the following:

(A) One (1) feed hopper
(B) One (1) feed conveyor
(C) One (1) single deck screener, equipped with an enclosure (full boot) covering the screen area and screen transfer points
(D) One (1) oversize discharge conveyor
(E) One (1) undersize discharge conveyor
(F) One (1) diesel engine, identified as CPS002-E1, with a maximum rated output of 111 horsepower, model year 2014 or later. Under 40 CFR 60, Subpart IIII this is considered an affected engine. Under 40 CFR 63, Subpart ZZZZ this is considered an affected engine.

(4) One (1) Area Three undersize storage pile, approved in 2015 for construction, with a nominal capacity of 475 ft^2.

(5) One (1) Area Three oversize stacker conveyor for loading railcars, approved in 2015 for construction, with a maximum rated capacity of 400 tons per hour, driven by one (1) diesel engine, identified as CPS002-E2, with a maximum rated output of 38 horsepower, model year 2014 or later. Under 40 CFR 60, Subpart IIII this is considered an affected engine. Under 40 CFR 63, Subpart ZZZZ this is considered an affected engine.

(b) One (1) coke screening operation, approved in 2015 for construction, identified as N-Yard Screening Station (CPS003), consisting of the following equipment:

(1) One (1) mobile screening unit, approved in 2015 for construction, with a maximum rated capacity of 250 tons per hour, consisting of the following:

(A) One (1) feed hopper
(B) One (1) feed conveyor
(C) One (1) single deck screener, equipped with an enclosure (full boot) covering the screen area and screen transfer points
(D) One (1) oversize discharge conveyor
(E) One (1) fines discharge conveyor
(F) One (1) diesel engine, identified as CPS003-E1, with a maximum rated output of 111 horsepower, model year 2014 or later. Under 40 CFR 60, Subpart IIII this is considered an affected engine. Under 40 CFR 63, Subpart ZZZZ this is considered an affected engine.

(2) One (1) N-Yard oversize stacker for loading railcars, approved in 2015 for construction, with a maximum rated capacity of 400 tons per hour, driven by one (1) diesel engine identified as CPS003-E2, with a maximum rated output of 38 horsepower, model year 2014 or later. Under 40 CFR 60, Subpart IIII this is considered an affected engine. Under 40 CFR 63, Subpart ZZZZ this is considered an affected engine.

(c) One (1) coke screening operation, approved in 2015 for construction, identified as Undersize Coke Screening Station (CPS004), consisting of the following equipment:

(1) One (1) mobile screening unit, approved in 2015 for construction, with a maximum rated capacity of 200 tons per hour, consisting of the following:

(A) One (1) feed hopper
(B) One (1) feed conveyor
(C) One (1) double deck screener, equipped with an enclosure (full boot) covering the screen area and screen transfer points
(D) One (1) oversize discharge conveyor
(E) One (1) buckwheat discharge conveyor
(F) One (1) undersize discharge conveyor
(G) One (1) diesel engine, identified as CPS004-E1, with a maximum rated output of 111 horsepower, model year 2014 or later. Under 40 CFR 60, Subpart IIII this is considered an affected engine. Under 40 CFR 63, Subpart ZZZZ this is considered an affected engine.

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

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

D.18.1 Prevention of Significant Deterioration (PSD) [326 IAC 2-2]

In order to render the requirements of 326 IAC 2-2 (PSD) not applicable, the Permittee shall comply with the following:

(a) Total PM emissions from the three (3) coke screening operations, identified as CPS002, CPS003, and CPS004, shall not exceed 24.90 tons per twelve (12) consecutive month period, with compliance determined at the end of each month.

(b) Total PM_{10} emissions from the three (3) coke screening operations, identified as CPS002, CPS003, and CPS004, shall not exceed 14.90 tons per twelve (12) consecutive month period, with compliance determined at the end of each month.

(c) Total direct $PM_{2.5}$ emissions from the three (3) coke screening operations, identified as CPS002, CPS003, and CPS004, shall not exceed 9.90 tons per twelve (12) consecutive month period, with compliance determined at the end of each month.

Compliance with these emission limits will ensure that the potential to emit from this modification is less than twenty-five (25) tons of PM, less than fifteen (15) tons of PM_{10}, and less than ten (10) tons of direct $PM_{2.5}$ per twelve (12) consecutive month period, and therefore will render the requirements of 326 IAC 2-2 not applicable.

D.18.2 Particulate Emissions [326 IAC 6.8-1-2]

Pursuant to 326 IAC 6.8-1-2(a), the particulate matter emissions from engines CPS002-E1, CPS002-E2, CPS003-E1, CPS003-E2, and CPS004-E1 shall not exceed three-hundredths (0.03)

grain per dry standard cubic foot (gr/dscf).

D.18.3 Preventive Maintenance Plan [326 IAC 2-7-5(12)]

A Preventive Maintenance Plan is required for these facilities and any control devices. Section B - Preventive Maintenance Plan contains the Permittee's obligation with regard to the preventive maintenance plan required by this condition.

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

D.18.4 Particulate Control

In order to ensure compliance with Condition D.18.1, the Permittee shall not operate CPS002 mobile screening unit, CPS003 mobile screening unit, or CPS004 mobile screening unit unless the enclosure (full boot) that covers the associated screen area and material transfer points is installed, maintained, and operated in a manner consistent with the manufacturer's specifications.

D.18.5 PM Emissions

To determine the compliance status with the PM emissions limit in Condition D.18.1(a), the Permittee shall calculate monthly PM emissions using the following equation:

$$E_{PM} = \frac{29.89 \frac{\text{lb PM}}{\text{kton}} Q_2 + 7.58 \frac{\text{lb PM}}{\text{kton}} Q_3 + 10.37 \frac{\text{lb PM}}{\text{kton}} Q_4}{2{,}000 \text{ lb/ton}} + 0.12 \text{ ton PM/month}$$

Where:

E_{PM} = Emissions of PM in tons per month
Q_2 = CPS002 (Area Three) coke throughput (kton/month)
Q_3 = CPS003 (N-Yard) coke throughput (kton/month)
Q_4 = CPS004 (Undersize) coke throughput (kton/month)
0.12 ton PM/month = PTE of the Area Three Coke pre-Screen storage pile, the screener engines (CPS002-E1, CPS003-E1, CPS004-E1) and the stacker engines (CPS002-E2 and CPS003-E2)
29.89 lb PM/kton = 0.957 (lb PM/kton/transfer point) x 7 transfer points + 3.75 lb PM/kton (coke screened) + 19.44 lb PM/kton (unpaved road traffic)
7.58 lb PM/kton = 0.957 (lb PM/kton/transfer point) x 4 transfer points + 3.75 lb PM/kton (coke screened)
10.37 lb PM/kton = 0.957 (lb PM/kton/transfer point) x 3 transfer points + 7.50 lb PM/kton coke screened

Conservative PTE calculation is based on all coke following the path with the highest number of conveyor transfer points.

D.18.6 PM10 Emissions

To determine the compliance status with the PM10 emissions limit in Condition D.18.1(b), the Permittee shall calculate monthly PM10 emissions using the following equation:

$$E_{PM10} = \frac{9.65 \frac{\text{lb PM10}}{\text{kton}} Q_2 + 3.12 \frac{\text{lb PM10}}{\text{kton}} Q_3 + 3.97 \frac{\text{lb PM10}}{\text{kton}} Q_4}{2{,}000 \text{ lb/ton}} + 0.10 \text{ ton PM10/month}$$

Where:

E_{PM10} = Emissions of PM10 in tons per month
Q2 = CPS002 (Area Three) coke throughput (kton/month)
Q3 = CPS003 (N-Yard) coke throughput (kton/month)
Q4 = CPS004 (Undersize) coke throughput (kton/month)

0.10 ton PM10/month = PTE of the Area Three Coke pre-Screen storage pile, the screener engines (CPS002-E1, CPS003-E1, CPS004-E1) and the stacker engines (CPS002-E2 and CPS003-E2)
9.65 lb PM10/kton = 0.453 (lb PM10/kton/transfer point) x 7 transfer points + 1.31 lb PM10/kton (coke screened) + 5.18 lb PM10/kton (unpaved road traffic)
3.12 lb PM10/kton = 0.453 (lb PM10/kton/transfer point) x 4 transfer points + 1.31 lb PM10/kton (coke screened)
3.97 lb PM10/kton = 0.453 (lb PM10/kton/transfer point) x 3 transfer points + 2.61 lb PM10/kton (coke screened)

Conservative PTE calculation is based on all coke following the path with the highest number of conveyor transfer points.

D.18.7 PM2.5 Emissions

To determine the compliance status with the PM2.5 emissions limit in Condition D.18.1(c), the Permittee shall calculate monthly PM2.5 emissions using the following equation:

$$E_{PM2.5} = \frac{1.20 \frac{\text{lb PM2.5}}{\text{kton}} Q_2 + 0.47 \frac{\text{lb PM2.5}}{\text{kton}} Q_3 + 0.60 \frac{\text{lb PM2.5}}{\text{kton}} Q_4}{2{,}000 \text{ lb/ton}} + 0.10 \text{ ton PM2.5/month}$$

Where:

$E_{PM2.5}$ = Emissions of PM2.5 in tons per month
Q2 = CPS002 (Area Three) coke throughput (kton/month)
Q3 = CPS003 (N-Yard) coke throughput (kton/month)
Q4 = CPS004 (Undersize) coke throughput (kton/month)
0.10 ton PM2.5/month = PTE of the Area Three Coke pre-Screen storage pile, the screener engines (CPS002-E1, CPS003-E1, CPS004-E1) and the stacker engines (CPS002-E2 and CPS003-E2)
1.20 lb PM2.5/kton = 0.069 (lb PM2.5/kton/transfer point) x 7 transfer points + 0.20 lb PM2.5/kton (coke screened) + 0.52 lb PM2.5/kton (unpaved road traffic)
0.47 lb PM2.5/kton = 0. 069 (lb PM2.5/kton/transfer point) x 4 transfer points + 0.20 lb PM2.5/kton (coke screened)
0.60 lb PM2.5/kton = 0. 069 (lb PM2.5/kton/transfer point) x 3 transfer points + 0.40 lb PM2.5/kton (coke screened)

Conservative PTE calculation is based on all coke following the path with the highest number of conveyor transfer points.

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

D.18.8 Visible Emissions Notations

(a) Visible emission notations of Area Three screener, N-Yard screener, and Undersize screener conveying, transferring, and screening operations 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 a reasonable response. Section C – Response to Excursions and Exceedances contains the Permittee's obligation with regard to the reasonable response steps required by this condition. Failure to take response steps 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.18.9 Record Keeping Requirements

(a) To document the compliance status with Condition D.18.1, the Permittee shall maintain records in accordance with (1) through (3) below. Records shall be complete and sufficient to establish compliance with the PM, PM10, and PM2.5 emission limits established in Condition D.18.1.

(1) Calendar dates covered in the compliance period.

(2) The monthly coke throughput in kton for each of the three (3) screening operations identified as CPS002, CPS003, and CPS004.

(3) The calculated PM, PM10, and PM2.5 emissions.

(b) To document the compliance status with Condition D.18.8, the Permittee shall maintain a daily record of visible emission notations for the Area Three screener, N-Yard screener, and Undersize screener operations. The Permittee shall include in each daily record when a visible emission notation is not taken and the reason for the lack of visible emission notation (e.g., the process did not operate that day).

(c) Section C - General Record Keeping Requirements contains the Permittee's obligations with regard to the records required by this condition.

D.18.10 Reporting Requirements

A quarterly summary of the information to document the compliance status with Conditions D.18.1(a), D.18.1(b), and D.18.1(c) shall be submitted not later than thirty (30) days after the end of the quarter being reported. Section C - General Reporting contains the Permittee's obligation with regard to the reporting required by this condition. The report submitted by the Permittee does require a certification that meets the requirements of 326 IAC 2-7-6(1) by a “responsible official,” as defined by 326 IAC 2-7-1(35).

SECTION D.19 **RESERVED**

SECTION D.20 **RESERVED**

SECTION D.21 **RESERVED**

SECTION D.22 EMISSIONS UNIT OPERATION CONDITIONS

Emissions Unit Description:

Coal Pulverization and Air Preheater System (East PCI Coal Pulverization)

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

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

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

Under 40 CFR 60, Subpart Y these units are considered affected facilities.

Pulverized Coal Storage and Feed System (West PCI Coal Pulverization)

(a) One (1) Pulverized coal Transport, identified as Line A, constructed in 1993, with a maximum capacity of 210 tons per hour, ducted to a baghouse (A) exhausting to stack (SS-5).

(b) One (1) Pulverized coal Transport, identified as Line B, constructed in 1993, with a maximum capacity of 210 tons per hour, ducted to a baghouse (B) exhausting to stack (SS-6).

(c) One (1) Pulverized coal storage reservoir, constructed in 1993, with a maximum capacity of 600 tons, blanketed with nitrogen and ducted to a baghouse (vent filter house) exhausting to stack (SS-7).

Under 40 CFR 60, Subpart Y these units are considered affected facilities.

Railcar Heater (PCI Coal Handling Thaw Shed)

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

Coal Handling Operations

Coal Handling System

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

(b) One (1) Reclaim Hopper, identified as RCH-1, constructed in 1993, with a maximum capacity of 300 tons per hour, ducted to baghouse DC-6 and exhausting to stack DC-6.

(c) One (1) Car Dump Hopper 1/C1, identified as FS-8, constructed in 1993, with a maximum capacity of 200 tons per hour, ducted to baghouse DC-1 exhausting to stack F1.

(d) One (1) Car dump Hopper 2/C1, identified as FS-9, constructed in 1993, with a maximum capacity of 200 tons per hour, ducted to a baghouse DC-2 exhausting to stack F2.

(e) One (1) Car Dump Hopper 3/C1, identified as FS-10, constructed in 1993, with a maximum capacity of 200 tons per hour, ducted to a baghouse DC-3 exhausting to stack F3.

(f) One (1) Transfer Point C1/C2, identified as FS-2, constructed in 1993, with a maximum capacity of 600 tons per hour, ducted to a baghouse DC-4 exhausting to stack F4.

(g) One (1) Reclaim Hopper/C2, identified as FS-14, constructed in 1993, with a maximum capacity of 300 tons per hour, ducted to a baghouse DC-5 exhausting to stack F5.

(h) One (1) Screen Transfer/C2, identified as FS-3, constructed in 1993, with a maximum capacity of 600 tons per hour, ducted to a baghouse DC-7 exhausting to stack F7.

(i) One (1) Screen/C3 Gate Transfer identified as FS-11, constructed in 1993, ducted to a baghouse DC-8 exhausting to stack F.

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

(k) One (1) Transfer Point C4/C5, identified as FS-4, constructed in 1993, ducted to a baghouse DC-10 exhausting to stack F10.

Under 40 CFR 60, Subpart Y these units are considered affected facilities.

East Building – Coal handling

(a) One (1) Transfer Point C5/C6, identified as FS-5, constructed in 1993, with a maximum capacity of 600 tons per hour, ducted to a baghouse DC-11 exhausting to stack F11.

(b) One (1) Transfer Point C6/Bin 1, identified as FS-7, constructed in 1993, ducted to baghouse DC-12 exhausting to stack F12.

(c) One (1) Transfer Point C5/Bin 2, identified as FS-6, constructed in 1993, ducted to baghouse DC-13 exhausting to stack F13.

(d) One (1) Transfer Point C6/Bin 3, identified as FS-13, constructed in 1993, with a maximum capacity of 600 tons per hour, ducted to baghouse DC-14 exhausting to stack F14.

Under 40 CFR 60, Subpart Y these units are considered affected facilities.

Coal Piles and Haul Roads

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

(b) Haul Roads - Vehicle Traffic

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

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

D.22.1 PSD Minor Limit (NO_X) [326 IAC 2-2]

Pursuant to CP (45) 1895 issued October 26, 1990, the NO_X emissions from the three (3) pulverized coal preheaters and railcar heater shall be limited to thirty-seven (37) tons per twelve (12) consecutive month period.

(a) Pursuant to CP(45) 1895, the natural gas usage in the three (3) preheaters shall be limited to less than 549 million cubic feet per twelve (12) consecutive month period with compliance demonstrated at the end of each month. The natural gas usage in the three (3) preheaters shall be limited to less than 183 million cubic feet per month.

(b) Pursuant to CP(45) 1895, the natural gas usage in the railcar heater shall be limited to less than 12.504 million cubic feet per twelve (12) consecutive month period with compliance demonstrated at the end of each month. The natural gas usage in the railcar heater shall be limited to less than 5 million cubic feet per month.

Compliance with this limit restricts the potential to emit for NO_X to less than thirty-seven (37) tons per year for the three (3) pulverized coal preheaters and railcar heater and makes the provisions of 326 IAC 2-2 Prevention of Significant Deterioration (PSD), not applicable.

D.22.2 PM and PM_{10} Minor Limits [326 IAC 2-2][326 IAC 2-1.1-5]

Pursuant to CP (45) 1895 (issued October 26, 1990) and T089-29907-00121 (issued December 20, 2013), in order to render 326 IAC 2-2 (PSD) not applicable, the PM and PM10 emissions from the coal pulverization system shall not exceed the emission limits listed in the table below:

Emission Unit	PM (lb/hr)	PM10 (lb/hr)
SS-1 (1A)	0.36	0.21
SS-1 (1B)	0.36	0.21
SS-1 (1C)	0.36	0.21
SS-2 (2A)	0.36	0.21
SS-2 (2B)	0.36	0.21
SS-2 (2C)	0.36	0.21
SS-3 (3A)	0.36	0.21
SS-3 (3B)	0.36	0.21
SS-3 (3C)	0.36	0.21
Line A (SS-5)	0.09	0.06
Line B (SS-6)	0.09	0.06
Pulverized coal storage reservoir (SS-7)	0.09	0.06
RCD-1 (8A)	0.36	0.21
RCD-1 (8B)	0.36	0.21

DC-6 (Stack DC-6)	0.09	0.06
DC-1 (Stack F1)	0.09	0.06
DC-2 (Stack F2)	0.09	0.06
DC-3 (Stack F3)	0.09	0.06
DC-4 (Stack F4)	0.09	0.06
DC-5 (Stack F5)	0.09	0.06
DC-7 (Stack F7)	0.09	0.06
DC-8 (Stack F)	0.09	0.06
DC-9 (Stack F9)	0.09	0.06
DC-10 (Stack F10)	0.09	0.06
DC-11 (Stack F11)	0.09	0.06
DC-12 (Stack F12)	0.09	0.06
DC-13 (Stack F13)	0.09	0.06
DC-14 (Stack F14)	0.09	0.06
Coal Pile F17	0.09	0.06

Compliance with these emission limits will ensure that the potential to emit from CP (45) 1895 issued October 26, 1990, is less than twenty-five (25) tons of PM and less than fifteen (15) tons of PM_{10} per twelve (12) consecutive month period, and therefore will render the requirements of 326 IAC 2-2 not applicable.

D.22.3 Particulate Emissions [326 IAC 6.8-1-2]

Pursuant to 326 IAC 6.8-1-2(a), the particulate matter emissions from the coal pulverization system units shall not exceed 0.03 grains per dry standard cubic foot of exhaust air.

D.22.4 Preventive Maintenance Plan

A Preventive Maintenance Plan is required for these facilities and any control devices. Section B - Preventive Maintenance Plan contains the Permittee's obligation with regard to the preventive maintenance plan required by this condition.

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

D.22.5 Particulate Control

In order to assure compliance with Condition D.22.2, the baghouses for particulate control shall be in operation and control emissions from the coal pulverization system units at all times the coal pulverization system units are in operation.

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

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

D.22.6 Visible Emissions Notations

(a) Visible emission notations of each baghouse stack exhaust 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 a reasonable response. Section C – Response to Excursions and Exceedances contains the Permittee's obligation with regard to the reasonable response steps required by this condition. Failure to take response steps shall be considered a deviation from this permit.

D.22.7 Broken or Failed Bag Detection

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

(b) 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.22.8 Record Keeping Requirements

(a) To document the compliance status with Condition D.22.1(a), the Permittee shall maintain records of the monthly natural gas usage in the three (3) air preheaters.

(b) To document the compliance status with Condition D.22.1(b), the Permittee shall maintain records of the monthly natural gas usage in the rail car heater.

(c) To document the compliance status with Condition D.22.6, the Permittee shall maintain records of daily visible emission notations of the baghouse(s) stack exhausts. The Permittee shall include in its daily record when a visible emission notation is not taken and the reason for the lack of visible emission notation (e.g. the process did not operate that day).

(d) Section C - General Record Keeping Requirements contains the Permittee's obligation with regard to the records required by this condition.

D.22.9 Reporting Requirements

A quarterly report of natural gas usage in the three (3) preheaters and railcar heater and a quarterly summary of the information to document the compliance status with D.22.1 shall be submitted not later than thirty (30) days after the end of the quarter being reported. Section C - General Reporting contains the Permittee's obligation with regard to the reporting required by this condition.

The report submitted by the Permittee does require a certification that meets the requirements of 326 IAC 2-7-6(1) by a “responsible official,” as defined by 326 IAC 2-7-1(35).

SECTION D.23 **RESERVED**

SECTION D.24 **RESERVED**

SECTION D.25 **RESERVED**

SECTION D.26 **RESERVED**

SECTION D.27 EMISSIONS UNIT OPERATION CONDITIONS

Emissions Unit Description:

Corrective Action Management Unit (CAMU)

(a) One (1) CAMU Evaporative Spray System, with a maximum throughput capacity of 250 gallons per minute (gpm), consisting of 16 spray heads, each with a rated capacity of 14.4 gpm, located on the floor of CAMU Unit 2. The system is fed from a single pump drawing water from the CAMU Unit 1 leachate collection system, which contains non-native materials dredged from the Calumet River.

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

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

D.27.1 Particulate Emissions Limitations [326 IAC 6.8-1-2(a)]

Pursuant to 326 IAC 6.8-1-2(a), the Permittee shall not allow or permit discharge to the atmosphere any gases which contain particulate matter in excess of 0.03 grain per dry standard cubic foot (dscf) from the CAMU Evaporative Spray System.

SECTION D.28 EMISSIONS UNIT OPERATION CONDITIONS

Emissions Unit Description:

Coke Receiving and Handling

(a) One (1) coke rail car unloading station, approved in 2014 for construction, identified as CPS0001, with a maximum capacity of 10,126,560 tons per year, consisting of the following:

(1) One (1) unloading station.

(2) One (1) conveyor, with a maximum rated capacity of 1,156 tons per hour.

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

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

D.28.1 PM/PM10 PSD Minor Limitation [326 IAC 2-2]

The Permittee shall comply with the following for CPS0001:

(a) The amount of coke unloaded at the rail car unloading station, identified as CPS0001, shall not exceed 1,000,000 tons per twelve (12) consecutive month period, with compliance determined at the end of each month.

(b) PM emissions from the rail car unloading station, identified as CPS0001, shall not exceed 0.96 lb per kiloton of coke.

(c) PM10 emissions from the rail car unloading station, identified as CPS0001, shall not exceed 0.45 lb per kiloton of coke.

(d) PM2.5 emissions from the rail car unloading station, identified as CPS0001, shall not exceed 0.069 lb per kiloton of coke.

(e) The fugitive dust control plan shall be implemented to reduce emissions from the unpaved roads.

Compliance with these emission limits will ensure that the potential to emit from this modification is less than twenty-five (25) tons of PM per year and less than fifteen (15) tons of PM_{10} per year and therefore will render the requirements of 326 IAC 2-2 not applicable.

D.28.2 Preventive Maintenance Plan [326 IAC 2-7-5(12)]

A Preventive Maintenance Plan is required for this facility. Condition B - Preventative Maintenance Plan contains the Permittee's obligation with regard to the preventative maintenance plan required by this condition.

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

D.28.3 Record Keeping Requirements

(a) To document the compliance status with Condition D.28.1(a), the Permittee shall maintain monthly records of the amount of coke unloaded at CPS0001.

(b) Section C - General Record Keeping Requirements, of this permit contains the

Permittee's obligation with regard to the records required by this condition.

D.28.4 Reporting Requirements

A quarterly summary of the information to document the compliance status with Condition D.28.1(a) shall be submitted not later than thirty (30) days after the end of the quarter being reported. Section C - General Reporting contains the Permittee's obligation with regard to the reporting required by this condition. The report submitted by the Permittee does require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official," as defined by 326 IAC 2-7-1(35).

SECTION D.29 EMISSIONS UNIT OPERATION CONDITIONS

Emissions Unit Description:

Iron Ore Screening

(a) One (1) iron ore pellet screening plant, identified as North Plant unit 01, constructed in 1974, with a nominal capacity of 600 tons per hour, using screens and conveyers to process iron ore pellets.

(b) One (1) iron ore pellet screening plant, identified as South Plant unit 02, constructed in July 1981, with a nominal capacity of 600 tons per hour, using screens and conveyers to process iron ore pellets.

(c) Loaders for loading/unloading and transporting iron ore pellets on unpaved roads.

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

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

D.29.1 PM, PM10 and PM2.5 PSD and Nonattainment NSR Minor Limit [326 IAC 2-2][326 IAC 2-1.1-5]

The PM, PM10 and PM2.5 from the one (1) iron ore pellet screening plant, identified as South Plant unit 02, excluding the PM, PM10 and PM2.5 emissions from the fines stockpiles and paved and unpaved roads shall be limited to a total of less than 18.7 tons per twelve consecutive month period, to a total of less than 12.9 tons per twelve consecutive month period, and to a total of less than 9.7 tons per twelve consecutive month period, respectively, with compliance determined at the end of each month.

Compliance with these limits and the implementation of the Fugitive Dust Control Plan, shall render the requirements of 326 IAC 2-2 (PSD) rules and 326 IAC 2-1.1-5, the Nonattainment NSR requirements not applicable to this modification.

D.29.2 Particulate Matter Limitations for Lake County [326 IAC 6.8-1-2]

Pursuant to 326 IAC 6.8-1-2 (Particulate Matter Limitations for Lake County), each feeder, screen, conveyor and loader used for iron ore pellet screening at the North and South Plants shall each not exceed 0.03 grains per dry standard cubic foot (gr/dscf) of particulate matter.

D.29.3 Preventive Maintenance Plan [326 IAC 2-7-5(12)]

The Preventative Maintenance Plan is required for the screening and conveying equipment. Section B - Preventive Maintenance Plan contains the Permittee's obligation with regard to the preventive maintenance plan required by this condition.

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

D.29.4 PM, PM10 and PM2.5

Compliance with the emission limits in Condition D.29.1 shall be determined as follows:

(a) The Permittee shall perform moisture content analysis or use the results of the chemical analysis performed by US Steel-Gary Works on one sample of the screened pelletized iron ore taken each operating day.

(b) The summation of the daily emissions calculations to demonstrate compliance with Condition D.29.1 shall be calculated for the following emission points:

Front end loader pellet ore feed into hopper (SH1)
Feed (SH1) to main feed conveyor (SC1)
Main feed conveyor (SC1) to Tyler shaker (SS1)
Tyler shaker screener (SS1)
Tyler shaker (SS1) to stacker conveyor (SC2)
Stacker conveyor (SC2) to stockpiles
Tyler shaker (SS1) to shuttle conveyor (SC3)
Shuttle conveyor (SC3) to conveyor (SC4)
Conveyor (SC4) to conveyor (SC5)
Conveyor (SC5) to stockpiles

Emissions calculations shall be as follows:

PM Daily Emissions, tons = Throughput, tons/day x PM EF, lb/ton x ton/2000 lbs

PM10 Daily Emissions, tons = Throughput, tons/day x PM10 EF, lb/ton x ton/2000 lbs

PM2.5 Daily Emissions, tons = Throughput, tons/day x PM2.5 EF, lb/ton x ton/2000 lbs

(c) The following emission factors shall be utilized in determining the daily emissions calculations in section (b) of this condition based upon the moisture content of the pelletized iron ore determined in section (a) of this condition:

(1) For the Tyler shaker screener (SS1):

Uncontrolled Emission factor (lb/ton)			Percent Moisture Content of Pelletized Iron Ore	Controlled Emission factor (lb/ton)			Percent Moisture Content of Pelletized Iron Ore
PM	PM10	PM2.5		PM	PM10	PM2.5	
0.025	0.0087	0.0087	at or below 1.3 %	0.0022	0.00074	0.00005	greater than 1.3%

(2) For the remaining emission points:

Uncontrolled Emission factor (lb/ton)			Percent Moisture Content of Pelletized Iron Ore	Controlled Emission factor (lb/ton)			Percent Moisture Content of Pelletized Iron Ore
PM	PM10	PM2.5		PM	PM10	PM2.5	
0.0030	0.00110	0.00110	at or below 1.3 %	0.00014	0.000046	0.000013	greater than 1.3%

D.29.5 Fugitive Dust Control

In order to comply with Condition D.29. 2 (Particulate Matter Limitations for Lake County), the Fugitive Dust Control Plan (included as Attachment A to this permit), shall be implemented to control fugitive dust.

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

D.29.6 Visible Emissions Notations

(a) Visible emission notations of the screening, conveying, loading/unloading and transporting exhaust shall be performed once per day during normal daylight operations when exhausting to the atmosphere. A trained employee shall record whether emissions are normal or abnormal.

(b) For processes operated continuously, "normal" means those conditions prevailing, or

expected to prevail, at least 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 a reasonable response. Section C- Response to Excursions or Exceedances contains the Permittee's obligation with regard to the reasonable response steps required by this condition. Failure to take response steps 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.29.7 Record Keeping Requirements

(a) To document the compliance status with Condition D.29.1, the Permittee shall maintain records of the daily iron ore pellet throughput weight, moisture content analysis and daily emissions calculations required by D.29.4. Daily emissions calculations shall be completed for each month within 10 days of the end of each month.

(b) To document the compliance status with Condition D.29.6 (Visible Emissions Notation), the Permittee shall maintain records of once per day visible emission notations of the screening, conveying, loading/unloading and transporting exhaust. The Permittee shall include in its daily record when a visible emission notation is not taken and the reason for the lack of visible emission notation (e.g. the process did not operate that day).

(c) Section C - General Record Keeping Requirements contains the Permittee's obligations with regard to the records required by this condition.

D.29.8 Reporting Requirements

A quarterly report of the daily PM, PM10 and PM2.5 emissions from the one (1) iron ore pellet screening plant, identified as South Plant unit 02, excluding the PM, PM10 and PM2.5 emissions from the fines stockpiles and paved and unpaved roads, to document the compliance status with D.29.1 shall be submitted not later than thirty (30) days after the end of the quarter being reported. Section C - General Reporting contains the Permittee's obligation with regard to the reporting required by this condition. The report submitted by the Permittee does require a certification that meets the requirements of 326 IAC 2-7-6(1) by a “responsible official,” as defined by 326 IAC 2-7-1(35).

SECTION D.30 **RESERVED**

SECTION D.31 EMISSIONS UNIT OPERATION CONDITIONS

Emissions Unit Description:

Insignificant activities:

(f) Two natural gas-fired boilers, identified as ETF-1 and ETF-2, permitted in 2016, each with a maximum capacity of 6.27 MMBtu/hr, equipped with low NOx burners and flue gas recirculation, and exhausting to stack ETF-1a and ETF-2a, respectively.

Under 40 CFR 63, Subpart DDDDD, these units are considered new industrial boilers.

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

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

D.3.1 Particulate Emissions [326 IAC 6.8-1-2]

(a) Pursuant to 326 IAC 6.8-1-2(b)(3), the particulate matter emissions from boilers ETF-1 and ETF-2 shall not exceed 0.01 grains per dry standard cubic foot when combusting natural gas.

SECTION E.1 Nitrogen Oxides Budget Trading Program - NOX Budget Permit for NOX Budget Units Under 326 IAC 10-4-1(a)

ORIS Code: 50733

NO_X Budget Source [326 IAC 2-7-5(14)]

One (1) Boiler House No. 4, emissions group 720, comprised of the following:

(a) Two (2) Boilers, 720 No. 1 and No. 2, identified as O4B10459 and O4B20460, constructed in 1967, equipped to combust natural gas, blast furnace gas and fuel oil, with a heat input of 500 MMBtu per hour each, exhausting through Stacks O46268 and O46269, respectively.

(b) One (1) Boiler, 720 No. 3, identified as O4B30461, constructed in 1967, equipped to combust blast furnace gas and natural gas, with a heat input of 500 MMBtu per hour, exhausting through Stack O46270.

One (1) Turbo Blower Boiler House (TBBH), emissions group 701, comprised of the following:

(a) Three (3) Boilers, 701 No. 1, No. 2, and No. 3, identified as OTB10462, OTB20463 and OTB30464, constructed in 1948, equipped to combust blast furnace gas, coke oven gas, fuel oil and natural gas, with a heat input of 410 MMBtu per hour each, exhausting through Stacks OT6271, OT6272 and OT6273, respectively.

(b) One (1) Boiler 701 No. 5, identified as OTB50466, constructed in 1958, equipped to combust blast furnace gas, coke oven gas, fuel oil and natural gas, with a heat input of 410 MMBtu per hour, exhausting through Stack OT6275.

(c) One (1) boiler 701 No. 6, identified as OTB60467, constructed prior to August 17, 1971, equipped to combust blast furnace gas and natural gas, with a heat input capacity of 710 MMBtu per hour, exhausting through Stack OT6276.

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

E.1.1 Automatic Incorporation of Definitions [326 IAC 10-4-7(e)]

This NO_X budget permit is deemed to incorporate automatically the definitions of terms under 326 IAC 10-4-2.

E.1.2 Standard Permit Requirements [326 IAC 10-4-4(a)]

(a) The owners and operators of the NO_X budget source and each NO_X budget unit shall operate each unit in compliance with this NO_X budget permit.

(b) The NO_X budget units subject to this NO_X budget permit are the following:

(1) At Boiler House No. 4, 720 No. 1, 720 No. 2, and 720 No. 3; and

(2) At Turbo Blower Boiler House, 701 No. 1, 701 No. 2, 701 No. 3, 701 No. 5, and 701 No. 6.

E.1.3 Monitoring Requirements [326 IAC 10-4-4(b)]

(a) The owners and operators and, to the extent applicable, the NO_X authorized account representative of the NO_X budget source and each NO_X budget unit at the source shall comply with the monitoring requirements of 40 CFR 75 and 326 IAC 10-4-12.

(b) The emissions measurements recorded and reported in accordance with 40 CFR 75 and 326 IAC 10-4-12 shall be used to determine compliance by each unit with the NO_X budget emissions limitation under 326 IAC 10-4-4(c) and Condition F.4, Nitrogen Oxides Requirements.

E.1.4 Nitrogen Oxides Requirements [326 IAC 10-4-4(c)]

(a) The owners and operators of the NO_X budget source and each NO_X budget unit at the source shall hold NO_X allowances available for compliance deductions under 326 IAC 10-4-10(j), as of the NO_X allowance transfer deadline, in each unit's compliance account and the source's overdraft account in an amount:

(1) Not less than the total NO_X emissions for the ozone control period from the unit, as determined in accordance with 40 CFR 75 and 326 IAC 10-4-12;

(2) To account for excess emissions for a prior ozone control period under 326 IAC 10-4-10(k)(5); or

(3) To account for withdrawal from the NO_X budget trading program, or a change in regulatory status of a NO_X budget opt in unit.

(b) Each ton of NO_X emitted in excess of the NO_X budget emissions limitation shall constitute a separate violation of the Clean Air Act (CAA) and 326 IAC 10-4.

(c) Each NO_X budget unit shall be subject to the requirements under (a) above and 326 IAC 10-4-4(c)(1) starting on May 31, 2004.

(d) NO_X allowances shall be held in, deducted from, or transferred among NO_X allowance tracking system accounts in accordance with 326 IAC 10 4 9 through 11, 326 IAC 10-4-13, and 326 IAC 10-4-14.

(e) A NO_X allowance shall not be deducted, in order to comply with the requirements under (a) above and 326 IAC 10-4-4(c)(1), for an ozone control period in a year prior to the year for which the NO_X allowance was allocated.

(f) A NO_X allowance allocated under the NO_X budget trading program is a limited authorization to emit one (1) ton of NO_X in accordance with the NO_X budget trading program. No provision of the NO_X budget trading program, the NO_X budget permit application, the NO_X budget permit, or an exemption under 326 IAC 10-4-3 and no provision of law shall be construed to limit the authority of the U.S. EPA or IDEM, OAQ to terminate or limit the authorization.

(g) A NO_X allowance allocated under the NO_X budget trading program does not constitute a property right.

(h) Upon recordation by the U.S. EPA under 326 IAC 10-4-10, 326 IAC 10-4-11, or 326 IAC 10-4-13, every allocation, transfer, or deduction of a NO_X allowance to or from each NO_X budget unit's compliance account or the overdraft account of the source where the unit is located is deemed to amend automatically, and become a part of, this NO_X budget permit of the NO_X budget unit by operation of law without any further review.

E.1.5 Excess Emissions Requirements [326 IAC 10-4-4(d)]

The owners and operators of each NO_X budget unit that has excess emissions in any ozone control period shall do the following:

(a) Surrender the NO_X allowances required for deduction under 326 IAC 10-4-10(k)(5).

(b) Pay any fine, penalty, or assessment or comply with any other remedy imposed under 326 IAC 10-4-10(k)(7).

E.1.6 Record Keeping Requirements [326 IAC 10-4-4(e)][326 IAC 2-7-5(3)]

Unless otherwise provided, the owners and operators of the NO_X budget source and each NO_X budget unit at the source shall keep, either on site at the source or at a central location within Indiana for those owners or operators with unattended sources, each of the following documents for a period of five (5) years:

(a) The account certificate of representation for the NO_X authorized account representative for the source and each NO_X budget unit at the source and all documents that demonstrate the truth of the statements in the account certificate of representation, in accordance with 326 IAC 10-4-6(h). The certificate and documents shall be retained either on site at the source or at a central location within Indiana for those owners or operators with unattended sources beyond the five (5) year period until the documents are superseded because of the submission of a new account certificate of representation changing the NO_X authorized account representative.

(b) All emissions monitoring information, in accordance with 40 CFR 75 and 326 IAC 10-4-12, provided that to the extent that 40 CFR 75 and 326 IAC 10-4-12 provide for a three (3) year period for record keeping, the three (3) year period shall apply.

(c) Copies of all reports, compliance certifications, and other submissions and all records made or required under the NO_X budget trading program.

(d) Copies of all documents used to complete a NO_X budget permit application and any other submission under the NO_X budget trading program or to demonstrate compliance with the requirements of the NO_X budget trading program.

This period may be extended for cause, at any time prior to the end of five (5) years, in writing by IDEM, OAQ or the U.S. EPA. Records retained at a central location within Indiana shall be available immediately at the location and submitted to IDEM, OAQ or U.S. EPA within three (3) business days following receipt of a written request. Nothing in 326 IAC 10-4-4(e) shall alter the record retention requirements for a source under 40 CFR 75. Unless otherwise provided, all records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

E.1.7 Reporting Requirements [326 IAC 10-4-4(e)]

(a) The NO_X authorized account representative of the NO_X budget source and each NO_X budget unit at the source shall submit the reports and compliance certifications required under the NO_X budget trading program, including those under 326 IAC 10-4-8, 326 IAC 10-4-12, or 326 IAC 10-4-13.

(b) Pursuant to 326 IAC 10-4-4(e) and 326 IAC 10-4-6(e)(1), each submission shall include the following certification statement by the NO_X authorized account representative: "I am authorized to make this submission on behalf of the owners and operators of the NO_X budget sources or NO_X budget units for which the submission is made. I certify under penalty of law that I have personally examined, and am familiar with, the statements and information submitted in this document and all its attachments. Based on my inquiry of those individuals with primary responsibility for obtaining the information, I certify that the statements and information are to the best of my knowledge and belief true, accurate, and complete. I am aware that there are significant penalties for submitting false statements and information or omitting required statements and information, including the possibility of fine or imprisonment."

(c) Where 326 IAC 10-4 requires a submission to IDEM, OAQ, the NO_X authorized account representative shall submit required information to:

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

(d) Where 326 IAC 10-4 requires a submission to U.S. EPA, the NO_X authorized account representative shall submit required information to:

U.S. Environmental Protection Agency
Clean Air Markets Division
1200 Pennsylvania Avenue, NW
Mail Code 6204N
Washington, DC 20460

E.1.8 Liability [326 IAC 10-4-4(f)]

The owners and operators of each NO_X budget source shall be liable as follows:

(a) Any person who knowingly violates any requirement or prohibition of the NO_X budget trading program, a NO_X budget permit, or an exemption under 326 IAC 10-4-3 shall be subject to enforcement pursuant to applicable state or federal law.

(b) Any person who knowingly makes a false material statement in any record, submission, or report under the NO_X budget trading program shall be subject to criminal enforcement pursuant to the applicable state or federal law.

(c) No permit revision shall excuse any violation of the requirements of the NO_X budget trading program that occurs prior to the date that the revision takes effect.

(d) Each NO_X budget source and each NO_X budget unit shall meet the requirements of the NO_X budget trading program.

(e) Any provision of the NO_X budget trading program that applies to a NO_X budget source, including a provision applicable to the NO_X authorized account representative of a NO_X budget source, shall also apply to the owners and operators of the source and of the NO_X budget units at the source.

(f) Any provision of the NO_X budget trading program that applies to a NO_X budget unit, including a provision applicable to the NO_X authorized account representative of a NO_X budget unit, shall also apply to the owners and operators of the unit. Except with regard to the requirements applicable to units with a common stack under 40 CFR 75 and 326 IAC 10-4-12, the owners and operators and the NO_X authorized account representative of one (1) NO_X budget unit shall not be liable for any violation by any other NO_X budget unit of which they are not owners or operators or the NO_X authorized account representative and that is located at a source of which they are not owners or operators or the NO_X authorized account representative.

E.1.9 Effect on Other Authorities [326 IAC 10-4-4(g)]

No provision of the NO_X budget trading program, a NO_X budget permit application, a NO_X budget permit, or an exemption under 326 IAC 10-4-3 shall be construed as exempting or excluding the owners and operators and, to the extent applicable, the NO_X authorized account representative of a NO_X budget source or NO_X budget unit from compliance with any other provision of the applicable, approved state implementation plan, a federally enforceable permit, or the CAA.

SECTION E.2 Clean Air Interstate (CAIR) Nitrogen Oxides Ozone Season Trading Program – CAIR Permit for CAIR Units Under 326 IAC 24-3-1(a)

ORIS Code: 50733

CAIR Permit for CAIR Units Under 326 IAC 24-3-1(a)

(a) One (1) Boiler House No. 4, emissions group 720, comprised of the following:

(1) Two (2) Boilers, 720 No. 1 and No. 2, identified as O4B10459 and O4B20460, constructed in 1967, equipped to combust natural gas, blast furnace gas and fuel oil, with a heat input of 500 MMBtu per hour each, exhausting through Stacks O46268 and O46269, respectively.

(2) One (1) Boiler, 720 No. 3, identified as O4B30461, constructed in 1967, equipped to combust blast furnace gas and natural gas, with a heat input of 500 MMBtu per hour, exhausting through Stack O46270.

(b) One (1) Turbo Blower Boiler House (TBBH), emissions group 701, comprised of the following:

(1) Three (3) Boilers, 701 No. 1, No. 2, and No. 3, identified as OTB10462, OTB20463 and OTB30464, constructed in 1948, equipped to combust blast furnace gas, coke oven gas, fuel oil and natural gas, with a heat input of 410 MMBtu per hour each, exhausting through Stacks OT6271, OT6272 and OT6273, respectively.

(2) One (1) Boiler 701 No. 5, identified as OTB50466, constructed in 1958, equipped to combust blast furnace gas, coke oven gas, fuel oil and natural gas, with a heat input of 410 MMBtu per hour, exhausting through Stack OT6275.

(3) One (1) boiler 701 No. 6, identified as OTB60467, constructed prior to August 17, 1971, equipped to combust blast furnace gas and natural gas, with a heat input capacity of 710 MMBtu per hour, exhausting through Stack OT6276.

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

E.2.1 Automatic Incorporation of Definitions [326 IAC 24-3-7(e)][40 CFR 97.323(b)]

This CAIR permit is deemed to incorporate automatically the definitions of terms under 326 IAC 24-3-2.

E.2.2 Standard Permit Requirements [326 IAC 24-3-4(a)][40 CFR 97.306(a)]

(a) The owners and operators of the CAIR NO_X ozone season source and CAIR NO_X ozone season units shall operate each unit in compliance with this CAIR permit.

(b) The CAIR NO_X ozone season units subject to this CAIR permit are 701B1, 701B2, 701B3, 701B5, 701B6, 720B1, 720B2 and 720B3.

E.2.3 Monitoring, Reporting, and Record Keeping Requirements [326 IAC 24-3-4(b)][40 CFR 97.306(b)]

(a) The owners and operators, and the CAIR designated representative, of each CAIR NO_X ozone season source and CAIR NO_X ozone season unit at the source shall comply with the monitoring, reporting, and record keeping requirements of 326 IAC 24-3-11.

(b) The emissions measurements recorded and reported in accordance with 326 IAC 24-3-11 shall be used to determine compliance by each CAIR NO_X ozone season source with

the CAIR NO_X ozone season emissions limitation under 326 IAC 24-3-4(c) and Condition G.4. Nitrogen Oxides Ozone Season Emission Requirements.

E.2.4 Nitrogen Oxides Ozone Season Emission Requirements [326 IAC 24-3-4(c)][40 CFR 97.306(c)]

(a) As of the allowance transfer deadline, the owners and operators of the each CAIR NO_X ozone season source and each CAIR NO_X ozone season unit at the source shall hold, in the source's compliance account, CAIR NO_X ozone season allowances available for compliance deductions for the control period under 326 IAC 24-3-9(i) in an amount not less than the tons of total nitrogen oxides emissions for the control period from all CAIR NO_X ozone season units at the source, as determined in accordance with 326 IAC 24-3-11.

(b) A CAIR NO_X unit shall be subject to the requirements under (a) above and 326 IAC 24-3-4(c)(1) starting on the deadline for meeting the unit's monitor certifications requirements under 326 IAC 24-3-11(C)(1), 11(c)(2),11(c)(3), or 11(c)(7) and for each control period thereafter.

(c) A CAIR NO_X ozone season allowance shall not be deducted for compliance with the requirements under (a) above and 326 IAC 24-3-4(c)(1), for a control period in a calendar year before the year for which the CAIR NO_X ozone season allowance was allocated.

(d) CAIR NO_X ozone season allowances shall be held in, deducted from, or transferred into or among CAIR NO_X ozone season allowance tracking system accounts in accordance with 326 IAC 24-3-9, 326 IAC 24-3-10, and 326 IAC 24-3-12.

(e) A CAIR NO_X allowance is a limited authorization to emit one (1) ton of nitrogen oxides in accordance with the CAIR NO_X ozone season trading program. No provision of the CAIR NO_X ozone season trading program, the CAIR permit application, the CAIR permit, or an exemption under 326 IAC 24-3-3 and no provision of law shall be construed to limit the authority of the State of Indiana or the United States to terminate or limit the authorization.

(f) A CAIR NO_X allowance does not constitute a property right.

(g) Upon recordation by the U.S. EPA under 326 IAC 24-3-8, 326 IAC 24-3-9, 326 IAC 24-3-10, or 326 IAC 24-3-12, every allocation, transfer, or deduction of a CAIR NO_X ozone season allowance to or from a CAIR NO_X ozone season source's compliance account is incorporated automatically in this CAIR permit.

E.2.5 Excess Emissions Requirements [326 IAC 24-3-4(d)][40 CFR 97.306(d)]

(a) The owners and operators of a CAIR NO_X ozone season source and each CAIR NO_X ozone season unit that emits nitrogen oxides during any control period in excess of the CAIR NO_X ozone season emissions limitation shall do the following:

(1) Surrender the CAIR NO_X ozone season allowances required for deduction under 326 IAC 24-3-9(j)(4).

(2) Pay any fine, penalty, or assessment or comply with any other remedy imposed, for the same violations, the Clean Air Act (CAA) or applicable state law.

Each ton of such excess emissions and each day of such control period shall constitute a separate violation of 326 IAC 24-3-4, the Clean Air Act (CAA), and applicable state law.

E.2.6 Record Keeping Requirements [326 IAC 24-3-4(e)][326 IAC 2-7-5(3)][40 CFR 97.306(e)]

Unless otherwise provided, the owners and operators of the CAIR NO_X ozone season source and each CAIR NO_X ozone season unit at the source shall keep on site at the source or at a central location within Indiana for those owners or operators with unattended sources, each of the following documents for a period of five (5) years from the date the document was created:

(a) The certificate of representation under 326 IAC 24-3-6(h) for the CAIR designated representative for the source and each CAIR NO_X ozone season unit at the source and all documents that demonstrate the truth of the statements in the certificate of representation. The certificate and documents shall be retained on site at the source or at a central location within Indiana for those owners or operators with unattended sources beyond such five (5) year period until such documents are superseded because of the submission of a new account certificate of representation under 326 IAC 24-3-6(h) changing the CAIR designated representative.

(b) All emissions monitoring information, in accordance with 326 IAC 24-3-11, provided that to the extent that 326 IAC 24-3-11 provides for a three (3) year period for record keeping, the three (3) year period shall apply.

(c) Copies of all reports, compliance certifications, and other submissions and all records made or required under the CAIR NO_X ozone season trading program.

(d) Copies of all documents used to complete a CAIR permit application and any other submission under the CAIR NO_X ozone season trading program or to demonstrate compliance with the requirements of the CAIR NO_X ozone season trading program.

This period may be extended for cause, at any time before the end of five (5) years, in writing by IDEM, OAQ or the U.S. EPA. Unless otherwise provided, all records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

E.2.7 Reporting Requirements [326 IAC 24 3 4(e) [40 CFR 97.306(e)]

(a) The CAIR designated representative of the CAIR NO_X ozone season source and each CAIR NO_X ozone season unit at the source shall submit the reports required under the CAIR NO_X ozone season trading program, including those under 326 IAC 24-3-11.

(b) Pursuant 326 IAC 24-3-4(e) and 326 IAC 24-3-6(e)(1), each submission under the CAIR NO_X ozone season trading program shall include the following certification statement by the CAIR designated representative: “I am authorized to make this submission on behalf of the owners and operators of the source or units for which the submission is made. I certify under penalty of law that I have personally examined, and am familiar with, the statements and information submitted in this document and all its attachments. Based on my inquiry of those individuals with primary responsibility for obtaining the information, I certify that the statements and information are to the best of my knowledge and belief true, accurate, and complete. I am aware that there are significant penalties for submitting false statements and information or omitting required statements and information, including the possibility of fine or imprisonment."

(c) Where 326 IAC 24-3 requires a submission to IDEM, OAQ, the CAIR designated representative shall submit required information to:

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

(d) Where 326 IAC 24-3 requires a submission to U.S. EPA, the CAIR designated representative shall submit required information to:

U.S. Environmental Protection Agency
Clean Air Markets Division
1200 Pennsylvania Avenue, NW
Mail Code 6204N
Washington, DC 20460

E.2.8 Liability [326 IAC 24-3-4(f)][40 CFR 97.306(f)]

The owners and operators of each CAIR NO_X ozone season source and each CAIR NO_X ozone season unit shall be liable as follows:

(a) Each CAIR NO_X ozone season source and each CAIR NO_X ozone season unit shall meet the requirements of the CAIR NO_X ozone season trading program.

(b) Any provision of the CAIR NO_X ozone season trading program that applies to a CAIR NO_X ozone season source or the CAIR designated representative of a CAIR NO_X ozone season source shall also apply to the owners and operators of such source and of the CAIR NO_X ozone season units at the source.

(c) Any provision of the CAIR NO_X ozone season trading program that applies to a CAIR NO_X ozone season unit or the CAIR designated representative of a CAIR NO_X ozone season unit shall also apply to the owners and operators of such units.

E.2.9 Effect on Other Authorities [326 IAC 24-3-4(g)][40 CFR 97.306(g)]

No provision of the CAIR NO_X ozone season trading program, a CAIR permit application, a CAIR permit, or an exemption under 326 IAC 24-3-3 shall be construed as exempting or excluding the owners and operators, and the CAIR designated representative, of a CAIR NO_X ozone season source or CAIR NO_X ozone season unit from compliance with any other provision of the applicable, approved state implementation plan, a federally enforceable permit, or the Clean Air Act (CAA).

SECTION F.1 **NSPS**

Emissions Unit Description:

Sheet Products Division

(c) Electro-galvanizing Line (EGL)

(2) One (1) natural gas fired Boiler No. 1 in the EGL Boiler House, identified as HBB10675, constructed in 1978 and modified in 2001, with a heat input capacity of 39.147 MMBtu per hour, exhausting through stack HB6559.

Under 40 CFR 63, Subpart DDDDD, this is considered an existing industrial boiler.

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

New Source Performance Standards (NSPS) Requirements [326 IAC 2-7-5(1)]

F.1.1 General Provisions Relating to New Source Performance Standards [326 IAC 12-1][40 CFR Part 60, Subpart A]

(a) Pursuant to 40 CFR 60.1, the Permittee shall comply with the provisions of 40 CFR Part 60, Subpart A – General Provisions, which are incorporated by reference as 326 IAC 12-1, for the emission unit(s) listed above, except as otherwise specified in 40 CFR Part 60, Subpart Dc.

(b) Pursuant to 40 CFR 60.4, the Permittee shall submit all required notifications and reports to:

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

F.1.2 Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units NSPS [326 IAC 12][40 CFR Part 60, Subpart Dc]

The Permittee shall comply with the following provisions of 40 CFR Part 60, Subpart Dc (included as Attachment B to the operating permit), which are incorporated by reference as 326 IAC 12, for the emission unit(s) listed above:

(1) 40 CFR 60.40c (a), (b), and (c)
(2) 40 CFR 60.41c
(3) 40 CFR 60.48c (a)(1), (a)(2), (a)(3), (g)(1), (g)(2), (i), and (j)

SECTION F.2 **NSPS**

Emissions Unit Description:

Coke Screening

(a) One (1) coke screening operation, approved in 2015 for construction, identified as Area Three Screening Station (CPS002), consisting of the following equipment:

(3) One (1) mobile screening unit, approved in 2015 for construction, with a maximum rated capacity of 250 tons per hour, consisting of the following:

(F) One (1) diesel engine, identified as CPS002-E1, with a maximum rated output of 111 horsepower, model year 2014 or later. Under 40 CFR 60, Subpart IIII this is considered an affected engine. Under 40 CFR 63, Subpart ZZZZ this is considered an affected engine.

(5) One (1) Area Three oversize stacker conveyor for loading railcars, approved in 2015 for construction, with a maximum rated capacity of 400 tons per hour, driven by one (1) diesel engine, identified as CPS002-E2, with a maximum rated output of 38 horsepower, model year 2014 or later. Under 40 CFR 60, Subpart IIII this is considered an affected engine. Under 40 CFR 63, Subpart ZZZZ this is considered an affected engine.

(b) One (1) coke screening operation, approved in 2015 for construction, identified as N-Yard Screening Station (CPS003), consisting of the following equipment:

(1) One (1) mobile screening unit, approved in 2015 for construction, with a maximum rated capacity of 250 tons per hour, consisting of the following:

(F) One (1) diesel engine, identified as CPS003-E1, with a maximum rated output of 111 horsepower, model year 2014 or later. Under 40 CFR 60, Subpart IIII this is considered an affected engine. Under 40 CFR 63, Subpart ZZZZ this is considered an affected engine.

(2) One (1) N-Yard oversize stacker for loading railcars, approved in 2015 for construction, with a maximum rated capacity of 400 tons per hour, driven by one (1) diesel engine identified as CPS003-E2, with a maximum rated output of 38 horsepower, model year 2014 or later. Under 40 CFR 60, Subpart IIII this is considered an affected engine. Under 40 CFR 63, Subpart ZZZZ this is considered an affected engine.

(c) One (1) coke screening operation, approved in 2015 for construction, identified as Undersize Coke Screening Station (CPS004), consisting of the following equipment:

(1) One (1) mobile screening unit, approved in 2015 for construction, with a maximum rated capacity of 200 tons per hour, consisting of the following:

(G) One (1) diesel engine, identified as CPS004-E1, with a maximum rated output of 111 horsepower, model year 2014 or later. Under 40 CFR 60, Subpart IIII this is considered an affected engine. Under 40 CFR 63, Subpart ZZZZ this is considered an affected engine.

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

New Source Performance Standards (NSPS) Requirements [326 IAC 2-7-5(1)]

F.2.1 General Provisions Relating to New Source Performance Standards [326 IAC 12-1][40 CFR Part 60, Subpart A]

(a) Pursuant to 40 CFR 60.1, the Permittee shall comply with the provisions of 40 CFR Part 60, Subpart A – General Provisions, which are incorporated by reference as 326 IAC 12-1, for the emission unit(s) listed above, except as otherwise specified in 40 CFR Part 60, Subpart IIII.

(b) Pursuant to 40 CFR 60.4, the Permittee shall submit all required notifications and reports to:

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

F.2.2 Standards of Performance for Stationary Compression Ignition Internal Combustion Engines NSPS [326 IAC 12][40 CFR Part 60, Subpart IIII]

The Permittee shall comply with the following provisions of 40 CFR Part 60, Subpart IIII (included as Attachment C to the operating permit), which are incorporated by reference as 326 IAC 12, for the emission unit(s) listed above:

(1) 40 CFR 60.4200(a)(3)
(2) 40 CFR 60.4204(b)
(3) 40 CFR 60.4206
(4) 40 CFR 60.4207
(5) 40 CFR 60.4208(c)
(6) 40 CFR 60.4208(d)
(7) 40 CFR 60.4209(b)
(8) 40 CFR 60.4211(a)
(9) 40 CFR 60.4211(c)
(10) 40 CFR 60.4211(g)
(11) 40 CFR 60.4212
(12) 40 CFR 60.4213(c)
(13) 40 CFR 60.4218
(14) 40 CFR 60.4219
(15) Table 8 to Subpart IIII of Part 60

SECTION F.3 NSPS

Emissions Unit Description:

Turboblower Boiler House (TBBH)

(c) One (1) boiler, No. 6, identified as OTB60467, constructed after August 17, 1971, equipped to combust blast furnace gas and natural gas, with a maximum heat input capacity of 710 MMBtu per hour, exhausting through Stack OT6276.

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

New Source Performance Standards (NSPS) Requirements [326 IAC 2-7-5(1)]

F.3.1 General Provisions Relating to New Source Performance Standards [326 IAC 12-1][40 CFR Part 60, Subpart A]

(a) Pursuant to 40 CFR 60.1, the Permittee shall comply with the provisions of 40 CFR Part 60, Subpart A – General Provisions, which are incorporated by reference as 326 IAC 12-1, for the emission unit(s) listed above, except as otherwise specified in 40 CFR Part 60, Subpart D.

(b) Pursuant to 40 CFR 60.4, the Permittee shall submit all required notifications and reports to:

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

F.3.2 Standards of Performance for Fossil-Fuel-Fired Steam Generators NSPS [326 IAC 12][40 CFR Part 60, Subpart D]

The Permittee shall comply with the following provisions of 40 CFR Part 60, Subpart D (included as Attachment D to the operating permit), which are incorporated by reference as 326 IAC 12, for the emission unit(s) listed above:

(1) 40 CFR Part 60.40 (a), (b), c)
(2) 40 CFR Part 60.41
(3) 40 CFR Part 60.42(a)(1), (2)
(4) 40 CFR Part 60.44(a)(1)

SECTION F.4 **NSPS**

Emissions Unit Description:

Coal Pulverization and Air Preheater System (East PCI Coal Pulverization)

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

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

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

Under 40 CFR 60, Subpart Y these units are considered affected facilities.

Pulverized Coal Storage and Feed System (West PCI Coal Pulverization)

(a) One (1) Pulverized coal Transport, identified as Line A, constructed in 1993, with a maximum capacity of 210 tons per hour, ducted to a baghouse (A) exhausting to stack (SS-5).

(b) One (1) Pulverized coal Transport, identified as Line B, constructed in 1993, with a maximum capacity of 210 tons per hour, ducted to a baghouse (B) exhausting to stack (SS-6).

(c) One (1) Pulverized coal storage reservoir, constructed in 1993, with a maximum capacity of 600 tons, blanketed with nitrogen and ducted to a baghouse (vent filter house) exhausting to stack (SS-7).

Under 40 CFR 60, Subpart Y these units are considered affected facilities.

Coal Handling Operations

Coal Handling System

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

(b) One (1) Reclaim Hopper, identified as RCH-1, constructed in 1993, with a maximum capacity of 300 tons per hour, ducted to baghouse DC-6 and exhausting to stack DC-6.

(c) One (1) Car Dump Hopper 1/C1, identified as FS-8, constructed in 1993, with a maximum capacity of 200 tons per hour, ducted to baghouse DC-1 exhausting to stack F1.

(d) One (1) Car dump Hopper 2/C1, identified as FS-9, constructed in 1993, with a maximum capacity of 200 tons per hour, ducted to a baghouse DC-2 exhausting to stack F2.

(e) One (1) Car Dump Hopper 3/C1, identified as FS-10, constructed in 1993, with a maximum capacity of 200 tons per hour, ducted to a baghouse DC-3 exhausting to stack F3.

(f) One (1) Transfer Point C1/C2, identified as FS-2, constructed in 1993, with a maximum capacity of 600 tons per hour, ducted to a baghouse DC-4 exhausting to stack F4.

(g) One (1) Reclaim Hopper/C2, identified as FS-14, constructed in 1993, with a maximum capacity of 300 tons per hour, ducted to a baghouse DC-5 exhausting to stack F5.

(h) One (1) Screen Transfer/C2, identified as FS-3, constructed in 1993, with a maximum capacity of 600 tons per hour, ducted to a baghouse DC-7 exhausting to stack F7.

(i) One (1) Screen/C3 Gate Transfer identified as FS-11, constructed in 1993, ducted to a baghouse DC-8 exhausting to stack F.

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

(k) One (1) Transfer Point C4/C5, identified as FS-4, constructed in 1993, ducted to a baghouse DC-10 exhausting to stack F10.

Under 40 CFR 60, Subpart Y these units are considered affected facilities.

East Building – Coal handling

(a) One (1) Transfer Point C5/C6, identified as FS-5, constructed in 1993, with a maximum capacity of 600 tons per hour, ducted to a baghouse DC-11 exhausting to stack F11.

(b) One (1) Transfer Point C6/Bin 1, identified as FS-7, constructed in 1993, ducted to baghouse DC-12 exhausting to stack F12.

(c) One (1) Transfer Point C5/Bin 2, identified as FS-6, constructed in 1993, ducted to baghouse DC-13 exhausting to stack F13.

(d) One (1) Transfer Point C6/Bin 3, identified as FS-13, constructed in 1993, with a maximum capacity of 600 tons per hour, ducted to baghouse DC-14 exhausting to stack F14.

Under 40 CFR 60, Subpart Y these units are considered affected facilities.

Insignificant Activities:

(6) Conveyors as follows:

(A) Covered conveyor for coal or coke conveying of less than or equal to 360 tons per day; [326 IAC 6.8-10-3]

(B) Uncovered coal conveying of less than or equal to 120 tons per day. [326 IAC 6.8-10-3]

Under 40 CFR 60, Subpart Y these units are considered affected facilities.

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

New Source Performance Standards (NSPS) Requirements [326 IAC 2-7-5(1)]

F.4.1 General Provisions Relating to New Source Performance Standards [326 IAC 12-1][40 CFR Part 60, Subpart A]

(a) Pursuant to 40 CFR 60.1, the Permittee shall comply with the provisions of 40 CFR Part 60, Subpart A – General Provisions, which are incorporated by reference as 326 IAC 12-1, for the emission unit(s) listed above, except as otherwise specified in 40 CFR Part 60, Subpart Y.

(b) Pursuant to 40 CFR 60.4, the Permittee shall submit all required notifications and reports to:

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

F.4.2 Standards of Performance for Coal Preparation and Processing Plants NSPS [326 IAC 12][40 CFR Part 60, Subpart Y]

The Permittee shall comply with the following provisions of 40 CFR Part 60, Subpart Y (included as Attachment E to the operating permit), which are incorporated by reference as 326 IAC 12, for the emission unit(s) listed above:

(1) 40 CFR 60.250(a), (b)
(2) 40 CFR 60.251
(3) 40 CFR 60.252(a)
(4) 40 CFR 60.254(a)
(5) 40 CFR 60.255(a)
(6) 40 CFR 60.257

SECTION F.5 **NESHAP**

Emissions Unit Description:

Coke Screening

(a) One (1) coke screening operation, approved in 2015 for construction, identified as Area Three Screening Station (CPS002), consisting of the following equipment:

(3) One (1) mobile screening unit, approved in 2015 for construction, with a maximum rated capacity of 250 tons per hour, consisting of the following:

(F) One (1) diesel engine, identified as CPS002-E1, with a maximum rated output of 111 horsepower, model year 2014 or later. Under 40 CFR 60, Subpart IIII this is considered an affected engine. Under 40 CFR 63, Subpart ZZZZ this is considered an affected engine.

(5) One (1) Area Three oversize stacker conveyor for loading railcars, approved in 2015 for construction, with a maximum rated capacity of 400 tons per hour, driven by one (1) diesel engine, identified as CPS002-E2, with a maximum rated output of 38 horsepower, model year 2014 or later. Under 40 CFR 60, Subpart IIII this is considered an affected engine. Under 40 CFR 63, Subpart ZZZZ this is considered an affected engine.

(b) One (1) coke screening operation, approved in 2015 for construction, identified as N-Yard Screening Station (CPS003), consisting of the following equipment:

(1) One (1) mobile screening unit, approved in 2015 for construction, with a maximum rated capacity of 250 tons per hour, consisting of the following:

(F) One (1) diesel engine, identified as CPS003-E1, with a maximum rated output of 111 horsepower, model year 2014 or later. Under 40 CFR 60, Subpart IIII this is considered an affected engine. Under 40 CFR 63, Subpart ZZZZ this is considered an affected engine.

(2) One (1) N-Yard oversize stacker for loading railcars, approved in 2015 for construction, with a maximum rated capacity of 400 tons per hour, driven by one (1) diesel engine identified as CPS003-E2, with a maximum rated output of 38 horsepower, model year 2014 or later. Under 40 CFR 60, Subpart IIII this is considered an affected engine. Under 40 CFR 63, Subpart ZZZZ this is considered an affected engine.

(c) One (1) coke screening operation, approved in 2015 for construction, identified as Undersize Coke Screening Station (CPS004), consisting of the following equipment:

(1) One (1) mobile screening unit, approved in 2015 for construction, with a maximum rated capacity of 200 tons per hour, consisting of the following:

(G) One (1) diesel engine, identified as CPS004-E1, with a maximum rated output of 111 horsepower, model year 2014 or later. Under 40 CFR 60, Subpart IIII this is considered an affected engine. Under 40 CFR 63, Subpart ZZZZ this is considered an affected engine.

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

National Emission Standards for Hazardous Air Pollutants (NESHAP) Requirements [326 IAC 2-7-5(1)]

F.5.1 General Provisions Relating to National Emission Standards for Hazardous Air Pollutants under 40 CFR Part 63 [326 IAC 20-1][40 CFR Part 63, Subpart A]

(a) Pursuant to 40 CFR 63.1 the Permittee shall comply with the provisions of 40 CFR Part 63, Subpart A – General Provisions, which are incorporated by reference as 326 IAC 20-1, for the emission unit(s) listed above, except as otherwise specified in 40 CFR Part 63, Subpart ZZZZ.

(b) Pursuant to 40 CFR 63.10, the Permittee shall submit all required notifications and reports to:

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

F.5.2 National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines NESHAP [40 CFR Part 63, Subpart ZZZZ][326 IAC 20-82]

The Permittee shall comply with the following provisions of 40 CFR Part 63, Subpart ZZZZ (included as Attachment F to the operating permit), which are incorporated by reference as 326 IAC 20-82, for the emission unit(s) listed above:

(1) 40 CFR 63.6580
(2) 40 CFR 63.6585(a)
(3) 40 CFR 63.6585(b)
(4) 40 CFR 63.6590(a)(2)(ii)
(5) 40 CFR 63.6590(c)(7)
(6) 40 CFR 63.6665
(7) 40 CFR 63.6670
(8) 40 CFR 63.6675

SECTION F.6 **RESERVED**

SECTION F.7 **RESERVED**

SECTION F.8 **RESERVED**

SECTION F.9 **NESHAP**

Emissions Unit Description:

Number 3 Sinter Plant

(a) Three (3) Sinter Strands, constructed in 1958 , identified as ISS10379, ISS20380 and ISS30381, each with 50 MMBtu per hour reheat burners combusting natural gas and coke oven gas identified as ISB001, ISB002 and ISB003 and a maximum capacity of 225 tons of sinter per hour each, each with ignition hood burners with a combined heat input of 50 MMBtu/hr combusting natural gas and coke oven gas, controlled by two (2) Windbox Gas Cleaning Systems IS3203 and IS3204, installed in 1996, each comprised of a Quench Reactor, Dry Venturi Scrubber, a baghouse operated in series, exhausting to Windbox stacks IS6198 and IS6199 which are equipped with VOC CEMS.

(b) One (1) Cold Screen Station, identified as ISR00389, constructed in 1958, with a maximum capacity of 450 tons per hour, using a Baghouse IS3209 as a control device and exhausting to stack IS6207.

(c) One (1) S1/S2 Conveyer System, identified as ISY00388, constructed in 1979, with a maximum capacity of 450 tons per hour, that transfers sinter from the sinter coolers to the cold screening station, using a baghouse IS3208 as a control device and exhausting to stack IS6206.

(d) Three (3) Sinter Coolers, identified as ISC10385, ISC20386, and ISC30387, constructed in 1958, with a maximum capacity of 225 ton per hour each, with emissions exhausting to stacks IS6203, IS6204, and IS6205 respectively.

(e) Three (3) Sinter Strand Discharge End Areas, identified as ISS10379, ISS20380 and ISS0381, constructed in 1958, using three (3) baghouses as control devices, designated as IS3205, IS3206, and IS3207, exhausting to stacks IS6200, IS6201, and IS6202 respectively.

Blast Furnaces

(d) No. 4 Blast Furnace, constructed in 1917, with a maximum capacity of 200 tons per hour, identified as IABF0308, using a Blast Furnace Gas Distribution System to collect the blast furnace gas and using natural gas injection and pulverized coal at a rate of 26 tons per hour, oil (from on-site contractor when it meets specifications) at a rate of 70 gallons per minute and/or coal tar (when the on-site contractor tar centrifuge is not operating) at a rate of 70 gallons per minute.

(1) Three (3) No. 4 Blast Furnace Stoves identified as IAST0360, replaced in 1947, with a maximum heat input capacity of 350 MMBtu per hour total combusting blast furnace gas (BFG) and natural gas, exhausting to the combustion stack IA6160.

(2) No. 4 Blast Furnace Casthouse, identified as IABF0308, constructed in 1917, with emissions from tapping and runners controlled by a natural gas iron oxide fume suppression system IA3177, exhausting to casthouse roof monitor IA6010.

(e) No. 6 Blast Furnace, constructed in 1910, with a maximum capacity of 200 tons per hour, identified as IABFO341, using a Blast Furnace Gas Distribution System to collect the blast furnace gas and using natural gas injection and pulverized coal injected at a

rate of 26 tons per hour, oil at a rate of 70 gallons per minute and /or coal tar at a rate of 70 gallons per minute.

(1) Four (4) No. 6 Blast Furnace Stoves identified as IBST0361, replaced in 1997, with a maximum heat input capacity of 350 MMBtu per hour total, combusting Blast Furnace Gas (BFG) and natural gas exhausting to the combustion stack IB6168.

(2) No. 6 Blast Furnace Casthouse, identified as IBBF0341, constructed in 1910, with emissions from tapping and runners controlled by a natural gas iron oxide fume suppression system IB3178, exhausting to casthouse roof monitor IB6011.

(f) No. 8 Blast Furnace, constructed in 1909, with a maximum capacity of 183 tons per hour, identified as ICBFO354, using a Blast Furnace Gas Distribution System to collect the blast furnace gas and using natural gas injection and pulverized coal injected at a rate of 26 ton per hour, oil at a rate of 70 gallons per minute and/or coal tar at a rate of 70 gallons per minute.

(1) Four (4) No. 8 Blast Furnace Stoves, identified as ICST0362, replaced in 1999, with a maximum heat input capacity of 325 MMBtu per hour total, combusting Blast Furnace Gas and natural gas, exhausting to the combustion stack IC6175.

(2) No. 8 Blast Furnace Casthouse, identified as ICBF0354, constructed in 1909, with emissions from tapping and runners controlled by a natural gas iron oxide fume suppression system IC3179, exhausting to cast house roof monitor IC6012.

(g) No. 14 Blast Furnace, constructed in 1974, with a maximum capacity of 450 tons per hour, identified as IDBF0369, using a Blast Furnace Gas Distribution System to collect the blast furnace gas and using natural gas injection and pulverized coal injected at a rate of 80 tons per hour, oil at a rate of 150 gallons per minute and/or coal tar at a rate of 150 gallons per minute.

(1) Three (3) No. 14 Blast Furnace Stoves identified as IDST0359, constructed in 1974, with a maximum heat input capacity of 700 MMBtu per hour total, combusting blast furnace gas and natural gas, exhausting to the combustion stack ID6184;

(2) No. 14 Blast Furnace Casthouse, identified as IDBF0369, constructed in 1974 with emissions controlled by a baghouse, identified as ID3185, exhausting to stack ID6187 and fugitive emissions exhausting through the casthouse roof monitor ID6013;

(h) One (1) No. 14 Blast Furnace Slag Granulation Plant owned by U.S. Steel - Gary Works and operated by U.S. Steel - Gary Works as part of the slag processing operation. The granulation plant has a maximum capacity of 1,704,000 tons of steel mill slag per year, consisting of the following:

Number One Basic Oxygen Process (BOP) Shop

(a) Two (2) Stations, identified as No. 1 and No. 2, Hot Metal Transfer and Desulfurization Stations. The Desulfurization Stations were originally constructed in 1981 and the Hot Metal Transfer Stations were originally constructed in 1965, and replaced in 1998. Each station consists of Hot Metal Desulfurization, SSDS0201, Hot Metal Transfer

SSMT0203 and Slag Skimming SSSS0205. Hot metal from the blast furnaces is desulfurized and skimmed prior to charging in the steel making vessels. The maximum capacity of each station is 456 tons per hour. Each station is equipped with a local exhaust ventilation hood to capture emissions ducted to the Hot Metal Desulfurization/Skimming Stations Baghouse SS3100. The desulfurization units are equipped with nitrogen suppression around where the desulfurization lance penetrates the hood hole.

(c) Basic Oxygen Process (BOP) Vessels, constructed in 1965, consisting of BOP vessel M, identified as SSVM0234, vessel E, identified as SSVE0235 and vessel D, identified as SSVD0236, with a maximum capacity of 250 tons per hour each. Emissions are controlled by open combustion hoods and an exhaust emission hood collection system, which exhausts emissions to the Gas Cleaning Systems SS3103 and SS3104.

(j) One emergency slag skimming station with a maximum capacity of 456 tons per hour with emissions ducted to the Hot Metal Transfer Station and Desulfurization/Skimming Stations Baghouse SS3100.

Number Two Q-BOP Shop

(a) Two (2) Hot Metal Transfer and Desulfurization Stations, identified as NSDS0246, constructed in 1987, with a maximum capacity of 510 tons per hour. These stations included: two (2) Hot Metal Mixers, identified as NSMM0264 and two (2) Hot Metal Mixer Heaters, identified as NSMH0251, constructed in 1973, with a maximum capacity of 255 tons per hour. The natural gas fired mixer heaters have a heat input capacity of 10 MMBtu/hr each. Emissions from the hot metal transfer and desulfurization stations, mixers and heaters are controlled by the Hot Metal Transfer and Desulfurization Stations Baghouse NS3115, discharging through NS6144 and the uncontrolled emissions go through roof monitor NS6631.

(b) Q-Basic Oxygen Process (BOP) vessels, constructed in 1973, consisting of BOP vessel T identified as NSVT0268, vessel W, identified as NSVW0269, and vessel Y, identified as NSVY0270, with a maximum capacity of 250 tons per hour each. Primary emissions are controlled by open combustion hood and two (2) Gas Cleaning Systems, secondary emissions are controlled by the Secondary Emissions Baghouse NS3124, exhausting to stack NS6123, and uncontrolled emissions exhaust through Roof Monitor NS6632.

(e) Three (3) Ladle Metallurgical Facilities, LMF1 identified as NSL10293, LMF 2 identified as NSL20294 were constructed in 1986 and LMF 3 identified as NSL30295, constructed in 1991 with a maximum capacity of 348 tons per hour each. Hot fume emissions from LMF 1 and 2 are controlled by Nos. 1 and 2 LMF Hot Fume Exhaust baghouses NS3135 and NS3136, exhausting through stacks NS6146 and NS6147. Material handling emissions at LMF 1 and 2 are controlled by the LMF Nos. 1 and 2 Material Handling baghouse NS3052, exhausting through stack NS6055. The LMF 3 Hot Fume Exhaust and Material Handling emissions are controlled by the LMF 3 Hot Fume and Material Handling Baghouse NS3137, exhausting to stack NS6148. All uncontrolled emissions exhaust through the roof monitor NS6634.

(f) One (1) Capped Argon Bubbling (CAB) Station with oxygen blowing, approved in 2014 for construction, identified as NSC40296, with a maximum capacity of 477,000 tons per year, using the No. 3 LMF Hot Fume and Material Handling Baghouse NS3137 as control, and exhausting to stack NS6148. All uncontrolled emissions exhaust through the roof monitor NS6634.

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

National Emission Standards for Hazardous Air Pollutants (NESHAP) Requirements [326 IAC 2-7-5(1)]

F.9.1 General Provisions Relating to National Emission Standards for Hazardous Air Pollutants under 40 CFR Part 63 [326 IAC 20-1][40 CFR Part 63, Subpart A]

(a) Pursuant to 40 CFR 63.1 the Permittee shall comply with the provisions of 40 CFR Part 63, Subpart A – General Provisions, which are incorporated by reference as 326 IAC 20-1, for the emission unit(s) listed above, except as otherwise specified in 40 CFR Part 63, Subpart FFFFF.

(b) Pursuant to 40 CFR 63.10, the Permittee shall submit all required notifications and reports to:

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

F.9.2 National Emission Standards for Hazardous Air Pollutants for Integrated Iron and Steel Manufacturing Facilities NESHAP [40 CFR Part 63, Subpart FFFFF][326 IAC 20-93]

The Permittee shall comply with the following provisions of 40 CFR Part 63, Subpart FFFFF (included as Attachment J to the operating permit), which are incorporated by reference as 326 IAC 20-93, for the emission unit(s) listed above:

(1) 40 CFR 63.7780
(2) 40 CFR 63.7781
(3) 40 CFR 63.7782(a), (b), (c), (d)
(4) 40 CFR 63.7783(a), (e)
(5) 40 CFR 63.7790
(6) 40 CFR 63.7800
(7) 40 CFR 63.7810
(8) 40 CFR 63.7820
(9) 40 CFR 63.7821
(10) 40 CFR 63.7822
(11) 40 CFR 63.7823
(12) 40 CFR 63.7824
(13) 40 CFR 63.7825
(14) 40 CFR 63.7826
(15) 40 CFR 63.7830
(16) 40 CFR 63.7831
(17) 40 CFR 63.7832
(18) 40 CFR 63.7833
(19) 40 CFR 63.7834
(20) 40 CFR 63.7835
(21) 40 CFR 63.7840
(22) 40 CFR 63.7841
(23) 40 CFR 63.7842
(24) 40 CFR 63.7843
(25) 40 CFR 63.7850
(26) 40 CFR 63.7851
(27) 40 CFR 63.7852
(28) Table 1 to Subpart FFFFF of Part 63—Emission and Opacity Limits (applicable sections)
(29) Table 3 to Subpart FFFFF of Part 63—Continuous Compliance with Emission and Opacity Limits (applicable sections)

(30) Table 4 to Subpart FFFFF of Part 63—Applicability of General Provisions to Subpart FFFFF (applicable sections)

SECTION F.10 **NESHAP**

Emissions Unit Description:

Continuous Pickling Lines

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

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

Sheet Products Division

(c) Electro-galvanizing Line (EGL)

(1) One (1) Electro-galvanizing Line (EGL), with one HCl pickle tank, No. 1 Pickle tank, identified as HET20685, a cleaner section, a plating section and associated scrubber, with a maximum capacity of 60.5 tons per hour. Fumes from the Pickle Section are controlled by a fume scrubber HE3583 exhausting through stack HE6563. The single sided process for this coating line was constructed in 1977 and was modified in 1993 to a double sided process for coating.

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

National Emission Standards for Hazardous Air Pollutants (NESHAP) Requirements [326 IAC 2-7-5(1)]

F.10.1 General Provisions Relating to National Emission Standards for Hazardous Air Pollutants under 40 CFR Part 63 [326 IAC 20-1][40 CFR Part 63, Subpart A]

(a) Pursuant to 40 CFR 63.1 the Permittee shall comply with the provisions of 40 CFR Part 63, Subpart A – General Provisions, which are incorporated by reference as 326 IAC 20-1, for the emission unit(s) listed above, except as otherwise specified in 40 CFR Part 63, Subpart CCC.

(b) Pursuant to 40 CFR 63.10, the Permittee shall submit all required notifications and reports to:

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

F.10.2 National Emission Standards for Hazardous Air Pollutants for Steel Pickling—HCl Process Facilities and Hydrochloric Acid Regeneration Plants NESHAP [40 CFR Part 63, Subpart CCC][326 IAC 20-29]

The Permittee shall comply with the following provisions of 40 CFR Part 63, Subpart CCC (included as Attachment K to the operating permit), which are incorporated by reference as 326

IAC 20-29, for the emission unit(s) listed above:

(1) 40 CFR 63.1155
(2) 40 CFR 63.1156
(3) 40 CFR 63.1157
(4) 40 CFR 63.1158
(5) 40 CFR 63.1159
(6) 40 CFR 63.1160(a)(1), (b)
(7) 40 CFR 63.1161
(8) 40 CFR 63.1162(a), (c)
(9) 40 CFR 63.1163(a)(2), (d), (e)
(10) 40 CFR 63.1164
(11) 40 CFR 63.1165
(12) 40 CFR 63.1166
(13) Table 1 to Subpart CCC of Part 63—Applicability of General Provisions (40 CFR Part 63, Subpart A) to Subpart CCC

SECTION F.11 **RESERVED**

SECTION F.12 **RESERVED**

SECTION F.13 **RESERVED**

SECTION F.14 **NESHAP**

Emissions Unit Description:

Sheet Products Division

(1) North Sheet Mill

(A) Twenty-six (26) 4-Stack A Box Annealing Furnaces and 50 bases, identified as HTAF0813 through HTAF0838, constructed in 1964, with a heat input capacity of 12 MMBtu per hour each. These furnaces are direct fired with emissions exhausting through vent pipes HT6530 through HT6555.

Under 40 CFR 63, Subpart DDDDD, this is considered an existing process heater.

(2) South Sheet Mill

(A) Seventeen (17) 8-Stack A Box Annealing furnaces and 66 bases, identified as HXBA0560 through HXBA0576, constructed in 1948. Eleven (11) furnaces have a heat input capacity of 15 MMBtu per hour each and the remaining six (6) are rated at 18 MMBtu per hour each. Emissions from these furnaces exhaust through the Roof Monitor HX6003.

Under 40 CFR 63, Subpart DDDDD, this is considered an existing process heater.

(B) One (1) No. 6 East Galvanizing Line, constructed in 1962, with a maximum capacity of 48 tons an hour, with one (1) annealing furnace identified as H6F10527 with a heat input of 45 MMBtu per hour and emissions through stack H66516. Also, contains one (1) Galvanneal Furnace identified as HF20529 with a heat input capacity of 20.0 MMBtu per hour and emissions exhausting through Roof Monitor H66006.

Under 40 CFR 63, Subpart DDDDD, this is considered an existing process heater.

(C) Two (2) hydrogen atmosphere batch annealing furnaces, with a total heat input capacity of 10.26 MMBtu per hour, constructed in 1997, consisting of three (3) fixed bases and two (2) movable cooling hoods.

Under 40 CFR 63, Subpart DDDDD, this is considered an existing process heater.

(3) Electro-galvanizing Line (EGL)

(A) One (1) natural gas fired Boiler No. 1 in the EGL Boiler House, identified as HBB10675, constructed in 1978 and modified in 2001, with a heat input capacity of 39.147 MMBtu per hour, exhausting through stack HB6559.

Under 40 CFR 63, Subpart DDDDD, this is considered an existing industrial boiler.

Tin Division

(1) Two (2) Annealing Lines, No. 1 and No. 2, each containing an annealing furnace, identified as T1AF0794 and T2AF0799, No. 1 constructed in 1950 and No. 2

constructed in 1959, with a maximum heat input capacities of 32 and 35 MMBtu per hour, respectively. Emissions exhaust to stacks T16609 and T26610. The No. 2 Continuous Anneal Line has a cleaning section with fumes collected in a fume scrubber exhausting through a stack

Under 40 CFR 63, Subpart DDDDD, this is considered an existing process heater.

(2) Five (5) 4-Stack A Box Annealing Furnaces and 12 bases, identified as TXAF0765 through TXAF0769, constructed in 1968. All furnaces have a heat input of 10.5 MMBtu per hour each. Emissions exhaust to stacks TX6580 through TX6584.

Under 40 CFR 63, Subpart DDDDD, this is considered an existing process heater.

Insignificant activities:

(f) Two natural gas-fired boilers, identified as ETF-1 and ETF-2, permitted in 2016, each with a maximum capacity of 6.27 MMBtu/hr, equipped with low NOx burners and flue gas recirculation, and exhausting to stack ETF-1a and ETF-2a, respectively.

Under 40 CFR 63, Subpart DDDDD, these units are considered new industrial boilers.

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

National Emission Standards for Hazardous Air Pollutants (NESHAP) Requirements [326 IAC 2-7-5(1)]

F.14.1 General Provisions Relating to National Emission Standards for Hazardous Air Pollutants under 40 CFR Part 63 [326 IAC 20-1][40 CFR Part 63, Subpart A]

(a) Pursuant to 40 CFR 63.1 the Permittee shall comply with the provisions of 40 CFR Part 63, Subpart A – General Provisions, which are incorporated by reference as 326 IAC 20-1, for the emission unit(s) listed above, except as otherwise specified in 40 CFR Part 63, Subpart DDDDD.

(b) Pursuant to 40 CFR 63.10, the Permittee shall submit all required notifications and reports to:

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

F.14.2 National Emission Standards for Hazardous Air Pollutants for Major Sources: Industrial, Commercial, and Institutional Boilers and Process Heaters NESHAP [40 CFR Part 63, Subpart DDDDD][326 IAC 20-95]

The Permittee shall comply with the following provisions of 40 CFR Part 63, Subpart DDDDD (included as Attachment O to the operating permit), which are incorporated by reference as 326 IAC 20-95:

(a) Exisiting industrial boilers and process heaters:
(1) 40 CFR 63.7480
(2) 40 CFR 63.7485
(3) 40 CFR 63.7490(a)(1), (d)
(4) 40 CFR 63.7495(b), (d)

(5) 40 CFR 63.7499(l), (n)
(6) 40 CFR 63.7500(a)(1), (a)(3), (b), (f)
(7) 40 CFR 63.7505(a)
(8) 40 CFR 63.7510(e)
(9) 40 CFR 63.7515(d)
(10) 40 CFR 63.7530(e)
(11) 40 CFR 63.7540(a)(10), (a)(13)
(12) 40 CFR 63.7545(a), (b), (e), (f)
(13) 40 CFR 63.7550(a), (b), (c)(1), (c)(5), (h)(3)
(14) 40 CFR 63.7555(a)(1), (a)(2)
(15) 40 CFR 63.7560
(16) 40 CFR 63.7565
(17) 40 CFR 63.7570
(18) 40 CFR 63.7575
(19) Table 3 to 40 CFR 63, Subpart DDDDD
(20) Table 9 to 40 CFR 63, Subpart DDDDD
(21) Table 10 to 40 CFR 63, Subpart DDDDD

(b) New industrial boilers:
(1) 40 CFR 63.7480
(2) 40 CFR 63.7485
(3) 40 CFR 63.7490(a)(2), (b)
(4) 40 CFR 63.7495(a), (d)
(5) 40 CFR 63.7499(l)
(6) 40 CFR 63.7500(a)(1), (a)(3), (b), (e)
(7) 40 CFR 63.7505(a)
(8) 40 CFR 63.7510(g)
(9) 40 CFR 63.7515(d)
(10) 40 CFR 63.7540(a)(11), (13)
(11) 40 CFR 63.7545(a), (c), (e)
(12) 40 CFR 63.7550(a), (b), (c)(1), (c)(5), (h)(3)
(13) 40 CFR 63.7555(a)(1), (2)
(14) 40 CFR 63.7560
(15) 40 CFR 63.7565
(16) 40 CFR 63.7570
(17) 40 CFR 63.7575
(18) Table 3 to 40 CFR 63, Subpart DDDDD
(19) Table 9 to 40 CFR 63, Subpart DDDDD
(20) Table 10 to 40 CFR 63, Subpart DDDDD

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE AND ENFORCEMENT BRANCH
PART 70 OPERATING PERMIT
CERTIFICATION

Source Name: U.S. Steel - Gary Works
Source Address: One North Broadway, Gary, Indiana 46402
Part 70 Permit No.: T089-29907-00121

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 AND ENFORCEMENT BRANCH
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251
Phone: (317) 233-0178
Fax: (317) 233-6865

PART 70 OPERATING PERMIT
EMERGENCY OCCURRENCE REPORT

Source Name: U.S. Steel - Gary Works
Source Address: One North Broadway, Gary, Indiana 46402
Part 70 Permit No.: T089-29907-00121

This form consists of 2 pages **Page 1 of 2**

□ This is an emergency as defined in 326 IAC 2-7-1(12)

- The Permittee must notify the Office of Air Quality (OAQ), within four (**4**) daytime business hours (1-800-451-6027 or 317-233-0178, ask for Compliance Section); and
- The Permittee must submit notice in writing or by facsimile within two (**2**) working days (Facsimile Number: 317-233-6865), and follow the other requirements of 326 IAC 2-7-16.

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: _____

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE AND ENFORCEMENT BRANCH
PART 70 OPERATING PERMIT
QUARTERLY DEVIATION AND COMPLIANCE MONITORING REPORT

Source Name: U.S. Steel - Gary Works
Source Address: One North Broadway, Gary, Indiana 46402
Part 70 Permit No.: T089-29907-00121

Months: _____ **to** _____ **Year:** _____

This report shall be submitted quarterly based on a calendar year. Proper notice submittal under Section B –Emergency Provisions satisfies the reporting requirements of paragraph (a) of Section C-General Reporting. Any deviation from the requirements of this permit, 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: _____

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE AND ENFORCEMENT BRANCH

Part 70 Quarterly Report

Source Name: U.S. Steel - Gary Works
Source Address: One North Broadway, Gary, Indiana 46402
Part 70 Permit No.: T089-29907-00121
Facility: No. 3 Sinter Plant Sinter Strand Windbox recirculating burners (ISB001, ISB002, and ISB003)
Parameter: Natural gas usage
Limit: 95.5 million cubic feet (MMCF) per 12-consecutive month period with compliance demonstrated at the end of each month.

QUARTER: _____ YEAR: _____

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

☐ 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 AND ENFORCEMENT BRANCH

Part 70 Quarterly Report

Source Name: U.S. Steel - Gary Works
Source Address: One North Broadway, Gary, Indiana 46402
Part 70 Permit No.: T089-29907-00121
Facility: No. 3 Sinter Plant Sinter Strand Windbox recirculating burners (ISB001, ISB002, and ISB003)
Parameter: Coke oven gas usage
Limit: 1,637.4 million cubic feet (MMCF) per 12-consecutive month period with compliance demonstrated at the end of each month

QUARTER: _____ YEAR: _____

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

☐ 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 AND ENFORCEMENT BRANCH

Part 70 Quarterly Report

Source Name: U.S. Steel - Gary Works
Source Address: One North Broadway, Gary, Indiana 46402
Part 70 Permit No.: T089-29907-00121
Facility: South Sheet Mill hydrogen atmosphere batch annealing furnaces
Parameter: NOx
Limit: 37.2 million cubic feet (MMCF) of natural gas per 12 consecutive month period with compliance demonstrated at the end of each month

QUARTER: _____ YEAR: _____

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

☐ 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 AND ENFORCEMENT BRANCH

Part 70 Quarterly Report

Source Name: U.S. Steel - Gary Works
Source Address: One North Broadway, Gary, Indiana 46402
Part 70 Permit No.: T089-29907-00121
Facility: Turboblower Boiler House (TBBH) boiler no. 6
Parameter: Natural Gas Usage
Limits: 1,059.7 million cubic feet (MMCF) per 12-consecutive month period with compliance demonstrated at the end of each month.

QUARTER: _____ YEAR: _____

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

☐ 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 AND ENFORCEMENT BRANCH

Part 70 Quarterly Report

Source Name: U.S. Steel - Gary Works
Source Address: One North Broadway, Gary, Indiana 46402
Part 70 Permit No.: T089-29907-00121
Facility: Granulation plant
Parameter: granule process rate
Limit:: 1,704,000 tons per 12 consecutive month period with compliance demonstrated at the end of each month

QUARTER: _____ YEAR: _____

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

☐ 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 AND ENFORCEMENT BRANCH

Part 70 Quarterly Report

Source Name: U.S. Steel - Gary Works
Source Address: One North Broadway, Gary, Indiana 46402
Part 70 Permit No.: T089-29907-00121
Facility: Coal Pulverization and Air Preheater System (East PCI Coal Pulverization) Air Preheaters 1, 2 and 3 combined (former Gary Coal Processing, LP)
Parameter: Natural gas usage
Limit: Natural gas usage of 549 MMCF per 12 consecutive month period with compliance demonstrated at the end of each month and less than 183 MMcf per month.

QUARTER: _____ YEAR: _____

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

☐ 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 AND ENFORCEMENT BRANCH

Part 70 Quarterly Report

Source Name: U.S. Steel - Gary Works
Source Address: One North Broadway, Gary, Indiana 46402
Part 70 Permit No.: T089-29907-00121
Facility: Railcar Heater - Thaw shed (PCI Coal Handling Thaw Shed) (former Gary Coal Processing, LP)
Parameter: Natural gas usage
Limit: Natural gas usage of 12.504 MMCF per 12 consecutive month period with compliance demonstrated at the end of each month and less than 5 MMCF per month.

QUARTER: _____ YEAR: _____

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

☐ 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 AND ENFORCEMENT BRANCH

Part 70 Quarterly Report

Source Name: U.S. Steel - Gary Works
Source Address: One North Broadway, Gary, Indiana 46402
Part 70 Permit No.: T089-29907-00121
Facility: Coke Receiving and Handling
Parameter: Coke Unloaded
Limit: The amount of coke unloaded at the rail car unloading station, identified as CPS0001, shall not exceed 1,000,000 tons per twelve (12) consecutive month period, with compliance determined at the end of each month:

QUARTER: _____ YEAR: _____

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

☐ 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 AND ENFORCEMENT BRANCH
Part 70 Usage Report

(Submit Report Quarterly)

Source Name: U.S. Steel - Gary Works
Source Address: One North Broadway, Gary, Indiana 46402
Part 70 Permit No.: T089-29907-00121
Facility: South Plant - Daily Emissions calculations excluding the PM, PM10 and PM2.5 emissions from the fines stockpiles and paved and unpaved roads.
Parameter: PM, PM10 and PM2.5
Limit: Total of less than 18.7 tons of PM per twelve consecutive month period, to a total of less than 12.9 tons of PM10 per twelve consecutive month period and to a total of less than 9.7 tons of PM2.5 per twelve consecutive month period, with compliance at the end of each month.

Month: _____ **Year:** _____

Day	PM Emissions (tons/day)	PM10 Emissions (tons/day)	PM2.5 Emissions (tons/day)	Day	PM Emissions (tons/day)	PM10 Emissions (tons/day)	PM2.5 Emissions (tons/day)
1				17			
2				18			
3				19			
4				20			
5				21			
6				22			
7				23			
8				24			
9				25			
10				26			
11				27			
12				28			
13				29			
14				30			
15				31			
16				Total This Month			
				Previous 11 Months			
				12 Month Total			

☐ No deviation occurred in this month.

☐ Deviation/s occurred in this month.
Deviation has been reported on:

Submitted by: _____
Title / Position: _____
Signature: _____
Date: _____
Phone: _____

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE AND ENFORCEMENT BRANCH

Part 70 Quarterly Report

Source Name: U.S. Steel - Gary Works
Source Address: One North Broadway, Gary, Indiana 46402
Part 70 Permit No.: T089-29907-00121
Facility: Coke Screening Operations CPS002, CPS003, and CPS004
Parameter: PM Emissions
Limit: The total PM emissions from the three (3) coke screening operations, identified as CPS002, CPS003, and CPS004, shall not exceed 24.90 tons per twelve (12) consecutive month period

QUARTER: _____ YEAR: _____

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

☐ 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 AND ENFORCEMENT BRANCH

Part 70 Quarterly Report

Source Name: U.S. Steel - Gary Works
Source Address: One North Broadway, Gary, Indiana 46402
Part 70 Permit No.: T089-29907-00121
Facility: Coke Screening Operations CPS002, CPS003, and CPS004
Parameter: PM10 Emissions
Limit: The total PM10 emissions from the three (3) coke screening operations, identified as CPS002, CPS003, and CPS004, shall not exceed 14.90 tons per twelve (12) consecutive month period

QUARTER: _____ YEAR: _____

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

☐ 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 AND ENFORCEMENT BRANCH

Part 70 Quarterly Report

Source Name: U.S. Steel - Gary Works
Source Address: One North Broadway, Gary, Indiana 46402
Part 70 Permit No.: T089-29907-00121
Facility: Coke Screening Operations CPS002, CPS003, and CPS004
Parameter: PM2.5 Emissions
Limit: The total PM2.5 emissions from the three (3) coke screening operations, identified as CPS002, CPS003, and CPS004, shall not exceed 9.90 tons per twelve (12) consecutive month period

QUARTER: _____ YEAR: _____

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

☐ No deviation occurred in this quarter.

☐ Deviation/s occurred in this quarter.
Deviation has been reported on:

Submitted by: _____
Title / Position: _____
Signature: _____
Date: _____
Phone: _____

Attachment E

Part 70 Operating Permit No: 089-29907-00121

[Downloaded from the eCFR on May 13, 2013]

Electronic Code of Federal Regulations

Title 40: Protection of Environment

PART 60—STANDARDS OF PERFORMANCE FOR NEW STATIONARY SOURCES

Subpart Y—Standards of Performance for Coal Preparation and Processing Plants

Source: 74 FR 51977, Oct. 8, 2009, unless otherwise noted.

§ 60.250 Applicability and designation of affected facility.

(a) The provisions of this subpart apply to affected facilities in coal preparation and processing plants that process more than 181 megagrams (Mg) (200 tons) of coal per day.

(b) The provisions in § 60.251, § 60.252(a), § 60.253(a), § 60.254(a), § 60.255(a), and § 60.256(a) of this subpart are applicable to any of the following affected facilities that commenced construction, reconstruction or modification after October 27, 1974, and on or before April 28, 2008: Thermal dryers, pneumatic coal-cleaning equipment (air tables), coal processing and conveying equipment (including breakers and crushers), and coal storage systems, transfer and loading systems.

(c) The provisions in § 60.251, § 60.252(b)(1) and (c), § 60.253(b), § 60.254(b), § 60.255(b) through (h), § 60.256(b) and (c), § 60.257, and § 60.258 of this subpart are applicable to any of the following affected facilities that commenced construction, reconstruction or modification after April 28, 2008, and on or before May 27, 2009: Thermal dryers, pneumatic coal-cleaning equipment (air tables), coal processing and conveying equipment (including breakers and crushers), and coal storage systems, transfer and loading systems.

(d) The provisions in § 60.251, § 60.252(b)(1) through (3), and (c), § 60.253(b), § 60.254(b) and (c), § 60.255(b) through (h), § 60.256(b) and (c), § 60.257, and § 60.258 of this subpart are applicable to any of the following affected facilities that commenced construction, reconstruction or modification after May 27, 2009: Thermal dryers, pneumatic coal-cleaning equipment (air tables), coal processing and conveying equipment (including breakers and crushers), coal storage systems, transfer and loading systems, and open storage piles.

§ 60.251 Definitions.

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

(a) *Anthracite* means coal that is classified as anthracite according to the American Society of Testing and Materials in ASTM D388 (incorporated by reference, *see* § 60.17).

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

(c) *Bituminous coal* means solid fossil fuel classified as bituminous coal by ASTM D388 (incorporated by reference—*see* § 60.17).

(d) *Coal* means:

(1) For units constructed, reconstructed, or modified on or before May 27, 2009, all solid fossil fuels classified as anthracite, bituminous, subbituminous, or lignite by ASTM D388 (incorporated by reference— *see* § 60.17).

(2) For units constructed, reconstructed, or modified after May 27, 2009, all solid fossil fuels classified as anthracite, bituminous, subbituminous, or lignite by ASTM D388 (incorporated by reference— *see* § 60.17), and coal refuse.

(e) *Coal preparation and processing plant* means any facility (excluding underground mining operations) which prepares coal by one or more of the following processes: breaking, crushing, screening, wet or dry cleaning, and thermal drying.

(f) *Coal processing and conveying equipment* means any machinery used to reduce the size of coal or to separate coal from refuse, and the equipment used to convey coal to or remove coal and refuse from the machinery. This includes, but is not limited to, breakers, crushers, screens, and conveyor belts. Equipment located at the mine face is not considered to be part of the coal preparation and processing plant.

(g) *Coal refuse* means waste products of coal mining, physical coal cleaning, and coal preparation operations (*e.g.* culm, gob, *etc.*) containing coal, matrix material, clay, and other organic and inorganic material.

(h) *Coal storage system* means any facility used to store coal except for open storage piles.

(i) *Design controlled potential PM emissions rate* means the theoretical particulate matter (PM) emissions (Mg) that would result from the operation of a control device at its design emissions rate (grams per dry standard cubic meter (g/dscm)), multiplied by the maximum design flow rate (dry standard cubic meter per minute (dscm/min)), multiplied by 60 (minutes per hour (min/hr)), multiplied by 8,760 (hours per year (hr/yr)), divided by 1,000,000 (megagrams per gram (Mg/g)).

(j) *Indirect thermal dryer* means a thermal dryer that reduces the moisture content of coal through indirect heating of the coal through contact with a heat transfer medium. If the source of heat (the source of combustion or furnace) is subject to another subpart of this part, then the furnace and the associated emissions are not part of the affected facility. However, if the source of heat is not subject to another subpart of this part, then the furnace and the associated emissions are part of the affected facility.

(k) *Lignite* means coal that is classified as lignite A or B according to the American Society of Testing and Materials in ASTM D388 (incorporated by reference, *see* § 60.17).

(l) *Mechanical vent* means any vent that uses a powered mechanical drive (machine) to induce air flow.

(m) *Open storage pile* means any facility, including storage area, that is not enclosed that is used to store coal, including the equipment used in the loading, unloading, and conveying operations of the facility.

(n) *Operating day* means a 24-hour period between 12 midnight and the following midnight during which coal is prepared or processed at any time by the affected facility. It is not necessary that coal be prepared or processed the entire 24-hour period.

(o) *Pneumatic coal-cleaning equipment* means:

(1) For units constructed, reconstructed, or modified on or before May 27, 2009, any facility which classifies bituminous coal by size or separates bituminous coal from refuse by application of air stream(s).

(2) For units constructed, reconstructed, or modified after May 27, 2009, any facility which classifies coal by size or separates coal from refuse by application of air stream(s).

(p) *Potential combustion concentration* means the theoretical emissions (nanograms per joule (ng/J) or pounds per million British thermal units (lb/MMBtu) heat input) that would result from combustion of a fuel in an uncleaned state without emission control systems, as determined using Method 19 of appendix A-7 of this part.

(q) *Subbituminous coal* means coal that is classified as subbituminous A, B, or C according to the American Society of Testing and Materials in ASTM D388 (incorporated by reference, *see* § 60.17).

(r) *Thermal dryer* means:

(1) For units constructed, reconstructed, or modified on or before May 27, 2009, any facility in which the moisture content of bituminous coal is reduced by contact with a heated gas stream which is exhausted to the atmosphere.

(2) For units constructed, reconstructed, or modified after May 27, 2009, any facility in which the moisture content of coal is reduced by either contact with a heated gas stream which is exhausted to the atmosphere or through indirect heating of the coal through contact with a heated heat transfer medium.

(s) *Transfer and loading system* means any facility used to transfer and load coal for shipment.

§ 60.252 Standards for thermal dryers.

(a) On and after the date on which the performance test is conducted or required to be completed under § 60.8, whichever date comes first, an owner or operator of a thermal dryer constructed, reconstructed, or modified on or before April 28, 2008, subject to the provisions of this subpart must meet the requirements in paragraphs (a)(1) and (a)(2) of this section.

(1) The owner or operator shall not cause to be discharged into the atmosphere from the thermal dryer any gases which contain PM in excess of 0.070 g/dscm (0.031 grains per dry standard cubic feet (gr/dscf)); and

(2) The owner or operator shall not cause to be discharged into the atmosphere from the thermal dryer any gases which exhibit 20 percent opacity or greater.

(b) Except as provided in paragraph (c) of this section, on and after the date on which the performance test is conducted or required to be completed under § 60.8, whichever date comes first, an owner or operator of a thermal dryer constructed, reconstructed, or modified after April 28, 2008, subject to the provisions of this subpart must meet the applicable standards for PM and opacity, as specified in paragraph (b)(1) of this section. In addition, and except as provided in paragraph (c) of this section, on and after the date on which the performance test is conducted or required to be completed under § 60.8, whichever date comes first, an owner or operator of a thermal dryer constructed, reconstructed, or modified after May 29, 2009, subject to the provisions of this subpart must also meet the applicable standards for sulfur dioxide (SO_2), and combined nitrogen oxides (NO_X) and carbon monoxide (CO) as specified in paragraphs (b)(2) and (b)(3) of this section.

(1) The owner or operator must meet the requirements for PM emissions in paragraphs (b)(1)(i) through (iii) of this section, as applicable to the affected facility.

(i) For each thermal dryer constructed or reconstructed after April 28, 2008, the owner or operator must meet the requirements of (b)(1)(i)(A) and (b)(1)(i)(B).

(A) The owner or operator must not cause to be discharged into the atmosphere from the thermal dryer any gases that contain PM in excess of 0.023 g/dscm (0.010 grains per dry standard cubic feet (gr/dscf)); and

(B) The owner or operator must not cause to be discharged into the atmosphere from the thermal dryer any gases that exhibit 10 percent opacity or greater.

(ii) For each thermal dryer modified after April 28, 2008, the owner or operator must meet the requirements of paragraphs (b)(1)(ii)(A) and (b)(1)(ii)(B) of this section.

(A) The owner or operator must not cause to be discharged to the atmosphere from the affected facility any gases which contain PM in excess of 0.070 g/dscm (0.031 gr/dscf); and

(B) The owner or operator must not cause to be discharged into the atmosphere from the affected facility any gases which exhibit 20 percent opacity or greater.

(2) Except as provided in paragraph (b)(2)(iii) of this section, for each thermal dryer constructed, reconstructed, or modified after May 27, 2009, the owner or operator must meet the requirements for SO_2 emissions in either paragraph (b)(2)(i) or (b)(2)(ii) of this section.

(i) The owner or operator must not cause to be discharged into the atmosphere from the affected facility any gases that contain SO_2 in excess of 85 ng/J (0.20 lb/MMBtu) heat input; or

(ii) The owner or operator must not cause to be discharged into the atmosphere from the affected facility any gases that either contain SO_2 in excess of 520 ng/J (1.20 lb/MMBtu) heat input or contain SO_2 in excess of 10 percent of the potential combustion concentration (*i.e.,* the facility must achieve at least a 90 percent reduction of the potential combustion concentration and may not exceed a maximum emissions rate of 1.2 lb/MMBtu (520 ng/J)).

(iii) Thermal dryers that receive all of their thermal input from a source other than coal or residual oil, that receive all of their thermal input from a source subject to an SO_2 limit under another subpart of this part, or that use waste heat or residual from the combustion of coal or residual oil as their only thermal input are not subject to the SO_2 limits of this section.

(3) Except as provided in paragraph (b)(3)(iii) of this section, the owner or operator must meet the requirements for combined NO_X and CO emissions in paragraph (b)(3)(i) or (b)(3)(ii) of this section, as applicable to the affected facility.

(i) For each thermal dryer constructed after May 27, 2009, the owner or operator must not cause to be discharged into the atmosphere from the affected facility any gases which contain a combined concentration of NO_X and CO in excess of 280 ng/J (0.65 lb/MMBtu) heat input.

(ii) For each thermal dryer reconstructed or modified after May 27, 2009, the owner or operator must not cause to be discharged into the atmosphere from the affected facility any gases which contain combined concentration of NO_X and CO in excess of 430 ng/J (1.0 lb/MMBtu) heat input.

(iii) Thermal dryers that receive all of their thermal input from a source other than coal or residual oil, that receive all of their thermal input from a source subject to a NO_X limit and/or CO limit under another subpart of this part, or that use waste heat or residual from the combustion of coal or residual oil as their only thermal input, are not subject to the combined NO_X and CO limits of this section.

(c) Thermal dryers receiving all of their thermal input from an affected facility covered under another 40 CFR Part 60 subpart must meet the applicable requirements in that subpart but are not subject to the requirements in this subpart.

§ 60.253 Standards for pneumatic coal-cleaning equipment.

(a) On and after the date on which the performance test is conducted or required to be completed under § 60.8, whichever date comes first, an owner or operator of pneumatic coal-cleaning equipment constructed, reconstructed, or modified on or before April 28, 2008, must meet the requirements of paragraphs (a)(1) and (a)(2) of this section.

(1) The owner or operator must not cause to be discharged into the atmosphere from the pneumatic coal-cleaning equipment any gases that contain PM in excess of 0.040 g/dscm (0.017 gr/dscf); and

(2) The owner or operator must not cause to be discharged into the atmosphere from the pneumatic coal-cleaning equipment any gases that exhibit 10 percent opacity or greater.

(b) On and after the date on which the performance test is conducted or required to be completed under § 60.8, whichever date comes first, an owner or operator of pneumatic coal-cleaning equipment constructed, reconstructed, or modified after April 28, 2008, must meet the requirements in paragraphs (b)(1) and (b)(2) of this section.

(1) The owner of operator must not cause to be discharged into the atmosphere from the pneumatic coal-cleaning equipment any gases that contain PM in excess or 0.023 g/dscm (0.010 gr/dscf); and

(2) The owner or operator must not cause to be discharged into the atmosphere from the pneumatic coal-cleaning equipment any gases that exhibit greater than 5 percent opacity.

§ 60.254 Standards for coal processing and conveying equipment, coal storage systems, transfer and loading systems, and open storage piles.

(a) On and after the date on which the performance test is conducted or required to be completed under § 60.8, whichever date comes first, an owner or operator shall not cause to be discharged into the atmosphere from any coal processing and conveying equipment, coal storage system, or coal transfer and loading system processing coal constructed, reconstructed, or modified on or before April 28, 2008, gases which exhibit 20 percent opacity or greater.

(b) On and after the date on which the performance test is conducted or required to be completed under § 60.8, whichever date comes first, an owner or operator of any coal processing and conveying equipment, coal storage system, or coal transfer and loading system processing coal constructed, reconstructed, or modified after April 28, 2008, must meet the requirements in paragraphs (b)(1) through (3) of this section, as applicable to the affected facility.

(1) Except as provided in paragraph (b)(3) of this section, the owner or operator must not cause to be discharged into the atmosphere from the affected facility any gases which exhibit 10 percent opacity or greater.

(2) The owner or operator must not cause to be discharged into the atmosphere from any mechanical vent on an affected facility gases which contain particulate matter in excess of 0.023 g/dscm (0.010 gr/dscf).

(3) Equipment used in the loading, unloading, and conveying operations of open storage piles are not subject to the opacity limitations of paragraph (b)(1) of this section.

(c) The owner or operator of an open storage pile, which includes the equipment used in the loading, unloading, and conveying operations of the affected facility, constructed, reconstructed, or modified after May 27, 2009, must prepare and operate in accordance with a submitted fugitive coal dust emissions control plan that is appropriate for the site conditions as specified in paragraphs (c)(1) through (6) of this section.

(1) The fugitive coal dust emissions control plan must identify and describe the control measures the owner or operator will use to minimize fugitive coal dust emissions from each open storage pile.

(2) For open coal storage piles, the fugitive coal dust emissions control plan must require that one or more of the following control measures be used to minimize to the greatest extent practicable fugitive coal dust: Locating the source inside a partial enclosure, installing and operating a water spray or fogging system, applying appropriate chemical dust suppression agents on the source (when the provisions of paragraph (c)(6) of this section are met), use of a wind barrier, compaction, or use of a vegetative cover. The owner or operator must select, for inclusion in the fugitive coal dust emissions control plan, the control measure or measures listed in this paragraph that are most appropriate for site conditions. The plan must also explain how the measure or measures selected are applicable and appropriate for site conditions. In addition, the plan must be revised as needed to reflect any changing conditions at the source.

(3) Any owner or operator of an affected facility that is required to have a fugitive coal dust emissions control plan may petition the Administrator to approve, for inclusion in the plan for the affected facility, alternative control measures other than those specified in paragraph (c)(2) of this section as specified in paragraphs (c)(3)(i) through (iv) of this section.

(i) The petition must include a description of the alternative control measures, a copy of the fugitive coal dust emissions control plan for the affected facility that includes the alternative control measures, and information sufficient for EPA to evaluate the demonstrations required by paragraph (c)(3)(ii) of this section.

(ii) The owner or operator must either demonstrate that the fugitive coal dust emissions control plan that includes the alternate control measures will provide equivalent overall environmental protection or demonstrate that it is either

economically or technically infeasible for the affected facility to use the control measures specifically identified in paragraph (c)(2).

(iii) While the petition is pending, the owner or operator must comply with the fugitive coal dust emissions control plan including the alternative control measures submitted with the petition. Operation in accordance with the plan submitted with the petition shall be deemed to constitute compliance with the requirement to operate in accordance with a fugitive coal dust emissions control plan that contains one of the control measures specifically identified in paragraph (c)(2) of this section while the petition is pending.

(iv) If the petition is approved by the Administrator, the alternative control measures will be approved for inclusion in the fugitive coal dust emissions control plan for the affected facility. In lieu of amending this subpart, a letter will be sent to the facility describing the specific control measures approved. The facility shall make any such letters and the applicable fugitive coal dust emissions control plan available to the public. If the Administrator determines it is appropriate, the conditions and requirements of the letter can be reviewed and changed at any point.

(4) The owner or operator must submit the fugitive coal dust emissions control plan to the Administrator or delegated authority as specified in paragraphs (c)(4)(i) and (c)(4)(ii) of this section.

(i) The plan must be submitted to the Administrator or delegated authority prior to startup of the new, reconstructed, or modified affected facility, or 30 days after the effective date of this rule, whichever is later.

(ii) The plan must be revised as needed to reflect any changing conditions at the source. Such revisions must be dated and submitted to the Administrator or delegated authority before a source can operate pursuant to these revisions. The Administrator or delegated authority may also object to such revisions as specified in paragraph (c)(5) of this section.

(5) The Administrator or delegated authority may object to the fugitive coal dust emissions control plan as specified in paragraphs (c)(5)(i) and (c)(5)(ii) of this section.

(i) The Administrator or delegated authority may object to any fugitive coal dust emissions control plan that it has determined does not meet the requirements of paragraphs (c)(1) and (c)(2) of this section.

(ii) If an objection is raised, the owner or operator, within 30 days from receipt of the objection, must submit a revised fugitive coal dust emissions control plan to the Administrator or delegated authority. The owner or operator must operate in accordance with the revised fugitive coal dust emissions control plan. The Administrator or delegated authority retain the right, under paragraph (c)(5) of this section, to object to the revised control plan if it determines the plan does not meet the requirements of paragraphs (c)(1) and (c)(2) of this section.

(6) Where appropriate chemical dust suppression agents are selected by the owner or operator as a control measure to minimize fugitive coal dust emissions, (1) only chemical dust suppressants with Occupational Safety and Health Administration (OSHA)-compliant material safety data sheets (MSDS) are to be allowed; (2) the MSDS must be included in the fugitive coal dust emissions control plan; and (3) the owner or operator must consider and document in the fugitive coal dust emissions control plan the site-specific impacts associated with the use of such chemical dust suppressants.

§ 60.255 Performance tests and other compliance requirements.

(a) An owner or operator of each affected facility that commenced construction, reconstruction, or modification on or before April 28, 2008, must conduct all performance tests required by § 60.8 to demonstrate compliance with the applicable emission standards using the methods identified in § 60.257.

(b) An owner or operator of each affected facility that commenced construction, reconstruction, or modification after April 28, 2008, must conduct performance tests according to the requirements of § 60.8 and the methods identified in § 60.257 to demonstrate compliance with the applicable emissions standards in this subpart as specified in paragraphs (b)(1) and (2) of this section.

(1) For each affected facility subject to a PM, SO_2 , or combined NO_X and CO emissions standard, an initial performance test must be performed. Thereafter, a new performance test must be conducted according the requirements in paragraphs (b)(1)(i) through (iii) of this section, as applicable.

(i) If the results of the most recent performance test demonstrate that emissions from the affected facility are greater than 50 percent of the applicable emissions standard, a new performance test must be conducted within 12 calendar months of the date that the previous performance test was required to be completed.

(ii) If the results of the most recent performance test demonstrate that emissions from the affected facility are 50 percent or less of the applicable emissions standard, a new performance test must be conducted within 24 calendar months of the date that the previous performance test was required to be completed.

(iii) An owner or operator of an affected facility that has not operated for the 60 calendar days prior to the due date of a performance test is not required to perform the subsequent performance test until 30 calendar days after the next operating day.

(2) For each affected facility subject to an opacity standard, an initial performance test must be performed. Thereafter, a new performance test must be conducted according to the requirements in paragraphs (b)(2)(i) through (iii) of this section, as applicable, except as provided for in paragraphs (e) and (f) of this section. Performance test and other compliance requirements for coal truck dump operations are specified in paragraph (h) of this section.

(i) If any 6-minute average opacity reading in the most recent performance test exceeds half the applicable opacity limit, a new performance test must be conducted within 90 operating days of the date that the previous performance test was required to be completed.

(ii) If all 6-minute average opacity readings in the most recent performance test are equal to or less than half the applicable opacity limit, a new performance test must be conducted within 12 calendar months of the date that the previous performance test was required to be completed.

(iii) An owner or operator of an affected facility continuously monitoring scrubber parameters as specified in § 60.256(b)(2) is exempt from the requirements in paragraphs (b)(2)(i) and (ii) if opacity performance tests are conducted concurrently with (or within a 60-minute period of) PM performance tests.

(c) If any affected coal processing and conveying equipment (*e.g.,* breakers, crushers, screens, conveying systems), coal storage systems, or coal transfer and loading systems that commenced construction, reconstruction, or modification after April 28, 2008, are enclosed in a building, and emissions from the building do not exceed any of the standards in *§* 60.254 that apply to the affected facility, then the facility shall be deemed to be in compliance with such standards.

(d) An owner or operator of an affected facility (other than a thermal dryer) that commenced construction, reconstruction, or modification after April 28, 2008, is subject to a PM emission standard and uses a control device with a design controlled potential PM emissions rate of 1.0 Mg (1.1 tons) per year or less is exempted from the requirements of paragraphs (b)(1)(i) and (ii) of this section provided that the owner or operator meets all of the conditions specified in paragraphs (d)(1) through (3) of this section. This exemption does not apply to thermal dryers.

(1) PM emissions, as determined by the most recent performance test, are less than or equal to the applicable limit,

(2) The control device manufacturer's recommended maintenance procedures are followed, and

(3) All 6-minute average opacity readings from the most recent performance test are equal to or less than half the applicable opacity limit or the monitoring requirements in paragraphs (e) or (f) of this section are followed.

(e) For an owner or operator of a group of up to five of the same type of affected facilities that commenced construction, reconstruction, or modification after April 28, 2008, that are subject to PM emissions standards and use identical control devices, the Administrator or delegated authority may allow the owner or operator to use a single PM performance test for one of the affected control devices to demonstrate that the group of affected facilities is in compliance with the applicable emissions standards provided that the owner or operator meets all of the conditions specified in paragraphs (e)(1) through (3) of this section.

(1) PM emissions from the most recent performance test for each individual affected facility are 90 percent or less of the applicable PM standard;

(2) The manufacturer's recommended maintenance procedures are followed for each control device; and

(3) A performance test is conducted on each affected facility at least once every 5 calendar years.

(f) As an alternative to meeting the requirements in paragraph (b)(2) of this section, an owner or operator of an affected facility that commenced construction, reconstruction, or modification after April 28, 2008, may elect to comply with the requirements in paragraph (f)(1) or (f)(2) of this section.

(1) Monitor visible emissions from each affected facility according to the requirements in paragraphs (f)(1)(i) through (iii) of this section.

(i) Conduct one daily 15-second observation each operating day for each affected facility (during normal operation) when the coal preparation and processing plant is in operation. Each observation must be recorded as either visible emissions observed or no visible emissions observed. Each observer determining the presence of visible emissions must meet the training requirements specified in § 2.3 of Method 22 of appendix A-7 of this part. If visible emissions are observed during any 15-second observation, the owner or operator must adjust the operation of the affected facility and demonstrate within 24 hours that no visible emissions are observed from the affected facility. If visible emissions are observed, a Method 9, of appendix A-4 of this part, performance test must be conducted within 45 operating days.

(ii) Conduct monthly visual observations of all process and control equipment. If any deficiencies are observed, the necessary maintenance must be performed as expeditiously as possible.

(iii) Conduct a performance test using Method 9 of appendix A-4 of this part at least once every 5 calendar years for each affected facility.

(2) Prepare a written site-specific monitoring plan for a digital opacity compliance system for approval by the Administrator or delegated authority. The plan shall require observations of at least one digital image every 15 seconds for 10-minute periods (during normal operation) every operating day. An approvable monitoring plan must include a demonstration that the occurrences of visible emissions are not in excess of 5 percent of the observation period. For reference purposes in preparing the monitoring plan, *see* OAQPS “Determination of Visible Emission Opacity from Stationary Sources Using Computer-Based Photographic Analysis Systems.” This document is available from the U.S. Environmental Protection Agency (U.S. EPA); Office of Air Quality and Planning Standards; Sector Policies and Programs Division; Measurement Group (D243-02), Research Triangle Park, NC 27711. This document is also available on the Technology Transfer Network (TTN) under Emission Measurement Center Preliminary Methods. The monitoring plan approved by the Administrator or delegated authority shall be implemented by the owner or operator.

(g) As an alternative to meeting the requirements in paragraph (b)(2) of this section, an owner or operator of an affected facility that commenced construction, reconstruction, or modification after April 28, 2008, subject to a visible emissions standard under this subpart may install, operate, and maintain a continuous opacity monitoring system (COMS). Each COMS used to comply with provisions of this subpart must be installed, calibrated, maintained, and continuously operated according to the requirements in paragraphs (g)(1) and (2) of this section.

(1) The COMS must meet Performance Specification 1 in 40 CFR part 60, appendix B.

(2) The COMS must comply with the quality assurance requirements in paragraphs (g)(2)(i) through (v) of this section.

(i) The owner or operator must automatically (intrinsic to the opacity monitor) check the zero and upscale (span) calibration drifts at least once daily. For particular COMS, the acceptable range of zero and upscale calibration materials is as defined in the applicable version of Performance Specification 1 in 40 CFR part 60, appendix B.

(ii) The owner or operator must adjust the zero and span whenever the 24-hour zero drift or 24-hour span drift exceeds 4 percent opacity. The COMS must allow for the amount of excess zero and span drift measured at the 24-

hour interval checks to be recorded and quantified. The optical surfaces exposed to the effluent gases must be cleaned prior to performing the zero and span drift adjustments, except for systems using automatic zero adjustments. For systems using automatic zero adjustments, the optical surfaces must be cleaned when the cumulative automatic zero compensation exceeds 4 percent opacity.

(iii) The owner or operator must apply a method for producing a simulated zero opacity condition and an upscale (span) opacity condition using a certified neutral density filter or other related technique to produce a known obscuration of the light beam. All procedures applied must provide a system check of the analyzer internal optical surfaces and all electronic circuitry including the lamp and photodetector assembly.

(iv) Except during periods of system breakdowns, repairs, calibration checks, and zero and span adjustments, the COMS must be in continuous operation and must complete a minimum of one cycle of sampling and analyzing for each successive 10-second period and one cycle of data recording for each successive 6-minute period.

(v) The owner or operator must reduce all data from the COMS to 6-minute averages. Six-minute opacity averages must be calculated from 36 or more data points equally spaced over each 6-minute period. Data recorded during periods of system breakdowns, repairs, calibration checks, and zero and span adjustments must not be included in the data averages. An arithmetic or integrated average of all data may be used.

(h) The owner or operator of each affected coal truck dump operation that commenced construction, reconstruction, or modification after April 28, 2008, must meet the requirements specified in paragraphs (h)(1) through (3) of this section.

(1) Conduct an initial performance test using Method 9 of appendix A-4 of this part according to the requirements in paragraphs (h)(1)(i) and(ii).

(i) Opacity readings shall be taken during the duration of three separate truck dump events. Each truck dump event commences when the truck bed begins to elevate and concludes when the truck bed returns to a horizontal position.

(ii) Compliance with the applicable opacity limit is determined by averaging all 15-second opacity readings made during the duration of three separate truck dump events.

(2) Conduct monthly visual observations of all process and control equipment. If any deficiencies are observed, the necessary maintenance must be performed as expeditiously as possible.

(3) Conduct a performance test using Method 9 of appendix A-4 of this part at least once every 5 calendar years for each affected facility.

§ 60.256 Continuous monitoring requirements.

(a) The owner or operator of each affected facility constructed, reconstructed, or modified on or before April 28, 2008, must meet the monitoring requirements specified in paragraphs (a)(1) and (2) of this section, as applicable to the affected facility.

(1) The owner or operator of any thermal dryer shall install, calibrate, maintain, and continuously operate monitoring devices as follows:

(i) A monitoring device for the measurement of the temperature of the gas stream at the exit of the thermal dryer on a continuous basis. The monitoring device is to be certified by the manufacturer to be accurate within ±1.7 °C (±3 °F).

(ii) For affected facilities that use wet scrubber emission control equipment:

(A) 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 ±1 inch water gauge.

(B) A monitoring device for the continuous 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 design water supply pressure. The pressure sensor or tap must be located close to the water discharge point. The Administrator shall have discretion to grant requests for approval of alternative monitoring locations.

(2) All monitoring devices under paragraph (a) of this section are to be recalibrated annually in accordance with procedures under § 60.13(b).

(b) The owner or operator of each affected facility constructed, reconstructed, or modified after April 28, 2008, that has one or more mechanical vents must install, calibrate, maintain, and continuously operate the monitoring devices specified in paragraphs (b)(1) through (3) of this section, as applicable to the mechanical vent and any control device installed on the vent.

(1) For mechanical vents with fabric filters (baghouses) with design controlled potential PM emissions rates of 25 Mg (28 tons) per year or more, a bag leak detection system according to the requirements in paragraph (c) of this section.

(2) For mechanical vents with wet scrubbers, monitoring devices according to the requirements in paragraphs (b)(2)(i) through (iv) of this section.

(i) 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 ±1 inch water gauge.

(ii) A monitoring device for the continuous measurement of the water supply flow rate to the control equipment. The monitoring device is to be certified by the manufacturer to be accurate within ±5 percent of design water supply flow rate.

(iii) A monitoring device for the continuous measurement of the pH of the wet scrubber liquid. The monitoring device is to be certified by the manufacturer to be accurate within ±5 percent of design pH.

(iv) An average value for each monitoring parameter must be determined during each performance test. Each monitoring parameter must then be maintained within 10 percent of the value established during the most recent performance test on an operating day average basis.

(3) For mechanical vents with control equipment other than wet scrubbers, a monitoring device for the continuous measurement of the reagent injection flow rate to the control equipment, as applicable. The monitoring device is to be certified by the manufacturer to be accurate within ±5 percent of design injection flow rate. An average reagent injection flow rate value must be determined during each performance test. The reagent injection flow rate must then be maintained within 10 percent of the value established during the most recent performance test on an operating day average basis.

(c) Each bag leak detection system used to comply with provisions of this subpart must be installed, calibrated, maintained, and continuously operated according to the requirements in paragraphs (c)(1) through (3) of this section.

(1) The bag leak detection system must meet the specifications and requirements in paragraphs (c)(1)(i) through (viii) of this section.

(i) The bag leak detection system must be certified by the manufacturer to be capable of detecting PM emissions at concentrations of 1 milligram per dry standard cubic meter (mg/dscm) (0.00044 grains per actual cubic foot (gr/acf)) or less.

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

(iii) The bag leak detection system must be equipped with an alarm system that will sound when the system detects an increase in relative particulate loading over the alarm set point established according to paragraph (c)(1)(iv) of this section, and the alarm must be located such that it can be heard by the appropriate plant personnel.

(iv) In the initial adjustment of the bag leak detection system, the owner or operator must establish, at a minimum, the baseline output by adjusting the sensitivity (range) and the averaging period of the device, the alarm set points, and the alarm delay time.

(v) Following initial adjustment, the owner or operator must not adjust the averaging period, alarm set point, or alarm delay time without approval from the Administrator or delegated authority except as provided in paragraph (c)(2)(vi) of this section.

(vi) Once per quarter, the owner or operator may adjust the sensitivity of the bag leak detection system to account for seasonal effects, including temperature and humidity, according to the procedures identified in the site-specific monitoring plan required by paragraph (c)(2) of this section.

(vii) The owner or operator must install the bag leak detection sensor downstream of the fabric filter.

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

(2) The owner or operator must develop and submit to the Administrator or delegated authority for approval a site-specific monitoring plan for each bag leak detection system. This plan must be submitted to the Administrator or delegated authority 30 days prior to startup of the affected facility. The owner or operator must operate and maintain the bag leak detection system according to the site-specific monitoring plan at all times. Each monitoring plan must describe the items in paragraphs (c)(2)(i) through (vi) of this section.

(i) Installation of the bag leak detection system;

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

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

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

(v) How the bag leak detection system output will be recorded and stored; and

(vi) Corrective action procedures as specified in paragraph (c)(3) of this section. In approving the site-specific monitoring plan, the Administrator or delegated authority may allow the owner and operator more than 3 hours to alleviate a specific condition that causes an alarm if the owner or operator identifies in the monitoring plan this specific condition as one that could lead to an alarm, adequately explains why it is not feasible to alleviate this condition within 3 hours of the time the alarm occurs, and demonstrates that the requested time will ensure alleviation of this condition as expeditiously as practicable.

(3) For each bag leak detection system, the owner or operator must initiate procedures to determine the cause of every alarm within 1 hour of the alarm. Except as provided in paragraph (c)(2)(vi) of this section, the owner or operator must alleviate the cause of the alarm within 3 hours of the alarm by taking whatever corrective action(s) are necessary. Corrective actions may include, but are not limited to the following:

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

(ii) Sealing off defective bags or filter media;

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

(iv) Sealing off a defective fabric filter compartment;

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

(vi) Shutting down the process producing the PM emissions.

§ 60.257 Test methods and procedures.

(a) The owner or operator must determine compliance with the applicable opacity standards as specified in paragraphs (a)(1) through (3) of this section.

(1) Method 9 of appendix A-4 of this part and the procedures in § 60.11 must be used to determine opacity, with the exceptions specified in paragraphs (a)(1)(i) and (ii).

(i) The duration of the Method 9 of appendix A-4 of this part performance test shall be 1 hour (ten 6-minute averages).

(ii) If, during the initial 30 minutes of the observation of a Method 9 of appendix A-4 of this part performance test, all of the 6-minute average opacity readings are less than or equal to half the applicable opacity limit, then the observation period may be reduced from 1 hour to 30 minutes.

(2) To determine opacity for fugitive coal dust emissions sources, the additional requirements specified in paragraphs (a)(2)(i) through (iii) must be used.

(i) The minimum distance between the observer and the emission source shall be 5.0 meters (16 feet), and the sun shall be oriented in the 140-degree sector of the back.

(ii) The observer shall select a position that minimizes interference from other fugitive coal dust emissions sources and make observations such that the line of vision is approximately perpendicular to the plume and wind direction.

(iii) The observer shall make opacity observations at the point of greatest opacity in that portion of the plume where condensed water vapor is not present. Water vapor is not considered a visible emission.

(3) A visible emissions observer may conduct visible emission observations for up to three fugitive, stack, or vent emission points within a 15-second interval if the following conditions specified in paragraphs (a)(3)(i) through (iii) of this section are met.

(i) No more than three emissions points may be read concurrently.

(ii) All three emissions points must be within a 70 degree viewing sector or angle in front of the observer such that the proper sun position can be maintained for all three points.

(iii) If an opacity reading for any one of the three emissions points is within 5 percent opacity from the applicable standard (excluding readings of zero opacity), then the observer must stop taking readings for the other two points and continue reading just that single point.

(b) The owner or operator must conduct all performance tests required by § 60.8 to demonstrate compliance with the applicable emissions standards specified in § 60.252 according to the requirements in § 60.8 using the applicable test methods and procedures in paragraphs (b)(1) through (8) of this section.

(1) Method 1 or 1A of appendix A-4 of this part shall be used to select sampling port locations and the number of traverse points in each stack or duct. Sampling sites must be located at the outlet of the control device (or at the outlet of the emissions source if no control device is present) prior to any releases to the atmosphere.

(2) Method 2, 2A, 2C, 2D, 2F, or 2G of appendix A-4 of this part shall be used to determine the volumetric flow rate of the stack gas.

(3) Method 3, 3A, or 3B of appendix A-4 of this part shall be used to determine the dry molecular weight of the stack gas. The owner or operator may use ANSI/ASME PTC 19.10-1981, “Flue and Exhaust Gas Analyses (incorporated by reference— *see* § 60.17) as an alternative to Method 3B of appendix A-2 of this part.

(4) Method 4 of appendix A-4 of this part shall be used to determine the moisture content of the stack gas.

(5) Method 5, 5B or 5D of appendix A-4 of this part or Method 17 of appendix A-7 of this part shall be used to determine the PM concentration as follows:

(i) The sampling time and sample volume for each run shall be at least 60 minutes and 0.85 dscm (30 dscf). Sampling shall begin no less than 30 minutes after startup and shall terminate before shutdown procedures begin. A minimum of three valid test runs are needed to comprise a PM performance test.

(ii) Method 5 of appendix A of this part shall be used only to test emissions from affected facilities without wet flue gas desulfurization (FGD) systems.

(iii) Method 5B of appendix A of this part is to be used only after wet FGD systems.

(iv) Method 5D of appendix A-4 of this part shall be used for positive pressure fabric filters and other similar applications (*e.g.,* stub stacks and roof vents).

(v) Method 17 of appendix A-6 of this part may be used at facilities with or without wet scrubber systems provided the stack gas temperature does not exceed a temperature of 160 ° C (320 ° F). The procedures of sections 8.1 and 11.1 of Method 5B of appendix A-3 of this part may be used in Method 17 of appendix A-6 of this part only if it is used after a wet FGD system. Do not use Method 17 of appendix A-6 of this part after wet FGD systems if the effluent is saturated or laden with water droplets.

(6) Method 6, 6A, or 6C of appendix A-4 of this part shall be used to determine the SO_2 concentration. A minimum of three valid test runs are needed to comprise an SO_2 performance test.

(7) Method 7 or 7E of appendix A-4 of this part shall be used to determine the NO_X concentration. A minimum of three valid test runs are needed to comprise an NO_X performance test.

(8) Method 10 of appendix A-4 of this part shall be used to determine the CO concentration. A minimum of three valid test runs are needed to comprise a CO performance test. CO performance tests are conducted concurrently (or within a 60-minute period) with NO_X performance tests.

§ 60.258 Reporting and recordkeeping.

(a) The owner or operator of a coal preparation and processing plant that commenced construction, reconstruction, or modification after April 28, 2008, shall maintain in a logbook (written or electronic) on-site and make it available upon request. The logbook shall record the following:

(1) The manufacturer's recommended maintenance procedures and the date and time of any maintenance and inspection activities and the results of those activities. Any variance from manufacturer recommendation, if any, shall be noted.

(2) The date and time of periodic coal preparation and processing plant visual observations, noting those sources with visible emissions along with corrective actions taken to reduce visible emissions. Results from the actions shall be noted.

(3) The amount and type of coal processed each calendar month.

(4) The amount of chemical stabilizer or water purchased for use in the coal preparation and processing plant.

(5) Monthly certification that the dust suppressant systems were operational when any coal was processed and that manufacturer's recommendations were followed for all control systems. Any variance from the manufacturer's recommendations, if any, shall be noted.

(6) Monthly certification that the fugitive coal dust emissions control plan was implemented as described. Any variance from the plan, if any, shall be noted. A copy of the applicable fugitive coal dust emissions control plan and any letters from the Administrator providing approval of any alternative control measures shall be maintained with the logbook. Any actions, *e.g.* objections, to the plan and any actions relative to the alternative control measures, *e.g.* approvals, shall be noted in the logbook as well.

(7) For each bag leak detection system, the owner or operator must keep the records specified in paragraphs (a)(7)(i) through (iii) of this section.

(i) Records of the bag leak detection system output;

(ii) Records of bag leak detection system adjustments, including the date and time of the adjustment, the initial bag leak detection system settings, and the final bag leak detection settings; and

(iii) The date and time of all bag leak detection system alarms, the time that procedures to determine the cause of the alarm were initiated, the cause of the alarm, an explanation of the actions taken, the date and time the cause of the alarm was alleviated, and whether the cause of the alarm was alleviated within 3 hours of the alarm.

(8) A copy of any applicable monitoring plan for a digital opacity compliance system and monthly certification that the plan was implemented as described. Any variance from plan, if any, shall be noted.

(9) During a performance test of a wet scrubber, and each operating day thereafter, the owner or operator shall record the measurements of the scrubber pressure loss, water supply flow rate, and pH of the wet scrubber liquid.

(10) During a performance test of control equipment other than a wet scrubber, and each operating day thereafter, the owner or operator shall record the measurements of the reagent injection flow rate, as applicable.

(b) For the purpose of reports required under section 60.7(c), any owner operator subject to the provisions of this subpart also shall report semiannually periods of excess emissions as follow:

(1) The owner or operator of an affected facility with a wet scrubber shall submit semiannual reports to the Administrator or delegated authority of occurrences when the measurements of the scrubber pressure loss, water supply flow rate, or pH of the wet scrubber liquid vary by more than 10 percent from the average determined during the most recent performance test.

(2) The owner or operator of an affected facility with control equipment other than a wet scrubber shall submit semiannual reports to the Administrator or delegated authority of occurrences when the measurements of the reagent injection flow rate, as applicable, vary by more than 10 percent from the average determined during the most recent performance test.

(3) All 6-minute average opacities that exceed the applicable standard.

(c) The owner or operator of an affected facility shall submit the results of initial performance tests to the Administrator or delegated authority, consistent with the provisions of section 60.8. The owner or operator who elects to comply with the reduced performance testing provisions of sections 60.255(c) or (d) shall include in the performance test report identification of each affected facility that will be subject to the reduced testing. The owner or operator electing to comply with section 60.255(d) shall also include information which demonstrates that the control devices are identical.

(d) After July 1, 2011, within 60 days after the date of completing each performance evaluation conducted to demonstrate compliance with this subpart, the owner or operator of the affected facility must submit the test data to EPA by successfully entering the data electronically into EPA's WebFIRE data base available at *http://cfpub.epa.gov/oarweb/index.cfm?action=fire.main.* For performance tests that cannot be entered into WebFIRE

(*i.e.,* Method 9 of appendix A-4 of this part opacity performance tests) the owner or operator of the affected facility must mail a summary copy to United States Environmental Protection Agency; Energy Strategies Group; 109 TW Alexander DR; mail code: D243-01; RTP, NC 27711.

Indiana Department of Environmental Management
Office of Air Quality

Technical Support Document (TSD) for a Part 70 Significant Permit Modification

Source Description and Location

Source Name:	**U.S. Steel - Gary Works**
Source Location:	**One North Broadway, Gary, Indiana 46402**
County:	**Lake**
SIC Code:	**3312 (Steel Works, Blast Furnaces (Including Coke Ovens), and Rolling Mills)**
Operation Permit No.:	**T089-29907-00121**
Operation Permit Issuance Date:	**December 20, 2013**
Significant Permit Modification No.:	**089-37377-00121**
Permit Reviewer:	**Thomas Olmstead/Kelsey Bonhivert**

Source Definition

US Steel - Gary Works is an integrated steel mill that includes the primary operation, U.S. Steel – Gary Works (Source ID 089-00121), at One North Broadway, Gary, Indiana, collocated with on-site contractors:

	Company Name	Source ID	Operation Description
1	U.S. Steel - Gary Works	089-00121	integrated steel mill
	On-Site Contractors		
2	TMS International, LLC	089-00132	slag processing/metal recovery
3	South Shore Slag LLC	089-00133	slag crushing, screening and conveying
4	Tube City IMS, LLC	089-00170	iron ore screening operation
5	Central Teaming Company Inc	089-00172	material handling
6	Mid-Continent Coal & Coke	089-00173	coke screening operation
7	Tube City IMS LLC	089-00174	scrap metal processing
8	Fritz Enterprises, Inc.	089-00578	iron and slag processing operation
9	Crister Companies	089-05333	slag crushing and screening operation

A Part 70 permit has been issued to U.S. Steel – Gary Works (Source ID 089-00121). Separate Administrative Part 70 permits will be issued to each of the on-site contractors, solely for administrative purposes. The companies may maintain separate reporting and compliance certification.

Existing Approvals

The source was issued Part 70 Operating Permit Renewal No. 089-29907-00121 on December 20, 2013. The source has since received the following approvals:

Permit Type	Permit Number	Issuance Date
Significant Source Modification	089-33648-00121	March 4, 2014
Significant Permit Modification	089-33651-00121	March 20, 2014
Significant Source Modification	089-34579-00121	August 21, 2014
Significant Permit Modification	089-34611-00121	September 8, 2014
Administrative Amendment	089-34973-00121	December 3, 2014
Administrative Amendment	089-35392-00121	February 23, 2015
Significant Source Modification	089-35649-00121	June 24, 2015

Permit Type	Permit Number	Issuance Date
Significant Permit Modification	089-35695-00121	July 10, 2015
Administrative Amendment	089-37337-00121	August 22, 2016
Administrative Amendment	089-37442-00121	September 1, 2016

County Attainment Status

The source is located in Lake County.

Pollutant	Designation
SO_2	Better than national standards.
CO	Attainment effective February 18, 2000, for the part of the city of East Chicago bounded by Columbus Drive on the north; the Indiana Harbor Canal on the west; 148th Street, if extended, on the south; and Euclid Avenue on the east. Unclassifiable or attainment effective November 15, 1990, for the remainder of East Chicago and Lake County.
O_3	On June 11, 2012, the U.S. EPA designated Lake County nonattainment, for the 8-hour ozone standard. [12]
$PM_{2.5}$	Unclassifiable or attainment effective February 6, 2012, for the annual $PM_{2.5}$ standard.
$PM_{2.5}$	Unclassifiable or attainment effective December 13, 2009, for the 24-hour $PM_{2.5}$ standard.
PM_{10}	Attainment effective March 11, 2003, for the cities of East Chicago, Hammond, Whiting, and Gary. Unclassifiable effective November 15, 1990, for the remainder of Lake County.
NO_2	Cannot be classified or better than national standards.
Pb	Unclassifiable or attainment effective December 31, 2011.

[1]The U. S. EPA has acknowledged in both the proposed and final rulemaking for this redesignation that the anti-backsliding provisions for the 1-hour ozone standard no longer apply as a result of the redesignation under the 8-hour ozone standard. Therefore, permits in Lake County are no longer subject to review pursuant to Emission Offset, 326 IAC 2-3 for the 1-hour standard.

[2]The department has filed a legal challenge to U.S. EPA's designation in 77 FR 34228.

(a) Ozone Standards

U.S. EPA, in the Federal Register Notice 77 FR 112 dated June 11, 2012, designated Lake County as nonattainment for ozone. On August 1, 2012, the air pollution control board issued an emergency rule adopting the U.S. EPA's designation. This rule became effective August 9, 2012. IDEM does not agree with U.S. EPA's designation of nonattainment. IDEM filed a suit against U.S. EPA in the U.S. Court of Appeals for the DC Circuit on July 19, 2012. However, in order to assure that sources are not potentially liable for a violation of the Clean Air Act, the OAQ is following the U.S. EPA's designation. Volatile organic compounds (VOC) and Nitrogen Oxides (NO_x) are regulated under the Clean Air Act (CAA) for the purposes of attaining and maintaining the National Ambient Air Quality Standards (NAAQS) for ozone. Therefore, VOC and NO_x emissions are considered when evaluating the rule applicability relating to ozone. Therefore, VOC and NO_x emissions were evaluated pursuant to the requirements of Emission Offset, 326 IAC 2-3.

(b) $PM_{2.5}$

Lake County has been classified as attainment for $PM_{2.5}$. Therefore, direct $PM_{2.5}$, SO_2, and NOx emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2.

(c) Other Criteria Pollutants
Lake County has been classified as attainment or unclassifiable in Indiana for all the other criteria pollutants. Therefore, these emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2.

Fugitive Emissions

Since this source is classified as an iron and steel mill plant, it is considered one (1) of the twenty-eight (28) listed source categories, as specified in 326 IAC 2-2, 326 IAC 2-3, or 326 IAC 2-7. Therefore, fugitive emissions are counted toward the determination of PSD, Emission Offset, and Part 70 Permit applicability.

Greenhouse Gas (GHG) Emissions

On June 23, 2014, in the case of *Utility Air Regulatory Group v. EPA*, cause no. 12-1146, (available at http://www.supremecourt.gov/opinions/13pdf/12-1146_4g18.pdf) the United States Supreme Court ruled that the U.S. EPA does not have the authority to treat greenhouse gases (GHGs) as an air pollutant for the purpose of determining operating permit applicability or PSD Major source status. On July 24, 2014, the U.S. EPA issued a memorandum to the Regional Administrators outlining next steps in permitting decisions in light of the Supreme Court's decision. U.S. EPA's guidance states that U.S. EPA will no longer require PSD or Title V permits for sources "previously classified as 'Major' based solely on greenhouse gas emissions."

The Indiana Environmental Rules Board adopted the GHG regulations required by U.S. EPA at 326 IAC 2-2-1(zz), pursuant to Ind. Code § 13-14-9-8(h) (Section 8 rulemaking). A rule, or part of a rule, adopted under Section 8 is automatically invalidated when the corresponding federal rule, or part of the rule, is invalidated. Due to the United States Supreme Court Ruling, IDEM, OAQ cannot consider GHG emissions to determine operating permit applicability or PSD applicability to a source or modification.

Source Status - Existing Source

The table below summarizes the potential to emit of the entire source, prior to the proposed modification, after consideration of all enforceable limits established in the effective permits:

	Source-Wide Emissions Before Modification (ton/year)								
Process / Emission Unit	**PM**	**PM_{10}**	**$PM_{2.5}$**	**SO_2**	**NO_X**	**VOC**	**CO**	**Single HAP***	**Combined HAPs**
Total for Source	>100	>100	>100	>100	>100	>100	>100	>10	>25
PSD Major Source Thresholds	100	100	100	100	100	100	100	--	--
Emission Offset Major Source Thresholds	---	---	---	---	100	100	---	--	--

*Single highest source-wide HAP.

(a) This existing source is a major stationary source, under PSD (326 IAC 2-2), because a PSD regulated pollutant, PM, PM10, PM2.5, SO2, NOx, VOC and CO, is emitted at a rate of 100 tons per year or more, and it is one of the twenty-eight (28) listed source categories, as specified in 326 IAC 2-2-1(ff)(1).

(b) This existing source is a major stationary source, under Emission Offset (326 IAC 2-3), because NOx and VOC, a nonattainment regulated pollutant, is emitted at a rate of 100 tons per year or more.

(c) This existing source is a major source of HAPs, as defined in 40 CFR 63.2, because HAP emissions are equal to or greater than ten (10) tons per year for a single HAP and equal to or

greater than twenty-five (25) tons per year for a combination of HAPs. Therefore, this source is a major source under Section 112 of the Clean Air Act (CAA).

(d) These emissions are based on Technical Support Document for SPM No. 089-35695-00121.

Description of Proposed Modification

The Office of Air Quality (OAQ) has reviewed an application, submitted by U.S. Steel - Gary Works on July 6, 2016, relating to the removal of stack testing for the pulverized coal storage reservoir stack SS-7. Emissions from SS-7 are created by the displaced air in the vessel when coal is introduced. The design of the vent filter has no fan and relies solely on intermittent system pressure for venting. Based on the amount of coal introduced into this system, displaced air being vented is minimal and difficult to test. IDEM, OAQ has witnessed two stack test failed attempts in 2009 and 2014. Therefore, the source requests that compliance determination and compliance monitoring requirements sufficient to assure reasonable compliance with all applicable limits be incorporated in lieu of compliance testing. The following is a list of the affected emission units and pollution control device(s):

(a) One (1) Pulverized Coal storage reservoir, constructed in 1993, with a maximum capacity of 600 tons, blanketed with nitrogen and ducted to a baghouse (vent filter house) exhausting to stack (SS-7).

Enforcement Issues

There are no pending enforcement actions related to this modification.

Emission Calculations

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

Permit Level Determination – Part 70 Modification to an Existing Source

Pursuant to 326 IAC 2-7-12(d)(1), this change to the permit is being made through a Significant Permit Modification because this modification makes a significant change to existing monitoring conditions.

Permit Level Determination – PSD and Emission Offset

There is no emissions increase as a result of this modification.

Federal Rule Applicability Determination

Due to the modification at this source, federal rule applicability has been reviewed as follows:

New Source Performance Standards (NSPS):

(a) The requirements of the New Source Performance Standards for Coal Preparation and Processing Plants, 40 CFR 60, Subpart Y and 326 IAC 12, are not included in the permit for the coal pile F17 because the pile was approved for construction prior to the applicability date of May 27, 2009 for open storage piles.

(b) The coal pulverization system is subject to the New Source Performance Standards for Coal Preparation and Processing Plants, 40 CFR 60, Subpart Y and 326 IAC 12, because the source operates a coal preparation and processing plant that processes more than 181 megagrams (Mg) (200 tons) of coal per day. Coal preparation and processing plant means any facility (excluding underground mining operations) which prepares coal by one or more of the following processes: breaking, crushing, screening, wet or dry cleaning, and thermal drying. The source prepares coal by breaking, crushing, and screening it before storage or injection into the blast furnaces. The provisions in 60.253(a), 60.254(a), and 60.255(a) of this subpart are applicable to any of the

affected facilities that commenced construction, reconstruction or modification after October 27, 1974, and on or before April 28, 2008. The units subject to this rule includes the following:

Coal Pulverization and Air Preheater System (East PCI Coal Pulverization)

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

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

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

Pulverized Coal Storage and Feed System (West PCI Coal Pulverization)

(a) One (1) Pulverized coal Transport, identified as Line A, constructed in 1993, with a maximum capacity of 210 tons per hour, ducted to a baghouse (A) exhausting to stack (SS-5).

(b) One (1) Pulverized coal Transport, identified as Line B, constructed in 1993, with a maximum capacity of 210 tons per hour, ducted to a baghouse (B) exhausting to stack (SS-6).

(c) One (1) Pulverized coal storage reservoir, constructed in 1993, with a maximum capacity of 600 tons, blanketed with nitrogen and ducted to a baghouse (vent filter house) exhausting to stack (SS-7).

Coal Handling Operations

Coal Handling System

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

(b) One (1) Reclaim Hopper, identified as RCH-1, constructed in 1993, with a maximum capacity of 300 tons per hour, ducted to baghouse DC-6 and exhausting to stack DC-6.

(c) One (1) Car Dump Hopper 1/C1, identified as FS-8, constructed in 1993, with a maximum capacity of 200 tons per hour, ducted to baghouse DC-1 exhausting to stack F1.

(d) One (1) Car dump Hopper 2/C1, identified as FS-9, constructed in 1993, with a maximum capacity of 200 tons per hour, ducted to a baghouse DC-2 exhausting to stack F2.

(e) One (1) Car Dump Hopper 3/C1, identified as FS-10, constructed in 1993, with a maximum capacity of 200 tons per hour, ducted to a baghouse DC-3 exhausting to stack F3.

(f) One (1) Transfer Point C1/C2, identified as FS-2, constructed in 1993, with a maximum capacity of 600 tons per hour, ducted to a baghouse DC-4 exhausting to stack F4.

(g) One (1) Reclaim Hopper/C2, identified as FS-14, constructed in 1993, with a maximum capacity of 300 tons per hour, ducted to a baghouse DC-5 exhausting to stack F5.

(h) One (1) Screen Transfer/C2, identified as FS-3, constructed in 1993, with a maximum capacity of 600 tons per hour, ducted to a baghouse DC-7 exhausting to stack F7.

(i) One (1) Screen/C3 Gate Transfer identified as FS-11, constructed in 1993, ducted to a baghouse DC-8 exhausting to stack F.

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

(k) One (1) Transfer Point C4/C5, identified as FS-4, constructed in 1993, ducted to a baghouse DC-10 exhausting to stack F10.

East Building – Coal handling

(a) One (1) Transfer Point C5/C6, identified as FS-5, constructed in 1993, with a maximum capacity of 600 tons per hour, ducted to a baghouse DC-11 exhausting to stack F11.

(b) One (1) Transfer Point C6/Bin 1, identified as FS-7, constructed in 1993, ducted to baghouse DC-12 exhausting to stack F12.

(c) One (1) Transfer Point C5/Bin 2, identified as FS-6, constructed in 1993, ducted to baghouse DC-13 exhausting to stack F13.

(d) One (1) Transfer Point C6/Bin 3, identified as FS-13, constructed in 1993, with a maximum capacity of 600 tons per hour, ducted to baghouse DC-14 exhausting to stack F14.

Insignificant Activities:

(a) Conveyors as follows:

(1) Covered conveyor for coal or coke conveying of less than or equal to 360 tons per day;

(2) Uncovered coal conveying of less than or equal to 120 tons per day.

(b) Coal bunker and coal scale exhausts and associated dust collector vents.

The units are subject to the following portions of Subpart Y.

(1) 40 CFR 60.250(a), (b)
(2) 40 CFR 60.251
(3) 40 CFR 60.252(a)
(4) 40 CFR 60.254(a)
(5) 40 CFR 60.255(a)
(6) 40 CFR 60.257

The requirements of 40 CFR Part 60, Subpart A – General Provisions, which are incorporated as 326 IAC 12-1, apply to the source except as otherwise specified in 40 CFR 60, Subpart Y.

(c) There are no other New Source Performance Standards (40 CFR Part 60) and 326 IAC 12 included in the permit for this proposed modification.

National Emission Standards for Hazardous Air Pollutants (NESHAP):

(d) The requirements of the National Emission Standards for Hazardous Air Pollutants for Major Sources: Industrial, Commercial, and Institutional Boilers and Process Heaters, 40 CFR 63,

Subpart DDDDD and 326 IAC 20-95 are not included in the permit for the railcar heater and three (3) preheaters because these units are direct fired.

(e) There are no National Emission Standards for Hazardous Air Pollutants under 40 CFR 63, 326 IAC 14 and 326 IAC 20 included for this proposed modification.

Compliance Assurance Monitoring (CAM):

(f) Pursuant to 40 CFR 64.2, Compliance Assurance Monitoring (CAM) is applicable to each existing pollutant-specific emission unit that meets the following criteria:

(1) has a potential to emit before controls equal to or greater than the major source threshold for the pollutant involved;

(2) is subject to an emission limitation or standard for that pollutant; and

(3) uses a control device, as defined in 40 CFR 64.1, to comply with that emission limitation or standard.

The following table is used to identify the applicability of CAM to each existing emission unit and each emission limitation or standard for a specified pollutant based on the criteria specified under 40 CFR 64.2:

ID	Emission Unit / Pollutant	Control Device	Applicable Emission Limitation	Uncontrolled PTE (tons/year)	Controlled PTE (tons/year)	CAM Applicable (Y/N)	Large Unit (Y/N)
SS-1	Coal pulverization equipment train -PM	Cyclone to baghouse	Y[4]	240.65	2.41	Y [3]	N
SS-2	Coal pulverization equipment train -PM	Cyclone to baghouse	Y[4]	240.65	2.41	Y [3]	N
SS-3	Coal pulverization equipment train -PM	Cyclone to baghouse	Y[4]	240.65	2.41	Y [3]	N
SS-1	Coal pulverization equipment train -PM10	Cyclone to baghouse	Y[4]	240.65	2.41	Y [3]	N
SS-2	Coal pulverization equipment train -PM10	Cyclone to baghouse	Y[4]	240.65	2.41	Y [3]	N
SS-3	Coal pulverization equipment train -PM10	Cyclone to baghouse	Y[4]	240.65	2.41	Y [3]	N
Line A	Pulverized coal Transport - PM/PM10	Baghouse A	Y	78.92	0.79	N [2]	N
Line B	Pulverized coal Transport - PM/PM10	Baghouse B	Y	78.92	0.79	N [2]	N
--	Pulverized coal storage reservoir - PM/PM10	Blanket of nitrogen to baghouse	Y	< 100	< 100	N [2]	N
RCD-1	Railcar Dumper -PM/PM10	Baghouse 8AB	Y	< 100	0.59	N [2]	N
RCH-1	Reclaim Hopper -PM/PM10	Baghouse DC-6	Y	< 100	0.59	N [2]	N
FS-8	Car Dump Hopper 1/C1 - PM/PM10	Baghouse DC-1	Y	< 100	0.04	N [2]	N
FS-9	Car Dump Hopper 2/C1 - PM/PM10	Baghouse DC-2	Y	< 100	0.01	N [2]	N
FS-10	Car Dump Hopper 3/C1 - PM/PM10	Baghouse DC-3	Y	< 100	0.01	N [2]	N
FS-2	Transfer Point C1/C2 - PM/PM10	Baghouse DC-4	Y	11.26	0.11	N [2]	N
FS-14	Reclaim Hopper/C2 - PM/PM10	Baghouse DC-5	Y	< 100	0.003	N [2]	N
FS-3	Screen Transfer/C2 - PM/PM10	Baghouse DC-7	Y	15.77	0.16	N [2]	N
FS-11	Screen/C3 Gate Transfer - PM/PM10	Baghouse DC-8	Y	< 100	0.02	N [2]	N

ID	Emission Unit / Pollutant	Control Device	Applicable Emission Limitation	Uncontrolled PTE (tons/year)	Controlled PTE (tons/year)	CAM Applicable (Y/N)	Large Unit (Y/N)
FS-12	Screen/C4 Gate Transfer - PM/PM10	Baghouse DC-9	Y	< 100	0.02	N [2]	N
FS-4	Transfer Point C4/C5 - PM/PM10	Baghouse DC-10	Y	11.26	0.11	N [2]	N
FS-5	Transfer Point C5/C6 - PM/PM10	Baghouse DC-11	Y	15.77	0.16	N [2]	N
FS-7	Transfer Point C6/Bin 1 - PM/PM10	Baghouse DC-12	Y	8.14	0.08	N [2]	N
FS-6	Transfer Point C5/Bin 2 - PM/PM10	Baghouse DC-13	Y	8.14	0.08	N [2]	N
FS-13	Transfer Point C6/Bin 3 - PM/PM10	Baghouse DC-14	Y	8.14	0.08	N [2]	N

Uncontrolled PTE (tpy) and controlled PTE (tpy) are evaluated against the Major Source Threshold for each pollutant. Major Source Threshold for criteria pollutants (PM10, PM2.5, SO2, NOX, VOC and CO) is 100 tpy, for a single HAP ten (10) tpy, and for total HAPs twenty-five (25) tpy

N [2]	CAM does not apply for PM and PM10 because the uncontrolled PTE of PM and PM10 is less than the major source threshold.
Y [3]	Under the Part 70 Permit program (40 CFR 70), PM is not a regulated pollutant.
Y[4]	Units have 326 IAC 2-2 (PSD) avoidance limits for PM and PM10.

Emission units without air pollution controls are not subject to CAM. Therefore, they are not listed.

Based on this evaluation, the requirements of 40 CFR Part 64, CAM, are applicable to the three (3) coal pulverization equipment trains, identified as SS-1, SS-2, and SS-3, which are each considered as an "other unit," for PM and PM10 upon issuance of the Part 70 Permit Renewal. A CAM plan must be submitted as part of the Part 70 Operating Permit Renewal application.

Based on this evaluation, the requirements of 40 CFR Part 64, CAM, are not applicable to any of the other coal pulverization system units as part of this modification.

State Rule Applicability Determination

Due to the modification at this source, state rule applicability has been reviewed as follows:

326 IAC 2-2 (PSD) and 2-3 (Emission Offset)
PSD and Emission Offset applicability is discussed under the Permit Level Determination – PSD and Emission Offset section.

326 IAC 2-4.1 (Major Sources of Hazardous Air Pollutants (HAP))
The operation of coal pulverization system will emit less than ten (10) tons per year for a single HAP and less than twenty-five (25) tons per year for a combination of HAPs. Therefore, 326 IAC 2-4.1 does not apply.

326 IAC 2-6 (Emission Reporting)
Since this source is located in Lake County, and has a potential to emit NOx and VOC greater than or equal to twenty-five (25) tons per year, an emission statement covering the previous calendar year must be submitted by July 1 of each year. The emission statement shall contain, at a minimum, the information specified in 326 IAC 2-6-4.

326 IAC 2-7-6(5) (Annual Compliance Certification)
The U.S. EPA Federal Register 79 FR 54978 notice does not exempt Title V Permittees from the requirements of 40 CFR 70.6(c)(5)(iv) or 326 IAC 2-7-6(5)(D), but the submittal of the Title V annual compliance certification to IDEM satisfies the requirement to submit the Title V annual compliance certifications to EPA. IDEM does not intend to revise any permits since the requirements of 40 CFR 70.6(c)(5)(iv) or 326 IAC 2-7-6(5)(D) still apply, but Permittees can note on their Title V annual

compliance certifications that submission to IDEM has satisfied reporting to EPA per Federal Register 79 FR 54978. This only applies to Title V Permittees and Title V compliance certifications.

326 IAC 6.5 PM Limitations Except Lake County
This source is not subject to 326 IAC 6.5 because it is not located in one of the following counties: Clark, Dearborn, Dubois, Howard, Marion, St. Joseph, Vanderburgh, Vigo or Wayne.

326 IAC 8-5-1 (Miscellaneous Operations)
The source does not engage in any of the miscellaneous operations specified in 326 IAC 8-5-1. Therefore, the requirements of 326 IAC 8-5-1 are not applicable.

Coal pulverization system:

(a) 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes)
Pursuant to 326 IAC 6-3-1(c)(3), the coal pulverization system is not subject to the requirements of 326 IAC 6-3, since this rule shall not apply if a particulate matter limitation that is as stringent as or more stringent than the particulate limitation established in 326 IAC 6.5 and 326 IAC 6.8, concerning particulate matter emissions. Therefore, the coal pulverization system is not subject to 326 IAC 6-3-2.

(b) 326 IAC 6.8 PM Limitations for Lake County
(1) The coal pulverization system is subject to 326 IAC 6.8-1-2 (Particulate emission limitations) and is not limited by any other subsection in 326 IAC 6.8-1-2. Therefore, pursuant to 326 IAC 6.8-1-2(a), particulate matter emissions from the coal pulverization system shall not exceed seven-hundredths (0.07) gram per dry standard cubic meter (g/dscm) (three-hundredths (0.03) grain per dry standard cubic foot (dscf)).
(2) The coal pulverization system is not subject to 326 IAC 6.8-2 (Lake County: PM10 Emission Requirements) because the coal pulverization system is not listed in the rule.
(3) The coal pulverization system is not subject to 326 IAC 6.8-8 (Lake County: Continuous Compliance Plan) because the coal pulverization system is not a listed facility included in 326 IAC 6.8-2.
(4) The coal pulverization system is subject to 326 IAC 6.8-10 (Lake County: Fugitive Particulate Matter) because the coal pulverization system emits fugitive particulate matter. The Permittee shall comply with the particulate emission limitations specified in 326 IAC 6.8-10-3 for the coal pulverization system and maintain and comply with the fugitive dust control plan (FDCP) submitted by the source and included as Attachment A to the operating permit.

Three (3) natural gas preheaters and railcar heater:

(a) 326 IAC 6.8 PM Limitations for Lake County
(1) The railcar heater and three (3) preheaters are subject to 326 IAC 6.8-1-2 (Particulate emission limitations) and are not limited by any other subsection in 326 IAC 6.8-1-2. Therefore, pursuant to 326 IAC 6.8-1-2(a), particulate matter emissions from the railcar heater and three (3) preheaters shall not exceed seven-hundredths (0.07) gram per dry standard cubic meter (g/dscm) (three-hundredths (0.03) grain per dry standard cubic foot (dscf)).
(2) The railcar heater and three (3) preheaters are not subject to 326 IAC 6.8-2 (Lake County: PM10 Emission Requirements) because pursuant to 326 IAC 6.8-2-1(d) Particulate limitations shall not be established for combustion units that burn only natural gas at sources or facilities identified in this article, as long as the units continue to burn only natural gas. The railcar heater and three (3) preheaters will only burn natural gas.
(3) The railcar heater and three (3) preheaters are not subject to 326 IAC 6.8-8 (Lake County: Continuous Compliance Plan) because the railcar heater and three (3) preheaters are not listed facilities included in 326 IAC 6.8-2.
(4) There are no fugitive emissions from the railcar heater and three (3) preheaters. Therefore, the requirements of 326 IAC 6.8-10 (Lake County: Fugitive Particulate Matter) and 326 IAC 6.8-11 (Lake County: Particulate Matter Contingency Measures) are not included in the permit for the railcar heater and three (3) preheaters.

(b) 326 IAC 6-2-1 (Particulate Matter Emission Limitations for Sources of Indirect Heating)
The requirements of 326 IAC 6-2-1 (Particulate Matter Emission Limitations for Sources of Indirect Heating) are not included in the permit for the railcar heater and three (3) preheaters because these units are direct fired.

(c) 326 IAC 7-1.1 Sulfur Dioxide Emission Limitations
The railcar heater and three (3) preheaters are not subject to 326 IAC 7-1.1 because their SO_2 PTE (or limited SO_2 PTE) is less than 25 tons/year or 10 pounds/hour.

(d) 326 IAC 8-1-6 (New Facilities; General Reduction Requirements)
This rule applies to facilities located anywhere in the state that were constructed on or after January 1, 1980, and which have potential volatile organic compound (VOC) emissions of 25 tons per year or more. The railcar heater and three (3) preheaters are not subject to 326 IAC 8-1-6 because each unit does not have potential VOC emissions of 25 tons per year or more.

(e) 326 IAC 9-1-2 (CARBON MONOXIDE EMISSION RULES)
The railcar heater and three (3) preheaters are not subject to 326 IAC 9-1-2 (Carbon Monoxide Emission Rules) because there is not an emission limit for these types of units that has been established in section 2 of this rule. Therefore, 326 IAC 9-1-3 does not apply.

Compliance Determination and Monitoring Requirements

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

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

(a) The Compliance Determination Requirements applicable to this modification are as follows:

(1) In order to assure compliance with 326 IAC 2-2, the baghouses for particulate control shall be in operation and control emissions from the coal pulverization system units at all times the coal pulverization system units are in operation.

(b) The Compliance Monitoring Requirements applicable to this proposed modification are as follows:

Emission Unit	Control Device	Parameter	Frequency	Range	Excursions and Exceedances
Coal pulverization system units	Baghouse	Visible Emissions	Daily	Normal-Abnormal	Response Steps

These monitoring conditions are necessary because the baghouses controlling particulate emissions must operate properly to ensure compliance with 326 IAC 2-2 (PSD).

(c) The testing requirements applicable to this proposed modification are as follows:

(1) Based on discussions with IDEM's Compliance Data Section, it has been determined that it is not possible for the source to perform controlled testing for PM or PM10 for the pulverized coal storage reservoir baghouse (vent filter house). The controlled emissions from the coal pulverization system unit's baghouses are sufficiently low such that the overall project emissions will be below the Part 70 significant thresholds of 25 and 15 tons per year for PM and PM10, respectively (See Appendix A of this TSD for detailed emission calculations).

Proposed Changes

The following changes listed below are due to the proposed modification. Deleted language appears as ~~strikethrough~~ text and new language appears as **bold** text:

Proposed Changes

(a) Sections A.3 Emission Units and Pollution Control Equipment Summary, A.4 Specifically Regulated Insignificant Activities, D.17, and D.22 have been revised to specify the units subject to 40 CFR 60, Subpart Y.

(b) Section D.17 has been revised to combine the insignificant activities in permit sections D.17, D.26, and D.30 for clarity. No new requirements are applicable to these insignificant activities.

(c) Section D.22 has been revised to combine the coal pulverization system units in permit sections D.23, D.24, and D.25 for clarity.

(d) Section D.22(b) has been added to this section from Section D.24.1, which was removed for clarity.

(e) Section D.22.2 has been revised to add the coal pulverization system units PM and PM10 emission limits that render 326 IAC 2-2 (PSD) not applicable. These are the same PSD limits that were stated in permit sections D.23 and D.25.

(f) Section D.22.3 has been revised. 326 IAC 6.8-1-2 applies to all of the coal pulverization system units.

(g) Testing conditions for the coal pulverization system units have been removed as discussed in the Compliance Determination and Monitoring Requirements section of this TSD. The source shall perform visible emission notations of each of the baghouse stacks for the coal pulverization system units in order to demonstrate compliance with 326 IAC 2-2 (PSD).

(h) Condition D.22.7 Parametric Monitoring has been removed. IDEM, OAQ's current policy is to only include one compliance monitoring requirement for this type of control. Therefore, IDEM, OAQ has removed Condition D.22.7 Parametric Monitoring since the permit also contains a Visible Emissions Notations requirement for the baghouse exhaust stacks. The associated Record Keeping Requirements have also been removed.

(i) Section D.22.8(b) has been added to this section from Section D.24.3(a), which was removed for clarity.

(j) Section F.4 has been added back into the permit to include the units subject to 40 CFR 60, Subpart Y. The coal pulverization system units were always subject to 40 CFR 60, Subpart Y. Administrative Amendment No. 089-35392-00121 removed 40 CFR 60, Subpart Y from the permit because the coal pulverization system units were not listed in the Emissions Unit Description Box. Therefore, Section F.4 has been added into the permit for the coal pulverization system units that are subject to the requirements of 40 CFR 60, Subpart Y.

Additional Changes

IDEM, OAQ made additional changes to the permit as described below in order to update the language to match the most current version of the applicable rule, to eliminate redundancy within the permit, and to provide clarification regarding the requirements of these conditions.

(a) Typographical errors have been corrected throughout.

(b) IDEM, OAQ has updated D sections for clarity.

(c) D Sections have been revised to change "facility" to "emissions unit" for clarity.

(d) D Section Emission Unit Description boxes have been revised to match the units in the A section of the permit.

(e) After discussions with EPA, OAQ decided to add a rule cite for the Compliance Determination Requirements subsection title in the D Sections. The addition of this rule cite is to satisfy EPA's concerns. The rule citation has been changed throughout the permit as follows:

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

The permit has been revised as follows:

A.3 Emission Units and Pollution Control Equipment Summary [326 IAC 2-7-4(c)(3)][326 IAC 2-7-5(14)]

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Coal Pulverization and Air Preheater System (East PCI Coal Pulverization)

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

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

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

Under 40 CFR 60, Subpart Y these units are considered affected facilities.

Pulverized Coal Storage and Feed System (West PCI Coal Pulverization)

(a) One (1) Pulverized coal Transport, identified as Line A, constructed in 1993, with a maximum capacity of 210 tons per hour, ducted to a baghouse (A) exhausting to stack (SS-5).

(b) One (1) Pulverized coal Transport, identified as Line B, constructed in 1993, with a maximum capacity of 210 tons per hour, ducted to a baghouse (B) exhausting to stack (SS-6).

(c) One (1) Pulverized coal storage reservoir, constructed in 1993, with a maximum capacity of 600 tons, blanketed with nitrogen and ducted to a baghouse (vent filter house)

exhausting to stack (SS-7).

Under 40 CFR 60, Subpart Y these units are considered affected facilities.

Railcar Heater (PCI Coal Handling Thaw Shed)

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

Coal Handling Operations

Coal Handling System

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

(b) One (1) Reclaim Hopper, identified as RCH-1, constructed in 1993, with a maximum capacity of 300 tons per hour, ducted to baghouse DC-6 and exhausting to stack DC-6.

(c) One (1) Car Dump Hopper 1/C1, identified as FS-8, constructed in 1993, with a maximum capacity of 200 tons per hour, ducted to baghouse DC-1 exhausting to stack F1.

(d) One (1) Car dump Hopper 2/C1, identified as FS-9, constructed in 1993, with a maximum capacity of 200 tons per hour, ducted to a baghouse DC-2 exhausting to stack F2.

(e) One (1) Car Dump Hopper 3/C1, identified as FS-10, constructed in 1993, with a maximum capacity of 200 tons per hour, ducted to a baghouse DC-3 exhausting to stack F3.

(f) One (1) Transfer Point C1/C2, identified as FS-2, constructed in 1993, with a maximum capacity of 600 tons per hour, ducted to a baghouse DC-4 exhausting to stack F4.

(g) One (1) Reclaim Hopper/C2, identified as FS-14, constructed in 1993, with a maximum capacity of 300 tons per hour, ducted to a baghouse DC-5 exhausting to stack F5.

(h) One (1) Screen Transfer/C2, identified as FS-3, constructed in 1993, with a maximum capacity of 600 tons per hour, ducted to a baghouse DC-7 exhausting to stack F7.

(i) One (1) Screen/C3 Gate Transfer identified as FS-11, constructed in 1993, ducted to a baghouse DC-8 exhausting to stack F.

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

(k) One (1) Transfer Point C4/C5, identified as FS-4, constructed in 1993, ducted to a baghouse DC-10 exhausting to stack F10.

Under 40 CFR 60, Subpart Y these units are considered affected facilities.

East Building – Coal handling

(a) One (1) Transfer Point C5/C6, identified as FS-5, constructed in 1993, with a maximum capacity of 600 tons per hour, ducted to a baghouse DC-11 exhausting to stack F11.

(b) One (1) Transfer Point C6/Bin 1, identified as FS-7, constructed in 1993, ducted to baghouse DC-12 exhausting to stack F12.

(c) One (1) Transfer Point C5/Bin 2, identified as FS-6, constructed in 1993, ducted to baghouse DC-13 exhausting to stack F13.

(d) One (1) Transfer Point C6/Bin 3, identified as FS-13, constructed in 1993, with a maximum capacity of 600 tons per hour, ducted to baghouse DC-14 exhausting to stack F14.

Under 40 CFR 60, Subpart Y these units are considered affected facilities.

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A.4 Specifically Regulated Insignificant Activities [326 IAC 2-7-1(21)][326 IAC 2-7-4(c)][326 IAC 2-7-5(14)]

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(6) Conveyors as follows:

(A) Covered conveyor for coal or coke conveying of less than or equal to 360 tons per day; [326 IAC 6.8-10-3]

(B) Uncovered coal conveying of less than or equal to 120 tons per day. [326 IAC 6.8-10-3]

Under 40 CFR 60, Subpart Y these units are considered affected facilities.

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SECTION D.6 ~~**FACILITY**~~**EMISSIONS UNIT** OPERATION CONDITIONS

~~**Emission**~~**Emissions** Unit Description:

~~**One (1)**~~ Number 3 Sinter Plant

(a) Three (3) Sinter Strands, constructed in 1958 , identified as ISS10379, ISS20380 and ISS30381, each with 50 MMBtu per hour reheat burners combusting natural gas and coke oven gas identified as ISB001, ISB002 and ISB003 and a maximum capacity of 225 tons of sinter per hour each, each with ignition hood burners with a combined heat input of 50 MMBtu/hr combusting natural gas and coke oven gas, controlled by two (2) Windbox Gas Cleaning Systems IS3203 and IS3204, installed in 1996, each comprised of a Quench Reactor, Dry Venturi Scrubber, a baghouse operated in series, exhausting to Windbox stacks IS6198 and IS6199 which are equipped with VOC CEMS.

(b) One (1) Cold Screen Station, identified as ISR00389, constructed in 1958, with a maximum capacity of 450 tons per hour, using a Baghouse IS3209 as a control device and exhausting to stack IS6207.

(c) One (1) S1/S2 Conveyer System, identified as ISY00388, constructed in 1979, with a maximum capacity of 450 tons per hour, that transfers sinter from the sinter coolers to the cold screening station, using a baghouse IS3208 as a control device and exhausting to stack IS6206.

(d) Three (3) Sinter Coolers, identified as ISC10385, ISC20386, and ISC30387, constructed in 1958, with a maximum capacity of 225 ton per hour each, with emissions exhausting to stacks IS6203, IS6204, and IS6205 respectively.

(e) Three (3) Sinter Strand Discharge End Areas, identified as ISS10379, ISS20380 and ISS0381, constructed in 1958, using three (3) baghouses as control devices,

designated as IS3205, IS3206, and IS3207, exhausting to stacks IS6200, IS6201, and IS6202 respectively.

(f) Blended Material Storage Bin Building, identified as ISB00377, constructed in 1979, including bins, feeders and conveyors, with a maximum capacity of 1,000 tons per hour, using a baghouse IS3196 as a control device and exhausting to stack IS6197.

(g) Storage and Blending Piles, identified as ISBP0376, with fugitive emissions.

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

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

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

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SECTION D.7 ~~**Facility**~~**EMISSIONS UNIT** OPERATION CONDITIONS

~~Emission~~**Emissions** Unit Description: Four (4) Blast Furnaces, designated as Blast Furnace No. 4, Blast Furnace No. 6, Blast Furnace No. 8 and Blast Furnace No. 14

Blast Furnaces

(a) Raw materials shipped to the ore yard identified as IAOYO366, are transferred to the Highline, identified as IAHL0307, from which raw material shipments and coke are sent through the Stockhouse.

(b) The No. 14 Blast Furnace Stockhouse, constructed in 1979, modified in 2009 with the addition of a baghouse for particulate control, identified Blast Furnace No. 14 Stockhouse Baghouse, exhausting to stack IDSH0367, servicing Blast Furnace 14. The No 4 Blast Furnace Stockhouse constructed in 1979, controlled by dust suppression, services Blast Furnace No. 4.

(c) The No 6 Blast Furnace Stockhouse constructed in 1979, controlled by dust suppression, services Blast Furnace No. 6. The No. 8 Blast Furnace Stockhouse constructed in 1979, controlled by dust suppression, services Blast Furnace No. 8.

(d) No. 4 Blast Furnace, constructed in 1917, with a maximum capacity of 200 tons per hour, identified as IABF0308, using a Blast Furnace Gas Distribution System to collect the blast furnace gas and using natural gas injection and pulverized coal at a rate of 26 tons per hour, oil (from on-site contractor when it meets specifications) at a rate of 70 gallons per minute and/or coal tar (when the on-site contractor tar centrifuge is not operating) at a rate of 70 gallons per minute.

(1) Three (3) No. 4 Blast Furnace Stoves identified as IAST0360, replaced in 1947, with a maximum heat input capacity of 350 MMBtu per hour total combusting blast furnace gas (BFG) and natural gas, exhausting to the combustion stack IA6160.

(2) No. 4 Blast Furnace Casthouse, identified as IABF0308, constructed in 1917, with emissions from tapping and runners controlled by a natural gas iron oxide

fume suppression system IA3177, exhausting to casthouse roof monitor IA6010.

(3) One (1) Slag Pit, identified as IASP0311, with fugitive emissions.

(e) No. 6 Blast Furnace, constructed in 1910, with a maximum capacity of 200 tons per hour, identified as IABFO341, using a Blast Furnace Gas Distribution System to collect the blast furnace gas and using natural gas injection and pulverized coal injected at a rate of 26 tons per hour, oil at a rate of 70 gallons per minute and /or coal tar at a rate of 70 gallons per minute.

(1) Four (4) No. 6 Blast Furnace Stoves identified as IBST0361, replaced in 1997, with a maximum heat input capacity of 350 MMBtu per hour total, combusting Blast Furnace Gas (BFG) and natural gas exhausting to the combustion stack IB6168.

(2) No. 6 Blast Furnace Casthouse, identified as IBBF0341, constructed in 1910, with emissions from tapping and runners controlled by a natural gas iron oxide fume suppression system IB3178, exhausting to casthouse roof monitor IB6011.

(3) One (1) Slag Pit, identified as IBSP0335, with fugitive emissions.

(f) No. 8 Blast Furnace, constructed in 1909, with a maximum capacity of 183 tons per hour, identified as ICBFO354, using a Blast Furnace Gas Distribution System to collect the blast furnace gas and using natural gas injection and pulverized coal injected at a rate of 26 ton per hour, oil at a rate of 70 gallons per minute and/or coal tar at a rate of 70 gallons per minute.

(1) Four (4) No. 8 Blast Furnace Stoves, identified as ICST0362, replaced in 1999, with a maximum heat input capacity of 325 MMBtu per hour total, combusting Blast Furnace Gas and natural gas, exhausting to the combustion stack IC6175.

(2) No. 8 Blast Furnace Casthouse, identified as ICBF0354, constructed in 1909, with emissions from tapping and runners controlled by a natural gas iron oxide fume suppression system IC3179, exhausting to cast house roof monitor IC6012.

(3) One (1) Slag Pit, identified as ICSP0363, with fugitive emissions.

(g) No. 14 Blast Furnace, constructed in 1974, with a maximum capacity of 450 tons per hour, identified as IDBF0369, using a Blast Furnace Gas Distribution System to collect the blast furnace gas and using natural gas injection and pulverized coal injected at a rate of 80 tons per hour, oil at a rate of 150 gallons per minute and/or coal tar at a rate of 150 gallons per minute.

(1) Three (3) No. 14 Blast Furnace Stoves identified as IDST0359, constructed in 1974, with a maximum heat input capacity of 700 MMBtu per hour total, combusting blast furnace gas and natural gas, exhausting to the combustion stack ID6184;

(2) No. 14 Blast Furnace Casthouse, identified as IDBF0369, constructed in 1974 with emissions controlled by a baghouse, identified as ID3185, exhausting to stack ID6187 and fugitive emissions exhausting through the casthouse roof monitor ID6013;

(3) One (1) Slag Pit, identified as IDSP0371, with fugitive emissions.

(4) Pursuant to Significant Source Modification 089-20118-00121, issued October 20, 2005, the following activities involved in the No. 14 Blast Furnace Reline Project were approved for construction:

(A) Replacement of furnace refractory lining with new and thinner refractory brick.

(B) Replacement of furnace shell.

(C) Removal and replacement of the top charging system with a new "bell-less" charging system.

(D) Placement of new copper staves in the mantle area of the furnace.

(E) Installation of copper cooling plates and a new bustle pipe.

(F) Repair of the checker work brick in the stoves and various structural, mechanical and electrical repairs.

(G) Enlargement of the slag granulator and addition of a stack.

(H) Changes to the casthouse and casthouse emissions control system to improve capture efficiency of hoods at the tap holes, iron troughs and runners.

(I) Removal and replacement of the existing system for cleaning blast furnace gas with a more efficient scrubbing system.

(h) One (1) No. 14 Blast Furnace Slag Granulation Plant owned by U.S. Steel - Gary Works and operated by U.S. Steel - Gary Works as part of the slag processing operation. The granulation plant has a maximum capacity of 1,704,000 tons of steel mill slag per year, consisting of the following:

(1) One (1) hot slag quenching operation, constructed in 1991, directed to a hooded exhaust stack.

(2) Two (2) silos, constructed in 1991, for temporary slag storage.

(3) Two (2) belt conveyers, constructed in January 1995.

(4) One (1) storage silo and loadout bay, constructed in May 1995, with a capacity of 400,000 tons per year.

(i) One (1) blast furnace gas distribution system consisting of instrumentation and valves designed to limit the maximum pressure through the distribution system by venting excess blast furnace gas to the three (3) bleeder stacks equipped with Flare No. 1 identified as BG6073, constructed before 1920, Flare No. 2, identified as BG6074 constructed before 1920 and Flare No. 4 identified as BG6075, constructed in 1974.

(j) One (1) iron beaching process, constructed prior to 1965, identified as IMIB0378.

(k) One (1) transfer ladle maintenance operation, constructed prior to 1965, identified as, IMVM0375.

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

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

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

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SECTION D.8 ~~**FACILITY**~~**EMISSIONS UNIT** OPERATION CONDITIONS

~~**Emission**~~**Emissions** Unit Description:

Number ~~**1**~~ **One Basic Oxygen Process (**BOP) Shop

(a) Two (2) Stations, identified as No. 1 and No. 2, Hot Metal Transfer and Desulfurization Stations. The Desulfurization Stations were originally constructed in 1981 and the Hot Metal Transfer Stations were originally constructed in 1965, and replaced in 1998. Each station consists of Hot Metal Desulfurization, SSDS0201, Hot Metal Transfer SSMT0203 and Slag Skimming SSSS0205. Hot metal from the blast furnaces is desulfurized and skimmed prior to charging in the steel making vessels. The maximum capacity of each station is 456 tons per hour. Each station is equipped with a local exhaust ventilation hood to capture emissions ducted to the Hot Metal Desulfurization/Skimming Stations Baghouse SS3100. The desulfurization units are equipped with nitrogen suppression around where the desulfurization lance penetrates the hood hole.

(b) One (1) Flux handling system, identified as SSFH0206, constructed in 1965, used for unloading, temporary storage, and transfer of fluxing agents to the steel making vessels, with a maximum capacity of 80 tons per hour. Emissions are controlled by No. 1, No. 2 and No. 3 baghouses SS3058, SS3059, and SS3053. Nos. 1 and 2 exhaust inside the building and No. 3 discharges through stack SS6056.

(c) Basic Oxygen Process (BOP) Vessels, constructed in 1965, consisting of BOP vessel M, identified as SSVM0234, vessel E, identified as SSVE0235 and vessel D, identified as SSVD0236, with a maximum capacity of 250 tons per hour each. Emissions are controlled by open combustion hoods and an exhaust emission hood collection system, which exhausts emissions to the Gas Cleaning Systems SS3103 and SS3104.

(d) Two (2) gas cleaning systems SS3103 and SS3104 that process the exhaust gases from the three (3) steel making vessels consisting of three (3) quenchers, two (2) scuppers, two (2) Venturi scrubbers, two (2) separators, two (2) gas coolers fitted with internal mist eliminators and two (2) induced draft fans. Emissions exhaust through stacks SS6102 and SS6103.

(e) CASbell/OB Lancing Stations M, D and E, include the controlled argon stirring process and blowing of oxygen to maintain temperature and chemistry. Constructed in 1981, Station M, identified as SSCM0231, Station E identified as SSCE0232, and Station D identified as SSCD0233 with a maximum capacity of 250 tons per hour each. Emissions are controlled by the CASbell/OB Lancing baghouse SS3105, exhausting through Stack SS6104 and uncaptured emissions venting to the roof monitor SS6636.

(f) One (1) Slingot Moulding Station, including the casting of bottom-poured steel ingots, identified as SSMS0227, constructed in 1965, exhausting to the roof monitor SS6637.

(g) Nine (9) natural gas fired Ladle Preheaters and Dryers identified as No. 1 through 9, with 1 through 4, constructed in 1983, 5 and 6 constructed in 1982 and 7 through 9 construction unknown. Six (6) Preheaters with a capacity of 14 MMBtu/hr each and three (3) Dryers with a

capacity of 10 MMBtu/hr each, identified as SSLD0230, exhausting through Roof Monitor SS6637.

(h) One (1) Continuous Caster, identified as SCSC0274, constructed in 1967, including a Tundish dryer with a heating capacity of 7.0 MMBtu/hr per hour, continuously casting steel slabs with a maximum capacity of 275 tons per hour. Emissions exhaust through Roof Monitor SC6638.

(i) One (1) fugitive emissions mitigation system at the No. 1 BOP Shop, constructed in June 2002, consisting of a capture hood system ducted to a 99% efficient baghouse with a flow rate of 11,500 acfm.

(j) One emergency slag skimming station with a maximum capacity of 456 tons per hour **~~exhausting through Roof Monitor SS6636~~with emissions ducted to the Hot Metal Transfer Station and Desulfurization/Skimming Stations Baghouse SS3100.**

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

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

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

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SECTION D.9 **~~FACILITY~~EMISSIONS UNIT** OPERATION CONDITIONS

~~Emission~~**Emissions** Unit Description:

Number ~~2~~**Two** Q-BOP Shop

(a) Two (2) Hot Metal Transfer and Desulfurization Stations, identified as NSDS0246, constructed in 1987, with a maximum capacity of 510 tons per hour. These stations included: two (2) Hot Metal Mixers, identified as NSMM0264 and two (2) Hot Metal Mixer Heaters, identified as NSMH0251, constructed in 1973, with a maximum capacity of 255 tons per hour. The natural gas fired mixer heaters have a heat input capacity of 10 MMBtu/hr each. Emissions from the hot metal transfer and desulfurization stations, mixers and heaters are controlled by the Hot Metal Transfer and Desulfurization Stations Baghouse NS3115~~ that discharges~~**, discharging** through ~~NS614.~~ **NS6144 and** the uncontrolled emissions ~~exhaust~~**go** through roof monitor NS6631.

(b) Q-Basic Oxygen Process (BOP) vessels, constructed in 1973, consisting of BOP vessel T identified as NSVT0268, vessel W, identified as NSVW0269, and vessel Y, identified as NSVY0270, with a maximum capacity of 250 tons per hour each. Primary emissions are controlled by open combustion hood and two (2) Gas Cleaning Systems, secondary emissions are controlled by the Secondary Emissions Baghouse NS3124, exhausting to stack NS6123, and uncontrolled emissions exhaust through Roof Monitor NS6632.

(c) Two (2) Gas Cleaning Systems, identified as NS3125 and NS3126 located in the gas cleaner facility, constructed in 1973, process the exhaust gases from the three (3) steel making vessels through three (3) quenchers, two (2) scuppers (tank like

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

(d) Three (3) Flux Bins T, W, and Y, identified as NSVT0265, NSVW0266 and NSVY0267, constructed in 1973, with a maximum capacity of 141 tons per hour each. Emissions are controlled by five (5) baghouses. Three (3) Flux Transfer Baghouses at 166' level identified as NS3112, NS3108, and NS3107, exhausting through Stacks NS6623, NS6627and NS6628 recycling captured material back to the process; One (1) North Flux Handling Baghouse at 116' level identified as NS3109 and one (1) South Flux Handling Baghouse at 116' level identified as NS3110, exhausting through stacks NS6626 and NS6625. Uncontrolled emissions exhaust through the roof monitor NS6632.

(e) Three (3) Ladle Metallurgical Facilities, LMF1 identified as NSL10293, LMF 2 identified as NSL20294 were constructed in 1986 and LMF 3 identified as NSL30295, constructed in 1991 with a maximum capacity of 348 tons per hour each. Hot fume emissions from LMF 1 and 2 are controlled by Nos. 1 and 2 LMF Hot Fume Exhaust baghouses NS3135 and NS3136, exhausting through stacks NS6146 and NS6147. Material handling emissions at LMF 1 and 2 are controlled by the LMF Nos. 1 and 2 Material Handling baghouse NS3052, exhausting through stack NS6055. The LMF 3 Hot Fume Exhaust and Material Handling emissions are controlled by the LMF 3 Hot Fume and Material Handling Baghouse NS3137, exhausting to stack NS6148. All uncontrolled emissions exhaust through the roof monitor NS6634.

(f) One (1) Capped Argon Bubbling (CAB) Station with oxygen blowing, approved in 2014 for construction, identified as NSC40296, with a maximum capacity of 477,000 tons per year, using the No. 3 LMF Hot Fume and Material Handling Baghouse NS3137 as control, and exhausting to stack NS6148. All uncontrolled emissions exhaust through the roof monitor NS6634.

(g) One (1) R-H Vacuum Degasser, identified as NSVD0271, constructed in 1989, with a maximum capacity of 297.1 tons of steel per hour consisting of two (2) natural gas fired heaters, one (1) active and one (1) spare, identified as NSAB0276 and NSSB0275, with heat input capacities of 12 MMBtu per hour and 3 MMBtu per hour, respectively. Carbon monoxide and other combustible gas emissions are controlled with a flare that exhausts through Stack NS6145 and uncontrolled emissions exhaust through the Roof Monitor NS6634.

(h) One (1) Slag Conditioning Station servicing the RH Vacuum Degasser, constructed in 1997, with a maximum capacity of 297.1 tons of steel per hour.

(1) PM_{10} emissions from the station are controlled by a baghouse exhausting through Stacks S-1 through S-6 and recycling captured material back to the process.

(2) PM_{10} emissions from the material handling of slag conditioning and metallurgical agents are exhausted through the RH Vacuum Degasser Slag Conditioning Baghouse NS3207, exhausting through Stack NS6636.

(i) One (1) Daytank Lime Silo at the lime dumping station, identified as NSDS0250 constructed in 1971. Emissions are controlled by the Daytank Lime Silo baghouse NS3106, exhausting through the stack, NS6629.

(j) Three (3) Continuous Casting Lines, identified as Lines A, B and C identified as, NCCA0284, NCCB0285 and NCCC0286, with a total maximum capacity of 800 tons per hour combined. Lines A and B were constructed in 1986. Line C was constructed in 1991. Emissions from the continuous casters go to the Roof Monitor NC6635.

(k) Fourteen (14) natural gas fired Ladle Preheaters, identified as NBLD0262, eleven (11) with a heat input capacity of 9 MMBtu per hour each and three (3) with a heat input of 10 MMBtu per hour each. Emissions go through Roof Monitor NS6633.

(l) Two (2) Hot Metal Ladle Skimmers, identified as NSLS0248, constructed in 1973. Emissions go through Roof Monitor NS6631.

(m) Two (2) Steel Slag Skimming Stations, consisting of slag skimmers, identified as NSS10292 and NSS20287. Both were constructed in 1973. Emissions go through Roof Monitor NS6633.

(n) One (1) Slingot Station, identified as NSST0290, constructed in 1986. Emissions go through Roof Monitor NS6634.

(o) Eight (8) natural gas fired Tundish Preheaters located at the No. 2 Caster, with a heat input capacity of 6 MMBtu per hour each. Emissions go through Roof Monitor NC6635.

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

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

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

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SECTION D.10 ~~**FACILITY**~~**EMISSIONS UNIT** OPERATION CONDITIONS

~~Emission~~**Emissions** Unit Description:

~~One (1) 84- Inch~~ Hot ~~Strip~~**Rolling** Mill

(a) Four (4) reheat furnaces Nos. 1, 2, 3 and 4, identified as RMF10500, RMF20501, RMF30502 and RMF40503 commenced operation in 1967, with heat input capacity of 600 MMBtu per hour each. Each furnace is equipped to combust natural gas and coke oven gas with emissions exhausting through Stacks RM6500, RM6501, RM6502 and RM6503.

(b) Two (2) waste heat boilers Nos. 1 and 2 , identified as RB1B0508 and RB2B0509, commenced operation in 1967, with a heat input capacity of 226 MMBtu per hour each. The heat input capacity from fuel from these boilers is derived from a combination of waste heat ducted from the reheat furnaces and the combustion of natural gas and coke oven gas. Emissions exhaust through the waste heat boiler stacks HB6504 and HB6505.

(c) One (1) 84-inch Hot Strip Mill, identified as RMV00504, commenced operation in 1967, with a maximum capacity of 856 tons per hour, 5 roughing mills and a 7-stand finishing mill with fugitive emissions through a Roof Monitor RM6630.

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

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

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SECTION D.11 ~~**FACILITY**~~**EMISSIONS UNIT** OPERATION CONDITIONS

~~Emission~~**Emissions** Unit Description:

~~Two~~ Continuous ~~Pickle~~**Pickling** Lines

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

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

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

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SECTION D.12 ~~**FACILITY**~~**EMISSIONS UNIT** OPERATION CONDITIONS

~~Emission~~**Emissions** Unit Description:

Sheet Products ~~Operations~~**Division**

(a) North Sheet Mill

(1) One (1) 5-Stand Cold Reduction Mill, identified as H5M50637, constructed in 1964, with a maximum capacity of 400 tons per hour, consisting of 5 Mill Stands. Emissions are controlled by fume collection H53547, exhausting to Stack H56527.

(2) Twenty-six (26) 4-Stack **A** Box Annealing Furnaces and 50 bases, identified as HTAF0813 through HTAF0838, constructed in 1964, with a heat input capacity of 12 MMBtu per hour each. These furnaces are direct fired with emissions exhausting through vent pipes HT6530 through HT6555.

Under 40 CFR 63, Subpart DDDDD, this is considered an existing process heater.

(3) One (1) 80-inch temper mill, constructed in 1964, with a maximum capacity of 250 tons per hour, with fugitive emissions.

(4) One (1) 80-inch Recoil Line, constructed in 1964, with a maximum capacity 120 tons per hour, with fugitive emissions.

(b) South Sheet Mill

(1) Seventeen (17) 8-Stack A Box Annealing furnaces and 66 bases, identified as

HXBA0560 through HXBA0576, constructed in 1948. Eleven (11) furnaces have a heat input capacity of 15 MMBtu per hour each and the remaining six (6) are rated at 18 MMBtu per hour each. Emissions from these furnaces exhaust through the Roof Monitor HX6003.

Under 40 CFR 63, Subpart DDDDD, this is considered an existing process heater.

(2) One (1) 2-Stand Temper Mill, identified as H2M00579, constructed in 1974, with a maximum capacity of 89 tons per hour, with fugitive emissions through Roof Monitor H26004.

(3) One (1) No. 6 East Galvanizing Line, constructed in 1962, with a maximum capacity of 48 tons an hour, with one (1) annealing furnace identified as H6F10527 with a heat input of 45 MMBtu per hour and emissions through stack H66516. Also, contains one (1) Galvanneal Furnace identified as HF20529 with a heat input capacity of 20.0 MMBtu per hour and emissions exhausting through Roof Monitor H66006.

Under 40 CFR 63, Subpart DDDDD, this is considered an existing process heater.

(4) Two (2) hydrogen atmosphere batch annealing furnaces, with a total heat input capacity of 10.26 MMBtu per hour, constructed in 1997, consisting of three (3) fixed bases and two (2) movable cooling hoods.

Under 40 CFR 63, Subpart DDDDD, this is considered an existing process heater.

(5) One (1) 84-inch Hot Roll Temper Mill, constructed in 1967, with a maximum capacity of 124 tons per hour, with fugitive emissions.

(6) One (1) coil prep line, constructed in 1968, with a maximum capacity of 73 tons per hour, with fugitive emissions.

(c) Electro-galvanizing Line (EGL)

(1) One (1) Electro-galvanizing Line (EGL), with one HCl pickle tank, No. 1 Pickle tank, identified as HET20685, a cleaner section, a plating section and associated scrubber, with a maximum capacity of 60.5 tons per hour. Fumes from the Pickle Section are controlled by a fume scrubber HE3583 exhausting through stack HE6563. The single sided process for this coating line was constructed in 1977 and was modified in 1993 to a double sided process for coating.

(2) One (1) natural gas fired Boiler No. 1 in the EGL Boiler House, identified as HBB10675, constructed in 1978 and modified in 2001, with a heat input capacity of 39.147 MMBtu per hour, exhausting through stack HB6559.

Under 40 CFR 63, Subpart DDDDD, this is considered an existing industrial boiler.

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

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SECTION D.13 ~~FACILITY~~**EMISSIONS UNIT** OPERATION CONDITIONS

~~Emission~~**Emissions** Unit Description:

Tin ~~Products Operations~~**Division**

(a) One (1) 6-Stand Cold Reduction Mill, identified as TRM00709, constructed in 1967, with a maximum capacity of 150 tons per hour. Emissions are controlled by a mist eliminator TR3600, exhausting to stack TR6575.

(b) One (1) cleaning line, identified as No. 7 Cleaning Line, constructed in 1967, with a maximum capacity of 80 tons per hour. Fumes are controlled by a fume scrubber exhausting to a stack.

(c) Two (2) Annealing Lines, No. 1 and No. 2, each containing an annealing furnace, identified as T1AF0794 and T2AF0799, No. 1 constructed in 1950 and No. 2 constructed in 1959, with a maximum heat input capacities of 32 and 35 MMBtu per hour, respectively. Emissions exhaust to stacks T16609 and T26610. The No. 2 Continuous Anneal Line has a cleaning section with fumes collected in a fume scrubber exhausting through a stack.

Under 40 CFR 63, Subpart DDDDD, this is considered an existing process heater.

(d) Five (5) 4-Stack A Box Annealing Furnaces and 12 bases, identified as TXAF0765 through TXAF0769, constructed in 1968. All furnaces have a heat input of 10.5 MMBtu per hour each. Emissions exhaust to stacks TX6580 through TX6584.

Under 40 CFR 63, Subpart DDDDD, this is considered an existing process heater.

(e) One (1) 48-inch Temper Mill, constructed in 1958, with a maximum capacity of 150 tons per hour, with fugitive emissions. This unit has a dust filter that exhausts inside the building.

(f) One (1) Double Reduction Mill with two (2) mill stands, identified as TDMO0742, constructed in 1963, with a maximum capacity of 75 tons per hour. Emissions are controlled by a mist eliminator D3603, exhausting to stack TD6595.

(g) One (1) No. 1 Tin Free Steel Line (TFS), constructed in 1950, with a maximum capacity of 24 tons per hour. The chemical treatment rinse section, TFR00753 exhaust through stack TF6597 and all other fugitive emissions from the line to roof monitor TF6661.

(h) One (1) No. 5 Electrolytic Tinning Line 5 (ETL), constructed in 1957, and with a maximum capacity of 50 tons per hour. The No. 5 ETL contains a Plating and Chemical Treatment Tank, identified as TFR00777, with fugitive emissions through Roof Monitor T56071.

(i) One (1) No. 6 Electrolytic Tinning Line (6 ETL), constructed in 1966, with a maximum capacity of 120 tons per hour. The 6 ETL also contains a Plating and Chemical Treatment Tank, identified as T6H00786, with fugitive emissions through Roof Monitor T56071.

(j) One (1) Tin Anode Caster, constructed in 1965, with a maximum capacity of 0.57 tons per hour, with fugitive emissions through roof monitor.

(k) One (1) Tin Mill Recoil and inspection Line, constructed in 1967, with a maximum capacity of 14.8 tons per hour.

(l) One (1) 45” Side Trimmer, constructed in 1961, with fugitive emissions through the roof monitor.

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

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SECTION D.14 ~~**FACILITY**~~**EMISSIONS UNIT** OPERATION CONDITIONS

~~Emission~~**Emissions** Unit Description:

No. **4** Boiler House~~4~~

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

(b) One (1) Boiler, No. 3, identified as O4B30461, constructed in 1967, equipped to combust blast furnace gas and natural gas, with a maximum heat input of 500 MMBtu per hour, exhausting through Stack O46270.

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

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

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

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

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SECTION D.15 ~~**FACILITY**~~**EMISSIONS UNIT** OPERATION CONDITIONS

~~Emission~~**Emissions** Unit Description:

Turboblower Boiler House (TBBH)

(a) Three (3) Boilers, No. 1, No. 2 and No. 3, identified as OTB10462, OTB20463 and OTB30464, constructed in 1948, equipped to combust blast furnace gas, coke oven gas, fuel oil and natural gas, with a maximum heat input of 410 MMBtu per hour each, exhausting through Stacks OT6271, OT6272 and OT6273, respectively.

(b) One (1) Boiler No. 5, identified as OTB50466, constructed in 1958, equipped to combust blast furnace gas, coke oven gas, fuel oil and natural gas, with a maximum

heat input of 410 MMBtu per hour, exhausting through Stack OT6275.

(c) One (1) boiler, No. 6, identified as OTB60467, constructed after August 17, 1971, equipped to combust blast furnace gas and natural gas, with a maximum heat input capacity of 710 MMBtu per hour, exhausting through Stack OT6276.

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

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

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

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SECTION D.16 ~~**FACILITY**~~**EMISSIONS UNIT** OPERATION CONDITIONS

~~Emission~~**Emissions** Unit Description:

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

(a) Paved Roads and Parking Lots

(b) Unpaved Roads and Parking Lots

(c) Batch Transfer-Loading and Unloading Operations

(d) Continuous Transfer In and Out of Storage Piles

(e) Batch Transfer Operations-Slag and Kish Handling

(f) Wind Erosion from Storage Piles and Open Areas

(g) In Plant Transfer by Truck or Rail

(h) In Plant Transfer by Front End Loader or Skip Hoist

(i) Material Processing Facility

(j) Crusher Fugitive Emissions

(k) Material Processing Facility Building Openings

(l) Dust Handling Equipment

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

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

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

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SECTION D.17 EMISSIONS UNIT OPERATION CONDITIONS

~~Emission~~**Emissions** Unit Description:

Insignificant activities ~~as follows~~:

(a) Specifically regulated insignificant activities:

(1) Degreasing operations that do not exceed 145 gallons per 12 months, except if subject to 326 IAC 20-6. [326 IAC 8-3-5][326 IAC 8-3-6][326 IAC 8-9-1]

(2) Cleaners and solvents characterized as follows:

(A) Having a vapor pressure equal to or less than 2 kPa; 15 mm Hg; or 0.3 psi measured at 38^{O}C (100^{O}F) or;

(B) Having a vapor pressure equal to or less than 0.7 kPA; 5mm Hg; or 0.1 psi measured at 20^{O}C (68^{O}F); the use of which for all cleaners and solvents combined does not exceed 145 gallons per 12 months.[326 IAC 8-3-5][326 IAC 8-3-6][326 IAC 8-9-1]

(3) The following VOC and HAP storage containers:

(A) Storage tanks with capacity less than or equal to 1,000 gallons and annual throughput less than 12,000 gallons. [326 IAC 8-9-1]

(B) Vessels storing lubricating oils, hydraulic oils, machining oils, and machining fluids. [326 IAC 8-9-1]

(4) The following equipment related to manufacturing activities not resulting in the emission of HAPs: brazing equipment, cutting torches, soldering equipment, welding equipment. [326 IAC 6.8-10-3]

(5) Any of the following structural steel and bridge fabrication activities:

(A) Cutting 200,000 linear feet or less of one inch (10) plate or equivalent.

(B) Using 80 tons or less of welding consumables. [326 IAC 6.8-10-3]

(6) Conveyors as follows:

(A) Covered conveyor for coal or coke conveying of less than or equal to 360 tons per day; [326 IAC 6.8-10-3]

(B) Uncovered coal conveying of less than or equal to 120 tons per day. [326 IAC 6.8-10-3]

Under 40 CFR 60, Subpart Y these units are considered affected facilities.

(7) Coal bunker and coal scale exhausts and associated dust collector vents. [326 IAC 6.8-10-3]

(8) Grinding and machining operations controlled with fabric filters, scrubbers, mist

collectors, wet collectors and electrostatic precipitators with a design grain loading of less than or equal to 0.03 grains per actual cubic foot and a gas flow rate less than or equal to 4000 actual cubic feet per minute, including the following: deburring; buffing; polishing; abrasive blasting; pneumatic conveying; and woodworking operations. [326 IAC 6.8-~~1-2(a)~~]**10-3]**

(9) Vents from ash transport systems not operated at positive pressure. [326 IAC 6.8-~~1-2(a~~**10-3**)]

(10) Fuel dispensing activities, including the following:

(A) A gasoline fuel transfer dispensing operation handling less than or equal to one thousand three hundred (1,300) gallons ~~q~~ per day and filling storage tanks having a capacity equal to or less than ten thousand **five** hundred (10,500) gallons. Such storage tanks may be in a fixed location or on mobile equipment. [326 IAC 8-9-1]

(B) A petroleum fuel other than gasoline dispensing facility, having a storage tank capacity less than or equal to ten thousand five hundred (10,500) gallons, and dispensing three thousand five hundred (3,500) gallons per day or less. A petroleum fuel, other than gasoline, dispensing facility having a storage capacity less than or equal to 10,500 gallons, dispensing less than or equal to 230,000 gallons per month. [326 IAC 8-9-1]

(b) **Specifically regulated insignificant activities (former Gary Coal Processing, LP):**

(1) Degreasing operations that do not exceed 145 gallons per 12 months, except if subject to 326 IAC 20-6.[326 IAC 8-3-5][326 IAC 8-3-8]

(2) Cleaners and solvents characterized as follows:

(A) Having a vapor pressure equal to or less than 2 kPa; 15 mm Hg; or 0.3 psi measured at 38OC (100OF) or;

(B) Having a vapor pressure equal to or less than 0.7 kPa; 5mm Hg; or 0.1 psi measured at 20OC (68OF); the use of which for all cleaners and solvents combined does not exceed 145 gallons per 12 months. [326 IAC 8-3-2][326 IAC 8-3-5][326 IAC 8-3-8]

(3) One (1) 5, 000 gallon #2 diesel fuel tank - A petroleum fuel, other than gasoline, dispensing facility having a storage capacity less than or equal to 10,500 gallons, and dispensing less than or equal to 230,000 gallons per month. [326 IAC 8-9-1]

(c) Other Insignificant Activities

(1) Space heaters, process heaters, or boilers using the following fuels:

(A) Natural gas-fired combustion sources with heat input equal to or less than ten million (10,000,000) Btu per hour.

(B) Fuel oil-fired combustion sources with heat input equal to or less than two million (2,000,000) Btu per hour and firing fuel containing equal or less than five-tenths percent (0.5%) sulfur by weight.

(2) Equipment powered by diesel fuel fired or natural gas fired internal combustion engines of capacity equal to or less than five hundred thousand (500,000)

British thermal units per hour except where total capacity of equipment operated by one (1) stationary source as defined by subdivision (38) exceeds two million (2,000,000) British thermal units per hour.

(3) Combustion source flame safety purging on startup.

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

(5) Equipment used exclusively for the following:

(A) Packaging lubricants and greases.

(B) Filling drums, pails, or other packaging containers with the following: Lubricating oils, Waxes and Greases.

(6) Application of: oils; greases; lubricants; and nonvolatile material; as temporary protective coatings.

(7) Closed loop heating and cooling systems.

(8) Rolling oil recovery systems.

(9) Groundwater oil recovery wells.

(10) Activities associated with the treatment of wastewater streams with an oil and grease content less than or equal to 1% by volume.

(11) Water runoff ponds for petroleum coke-cutting and coke storage piles.

(12) Any operation using aqueous solutions containing less than 1% by weight of VOCs, excluding HAPS.

(13) Water based adhesives that are less than or equal to 5% by volume of VOCs excluding HAPs.

(14) Noncontact cooling tower systems with forced or induced draft cooling tower system not regulated under a NESHAP.

(15) Quenching operations used with heat treating operations.

(16) Replacement or repair of electrostatic precipitators, bags in baghouses and filters in other air filtration equipment.

(17) Heat exchanger cleaning and repair.

(18) Process vessel degassing and cleaning to prepare for internal repairs.

(19) Stockpiled soils from soil remediation activities that are covered and waiting transport for disposal.

(20) Paved and unpaved roads and parking lots with public access.

(21) Underground conveyors.

(22) Asbestos abatement projects regulated by 326 IAC 14-10.

(23) Purging of gas lines and vessels that is related to routing maintenance and repair of buildings, structures, or vehicles at the source where air emissions

from those activities would not be associated with any production process.

(24) Flue gas conditioning systems and associated chemicals, such as the following: sodium sulfate, ammonia and sulfur trioxide.

(25) Equipment used to collect any material that might be released during a malfunction, process upset, or spill cleanup, including catch tanks, temporary liquid separators, tanks, and fluid handling equipment.

(26) Blow down for any of the following: sight glass; boiler; compressors; pumps; and cooling tower.

(27) Activities associated with emergencies, including the following:

(A) On-site fire training approved by the department.

(B) Emergency generators as follows: Gasoline generators not exceeding one hundred ten (110) horsepower, Diesel generators not exceeding one thousand six hundred (1,600) horsepower and natural gas turbines or reciprocating engines not exceeding one thousand six hundred (1,600) horsepower.

(C) Stationary fire ~~pump~~**pumps**.

(28) Purge double block and bleed valves.

(29) A laboratory as defined in 326 IAC 2-7-1(21)(G).

(30) RCRA groundwater remediation system, identified as GWRP-1 which includes eleven (11) recirculation wells to remove benzene from groundwater through a combination of in-situ air sparging, air stripping and vapor extraction.

(d) RESERVED

(e) Specifically regulated insignificant activities (Iron Ore Screening):

(1) Degreasing operations that do not exceed 145 gallons per 12 months, except if subject to 326 IAC 20-6.[326 IAC 8-3-2][326 IAC 8-3-8]

(2) Cleaners and solvents characterized as follows:

(A) Having a vapor pressure equal to or less than 2 kPa; 15 mm Hg; or 0.3 psi measured at 38 □C (100□F) or;

(B) Having a vapor pressure equal to or less than 0.7 kPa; 5mm Hg; or 0.1 psi measured at 20 □C (68 cleaners and solvents combined does not exceed 145 gallons per 12 months. [326 IAC 8-3-2][326 IAC 8-3-8]

(3) 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. [326 IAC 8-9-1]

(4) 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]

(5) The following VOC and HAP storage containers: Storage tanks with capacity less than or equal to 1,000 gallons and annual throughput less than 12,000 gallons. [326 IAC 8-9-1]

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

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

D.17.1 Fugitive Dust Emission Limitations [326 IAC 6-4-2][326 IAC 6.8-10-3]

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D.17.2 Cold Cleaner Degreaser Control Equipment and Operating Requirements [326 IAC 8-3-2]

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D.17.3 ~~D.17.4~~ Open ~~Top~~**To** Vapor Degreaser Operation [326 IAC 8-3-3]

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D.17.~~5~~**4** Conveyorized Degreaser Control Equipment and Operating Requirements [326 IAC 8-3-4]

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D.17.5 Material Requirements for Cold Cleaner Degreasers [326 IAC 8-3-8]

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D.17.6 Volatile Organic Liquid Storage Vessels [326 IAC 8-9-1]

(a) Pursuant to 326 IAC 8-9-1(a) and (b) (Volatile Organic Liquid Storage Vessels), on and after October 1, 1995, stationary vessels used to store volatile organic liquids (VOL), that are located in **Clark, Floyd,** Lake **or Porter** County with a capacity of less than thirty nine thousand (39,000) gallons are subject to the reporting and record keeping requirements of this rule. The VOL storage vessels are exempted from all other provisions of this rule.

(b) Pursuant to 326 IAC 8-9-6(a) and (b), the Permittee ~~of each Volatile Organic Liquid Storage vessel to which 326 IAC 8-9-1 applies~~ shall maintain the following records for the life of the ~~vessel~~**stationary storage vessels** and submit a report to IDEM, OAQ containing the following for each vessel:

***

D.17.7 Preventive Maintenance Plan [326 IAC 2-7-5(12)]

A Preventive Maintenance Plan is required for these facilities and their associated control devices. Section B - Preventive Maintenance Plan contains the Permittee's obligation with regard to the preventive maintenance plan required by this condition.

Record Keeping and Reporting Requirement [326 IAC 2-~~8-4~~**7-5(**3)] [326 IAC 2-~~8-16~~**7-19**]

D.17.~~7~~**8** Record Keeping Requirements

(a) To document the compliance status with Condition D.17.~~2~~**5**, the Permittee shall maintain the following records for each purchase of solvent used in the cold cleaner degreasing operations. These records shall be retained on-site or accessible electronically for the most recent three (3) year period and shall be reasonably accessible for an additional two (2) year period.

(~~a~~**1**) The name and address of the solvent supplier.

(~~b~~**2**) The date of purchase~~.~~ **(or invoice/bill dates of contract servicer indicating service date).**

(~~c~~**3**) The type of solvent purchased.

(~~d~~**4**) The total volume of the solvent purchased.

(~~e~~**5**) The true vapor pressure of the solvent measured in millimeters of mercury at twenty (20) degrees Celsius (sixty-eight (68) degrees Fahrenheit).

(b) Section C - General Record Keeping Requirements contains the Permittee's obligations with regard to the records required by this condition.

SECTION D.18 EMISSIONS UNIT OPERATION CONDITIONS

Emissions Unit Description:

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

***

SECTION D.22 **~~FACILITY~~EMISSIONS UNIT** OPERATION CONDITIONS

~~Emission~~
Emissions Unit Description:

Coal Pulverization and Air Preheater System (East PCI Coal Pulverization**)**

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

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

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

Under 40 CFR 60, Subpart Y these units are considered affected facilities.

Pulverized Coal Storage and Feed System (West PCI Coal Pulverization)

(a) One (1) Pulverized coal Transport, identified as Line A, constructed in 1993, with a maximum capacity of 210 tons per hour, ducted to a baghouse (A) exhausting to stack (SS-5).

(b) One (1) Pulverized coal Transport, identified as Line B, constructed in 1993, with

a maximum capacity of 210 tons per hour, ducted to a baghouse (B) exhausting to stack (SS-6).

(c) One (1) Pulverized coal storage reservoir, constructed in 1993, with a maximum capacity of 600 tons, blanketed with nitrogen and ducted to a baghouse (vent filter house) exhausting to stack (SS-7).

Under 40 CFR 60, Subpart Y these units are considered affected facilities.

Railcar Heater (PCI Coal Handling Thaw Shed)

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

Coal Handling Operations

Coal Handling System

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

(b) One (1) Reclaim Hopper, identified as RCH-1, constructed in 1993, with a maximum capacity of 300 tons per hour, ducted to baghouse DC-6 and exhausting to stack DC-6.

(c) One (1) Car Dump Hopper 1/C1, identified as FS-8, constructed in 1993, with a maximum capacity of 200 tons per hour, ducted to baghouse DC-1 exhausting to stack F1.

(d) One (1) Car dump Hopper 2/C1, identified as FS-9, constructed in 1993, with a maximum capacity of 200 tons per hour, ducted to a baghouse DC-2 exhausting to stack F2.

(e) One (1) Car Dump Hopper 3/C1, identified as FS-10, constructed in 1993, with a maximum capacity of 200 tons per hour, ducted to a baghouse DC-3 exhausting to stack F3.

(f) One (1) Transfer Point C1/C2, identified as FS-2, constructed in 1993, with a maximum capacity of 600 tons per hour, ducted to a baghouse DC-4 exhausting to stack F4.

(g) One (1) Reclaim Hopper/C2, identified as FS-14, constructed in 1993, with a maximum capacity of 300 tons per hour, ducted to a baghouse DC-5 exhausting to stack F5.

(h) One (1) Screen Transfer/C2, identified as FS-3, constructed in 1993, with a maximum capacity of 600 tons per hour, ducted to a baghouse DC-7 exhausting to stack F7.

(i) One (1) Screen/C3 Gate Transfer identified as FS-11, constructed in 1993, ducted to a baghouse DC-8 exhausting to stack F.

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

(k) One (1) Transfer Point C4/C5, identified as FS-4, constructed in 1993, ducted to a

baghouse DC-10 exhausting to stack F10.

Under 40 CFR 60, Subpart Y these units are considered affected facilities.

East Building – Coal handling

(a) One (1) Transfer Point C5/C6, identified as FS-5, constructed in 1993, with a maximum capacity of 600 tons per hour, ducted to a baghouse DC-11 exhausting to stack F11.

(b) One (1) Transfer Point C6/Bin 1, identified as FS-7, constructed in 1993, ducted to baghouse DC-12 exhausting to stack F12.

(c) One (1) Transfer Point C5/Bin 2, identified as FS-6, constructed in 1993, ducted to baghouse DC-13 exhausting to stack F13.

(d) One (1) Transfer Point C6/Bin 3, identified as FS-13, constructed in 1993, with a maximum capacity of 600 tons per hour, ducted to baghouse DC-14 exhausting to stack F14.

Under 40 CFR 60, Subpart Y these units are considered affected facilities.

Coal Piles and Haul Roads

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

(b) Haul Roads - Vehicle Traffic

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

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

D.22.1 PSD Minor Limit (NO_X) [326 IAC 2-2]

Pursuant to CP (45) 1895 issued October 26, 1990, the NO_X emissions from the **three (3)** pulverized coal preheaters and railcar heater ~~(Section D.24)~~ shall be limited to **thirty-seven (**37**)** tons per **twelve (**12**)** consecutive month period.

(a) Pursuant to CP(45) 1895, the natural gas usage in the three (3) preheaters shall be limited to less than 549 million cubic feet per **twelve (**12**)** consecutive month period with compliance demonstrated at the end of each month. The natural gas usage in the three (3) preheaters shall be limited to less than 183 million cubic feet per month.

(b) Pursuant to **CP(45) 1895, the natural gas usage in the railcar heater shall be limited to less than 12.504 million cubic feet per twelve (12) consecutive month period with compliance demonstrated at the end of each month. The natural gas usage in the railcar heater shall be limited to less than 5 million cubic feet per month.**

Compliance with this limit restricts the potential to emit for NO_X to less than **thirty-seven (**37**)** tons per year for the three (3) **pulverized coal** preheaters **and railcar heater** and makes the provisions of 326 IAC 2-2 Prevention of Significant Deterioration (PSD), not applicable.

D.22.2 PM and PM_{10} Minor Limits [326 IAC 2-2][326 IAC 2-1.1-5]

~~(a) The particulate matter (PM) from SS-1 stacks 1A, 1B and 1C; SS-2 stacks 2A, 2B and 2C; and SS-3 stacks 3A, 3B and 3C shall each not exceed 0.36 pounds per hour.~~

~~(b) The particulate matter less than 10 microns (PM_{10}) from SS-1 stacks 1A, 1B and 1C; SS-2 stacks 2A, 2B and 2C; and SS-3 stacks 3A, 3B and 3C shall each not exceed 0.21 pounds per hour.~~

~~(c)~~ **Pursuant to CP (45) 1895 (issued October 26, 1990) and T089-29907-00121 (issued December 20, 2013), in order to render 326 IAC 2-2 (PSD) not applicable, the PM and PM10 emissions from the coal pulverization system shall not exceed the emission limits listed in the table below:**

Emission Unit	PM (lb/hr)	PM10 (lb/hr)
SS-1 (1A)	0.36	0.21
SS-1 (1B)	0.36	0.21
SS-1 (1C)	0.36	0.21
SS-2 (2A)	0.36	0.21
SS-2 (2B)	0.36	0.21
SS-2 (2C)	0.36	0.21
SS-3 (3A)	0.36	0.21
SS-3 (3B)	0.36	0.21
SS-3 (3C)	0.36	0.21
Line A (SS-5)	0.09	0.06
Line B (SS-6)	0.09	0.06
Pulverized coal storage reservoir (SS-7)	0.09	0.06
RCD-1 (8A)	0.36	0.21
RCD-1 (8B)	0.36	0.21
DC-6 (Stack DC-6)	0.09	0.06
DC-1 (Stack F1)	0.09	0.06
DC-2 (Stack F2)	0.09	0.06
DC-3 (Stack F3)	0.09	0.06
DC-4 (Stack F4)	0.09	0.06
DC-5 (Stack F5)	0.09	0.06
DC-7 (Stack F7)	0.09	0.06
DC-8 (Stack F)	0.09	0.06
DC-9 (Stack F9)	0.09	0.06
DC-10 (Stack F10)	0.09	0.06
DC-11 (Stack F11)	0.09	0.06
DC-12 (Stack F12)	0.09	0.06
DC-13 (Stack F13)	0.09	0.06
DC-14 (Stack F14)	0.09	0.06
Coal Pile F17	0.09	0.06

Compliance with ~~the limitations in conditions D.22.2(a), D.23.1(a) and D.25.1(a) combined limits PM to~~ **these emission limits will ensure that the potential to emit from CP (45) 1895 issued October 26, 1990, is less than twenty-five (25) tons of PM and** less than ~~25 tons per year and makes 326 IAC 2-2 and~~**fifteen (15) tons of PM_{10} per twelve (12) consecutive month period, and therefore will render the requirements of** 326 IAC 2-~~1.1-5 not applicable.~~

~~(d) Compliance with the limitations in conditions D.22.2(b), D.23.1(b) and D.25.1(b) combined limits PM_{10} to less than 15 tons per year and makes 326 IAC 2-2 and 326 IAC 2-1.1-5~~ not applicable.

D.22.3 Particulate ~~Limitations [326 IAC 6.8-1-2(a)]~~**Emissions [**326 IAC 6.8-1-2**]**

Pursuant to 326 IAC 6.8-1-2(a~~)~~ ~~(Particulate Matter Limitations for Lake County~~), the particulate matter **emissions** from the coal pulverization ~~equipment trains 1, 2 and 3~~**system units** shall not

exceed ~~three-hundredths (~~0.03~~) grain~~ **grains** per dry standard cubic foot ~~(dscf).~~**of exhaust air.**

~~**Compliance Determination Requirements**~~

D.22.4 ~~Testing Requirements~~**Preventive Maintenance Plan**

~~Within 5 years after the most recent valid compliance demonstration, the Permittee shall perform PM/PM_{10} testing on the three pulverization equipment train SS-1 baghouse stacks 1A, 1B and 1C, the three pulverization equipment train SS-2 baghouse stacks 2A, 2B and 2C, or the three pulverization equipment train SS-3, baghouse stacks 3A, 3B and 3C for the purpose of determining compliance with Conditions D.22.2 and D.22.3, utilizing methods approved by the Commissioner..~~

~~The second 5 year test cyle shall be performed on the three pulverization equipment train baghouse SS-1 stacks 1A, 1B and 1C, the three pulverization equipment train SS-2 baghouse stacks 2A, 2B and 2C or the three pulverization equipment train SS-3 baghouse stacks 3A, 3B and 3C not previously tested.~~

~~The third 5 year test cycle shall be performed on the three pulverization equipment train baghouse SS-1 stacks 1A, 1B and 1C, the three pulverization equipment train SS-2 baghouse stacks 2A, 2B and 2C or the three pulverization equipment train SS-3 baghouse stacks 3A, 3B and 3C not previously tested.~~

~~The testing cycle for these units shall be repeated at least once every 5 years from the date of the most recent valid compliance demonstration. Testing shall be conducted in accordance with the provisions of 326 IAC 3-6 (Source Sampling Procedures).~~**A Preventive Maintenance Plan is required for these facilities and any control devices.** Section ~~C - Performance Testing~~**B - Preventive Maintenance Plan** contains the Permittee's obligation with regard to the ~~performance testing~~**preventive maintenance plan** required by this condition.

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

D.22.5 Particulate ~~Matter~~ Control ~~[326 IAC 2-7-6(6)]~~

~~(a)~~ **In order to assure compliance with Condition D.22.2,** the baghouses for particulate control shall be in operation and control ~~particulate~~ emissions **from the coal pulverization system units** at all times the ~~three (3)~~**coal** pulverization ~~equipment trains~~**system units** are in operation.

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

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

D.22.6 Visible Emissions Notations

(a) Visible emission notations of ~~the pulverization equipment train SS-1~~**each** baghouse ~~stacks 1A, 1B and 1C; pulverization equipment train SS-2 baghouse stacks 2A, 2B and 2C; and pulverization equipment train SS-3, baghouse stacks 3A, 3B and 3C~~**stack exhaust** shall be performed once per day during normal daylight operations ~~when exhausting to the atmosphere.~~**.** A trained employee shall record whether emissions are normal or abnormal.

(b) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.

(c) In the case of batch or discontinuous operations, readings shall be taken during that part

of the operation that would normally be expected to cause the greatest emissions.

(d) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.

(e) If abnormal emissions are observed, the Permittee shall take a reasonable response. Section C ~~--~~ Response to Excursions ~~or~~**and** Exceedances contains the Permittee's obligation with regard to the reasonable response steps required by this condition. Failure to take response steps shall be considered a deviation from this permit.

D.22.7 ~~Parametric Monitoring~~**Broken or Failed Bag Detection**

~~The Permittee shall record the pressure drop across the baghouses used in conjunction with each pulverization equipment train, at least once per day when each pulverization equipment train is in operation. When for any one reading, the pressure drop across the baghouse is outside the normal range, the Permittee shall take a reasonable response. The normal range for this unit is a pressure drop between 1.0 and 8.0 inches of water unless a different upper-bound or lower-bound value for this range is determined during the latest stack test~~
~~Section C - Response to Excursions or Exceedances contains the Permittee's obligation with regard to the reasonable response steps required by this condition. A pressure reading that is outside the above mentioned range is not a deviation from this permit. Failure to take response steps shall be considered a deviation of this permit.~~

~~The instrument used for determining the pressure shall comply with Section C - Instrument Specifications, of this permit, shall be subject to approval by IDEM, OAQ shall be calibrated or replaced at least once every six (6) months or other time period specified by the manufacturer. The Permittee shall maintain records of the manufacturer specifications, if used.~~

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

(b) 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.22.8 Record Keeping Requirements

(a) To document the compliance status with Condition D.22.1~~,~~**(a),** the Permittee shall maintain records of the monthly natural gas usage in the three (3) air preheaters.

(b) To document the compliance status with ~~Conditions~~**Condition D.22.1(b), the Permittee shall maintain records of the monthly natural gas usage in the rail car heater.**

(c) To document the compliance status with Condition D.22.6, the Permittee shall maintain records of ~~once per day~~**daily** visible emission notations of the ~~three (3) pulverization equipment train~~ baghouse ~~stacks exhaust~~**(s) stack exhausts**. The

Permittee shall include in its daily record when a visible emission notation is not taken and the reason for the lack of visible emission notation (e.g. the process did not operate that day).

~~(c) To document the compliance status with Condition D.22.7, the Permittee shall maintain records once per day of the pressure drop during normal operation. The Permittee shall include in its daily record when a pressure drop reading is not taken and the reason for the lack of pressure drop reading (e.g. the process did not operate that day).~~

~~(d) To document the compliance status with Condition D.22.4, the Permittee shall maintain records of the stacks tested during each 2.5 year test cycle.~~

~~(e~~**(d)** Section C - General Record Keeping Requirements contains the Permittee's ~~obligations~~**obligation** with regard to the records required by this condition.

D.22.9 Reporting Requirements

A quarterly report of natural gas usage in the three (3) preheaters and railcar heater and a quarterly summary of the information to document the compliance status with ~~conditions~~ D.22.1 shall be submitted not later than thirty (30) days after the end of the quarter being reported. Section C - General Reporting contains the ~~Permittee's~~**Permittee's** obligation with regard to the reporting required by this condition.

The report submitted by the Permittee does require a certification that meets the requirements of 326 IAC 2-7-6(1) by a **"**responsible official**,"** as defined by 326 IAC 2-7-1(35).

SECTION D.23 **RESERVED~~Facility Operation Conditions~~**

~~Emissions Unit Description: West PCI Coal Pulverization~~

~~(a) One (1) Pulverized Coal Transport, identified as Line A, constructed in 1993, with a maximum capacity of 210 tons per hour, ducted to a baghouse (A) exhausting to stack (SS-5).~~

~~(b) One (1) Pulverized Coal Transport, identified as Line B, constructed in 1993, with a maximum capacity of 210 tons per hour, ducted to a baghouse (B) exhausting to stack (SS-6).~~

~~(c) One (1) Pulverized Coal storage reservoir, constructed in 1993, with a maximum capacity of 600 tons, blanketed with nitrogen and ducted to a baghouse (vent filter house) exhausting to stack (SS-7).~~

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

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

~~D.23.1 PM and PM_{10} Minor Limits [326 IAC 2-2][326 IAC 2-1.1-5]~~

~~(a) The particulate matter (PM) from stacks SS-5, SS-6 and SS-7 shall each not exceed 0.09 pound per hour.~~

~~(b) The particulate matter less than 10 microns (PM_{10}) from stacks SS-5, SS-6 and SS-7 shall each not exceed 0.06 pound per hour.~~

~~(c) Compliance with the limitations in conditions D.22.1(a), D.23.1(a) and D.25.1(a) combined limits PM to less than 25 tons per year and makes 326 IAC 2-2 and 326 IAC 2-1.1-5 not applicable.~~

~~(d) Compliance with the limitations in conditions D.22.2(b), D.23.1(b) and D.25.1(b) combined limits PM_{10} to less than 15 tons per year and makes 326 IAC 2-2 and 326 IAC 2-1.1-5 not applicable.~~

~~D.23.2 Particulate Limitations [326 IAC 6.8-1-2(a)]~~

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

Compliance Determination Requirements

D.23.3 Testing Requirements

Within 5 years after the most recent valid compliance demonstration, the Permittee shall perform PM/ PM_{10} stack tests on one of the pulverized coal transport stacks SS-5 and SS-6 for the purpose of determining compliance with Conditions D.23.1 and D.23.2, utilizing a testing method approved by the commissioner. PM_{10} includes filterable and condensable PM.

The second 5 year test cycle shall be performed on the pulverized coal transport stacks SS-5 or SS-6 not previously tested and the pulverized coal storage reservoir stack SS-7.

The testing cycle for these units shall be repeated at least once every 5 years from the date of the most recent valid compliance demonstration. Testing shall be conducted in accordance with the provisions of 326 IAC 3-6 (Source Sampling Procedures). Section C - Performance Testing contains the Permittee's obligation with regard to the performance testing required by this condition.

D.23.4 Particulate Control

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

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

D.23.5 Record Keeping Requirements

(a) To document the compliance status with Condition D.23.3, the Permittee shall maintain records of the stacks tested during each five year testing cycle.

(b) Section C - General Record Keeping Requirements contains the Permittee's obligations with regard to the records required by this condition.

SECTION D.24 **RESERVEDFACILITY OPERATION CONDITIONS**

Emissions Unit Description: PCI Coal Handling Thaw Shed

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

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

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

D.24.1 PSD Minor Limit (NO_x) [326 IAC 2-2]

Pursuant to CP (45) 1895 issued October 26, 1990, the NO_x emissions from the railcar heater and pulverized coal preheaters (Section D.22) shall be limited to 37 tons per 12 consecutive month period. Pursuant to CP(45) 1895, the natural gas usage in the railcar heater shall be limited to less than 12.504 million cubic feet per 12 consecutive month period with compliance demonstrated at the end of each month. The natural gas usage in the railcar heater shall be limited to less than 5 million cubic feet per month. Compliance with this limit restricts the potential to emit for NO_x to less than 37 tons per year for the railcar heater and makes the provisions of 326 IAC 2-2 Prevention of Significant Deterioration (PSD), not applicable.

D.24.2 Fugitive Dust Emission Limitations [326 IAC 6-4-2][326 IAC 6.8-10-3]

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

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

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

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

Where
P = Percentage increase
R = Number of particles of fugitive dust measured at downward receptor site
U = Number of particles of fugitive dust measured at upwind or background site

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

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

Where
N = Fraction of fugitive dust that is respirable dust;
PR = allowable percentage increase in dust concentration above background; and
P = no value greater than sixty-seven percent (67%).

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

(D) If fugitive dust is visible crossing the boundary or property line of a source. This subdivision may be refuted by factual data expressed in subdivisions (1), (2) or (3) of this section. 326 IAC 6-4-2(4) is not federally enforceable.

(2) Pursuant to 326 IAC 6-4-6(6) (Exceptions), fugitive dust from a source caused by adverse meteorological conditions will be considered an exception to this rule (326 IAC 6-4) and therefore not in violation.

(b) Pursuant to 326 IAC 6.8-10-3 Lake County Fugitive Particulate Matter Emissions Limitations, fugitive emissions from the railcar heater generating fugitive dust shall comply with the emissions limitations in Section C - Fugitive Dust Emissions.

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

D.24.3 Record Keeping Requirements

(a) To document the compliance status with Condition D.24.1, the Permittee shall maintain records of the monthly natural gas usage in the rail car heaters.

(b) Section C - General Record Keeping Requirements contains the Permittee's obligations with regard to the records required by this condition.

D.24.4 Reporting Requirements

A quarterly summary of the information to document the compliance status with condition D.24.1 shall be not later than thirty (30) days after the end of the quarter being reported. Section C - General Reporting contains the Permittee's obligation with regard to the reporting required by this condition. The report submitted by the Permittee does require a certification that meets the requirements of 326 IAC 2-7-6(1) by a responsible official as defined by 326 IAC 2-7-1(35).

SECTION D.25 **RESERVED~~FACILITY OPERATION CONDITIONS~~**

~~Emissions Unit Description: PCI Coal Handling Operations~~

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

~~(b) One (1) Reclaim Hopper, identified as RCH-1, constructed in 1993, with a maximum capacity of 300 tons per hour, ducted to baghouse DC-6 and exhausting to stack DC-6.~~

~~(c) One (1) Car Dump Hopper 1/C1, identified as FS-8, constructed in 1993, with a maximum capacity of 200 tons per hour, ducted to baghouse DC-1 exhausting to stack F1.~~

~~(d) One (1) Car dump Hopper 2/C1, identified as FS-9, constructed in 1993, with a maximum capacity of 200 tons per hour, ducted to a baghouse DC-2 exhausting to stack F2.~~

~~(e) One (1) Car Dump Hopper 3/C1, identified as FS-10, constructed in 1993, with a maximum capacity of 200 tons per hour, ducted to a baghouse DC-3 exhausting to stack F3.~~

~~(f) One (1) Transfer Point C1/C2, identified as FS-2, constructed in 1993, with a maximum capacity of 600 tons per hour, ducted to a baghouse (DC-4) exhausting to stack (F4).~~

~~(g) One (1) Reclaim Hopper/C2, identified as FS-14, constructed in 1993, with a maximum capacity of 300 tons per hour, ducted to a baghouse DC-5 exhausting to stack F5.~~

~~(h) One (1) Screen Transfer/C2, identified as FS-3, constructed in 1993, with a maximum capacity of 600 tons per hour, ducted to a baghouse DC-7 exhausting to stack F7.~~

~~(i) One (1) Screen/C3 Gate Transfer identified as FS-11, constructed in 1993, ducted to a baghouse DC-8 exhausting to stack F8.~~

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

~~(k) One (1) Transfer Point C4/C5, identified as FS-4, constructed in 1993, ducted to a baghouse DC-10 exhausting to stack F10.~~

~~East Building- Coal Handling~~

~~(a) One (1) Transfer Point C5/C6, identified as FS-5, constructed in 1993, with a maximum capacity of 600 tons per hour, ducted to a baghouse DC-11 exhausting to stack F11.~~

~~(b) One (1) Transfer Point C6/Bin 1, identified as FS-7, constructed in 1993, ducted to baghouse DC-12 exhausting to stack F12.~~

~~(c) One (1) Transfer Point C5/Bin 2, identified as FS-6, constructed in 1993, ducted to baghouse DC-13 exhausting to stack F13.~~

~~(d) One (1) Transfer Point C6/Bin 3, identified as FS-13, constructed in 1993, with a maximum capacity of 600 tons per hour, ducted to baghouse DC-14 exhausting to stack F14.~~

~~Coal Piles and Haul Roads~~

~~(a) One coal pile operation, identified as F17, constructed in 1993, with a storage capacity of 100,000 tons and an area of 2 acres.~~

~~(b) Haul – Roads – Vehicle Traffic~~

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

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

D.25.1 PM and PM_{10} Minor Limits [326 IAC 2-2][326 IAC 2-1.1-5]

The Permittee shall comply with the following particulate matter (PM) and particulate matter less than 10 microns (PM_{10}) emission limits:

(a) The PM emissions from stacks 8A, 8B, shall each not exceed 0.36 pound per hour.

(b) The PM emissions from stacks DC-6, F1 through F5 and F7 through F14 and Coal Pile identified as F17 shall each not exceed 0.09 pound per hour.

(c) The PM_{10} emissions from stacks 8A, 8B, shall each not exceed 0.21 pound per hour

(d) The PM_{10} emissions from stacks DC-6, F1 through F5 and F7 through F14 and Coal Pile identified as F17 shall each not exceed 0.06 pound per hour.

(e) Compliance with the limitations in conditions D.22.2(a), D.23.1(a) and D.25.1(a) combined limits PM to less than 25 tons per year and makes 326 IAC 2-2 and 326 IAC 2-1.1-5 not applicable.

(f) Compliance with the limitations in conditions D.22.2(b), D.23(b) and D.25.1(b) combined limits PM_{10} to less than 15 tons per year and makes 326 IAC 2-2 and 326 IAC 2-1.1-5 not applicable.

D.25.2 Particulate Limitations [326 IAC 6.8-1-2(a)]

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

Compliance Determination Requirements

D.25.3 Testing Requirements

Within 5 years after the most recent valid compliance demonstration, the Permittee shall perform PM/ PM_{10} stack tests on Railcar Dumper Stacks 8A and 8B and one of each of the following for the purpose of determining compliance with Conditions D25.1 and D.25.2, utilizing methods approved by the Commissioner:

(a) Reclaim Hopper RCH-1 baghouse Stack DC-6 or Reclaim Hopper/C2 stack F5;

(b) Car Dump Hopper 1/C1 stack F1, Car Dump Hopper 2/C2 stack F2 or Car Dump Hopper 3/C3 stack F3;

(c) Transfer Point C1/C2 Stack F4, Transfer Point C4/C5 stack F10 or Transfer Point C5/C6 stack F11;

(d) Screen Transfer/C2 stack F7, Screen Transfer/C3 gate Transfer stack F8 or Screen Transfer/C4 Gate Transfer stack F9; and

(e) Transfer Point C6/Bin 1, stack F12, Transfer Point C5/Bin 2, stack F13 or Transfer Point C6/Bin 3 stack F14

The second 5 year test cycle for PM/ PM_{10} shall be performed on the Railcar Dumper Stacks 8A and 8B and one of each of the following not tested previously:

(a) Reclaim Hopper RCH-1 baghouse Stack DC-6 or Reclaim Hopper/C2 stack F5;

(b) Car Dump Hopper 1/C1 stack F1, Car Dump Hopper 2/C2 stack F2 or Car Dump Hopper 3/C3 stack F3;

(c) Transfer Point C1/C2 Stack F4, Transfer Point C4/C5 stack F10 or Transfer Point C5/C6 stack F11;

(d) Screen Transfer/C2 stack F7, Screen Transfer/C3 gate Transfer stack F8 or Screen Transfer/C4 Gate Transfer stack F9; and

(e) Transfer Point C6/Bin 1, stack F12, Transfer Point C5/Bin 2, stack F13 or Transfer Point C6/Bin 3 stack F14

The third 5-year test cycle for PM/ PM_{10} shall be performed on the Railcar Dumper Stacks 8A and 8B, Reclaim Hopper RCH-1 baghouse Stack DC-6 or Reclaim Hopper/C2 stack F5 and one of each of the following not tested previously in test cycle one or two:

(a) Car Dump Hopper 1/C1 stack F1, Car Dump Hopper 2/C2 stack F2 or Car Dump Hopper 3/C3 stack F3;

(b) Transfer Point C1/C2 Stack F4, Transfer Point C4/C5 stack F10 or Transfer Point C5/C6 stack F11;

(c) Screen Transfer/C2 stack F7, Screen Transfer/C3 gate Transfer stack F8 or Screen Transfer/C4 Gate Transfer stack F9; and

(d) Transfer Point C6/Bin 1, stack F12, Transfer Point C5/Bin 2, stack F13 or Transfer Point C6/Bin 3 stack F14

The test cycle for these units shall be repeated at least once every 5 years from the date of the most recent valid compliance demonstration. Testing shall be conducted in accordance with the provisions of 326 IAC 3-6 (Source Sampling Procedures). Section C - Performance Testing contains the Permittee's obligation with regard to the performance testing required by this condition. PM_{10} includes filterable and condensable PM.

D.25.4 Particulate Control

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

D.25.5 Fugitive Dust Control

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

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

D.25.6 Record Keeping Requirements

(a) To document the compliance status with Condition D.25.3, the Permittee shall maintain records of the stacks tested during each five year testing cycle.

(b) Section C - General Record Keeping Requirements contains the Permittee's obligations with regard to the records required by this condition.

SECTION D.26 **RESERVED FACILITY OPERATION CONDITIONS**

Emissions Unit Description: Specifically Regulated insignificant activities include the following facilities, emission units, fugitive sources, control equipment, process equipment and operational practices:

(a) Degreasing operations that do not exceed 145 gallons per 12 months, except if subject to 326

~~IAC 20-6.~~

~~(b) Cleaners and solvents characterized as follows:~~

~~(1) Having a vapor pressure equal to or less than 2 kPa; 15 mm Hg; or 0.3 psi measured at 38°C (100°F) or;~~
~~(2) Having a vapor pressure equal to or less than 0.7 kPa; 5mm Hg; or 0.1 psi measured at 20°C (68°F); the use of which for all cleaners and solvents combined does not exceed 145 gallons per 12 months.~~

~~(c) One (1) 5,000 gallon #2 diesel fuel tank - A petroleum fuel, other than gasoline, dispensing facility having a storage capacity less than or equal to 10,500 gallons, and dispensing less than or equal to 230,000 gallons per month.~~

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

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

~~D.26.1 Volatile Organic Compounds (VOC) [326 8-3-5]~~

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

~~(1) Equip the degreaser with a cover. The cover must be designed so that it can be easily operated with one (1) hand if:~~

~~(A) The solvent volatility is greater than two (2) kiloPascals (fifteen (15) millimeters of mercury or three-tenths (0.3) pounds per square inch) measured at thirty-eight degrees Celsius (38°C) (one hundred degrees Fahrenheit (100°F));~~

~~(B) The solvent is agitated; or~~

~~(C) The solvent is heated.~~

~~(2) Equip the degreaser with a facility for draining cleaned articles. If the solvent volatility is greater than four and three-tenths (4.3) kiloPascals (thirty-two (32) millimeters of mercury or six-tenths (0.6) pounds per square inch) measured at thirty-eight degrees Celsius (38°C) (one hundred degrees Fahrenheit (100°F)), then the drainage facility must be internal such that articles are enclosed under the cover while draining. The drainage facility may be external for applications where an internal type cannot fit into the cleaning system.~~

~~(3) Provide a permanent, conspicuous label which lists the operating requirements outlined in subsection (b).~~

~~(4) The solvent spray, if used, must be a solid, fluid stream and shall be applied at a pressure which does not cause excessive splashing.~~

~~(5) Equip the degreaser with one (1) of the following control devices if the solvent volatility is greater than four and three-tenths (4.3) kiloPascals (thirty-two (32) millimeters of mercury or six-tenths (0.6) pounds per square inch) measured at thirty-eight degrees Celsius (38°C) (one hundred degrees Fahrenheit (100°F)), or if the solvent is heated to a temperature greater than forty-eight and nine-tenths degrees Celsius (48.9°C) (one hundred twenty degrees Fahrenheit (120°F)):~~

~~(A) A freeboard that attains a freeboard ratio of seventy-five hundredths~~

~~(0.75) or greater.~~

~~(B) A water cover when solvent is used is insoluble in, and heavier than, water.~~

~~(C) Other systems of demonstrated equivalent control such as a refrigerated chiller of carbon adsorption. Such systems shall be submitted to the U.S. EPA as a SIP revision.~~

~~(b) Pursuant to 326 IAC 8-3-5(b) (Cold Cleaner Degreaser Operation and Control), the owner or operator of a cold cleaning facility construction of which commenced after July 1, 1990, shall ensure that the following operating requirements are met:~~

~~(1) Close the cover whenever articles are not being handled in the degreaser.~~

~~(2) Drain cleaned articles for at least fifteen (15) seconds or until dripping ceases.~~

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

~~D.26.2 Volatile Organic Compounds (VOC) [326 IAC 8-3-8] (Material requirements for cold cleaning degreasers)~~

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

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

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

~~(c) On and after November 1, 1999, all persons subject to the requirements of 326 IAC 8-3-8 (c)(1)(B) and (c)(2)(B) shall maintain each of the following records for each purchase:~~

~~(1) The name and address of the solvent supplier.~~

~~(2) The date of purchase.~~

~~(3) The type of solvent.~~

~~(4) The volume of each unit of solvent.~~

~~(5) The total volume of the solvent.~~

~~(6) The true vapor pressure of the solvent measured in millimeters of mercury at twenty (20) degrees Celsius (sixty-eight (68) degrees Fahrenheit).~~

~~(d) All records required by 326 IAC 8-3-8 (d) shall be retained on-site for the most recent three (3) year period and shall be reasonably accessible for an additional two (2) year period.~~

~~D.26.3 Volatile Organic Liquid Storage Vessels [326 IAC 8-9-1]~~

~~(a) Pursuant to 326 IAC 8-9-1(a) and (b) (Volatile Organic Liquid Storage Vessels), on and after October 1, 1995, stationary vessels used to store volatile organic liquids (VOL), that are located in Clark, Floyd, Lake or Porter County with a capacity of less than thirty nine thousand (39,000) gallons are subject to the reporting and record keeping requirements of this rule. The VOL storage vessels are exempted from all other provisions of this rule.~~

~~(b) Pursuant to 326 IAC 8-9-6(a) and (b), the Permittee shall maintain the following records for the life of the stationary storage vessels and submit a report to IDEM, OAQ containing the following for each vessel:~~

~~(1) The vessel identification number,~~

~~(2) The vessel dimensions, and~~

~~(3) The vessel capacity.~~

SECTION D.27 **~~FACILITY~~EMISSIONS UNIT** OPERATION CONDITIONS

Emissions Unit Description:

Corrective Action Management Unit (CAMU)

(a) One (1) CAMU Evaporative Spray System, with a maximum throughput capacity of 250 gallons per minute (gpm), consisting of 16 spray heads, each with a rated capacity of 14.4 gpm, located on the floor of CAMU Unit 2. The system is fed from a single pump drawing water from the CAMU Unit 1 leachate collection system, which contains non-native materials dredged from the Calumet River.

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

***

SECTION D.28 **~~FACILITY~~EMISSIONS UNIT** OPERATION CONDITIONS

~~Emission~~**Emissions** Unit Description:

Coke Receiving and Handling

(a) One (1) coke rail car unloading station, approved in 2014 for construction, identified as CPS0001, with a maximum capacity of 10,126,560 tons per year, consisting of the following:

(1) One (1) unloading station.

(2) One (1) conveyor, with a maximum rated capacity of 1,156 tons per hour.

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

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

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

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SECTION D.29 EMISSIONS UNIT OPERATION CONDITIONS

Emissions Unit Description:

Iron Ore Screening

(a) One (1) iron ore pellet screening plant, identified as North Plant unit 01, constructed in 1974, with a nominal capacity of 600 tons per hour, using screens and conveyers to process iron ore pellets.

(b) One (1) iron ore pellet screening plant, identified as South Plant unit 02, constructed in July 1981, with a nominal capacity of 600 tons per hour, using screens and conveyers to process iron ore pellets.

(c) Loaders for loading/unloading and transporting iron ore pellets on unpaved roads.

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

***

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

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

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SECTION D.30 **RESERVED**~~**FACILITY OPERATION CONDITIONS**~~

~~**Facility Description [326 IAC 2-7-5(14)]: The insignificant activities specifically regulated are as follows:**~~

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

~~(b) Cleaners and solvents characterized as follows:~~

~~(1) Having a vapor pressure equal to or less than 2 kPa; 15 mm Hg; or 0.3 psi measured at 38°C (100°F); or~~

~~(2) Having a vapor pressure equal to or less than 0.7 kPa; 5mm Hg; or 0.1 psi measured at 20°C (68°F); the use of which for all cleaners and solvents combined does not exceed 145 gallons per 12 months.~~

~~(c) 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.~~

~~(d) 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.~~

(e) Storage tanks with capacity less than or equal to 1,000 gallons and annual throughput less than 12,000 gallons.

(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.30.1 Cold Cleaner Degreaser Control Equipment and Operating Requirements [326 IAC 8-3-2]

Pursuant to 326 IAC 8-3-2 (Cold Cleaner Degreaser Control Equipment and Operating Requirements), the Permittee shall:

(a) Ensure the following control equipment and operating requirements are met:

(1) Equip the degreaser with a cover.

(2) Equip the degreaser with a device for draining cleaned parts.

(3) Close the degreaser cover whenever parts are not being handled in the degreaser.

(4) Drain cleaned parts for at least fifteen (15) seconds or until dripping ceases;

(5) Provide a permanent, conspicuous label that lists the operating requirements in subdivisions (3), (4), (6), and (7).

(6) Store waste solvent only in closed containers.

(7) Prohibit the disposal or transfer of waste solvent in such a manner that could allow greater than twenty percent (20%) of the waste solvent (by weight) to evaporate into the atmosphere.

(b) Ensure the following additional control equipment and operating requirements are met:

(1) Equip the degreaser with one (1) of the following control devices if the solvent is heated to a temperature of greater than forty-eight and nine-tenths (48.9) degrees Celsius (one hundred twenty (120) degrees Fahrenheit):

(A) A freeboard that attains a freeboard ratio of seventy-five hundredths (0.75) or greater.
(B) A water cover when solvent used is insoluble in, and heavier than, water.
(C) A refrigerated chiller.
(D) Carbon adsorption.
(E) An alternative system of demonstrated equivalent or better control as those outlined in clauses (A) through (D) that is approved by the department. An alternative system shall be submitted to the U.S. EPA as a SIP revision.

(2) Ensure the degreaser cover is designed so that it can be easily operated with one (1) hand if the solvent is agitated or heated.

(3) If used, solvent spray:
(A) must be a solid, fluid stream; and
(B) shall be applied at a pressure that does not cause excessive splashing.

D.30.2 Material Requirements for Cold Cleaner Degreasers [326 IAC 8-3-8]

Pursuant to 326 IAC 8-3-8 (Material Requirements for Cold Cleaner Degreasers), the Permittee shall not operate a cold cleaning degreaser with a solvent that has a VOC composite partial 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 Requirement [326 IAC 2-8-4(3)][326 IAC 2-8-16]**~~

~~D.30.3 Record Keeping Requirements~~

~~To document the compliance status with Condition D.30.2, the Permittee shall maintain the following records for each purchase of solvent used in the cold cleaner degreasing operations. These records shall be retained on-site or accessible electronically for the most recent three (3) year period and shall be reasonably accessible for an additional two (2) year period.~~

~~(a) The name and address of the solvent supplier.~~

~~(b) The date of purchase.~~

~~(c) The type of solvent purchased.~~

~~(d) The total volume of the solvent purchased.~~

~~(e) The true vapor pressure of the solvent measured in millimeters of mercury at twenty (20) degrees Celsius (sixty-eight (68) degrees Fahrenheit).~~

~~Section C - General Record Keeping Requirements contains the Permittee's obligation with regard to the records required by this condition.~~

~~D.30.4 Volatile Organic Liquid Storage Vessels [326 IAC 8-9-1]~~

~~Pursuant to 326 IAC 8-9-6 (a) and (b), the Permittee shall maintain the following records for the life of the stationary storage vessels for each vessel:~~

~~(a) The vessel identification number;~~

~~(b) The vessel dimensions; and~~

~~(c) The vessel capacity.~~

***

SECTION F.4 **~~RESERVED~~ NSPS**

Emissions Unit Description:

Coal Pulverization and Air Preheater System (East PCI Coal Pulverization)

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

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

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

Under 40 CFR 60, Subpart Y these units are considered affected facilities.

Pulverized Coal Storage and Feed System (West PCI Coal Pulverization)

(a) One (1) Pulverized coal Transport, identified as Line A, constructed in 1993, with a maximum capacity of 210 tons per hour, ducted to a baghouse (A) exhausting to stack (SS-5).

(b) One (1) Pulverized coal Transport, identified as Line B, constructed in 1993, with a maximum capacity of 210 tons per hour, ducted to a baghouse (B) exhausting to stack (SS-6).

(c) One (1) Pulverized coal storage reservoir, constructed in 1993, with a maximum capacity of 600 tons, blanketed with nitrogen and ducted to a baghouse (vent filter house) exhausting to stack (SS-7).

Under 40 CFR 60, Subpart Y these units are considered affected facilities.

Coal Handling Operations

Coal Handling System

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

(b) One (1) Reclaim Hopper, identified as RCH-1, constructed in 1993, with a maximum capacity of 300 tons per hour, ducted to baghouse DC-6 and exhausting to stack DC-6.

(c) One (1) Car Dump Hopper 1/C1, identified as FS-8, constructed in 1993, with a maximum capacity of 200 tons per hour, ducted to baghouse DC-1 exhausting to stack F1.

(d) One (1) Car dump Hopper 2/C1, identified as FS-9, constructed in 1993, with a maximum capacity of 200 tons per hour, ducted to a baghouse DC-2 exhausting to stack F2.

(e) One (1) Car Dump Hopper 3/C1, identified as FS-10, constructed in 1993, with a maximum capacity of 200 tons per hour, ducted to a baghouse DC-3 exhausting to stack F3.

(f) One (1) Transfer Point C1/C2, identified as FS-2, constructed in 1993, with a maximum capacity of 600 tons per hour, ducted to a baghouse DC-4 exhausting to stack F4.

(g) One (1) Reclaim Hopper/C2, identified as FS-14, constructed in 1993, with a maximum capacity of 300 tons per hour, ducted to a baghouse DC-5 exhausting to stack F5.

(h) One (1) Screen Transfer/C2, identified as FS-3, constructed in 1993, with a maximum capacity of 600 tons per hour, ducted to a baghouse DC-7 exhausting to stack F7.

(i) One (1) Screen/C3 Gate Transfer identified as FS-11, constructed in 1993, ducted to a baghouse DC-8 exhausting to stack F.

(j) One (1) Screen/C4 Gate Transfer, identified as FS-12, constructed in 1993, with a

maximum capacity of 600 tons per hour, ducted to a baghouse DC-9 exhausting to stack F9.

(k) One (1) Transfer Point C4/C5, identified as FS-4, constructed in 1993, ducted to a baghouse DC-10 exhausting to stack F10.

Under 40 CFR 60, Subpart Y these units are considered affected facilities.

East Building – Coal handling

(a) One (1) Transfer Point C5/C6, identified as FS-5, constructed in 1993, with a maximum capacity of 600 tons per hour, ducted to a baghouse DC-11 exhausting to stack F11.

(b) One (1) Transfer Point C6/Bin 1, identified as FS-7, constructed in 1993, ducted to baghouse DC-12 exhausting to stack F12.

(c) One (1) Transfer Point C5/Bin 2, identified as FS-6, constructed in 1993, ducted to baghouse DC-13 exhausting to stack F13.

(d) One (1) Transfer Point C6/Bin 3, identified as FS-13, constructed in 1993, with a maximum capacity of 600 tons per hour, ducted to baghouse DC-14 exhausting to stack F14.

Under 40 CFR 60, Subpart Y these units are considered affected facilities.

Insignificant Activities:

(6) Conveyors as follows:

(A) Covered conveyor for coal or coke conveying of less than or equal to 360 tons per day; [326 IAC 6.8-10-3]

(B) Uncovered coal conveying of less than or equal to 120 tons per day. [326 IAC 6.8-10-3]

Under 40 CFR 60, Subpart Y these units are considered affected facilities.

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

New Source Performance Standards (NSPS) Requirements [326 IAC 2-7-5(1)]

F.4.1 General Provisions Relating to New Source Performance Standards [326 IAC 12-1][40 CFR Part 60, Subpart A]

(a) Pursuant to 40 CFR 60.1, the Permittee shall comply with the provisions of 40 CFR Part 60, Subpart A – General Provisions, which are incorporated by reference as 326 IAC 12-1, for the emission unit(s) listed above, except as otherwise specified in 40 CFR Part 60, Subpart Y.

(b) Pursuant to 40 CFR 60.4, the Permittee shall submit all required notifications and reports to:

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

F.4.2 Standards of Performance for Coal Preparation and Processing Plants NSPS [326 IAC 12][40 CFR Part 60, Subpart Y]

The Permittee shall comply with the following provisions of 40 CFR Part 60, Subpart Y (included as Attachment E to the operating permit), which are incorporated by reference as 326 IAC 12, for the emission unit(s) listed above:

(1) 40 CFR 60.250(a), (b)
(2) 40 CFR 60.251
(3) 40 CFR 60.252(a)
(4) 40 CFR 60.254(a)
(5) 40 CFR 60.255(a)
(6) 40 CFR 60.257

Conclusion and Recommendation

Unless otherwise stated, information used in this review was derived from the application and additional information submitted by the applicant. An application for the purposes of this review was received on July 6, 2016.

The operation of this proposed modification shall be subject to the conditions of the attached Significant Permit Modification.

The staff recommends to the Commissioner that the Part 70 Significant Permit Modification be approved.

IDEM Contact

(a) Questions regarding this proposed permit can be directed to Kelsey Bonhivert at the Indiana Department Environmental Management, Office of Air Quality, Permits Branch, 100 North Senate Avenue, MC 61-53 IGCN 1003, Indianapolis, Indiana 46204-2251 or by telephone at (317) 233-1782 or toll free at 1-800-451-6027 extension 3-1782.

(b) A copy of the findings is available on the Internet at: http://www.in.gov/ai/appfiles/idem-caats/

(c) For additional information about air permits and how the public and interested parties can participate, refer to the IDEM Permit Guide on the Internet at: http://www.in.gov/idem/5881.htm; and the Citizens' Guide to IDEM on the Internet at: http://www.in.gov/idem/6900.htm.

Appendix A: Emission Calculations
PTE Summary

Company Name: U.S. Steel - Gary Works
Source Address: One North Broadway, Gary, Indiana 46402
Permit Number: 089-37377-00121
Reviewer: Thomas Olmstead
Date: September, 2016

Potential to Emit after Issuance (tons/yr)						
Emission Unit	**PM**	**PM10**	**SO_2**	**NOx**	**VOC**	**CO**
CP 1895 Project	24.44	14.85	0.33	27.54	3.03	46.27
Total	**24.44**	**14.85**	**0.33**	**27.54**	**3.03**	**46.27**
Significant Levels	25	15	40	40	40	100

Appendix A: Emission Calculations
Summary

Company Name: U.S. Steel - Gary Works
Source Address: One North Broadway, Gary, Indiana 46402
Permit Number: 089-37377-00121
Reviewer: Thomas Olmstead
Date: September, 2016

Summary									
Emission Unit	Stack ID	Controlled (lb/hr)		Stack Testing (lb/hr)		Limited (lb/hr)		Stack test date	
		PM	PM10	Measured Emission Rate PM	Measured Emission Rate PM10	PM	PM10		
Coal pulverization equipment train	1A	0.55	0.55	--	--	0.36	0.21	--	
	1B			--	--	0.36	0.21	--	
	1C			--	--	0.36	0.21	--	
Coal pulverization equipment train	2A	0.55	0.55	--	--	0.36	0.21	--	
	2B			--	--	0.36	0.21	--	
	2C			--	--	0.36	0.21	--	
Coal pulverization equipment train	3A	0.55	0.55	--	--	0.36	0.21	--	
	3B			--	--	0.36	0.21	--	
	3C			--	--	0.36	0.21	--	
Pulverized coal Transport	SS-5	0.18	0.18	--	--	0.09	0.06	--	
Pulverized coal Transport	SS-6	0.18	0.18	--	--	0.09	0.06	--	
Pulverized coal storage reservoir	SS-7	0.04	0.04	--[1]	--[1]	0.09	0.06	--[1]	
Railcar Dumper	8A	--	--	0.13	0.13	0.36	0.21	25-Jun-09	
	8B			0.13	0.13	0.36	0.21	25-Jun-09	
Reclaim Hopper	DC-6	--	--	0.01	0.01	0.09	0.06	04-Jun-14	
Car Dump Hopper 1/C1	F1	--	--	0.001	0.001	0.09	0.06	01-Jul-09	[2]
Car Dump Hopper 2/C1	F2	--	--	0.001	0.001	0.09	0.06	16-Jun-14	
Car Dump Hopper 3/C1	F3	--	--	0.001	0.001	0.09	0.06	--	[3]
Transfer Point C1/C2	F4	0.03	0.03	--	--	0.09	0.06	--	
Reclaim Hopper/C2	F5	--	--	0.001	0.001	0.09	0.06	01-Jul-09	[4]
Screen Transfer/C2	F7	0.04	0.04	--	--	0.09	0.06	--	
Screen/C3 Gate Transfer	F	--	--	0.004	0.004	0.09	0.06	--	[5]
Screen/C4 Gate Transfer	F9	--	--	0.004	0.004	0.09	0.06	29-Jun-09	[6]
Transfer Point C4/C5	F10	0.03	0.03	--	--	0.09	0.06	--	
Transfer Point C5/C6	F11	0.04	0.04	--	--	0.09	0.06	--	
Transfer Point C6/Bin 1	F12	0.02	0.02	--	--	0.09	0.06	--	
Transfer Point C5/Bin 2	F13	0.02	0.02	--	--	0.09	0.06	--	
Transfer Point C6/Bin 3	F14	0.02	0.02	--	--	0.09	0.06	--	
Coal Pile	F17	2.90E-03	1.37E-03	--	--	0.09	0.06	--	
Haul Roads	--	0.01	1.89E-03	--	--	--	--	--	
Total (lb/hr)		**2.24**	**2.23**	**0.29**	**0.29**	**5.58**	**3.39**	--	

	PM	PM10
Total Controlled Emissions (Calculated + Stack Tested) (lb/hr)	2.53	2.52
Limited (lb/hr)	5.58	3.39
Total Controlled Emissions (Calculated + Stack Tested) (ton/yr)	**11.07**	**11.03**
Limited (ton/yr)	**24.44**	**14.85**

Notes
PTE (tons/yr) = [Total (lb/hr)] x [8760 hr/yr] x [1 ton/2000 lbs]
1. Determined to be not testable as discussed in TSD 089-37377-00121.
2. PM=PM10 for testing with GFR 725 DSCFM and measured emission rate 0.0002 gr/dscf.
3. Car Dump Hopper 3/C1 stack test results are assumed to be equal to Car Dump Hopper 2/C1 because these units are like processes.
4. PM=PM10 for testing with GFR 294 DSCFM and measured emission rate 0.0003 gr/dscf.
5. Screen/C3 Gate Transfer stack test results are assumed to be equal to Screen/C4 Gate Transfer because these units are like processes.
6. PM=PM10 for testing with GFR 1481 DSCFM and measured emission rate 0.0003 gr/dscf.

Appendix A: Emission Calculations
PM/PM10/PM2.5 Emissions from Coal handling

Company Name: U.S. Steel - Gary Works
Source Address: One North Broadway, Gary, Indiana 46402
Permit Number: 089-37377-00121
Reviewer: Thomas Olmstead
Date: September, 2016

Process Description	ID	Control Device	Stack ID	Outlet Grain Loading * (gr/dscf)	Maximum Air Flow Rate* (acfm)	PTE of PM/PM10/PM2.5 Uncontrolled (lbs/hr)	PTE of PM/PM10/PM2.5 Uncontrolled (tons/yr)	Control Efficiency (%)	PTE of PM/PM10/PM2.5 after Control (lbs/hr)	PTE of PM/PM10/PM2.5 after Control (tons/yr)
Coal pulverization equipment train	SS-1	Cyclone to baghouse	1A, 1B, and 1C	0.001	64,100	54.94	**240.65**	99%	0.55	**2.41**
Coal pulverization equipment train	SS-2	Cyclone to baghouse	2A, 2B, and 2C	0.001	64,100	54.94	**240.65**	99%	0.55	**2.41**
Coal pulverization equipment train	SS-3	Cyclone to baghouse	3A, 3B, and 3C	0.001	64,100	54.94	**240.65**	99%	0.55	**2.41**
Pulverized coal Transport	Line A	Baghouse A	SS-5	0.002	10,510	18.02	**78.92**	99%	0.18	**0.79**
Pulverized coal Transport[1]	Line B	Baghouse B	SS-6	0.002	10,510	18.02	**78.92**	99%	0.18	**0.79**
Pulverized coal storage reservoir[3]	--	Blanket of nitrogen to baghouse	SS-7	0.03	--	3.71	**16.24**	99%	0.04	**0.16**
Railcar Dumper	RCD-1	Baghouse 8AB	8A and 8B	NA	NA	--	**--**	99%	--	**--**
Reclaim Hopper	RCH-1	Baghouse DC-6	DC-6	NA	NA	--	**--**	99%	--	**--**
Car Dump Hopper 1/C1	FS-8	Baghouse DC-1	F1	NA	NA	--	**--**	99%	--	**--**
Car Dump Hopper 2/C1	FS-9	Baghouse DC-2	F2	NA	NA	--	**--**	99%	--	**--**
Car Dump Hopper 3/C1	FS-10	Baghouse DC-3	F3	NA	NA	--	**--**	99%	--	**--**
Transfer Point C1/C2	FS-2	Baghouse DC-4	F4	0.001	3,000	2.57	**11.26**	99%	0.03	**0.11**
Reclaim Hopper/C2	FS-14	Baghouse DC-5	F5	NA	NA	--	**--**	99%	--	**--**
Screen Transfer/C2	FS-3	Baghouse DC-7	F7	0.001	4,200	3.60	**15.77**	99%	0.04	**0.16**
Screen/C3 Gate Transfer	FS-11	Baghouse DC-8	F	NA	NA	--	**--**	99%	--	**--**
Screen/C4 Gate Transfer	FS-12	Baghouse DC-9	F9	NA	NA	--	**--**	99%	--	**--**
Transfer Point C4/C5	FS-4	Baghouse DC-10	F10	0.001	3,000	2.57	**11.26**	99%	0.03	**0.11**
Transfer Point C5/C6	FS-5	Baghouse DC-11	F11	0.001	4,200	3.60	**15.77**	99%	0.04	**0.16**
Transfer Point C6/Bin 1	FS-7	Baghouse DC-12	F12	0.001	2,167	1.86	**8.14**	99%	0.02	**0.08**
Transfer Point C5/Bin 2	FS-6	Baghouse DC-13	F13	0.001	2,167	1.86	**8.14**	99%	0.02	**0.08**
Transfer Point C6/Bin 3[2]	FS-13	Baghouse DC-14	F14	0.001	2,167	1.86	**8.14**	99%	0.02	**0.08**
Total						222.49	**974.49**		2.22	**9.74**

Assume all PM=PM10=PM2.5 emissions.

* Outlet Grain Loading and Maximum Air Flow Rate was supplied by the source in CP 1895.

Methodology

PTE after Control (lbs/hr) = Outlet Grain Loading (gr/dscf) x Max. Air Flow Rate (scfm) x 60 mins/hr x 1/7000 lb/gr
PTE after Control (tons/yr) = Outlet Grain Loading (gr/dscf) x Max. Air Flow Rate (scfm) x 60 mins/hr x 1/7000 lb/gr x 8760 hr/yr x 1 ton/2000 lbs
PTE before Control (tons/yr) = PTE after Control (tons/yr) / (1-Control Efficiency)
NA = CP (45) 1895 issued October 26, 1990 does not provide Outlet Grain Loading or Maximum Air Flow Rate for these emission units.

1. Pulverized coal Transport Line A Outlet Grain Loading and Maximum Air Flow Rate is assumed to be equal to Pulverized coal Transport Line B because these units are like processes.
2. Transfer Point C6/Bin 3 Outlet Grain Loading and Maximum Air Flow Rate is assumed to be equal to Transfer Point C5/Bin 2 and Transfer Point C6/Bin 1 because these units are like processes.
3. Pulverized coal storage reservoir PTE after Control (lb/hr) = [Maximum throughput rate coal (tons/hr)] x [2000lbs/1 ton] x [density of coal (lb/cubic ft)] x [Outlet Grain Loading (gr/dscf)] x [1/7000 lb/gr]. Maximium throughput rate for coal is based on maximum capacity of 90 tons per hour for each pulverizer, there are three pulverizers. Coal Density is 62.416 lbs per cubic foot. Outlet Grain Loading is based on outlet grain loading for the coal pulverization system units of 0.03 gr/dscf as stated in application.

Appendix A: Emissions Calculations
Natural Gas Combustion Only
MM BTU/HR <100
Three (3) natural gas preheaters and railcar heater

Company Name: **U.S. Steel - Gary Works**
Source Address: **One North Broadway, Gary, Indiana 46402**
Permit Number: **089-37377-00121**
Reviewer: **Thomas Olmstead**
Date: **September, 2016**

Units	Heat Input Capacity MMBtu/hr
Railcar Heater	14
SS-1 preheater	37.25
SS-2 preheater	37.25
SS-3 preheater	37.25
Total	**125.75**

Heat Input Capacity MMBtu/hr	HHV mmBtu / mmscf	Potential Throughput MMCF/yr
125.8	1000	1101.6

	Pollutant						
	PM*	PM10*	direct PM2.5*	SO2	NOx	VOC	CO
Emission Factor in lb/MMCF	--	--	--	0.6	50 **see below	5.5	84
Potential Emission in tons/yr	--	--	--	0.33	27.54	3.03	46.27

*PM, PM10, and PM2.5 emissions are included in the coal handling calculations and are based on outlet grain loading. The three (3) natural gas-fired preheaters are direct fired.
**Emission Factors for NOx: Uncontrolled = 100, Low NOx Burner = 50, Low NOx Burners/Flue gas recirculation = 32

Methodology
All emission factors are based on normal firing.
MMBtu = 1,000,000 Btu
MMCF = 1,000,000 Cubic Feet of Gas
Emission Factors are from AP 42, Chapter 1.4, Tables 1.4-1, 1.4-2, 1.4-3, SCC #1-02-006-02, 1-01-006-02, 1-03-006-02, and 1-03-006-03
Potential Throughput (MMCF) = Heat Input Capacity (MMBtu/hr) x 8,760 hrs/yr x 1 MMCF/1,000 MMBtu
Emission (tons/yr) = Throughput (MMCF/yr) x Emission Factor (lb/MMCF)/2,000 lb/ton

Hazardous Air Pollutants (HAPs)

	HAPs - Organics					
	Benzene	Dichlorobenzene	Formaldehyde	Hexane	Toluene	**Total - Organics**
Emission Factor in lb/MMcf	2.1E-03	1.2E-03	7.5E-02	1.8E+00	3.4E-03	
Potential Emission in tons/yr	1.2E-03	6.6E-04	4.1E-02	0.99	1.9E-03	**1.04**

	HAPs - Metals					
	Lead	Cadmium	Chromium	Manganese	Nickel	**Total - Metals**
Emission Factor in lb/MMcf	5.0E-04	1.1E-03	1.4E-03	3.8E-04	2.1E-03	
Potential Emission in tons/yr	2.8E-04	6.1E-04	7.7E-04	2.1E-04	1.2E-03	**3.0E-03**
					Total HAPs	**1.04**
					Worst HAP	**0.99**

Methodology is the same as above.
The five highest organic and metal HAPs emission factors are provided above.
Additional HAPs emission factors are available in AP-42, Chapter 1.4.

Appendix A: Emission Calculations
FUGITIVE EMISSIONS FROM COAL HANDLING

Company Name: U.S. Steel - Gary Works
Source Address: One North Broadway, Gary, Indiana 46402
Permit Number: 089-37377-00121
Reviewer: Thomas Olmstead
Date: September, 2016

	FUGITIVE EMISSIONS FROM COAL HANDLING - Load-in and Load-out Coal to Open Storage Piles, F17												
	EMISSION FACTORS							POTENTIAL TO EMIT					
	UNCONTROLLED			CONTROLLED				UNCONTROLLED			CONTROLLED		
Description	PM EF (lbs/ton)	PM10 -EF (lbs/ton)	PM2.5 -EF (lbs/ton)	PM EF (lbs/ton)	PM10 -EF (lbs/ton)	PM2.5 -EF (lbs/ton)	PROD.* (ton/year)	PM (tons/yr)	PM-10 (tons/yr)	PM-2.5 (tons/yr)	PM (tons/yr)	PM-10 (tons/yr)	PM-2.5 (tons/yr)
Coal Pile	0.000635	0.000300	0.000045	0.000063	0.000030	0.000005	400,000	0.13	0.06	0.01	0.0127	0.0060	0.0009

PROD* - based upon 200,000 tons/yr of coal loaded into coal pile + 200,000 tons/yr loaded out from the storage pile.

1) Reference AP-42, 13.2.4.3, Eq 1, 1/95.

EF=k*(0.0032)*((u/5)^1.3)/((m/2)^1.4)
(batch and continuous loading)

Varb.	Value	Units	Comments
k	0.74		Particle Size multiplier < 30 um (AP-42, Table 13.2.4.3, 11/96)
k'	0.35		Particle Size multiplier < 10 um (AP-42, Table 13.2.4.3, 11/96)
k^2	0.053		Particle Size multiplier < 2.5 um (AP-42, Table 13.2.4.3, 11/96)
u	7	MPH	mean wind speed, meters per second (m/s) (miles per hour [mph])
m	7.00	%	Unprocessed Material Moisture Content of Coal Pile

2) AP-42, 13.2.4.4 Controls, 11/96 90% from from aggregate storage operations

Methodology
PTE Uncontrolled tons/year = {EF (lbs/ton) x Prod. (tons/yr)} / (2000 lbs/ 1 ton)
PTE Controlled tons/year = {EF (lbs/ton) x Prod. (tons/yr)} x (1-control efficiency) / (2000 lbs/ 1 ton)

Appendix A: Emission Calculations
Fugitive Dust Emissions - Paved Roads

Company Name: U.S. Steel - Gary Works
Source Address: One North Broadway, Gary, Indiana 46402
Permit Number: 089-37377-00121
Reviewer: Thomas Olmstead
Date: September, 2016

Paved Roads at Industrial Site
The following calculations determine the amount of emissions created by paved roads, based on 8,760 hours of use and AP-42, Ch 13.2.1 (1/2011).

Vehicle Informtation (provided by source)

Type	Maximum number of vehicles per day	Number of one-way trips per day per vehicle	Maximum trips per day (trip/day)	Maximum Weight Loaded (tons/trip)	Total Weight driven per day (ton/day)	Maximum one-way distance (feet/trip)	Maximum one-way distance (mi/trip)	Maximum one-way miles (miles/day)	Maximum one-way miles (miles/yr)
Vehicle (entering plant) (one-way trip)	20.0	1.0	20.0	1.8	36.0	425	0.080	1.6	587.6
Vehicle (leaving plant) (one-way trip)	20.0	1.0	20.0	1.0	20.0	425	0.080	1.6	587.6
		Totals	**40.0**		**56.0**			**3.2**	**1175.2**

Average Vehicle Weight Per Trip = 1.4 tons/trip
Average Miles Per Trip = 0.08 miles/trip

Unmitigated Emission Factor, Ef = [k * (sL)^0.91 * (W)^1.02] (Equation 1 from AP-42 13.2.1)

	PM	PM10	PM2.5	
where k =	0.011	0.0022	0.00054	lb/VMT = particle size multiplier (AP-42 Table 13.2.1-1)
W =	1.4	1.4	1.4	tons = average vehicle weight (provided by source)
sL =	12.5	12.5	12.5	g/m^2 = silt loading value for paved roads at iron and steel production facilities - Table 13.2.1-3)

Taking natural mitigation due to precipitation into consideration, Mitigated Emission Factor, Eext = E * [1 - (p/4N)] (Equation 2 from AP-42 13.2.1)
Mitigated Emission Factor, Eext = Ef * [1 - (p/4N)]
where p = 125 days of rain greater than or equal to 0.01 inches (see Fig. 13.2.1-2)
N = 365 days per year

	PM	PM10	PM2.5	
Unmitigated Emission Factor, Ef =	0.154	0.031	0.0076	lb/mile
Mitigated Emission Factor, Eext =	0.141	0.028	0.0069	lb/mile
Dust Control Efficiency =	50%	50%	50%	(pursuant to control measures outlined in fugitive dust control plan)

Process	Unmitigated PTE of PM (tons/yr)	Unmitigated PTE of PM10 (tons/yr)	Unmitigated PTE of PM2.5 (tons/yr)	Mitigated PTE of PM (tons/yr)	Mitigated PTE of PM10 (tons/yr)	Mitigated PTE of PM2.5 (tons/yr)	Controlled PTE of PM (tons/yr)	Controlled PTE of PM10 (tons/yr)	Controlled PTE of PM2.5 (tons/yr)
Vehicle (entering plant) (one-way trip)	0.05	0.01	0.00	0.04	0.01	0.00	0.02	0.00	0.00
Vehicle (leaving plant) (one-way trip)	0.05	0.01	0.00	0.04	0.01	0.00	0.02	0.00	0.00
Totals	**0.09**	**0.02**	**0.00**	**0.08**	**0.02**	**0.00**	**0.04**	**0.01**	**0.00**

Methodology
Total Weight driven per day (ton/day) = [Maximum Weight Loaded (tons/trip)] * [Maximum trips per day (trip/day)]
Maximum one-way distance (mi/trip) = [Maximum one-way distance (feet/trip) / [5280 ft/mile]
Maximum one-way miles (miles/day) = [Maximum trips per year (trip/day)] * [Maximum one-way distance (mi/trip)]
Average Vehicle Weight Per Trip (ton/trip) = SUM[Total Weight driven per day (ton/day)] / SUM[Maximum trips per day (trip/day)]
Average Miles Per Trip (miles/trip) = SUM[Maximum one-way miles (miles/day)] / SUM[Maximum trips per year (trip/day)]
Unmitigated PTE (tons/yr) = [Maximum one-way miles (miles/yr)] * [Unmitigated Emission Factor (lb/mile)] * (ton/2000 lbs)
Mitigated PTE (tons/yr) = [Maximum one-way miles (miles/yr)] * [Mitigated Emission Factor (lb/mile)] * (ton/2000 lbs)
Controlled PTE (tons/yr) = [Mitigated PTE (tons/yr)] * [1 - Dust Control Efficiency]

Abbreviations
PM = Particulate Matter
PM10 = Particulate Matter (<10 um)
PM2.5 = Particle Matter (<2.5 um)
PTE = Potential to Emit

Indiana Department of Environmental Management
We Protect Hoosiers and Our Environment.
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(800) 451-6027 • (317) 232-8603 • www.idem.IN.gov

Michael R. Pence
Governor

Carol S. Comer
Commissioner

September 30, 2016

Kevin M Dalton
U.S. Steel - Gary Works
1 N Broadway Mail Station 70A
Gary, IN 46402

Re: Public Notice
U.S. Steel - Gary Works
Permit Level: Title V - Significant Permit

Modification

Permit Number: 089 - 37377 - 00121

Dear Kevin M Dalton:

Enclosed is a copy of your draft Title V - Significant Permit Modification, Technical Support Document, emission calculations, and the Public Notice which will be printed in your local newspaper.

The Office of Air Quality (OAQ) has prepared two versions of the Public Notice Document. The abbreviated version will be published in the newspaper, and the more detailed version will be made available on the IDEM's website and provided to interested parties. Both versions are included for your reference. The OAQ has requested that the Post Tribune in Merrillville, IN, and The Times in Munster, IN publish the abbreviated version of the public notice no later than October 5, 2016. You will not be responsible for collecting any comments, nor are you responsible for having the notice published in the newspaper.

OAQ has submitted the draft permit package to the Dubois Public Library, 1835 Broadway in Gary IN. As a reminder, you are obligated by 326 IAC 2-1.1-6(c) to place a copy of the complete permit application at this library no later than ten (10) days after submittal of the application or additional information to our department. We highly recommend that even if you have already placed these materials at the library, that you confirm with the library that these materials are available for review and request that the library keep the materials available for review during the entire permitting process.

Please review the enclosed documents carefully. This is your opportunity to comment on the draft permit and notify the OAQ of any corrections that are needed before the final decision. Questions or comments about the enclosed documents should be directed to Kelsey Bonhivert, Indiana Department of Environmental Management, Office of Air Quality, 100 N. Senate Avenue, Indianapolis, Indiana, 46204 or call (800) 451-6027, and ask for extension 3-1782 or dial (317) 233-1782.

Sincerely,
Len Pogost

Len Pogost
Permits Branch
Office of Air Quality

Enclosures
PN Applicant Cover letter 2/17/2016

Indiana Department of Environmental Management
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Michael R. Pence
Governor

Carol S. Comer
Commissioner

ATTENTION: PUBLIC NOTICES, LEGAL ADVERTISING

September 29, 2016

The Post Tribune
Attn: Classifieds
1433 E 83rd Avenue
Merrillville, IN 46410

and

The Times
Attn: Classifieds
601 W 45th Avenue
Munster, IN 46321

Enclosed, please find one Indiana Department of Environmental Management Notice of Public Comment for U.S. Steel - Gary Works, Lake County, Indiana.

Since our agency must comply with requirements which call for a Notice of Public Comment, we request that you print this notice one time, no later than October 5, 2016.

Please send a notarized form, clippings showing the date of publication, and the billing to the Indiana Department of Environmental Management, Accounting, Room N1345, 100 North Senate Avenue, Indianapolis, Indiana, 46204.

To ensure proper payment, please reference account # 100174737.

We are required by the Auditor's Office to request that you place the Federal ID Number on all claims. If you have any conflicts, questions, or problems with the publishing of this notice or if you do not receive complete public notice information for this notice, please call Len Pogost at 800-451-6027 and ask for extension 3-2803 or dial 317-233-2803.

Sincerely,

Len Pogost

Len Pogost
Permit Branch
Office of Air Quality

Permit Level: Title V - Significant Permit Modification
Permit Number: 089 - 37377 - 00121

Enclosure
PN Newspaper.dot 6/13/2013

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Michael R. Pence
Governor

Carol S. Comer
Commissioner

September 30, 2016

To: Dubois Public Library 1835 Broadway Gary IN

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

Subject: **Important Information to Display Regarding a Public Notice for an Air Permit**

Applicant Name: U.S. Steel - Gary Works
Permit Number: 089 - 37377 - 00121

Enclosed is a copy of important information to make available to the public. This proposed project is regarding a source that may have the potential to significantly impact air quality. Librarians are encouraged to educate the public to make them aware of the availability of this information. The following information is enclosed for public reference at your library:

- Notice of a 30-day Period for Public Comment
- Request to publish the Notice of 30-day Period for Public Comment
- Draft Permit and Technical Support Document

You will not be responsible for collecting any comments from the citizens. Please refer all questions and request for the copies of any pertinent information to the person named below.

Members of your community could be very concerned in how these projects might affect them and their families. **Please make this information readily available until you receive a copy of the final package.**

If you have any questions concerning this public review process, please contact Joanne Smiddie-Brush, OAQ Permits Administration Section at 1-800-451-6027, extension 3-0185. Questions pertaining to the permit itself should be directed to the contact listed on the notice.

Enclosures
PN Library.dot 2/16/2016

Indiana Department of Environmental Management
We Protect Hoosiers and Our Environment.
100 N. Senate Avenue • Indianapolis, IN 46204
(800) 451-6027 • (317) 232-8603 • www.idem.IN.gov

Michael R. Pence
Governor

Carol S. Comer
Commissioner

Notice of Public Comment

September 30, 2016
U.S. Steel - Gary Works
089 - 37377 - 00121

Dear Concerned Citizen(s):

You have been identified as someone who could potentially be affected by this proposed air permit. The Indiana Department of Environmental Management, in our ongoing efforts to better communicate with concerned citizens, invites your comment on the draft permit.

Enclosed is a Notice of Public Comment, which has been placed in the Legal Advertising section of your local newspaper. The application and supporting documentation for this proposed permit have been placed at the library indicated in the Notice. These documents more fully describe the project, the applicable air pollution control requirements and how the applicant will comply with these requirements.

If you would like to comment on this draft permit, please contact the person named in the enclosed Public Notice. Thank you for your interest in the Indiana's Air Permitting Program.

Please Note: *If you feel you have received this Notice in error, or would like to be removed from the Air Permits mailing list, please contact Patricia Pear with the Air Permits Administration Section at 1-800-451-6027, ext. 3-6875 or via e-mail at PPEAR@IDEM.IN.GOV. If you have recently moved and this Notice has been forwarded to you, please notify us of your new address and if you wish to remain on the mailing list. Mail that is returned to IDEM by the Post Office with a forwarding address in a different county will be removed from our list unless otherwise requested.*

Enclosure
PN AAA Cover.dot 2/17/2016

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AFFECTED STATE NOTIFICATION OF PUBLIC COMMENT PERIOD
DRAFT INDIANA AIR PERMIT

September 30, 2016

A 30-day public comment period has been initiated for:

Permit Number: **089 - 37377 - 00121**
Applicant Name: **U.S. Steel - Gary Works**
Location: **Gary, Lake County, Indiana**

The public notice, draft permit and technical support documents can be accessed via the **IDEM Air Permits Online** site at:
http://www.in.gov/ai/appfiles/idem-caats/

Questions or comments on this draft permit should be directed to the person identified in the public notice by telephone or in writing to:

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

Questions or comments regarding this email notification or access to this information from the EPA Internet site can be directed to Chris Hammack at chammack@idem.IN.gov or (317) 233-2414.

Mail Code 61-53

IDEM Staff	LPOGOST 9/30/2016 US Steel - Gary Works 089 - 37377 - 00121 draft			AFFIX STAMP HERE IF USED AS CERTIFICATE OF MAILING
Name and address of Sender		Indiana Department of Environmental Management Office of Air Quality – Permits Branch 100 N. Senate Indianapolis, IN 46204	Type of Mail: **CERTIFICATE OF MAILING ONLY**	

Line	Article Number	Name, Address, Street and Post Office Address	Postage	Handing Charges	Act. Value (If Registered)	Insured Value	Due Send if COD	R.R. Fee	S.D. Fee	S.H. Fee	Rest. Del. Fee / Remarks
1		Kevin M Dalton US Steel - Gary Works 1 N Broadway Mail Station 70A Gary IN 46402 (Source CAATS)									
2		Mark Tabler VP US Steel - Gary Works 1 N Broadway Gary IN 46402 *(RO CAATS)*									
3		Chris Hardin United States Steel Corporation Penn Liberty Plaza I, 1350 Penn Avenue, Suite 200 Pittsburgh PA 15222-4211 *(Source – addl contact)*									
4		Mark Coleman PO Box 85 Beverly Shores IN 46301-0085 *(Affected Party)*									
5		East Chicago City Council 4525 Indianapolis Blvd East Chicago IN 46312 *(Local Official)*									
6		Gary Mayors Office 401 Broadway # 203 Gary IN 46402 *(Local Official)*									
7		Lake County Health Department-Gary 1145 W. 5th Ave Gary IN 46402-1795 *(Health Department)*									
8		WJOB / WZVN Radio 6405 Olcott Ave Hammond IN 46320 *(Affected Party)*									
9		Lowell Town Council and Town Manager PO Box 157, 501 East Main Street Lowell IN 46356 *(Local Official)*									
10		Shawn Sobocinski 1814 Laporte Street Portage IN 46368-1217 *(Affected Party)*									
11		Mr. Dennis Hahney Pipefitters Association, Local Union 597 1461 East Summit St Crown Point IN 46307 *(Affected Party)*									
12		Craig Hogarth 7901 West Morris Street Indianapolis IN 46231 *(Affected Party)*									
13		Lake County Commissioners 2293 N. Main St, Building A 3rd Floor Crown Point IN 46307 (Local Official)									
14		Northwestern In Regional Planning Com (NIRPC) 6100 Southport Road Portage IN 46368 *(Affected Party)*									
15		Anthony Copeland 2006 E. 140th Street East Chicago IN 46312 *(Affected Party)*									

Total number of pieces Listed by Sender	Total number of Pieces Received at Post Office	Postmaster, Per (Name of Receiving employee)	The full declaration of value is required on all domestic and international registered mail. The maximum indemnity payable for the reconstruction of nonnegotiable documents under Express Mail document reconstructing insurance is $50,000 per piece subject to a limit of $50, 000 per occurrence. The maximum indemnity payable on Express mil merchandise insurance is $500. The maximum indemnity payable is $25,000 for registered mail, sent with optional postal insurance. See ***Domestic Mail Manual*** **R900, S913**, and **S921** for limitations of coverage on inured and COD mail. See ***International Mail Manual*** for limitations o coverage on international mail. Special handling charges apply only to Standard Mail (A) and Standard Mail (B) parcels.

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Mail Code 61-53

IDEM Staff	LPOGOST 9/29/2016 US Steel - Gary Works 37377 (draft/final)		AFFIX STAMP HERE IF USED AS CERTIFICATE OF MAILING
Name and address of Sender		Indiana Department of Environmental Management Office of Air Quality – Permits Branch 100 N. Senate Indianapolis, IN 46204	Type of Mail: **CERTIFICATE OF MAILING ONLY**

Line	Article Number	Name, Address, Street and Post Office Address	Postage	Handing Charges	Act. Value (If Registered)	Insured Value	Due Send if COD	R.R. Fee	S.D. Fee	S.H. Fee	Rest. Del. Fee Remarks
1		Barbara G. 506 Lilac Street East Chicago IN 46312 (Affected Party)									
2		Mr. Robert Garcia 3733 Parrish Avenue East Chicago IN 46312 *(Affected Party)*									
3		Ms. Karen Kroczek 8212 Madison Ave Munster IN 46321-1627 *(Affected Party)*									
4		Joseph Hero 11723 S Oakridge Drive St. John IN 46373 *(Affected Party)*									
5		Gary City Council 401 Broadway # 209 Gary IN 46402 *(Local Official)*									
6		Peter Julovich City of Gary Dept. of Envrionmental Affairs 839 Broadway SuiteN206 Gary IN 46402 *(Local Official)*									
7		Mr. Larry Davis 268 South, 600 West Hebron IN 46341 *(Affected Party)*									
8		Dubois Public Library 1835 Broadway Gary IN 46407 *(Library)*									
9		Ryan Dave 939 Cornwallis Munster IN 46321 *(Affected Party)*									
10											
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Total number of pieces Listed by Sender	Total number of Pieces Received at Post Office	Postmaster, Per (Name of Receiving employee)	The full declaration of value is required on all domestic and international registered mail. The maximum indemnity payable for the reconstruction of nonnegotiable documents under Express Mail document reconstructing insurance is $50,000 per piece subject to a limit of $50, 000 per occurrence. The maximum indemnity payable on Express mil merchandise insurance is $500. The maximum indemnity payable is $25,000 for registered mail, sent with optional postal insurance. See ***Domestic Mail Manual*** **R900, S913**, and **S921** for limitations of coverage on inured and COD mail. See ***International Mail Manual*** for limitations o coverage on international mail. Special handling charges apply only to Standard Mail (A) and Standard Mail (B) parcels.

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