INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
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(800) 451-6027 • (317) 232-8603 • www.idem.IN.gov

Eric J. Holcomb
Governor

Bruno L. Pigott
Commissioner

To:	Interested Parties
Date:	August 17, 2021
From:	Jenny Acker, Chief Permits Branch Office of Air Quality
Source Name:	Cleveland-Cliffs Burns Harbor, LLC
Permit Level:	Title V – Significant Permit Modification
Permit Number:	127-44000-00001
Source Location:	250 West US Highway 12 Burns Harbor, IN 46304
Type of Action Taken:	Modification at an existing source

Notice of Decision: Approval - Effective Immediately

Please be advised that on behalf of the Commissioner of the Department of Environmental Management, I have issued a decision regarding the matter referenced above.

The final decision is available on the IDEM website at: http://www.in.gov/apps/idem/caats/
To view the document, choose Search Option **by Permit Number**, then enter permit 44000. This search will also provide the application received date, **draft permit** public notice starts and end date, **proposed permit** EPA review period start and end date, and **final** permit issuance date.

The final decision is also available via IDEM's Virtual File Cabinet (VFC). Please go to: https://www.in.gov/idem and enter VFC in the search box. You will then have the option to search for permit documents using a variety of criteria.

(continues on next page)

If you would like to request a paper copy of the permit document, please contact IDEM's Office of Records Management:

IDEM - Office of Records Management
Indiana Government Center North, Room 1207
100 North Senate Avenue
Indianapolis, IN 46204
Phone: (317) 232-8667
Fax: (317) 233-6647
Email: IDEMFILEROOM@idem.in.gov

Pursuant to IC 13-17-3-4 and 326 IAC 2, this permit modification is effective immediately, unless a petition for stay of effectiveness is filed and granted, and may be revoked or modified in accordance with the provisions of IC 13-15-7-1.

If you wish to challenge this decision, IC 4-21.5-3-7 and IC 13-15-7-3 require that you file a petition for administrative review. This petition may include a request for stay of effectiveness and must be submitted to the Office Environmental Adjudication, 100 North Senate Avenue, Government Center North, Room N103, Indianapolis, IN 46204, **within eighteen (18) days of the mailing of this notice**. The filing of a petition for administrative review is complete on the earliest of the following dates that apply to the filing:

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

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

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

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

The EPA requests that you file Title V petitions electronically through the Central Data Exchange. To do so, please go to: https://cdx.epa.gov/ .

If you tried but you are unable to use the Central Data Exchange to file your petition, the EPA requests that you send your petition and associated attachments via email to: titleVpetitions@epa.gov.

If you have made every effort to electronically submit your petition but are simply unable to successfully do so, please submit a hardcopy of your petition to the following address:

US EPA
Office of Air Quality Planning and Standards
Air Quality Policy Division
Operating Permits Group Leader
109 T.W. Alexander Dr. (C-504-01)
Research Triangle Park, NC 27711

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

Enclosures
Decision-Title V-Mod 1/9/17

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Eric J. Holcomb
Governor

Bruno L. Pigott
Commissioner

August 17, 2021

Mr. Tom Maicher
Cleveland-Cliffs Burns Harbor, LLC
250 W US Hwy 12
Burns Harbor, Indiana 46304

Re: 127-44000-00001
Significant Permit Modification

Dear Mr. Maicher:

Cleveland-Cliffs Burns Harbor, LLC was issued Part 70 Operating Permit Renewal No. T127-40675-00001 on May 31, 2019 for a stationary integrated iron and steel mill located at 250 W US Hwy 12, Burns Harbor, Indiana 46304. An application requesting changes to this permit was received on April 12, 2021. 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:

Attachment O: 40 CFR 60, Subpart IIII, NSPS for Stationary Compression Ignition Internal Combustion Engines

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	Fugitive Dust Control Plan (FDCP)
Attachment B	40 CFR 63, Subpart L - National Emission Standards for Hazardous Air Pollutants for Coke Oven Batteries
Attachment C	40 CFR 63, Subpart FFFFF - National Emission Standards for Hazardous Air Pollutants for Integrated Iron and Steel Manufacturing Facilities
Attachment D	40 CFR 63, Subpart CCC - National Emission Standards for Hazardous Air Pollutants for Steel Pickling—HCl Process Facilities and Hydrochloric Acid Regeneration Plants
Attachment E	40 CFR 63, Subpart DDDDD – National Emission Standards for Industrial, Commercial, and Institutional Boilers and Process Heaters
Attachment F	40 CFR 63, Subpart ZZZZ - National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engine
Attachment G	40 CFR 61, Subpart L - National Emission Standard for Benzene Emissions from Coke By-Product Recovery Plants
Attachment H	40 CFR 61, Subpart V - National Emission Standard for Equipment Leaks (Fugitive Emission Sources)
Attachment I	40 CFR 61, Subpart FF - National Emission Standard for Benzene Waste Operations
Attachment J	40 CFR 60, Subpart Y - Standards of Performance for Coal Preparation and Processing Plants
Attachment K	40 CFR 60, Subpart N - Standards of Performance for Primary Emissions from Basic Oxygen Process Furnaces

Attachment L	40 CFR 60, Subpart D - Standards of Performance for Fossil-Fuel-Fired Steam Generators
Attachment M	40 CFR 60, Subpart JJJJ - Standards of Performance for Stationary Spark Ignition Internal Combustion Engines
Attachment N	40 CFR 63, Subpart CCCCC - National Emission Standards for Hazardous Air Pollutants for Coke Ovens: Pushing, Quenching, and Battery Stacks

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

Previously issued approvals for this source are also available via IDEM's Virtual File Cabinet (VFC). To access VFC, please go to: https://www.in.gov/idem/ and enter VFC in the search box. You will then have the option to search for permit documents using a variety of criteria.

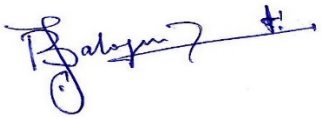
Federal rules under Title 40 of United States Code of Federal Regulations may also be found on the U.S. Government Printing Office's Electronic Code of Federal Regulations (eCFR) website, located on the Internet at: http://www.ecfr.gov/cgi-bin/text-idx?tpl=/ecfrbrowse/Title40/40tab_02.tpl.

A copy of the permit is available on the Internet at: http://www.in.gov/ai/appfiles/idem-caats/. A copy of the application and permit is also available via IDEM's Virtual File Cabinet (VFC). To access VFC, please go to: https://www.in.gov/idem/ and enter VFC in the search box. You will then have the option to search for permit documents using a variety of criteria. For additional information about air permits and how the public and interested parties can participate, refer to the IDEM Air Permits page on the Internet at: https://www.in.gov/idem/airpermit/public-participation/; and the Citizens' Guide to IDEM on the Internet at: https://www.in.gov/idem/resources/citizens-guide-to-idem/.

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

If you have any questions regarding this matter, please contact Wilfredo de la Rosa, 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) 232-8422 or (800) 451-6027, and ask for Wilfredo de la Rosa or (317) 232-8422.

Sincerely,



Josiah K. Balogun, Section Chief
Permits Branch
Office of Air Quality

Attachments: Modified Permit and Technical Support Document
cc: File - Porter County
Porter 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

Cleveland-Cliffs Burns Harbor, LLC
250 W US Hwy 12
Burns Harbor, Indiana 46304

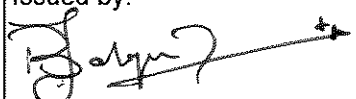
(herein known as the Permittee) is hereby authorized to operate subject to the conditions contained herein, the source described in Section A (Source Summary) of this permit.

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

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

Operation Permit No.: T127-40675-00001 Master Agency Interest ID.: 12029	
Issued by: Original signed by: Josiah K. Balogun, Section Chief Permits Branch, Office of Air Quality	Issuance Date: May 31, 2019 Expiration Date: May 31, 2024

First Administrative Amendment No. 127-43739-00001, issued on February 12, 2021.

Significant Permit Modification No.: 127-44000-00001	
Issued by:  Josiah K. Balogun, Section Chief Permits Branch Office of Air Quality	Issuance Date: August 17, 2021 Expiration Date: May 31, 2024

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ATTACHMENTS:

Attachment G	40 CFR 61, Subpart L - National Emission Standard for Benzene Emissions from Coke By-Product Recovery Plants
Attachment H	40 CFR 61, Subpart V - National Emission Standard for Equipment Leaks (Fugitive Emission Sources)
Attachment I	40 CFR 61, Subpart FF - National Emission Standard for Benzene Waste Operations
Attachment J	40 CFR 60, Subpart Y - Standards of Performance for Coal Preparation and Processing Plants
Attachment K	40 CFR 60, Subpart N - Standards of Performance for Primary Emissions from Basic Oxygen Process Furnaces
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Attachment O	40 CFR 60, Subpart IIII – Standards of Performance for Stationary Compression Ignition Internal Combustion Engines.

SECTION A SOURCE SUMMARY

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

A.1 General Information [326 IAC 2-7-4(c)][326 IAC 2-7-5(14)][326 IAC 2-7-1(22)]

The Permittee owns and operates a stationary steel works plant for the production of coke, limited coal chemical, molten iron, molten steel, steel slabs, hot rolled steel, steel coils, steel plates, cold rolled and/or coated steel sheet and plate.

Source Address:	250 West U.S. Highway 12, Burns Harbor, Indiana 46304-9745
General Source Phone Number:	(219) 787-2712
SIC Code:	3312
County Location:	Porter
Source Location Status:	Nonattainment for 8-hour ozone standard Attainment for all other criteria pollutants
Source Status:	Part 70 Operating Permit Program Major Stationary 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)]

This steel works operation consists of a primary source, Cleveland-Cliffs Burns Harbor LLC (Plant ID 127-00001), located at 250 West U.S. Highway 12, Burns Harbor, Indiana, and its contractors. The contractors listed below were issued separate Part 70 operating permits solely for administrative purposes:

(a) Indiana Flame Service (Plt ID 127-00098);

(b) Metal Services, LLC dba Phoenix Services, LLC (Plt ID 127-00026);

(c) Mid-Continent Coal and Coke (Plt ID127-00108);

(d) Oil Technology, Inc. (Plt ID 127-00074);

(e) SMS Mill Services, LLC (Plt ID 127-00076);

(f) Beemsterboer Slag Corp (Plt ID 127-00116);

(g) Fritz Enterprises, Inc. (Plt ID 127-00123); and

(h) PSC Metals, Inc. (Plt ID 127-00118).

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:

(a) A Coke Oven process plant consisting of two (2) Coke Batteries, #1 and #2, with #1 modified in 1983 and a #2 pad-up rebuild in 1994, each consisting of eighty-two (82) ovens, with nominal capacities 160 tons per hour and 140 tons per hour of dry coal, respectively, consisting of the following:

(1) Batteries #1 & #2:

(A) Battery #1 underfire, identified as EU512-08, with an estimated nominal heat input of 465 MMBtu/hr, and opacity measured by a continuous opacity monitor, exhausting at stack EP512-3026.

(B) Battery #2 underfire, identified as EU512-16, with an estimated nominal heat input of 420 MMBtu/hr, and opacity measured by a continuous opacity monitor, exhausting at stack EP512-3027.

(C) Pushing operations, identified as EU512-06 and 14, respectively, with particulate emissions for each battery controlled by baghouse C512-3024 exhausting at stack EP512-3024, and baghouse C512-3018 exhausting to stack EP512-3018. Each baghouse has the ability to control particulate emissions from either or both batteries.

(D) Battery #1 gas collector main pressure valves, identified as EU512-07, exhausting to four (4) stacks collectively identified as EP512-3086 equipped with four (4) flares collectively identified as C512-3015.

(E) Battery #2 gas collector main pressure valves, identified as EU512-15, exhausting to six (6) stacks collectively identified as EP512-3087 equipped with six (6) flares collectively identified as C512-3016.

(F) Quenching operations, identified as EU512-09 and 17, respectively with emissions exiting stations EP512-3081 and 3082, including quench towers (servicing either battery) equipped with baffles and sprays.

(G) Batteries #1 and #2 fugitive emissions are generated from the following:

(i) Charging operations, identified as EU512-04 and 12, respectively, with fugitive emissions EP512-3016 and 3022, respectively;

(ii) Lids (four on each oven), identified as EU512-03 and 11, respectively, with fugitive emissions EP512-3015 and 3021, respectively;

(iii) Offtake Systems including emission from mini-stand pipe, identified as EU512-02 and 10, respectively, with fugitive emissions EP512-3014 and 3020, respectively;

(iv) Doors, identified as EU512-05 and 13, with fugitive emissions EP512-3017 and 3023; and

(v) A Cold Screening operation consisting of material conveyor and junction houses.

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

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

EP512-3012	Tar Loading facility
EP512-3049	Flushing Liquor Header
EP512-3054	500 gallon open Surge Tank
EP512-3055	Flushing Liquor Sump
EP512-3056	Ammonia Absorber Recirculation Tank
EP512-3059	Waste Water Sump #8
EP512-3060	Two (2) Waste Ammonia Liquor Clarifiers [both currently out of service]
EP512-3070	Ammonia Absorber Gas Drips Sump
EP512-3080	Crystallizer Hotwell Sump
EP512-3088	No.9 Sump
EP512-3041	Barometric Condenser
EP512-3042	30,000 gallon Sulfuric Acid Tank
EP512-3043	20,000 gallon Sulfuric Acid Tank [currently out of service]
EP512-3044	Ball Mill
EP512-3201	7,500 gallon Primary tar sludge storage/process tank
EP512-3202	7,500 gallon Secondary tar sludge storage/process tank

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

EP512-3002	Tar Precipitator Sump
EP512-3050	Flushing Liquor Decanter A, B, & C and sludge conveyor (the exit end of the decanter and screw conveyor are exempt from control)
EP512-3057	Purifier Muck Storage Tank
EP512-3067	Wash Oil Decanter
EP512-3068	No.5 Sump
EP512-3069	Tar Precipitator Seal Pots
EP512-3072	Tar Transfer Tank
EP512-3073	Flushing Liquor Circulation Tanks, North & South
EP512-3074	Tar Storage Tanks B & C
EP512-3075	Primary Cooler Condensate Tank
EP512-3077	Wash Oil Separation Tank
EP512-3078	Wash Oil Decanter Muck Storage Tank
EP512-3094	Exhauster’s Area (Exhausters A, B and C including associated seal pots)

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

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

EP512-3101 Feed Tank

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

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

(1) A raw coal receipt, storage and handling subsystem consisting of conveyors, junction houses, and radial stacker capable of delivering 2300 tons of coal per hour to a storage pile with emission points EP520-3569 and 3570.

(2) A coal reclamation subsystem with bulldozer, reclaim hoppers, under and above ground conveyors with junction houses, and coal screen with pre crusher, delivering coal to the Coal Preparation Plant.

(3) A building enclosed Coal Preparation Plant consisting of the following:

(A) Distribution conveyor and two (2) raw coal storage bins equipped with bin filters and screw feeders.

(B) Two (2) natural gas coal dryers (25 MMBtu/hour each), two (2) granulation mills with spinner separators and cyclones exhausting and transporting undersize coal and transport air to two (2) baghouses. A portion of the baghouses exhaust is returned to the pulverization mills and the remaining exhaust exits through two (2) stacks.

(C) Coal product storage and injection system with product screens (2), storage bins (4) with filters, weight hoppers (4), distribution bins (4) with filters, injectors and lock hoppers with filters (8) and related pipework that delivers granulated coal to C and D Blast Furnaces.

(d) A Continuous Sintering process plant with a nominal throughput of 535 tons per hour of sinter constructed in 1968, located in the Blast Furnaces Department consisting of the following:

(1) One (1) mixing drum identified as EU520-04, with emissions controlled by one (1) Venturi wet scrubber identified as C520-3502, exhausting at stack EP520-3512.

(2) One (1) sintering operation, consisting of twelve (12) windboxes, collectively identified as EU520-05, with emissions exhausting through one (1) multiclone, consisting of eight (8) cyclones followed in series by one (1) Venturi scrubber and mist eliminator, collectively identified as C520-3503, with VOC emissions monitored by a Continuous Emissions Monitor System (CEMS), exhausting at stack EP520-3513.

(3) A miscellaneous Cold Screening material handling operation consisting of material conveyor and junction houses, identified as EU520-06, with particulate emissions controlled by one (1) dedust baghouse, identified as C520-3501, exhausting at stack EP520-3511, and fugitive emissions reporting to monitors EP520-3510 and 15.

(4) A finished sinter cooler operation, identified as EU520-24, with fugitive emissions identified as EP520-3514.

(5) A Cold Screening operation consisting of material conveyor and junction houses.

(e) Two (2) Blast Furnaces, designated as Blast Furnace C and Blast Furnace D, comprised of the following facilities and process equipment:

(1) C Blast Furnace constructed in 1971, with a nominal (combined with D furnace) capacity of 623 tons per hour of iron including an integral gas cleaning system consisting of various components including a dust catcher, separator, and 2 scrubbers (primary and secondary), which provides clean fuel to the plant fuel distribution system with excess gas flared at stack EP520-3540.

(2) C Blast Furnace Stoves, exhausting to combustion stack (EP520-3547) with an estimated heat input rate of 660 MMBtu/hr.

(3) C Furnaces with East and West casthouses with iron and slag runner fugitive emissions reporting to roof monitors EP520-3543 and 3545 respectively and tap hole and tilting runner emissions controlled by MACT baghouse installed in 2007.

(4) D Blast Furnace constructed in 1968, with a nominal (combined with C furnace) capacity of 623 tons per hour of iron, including a integral gas cleaning system consisting of various components including a dust catcher, separator, and 2 scrubbers (primary and secondary), which provides clean fuel to the plant fuel distribution system with excess gas flared at stack EP520-3553.

(5) D Blast Furnace Stoves, exhausting to combustion stack (EP520-3560) with an estimated heat input rate of 660 MMBtu/hr.

(6) D Furnaces with East and West casthouses with iron and slag runner fugitive emissions reporting to roof monitors EP520-3556 and 3558 respectively and respectively and tap hole and tilting runner emissions controlled by MACT baghouse installed in 2007.

(7) Blast Furnaces material handling and miscellaneous activities constructed in 1968:

(A) One (1) rail car dumper, with one (1) truck hopper, with emissions from car dumper controlled by baghouse C520-3506, and exhausting to stacks EP520-3520 and 3532 and fugitive emissions exhausting to building and ambient air (from truck hopper).

(B) One (1) railcar thaw shed constructed in 1969 with natural gas heaters used seasonally.

(C) Raw material handling operations with conveyors with transfer stations.

(D) Material Piles and Stacker/Reclaimers.

(E) C and D Stockhouses.

(8) One (1) stacker replacement project, approved in 2014 for construction, including the following:

(a) Two (2) drag belt feeder hopper-conveyors, identified as EURTF1 and EURTF2, with maximum capacity of material transfer at 1,000 tons per hour, each.

(b) Two (2) drag belt feeder hopper-conveyors, identified as EURTF3 and EURTF4, with maximum capacity of material transfer at 2,500 tons per hour, each.

(c) One (1) drag belt feeder conveyor, identified as EURTF5, with a maximum capacity of material transfer at 2,000 tons per hour.

(d) One (1) vertical stacker, identified as EURTF6, with hopper-conveyor with maximum capacity of material transfer at 2,500 tons per hour.

(f) A Basic Oxygen Furnace (BOF) Shop operation located in the Steelmaking Department consisting of the following:

(1) Three (3) Hot Metal Transfer/Desulfurization and Skimming Stations, with an annual total combined nominal input of 623 tons per hour of hot metal per month, with #1 & #2 constructed in 1968, and #3 in 1978 and modified in 1992, each identified as EU534-01, 02, and 03, respectively. #1 Hot Metal Transfer/ Desulfurization and Skimming Station have particulate emissions controlled by the MACT baghouse installed in May 2007, exhausting at the stack for the MACT baghouse. #2 Hot Metal Transfer/Desulfurization and Skimming Station has particulate emissions controlled by baghouses C534-4001 and 4002 that have been ducted in parallel, exhausting at stacks EP534-4001 and 4002 respectively, and #3 Hot Metal Transfer/Desulfurization and Skimming Station has particulate emissions controlled by baghouse C534-4003, exhausting at stacks EP534-4008.

(2) Three (3) BOF Shop vessels, with #1 & #2 constructed in 1968 and #3 in 1978, identified as EU534-06a (No. 1), EU534-06b (No. 2), and EU534-07(No. 3), each with a nominal capacity of 300 tons per heat of liquid steel with a combined estimated capacity of 500 tons per hour of molten steel, emissions from vessels No. 1 and No. 2 (EU534-06a, 06b) controlled by three (3) scrubbers, numbered #2, #3, and #4 in parallel, collectively identified as C534-4004, each exhausting at respective stacks EP534-4013, 4014, and 4015, respectively, and emissions from vessel No. 3 (EU534-07) controlled by scrubber C534-4007 exhausting to stack EP534-4017, equipped with CO flare C534-4008. The three BOF vessels have secondary capture hood ducted to a MACT baghouse installed in May 2007.

(3) Refining Cycles for three BOF Shop vessels, identified as EU534-10 for vessels No. 1 and No. 2 (EU534-06a, EU534-06b), and EU534-11 for vessel No. 3 (EU534-07), using the respective exhausts and emissions control equipment for the associated BOF Shop vessels listed above.

(4) Three (3) Molten Steel Ladle Addition Stations consisting of:

(A) Station No. 1 argon stirring and desulfurization (steel desulfurization approved in 2012 for construction), constructed in 1968, identified as EU534-14, with fugitive emissions reporting to roof monitor EP534-4003 and exhausting to the MACT baghouse installed in May 2007; and

(B) Stations No. 2 and No. 3 stirring and desulfurization and alloy addition, constructed in 1978 (steel desulfurization upgrade approved in 2012 for construction), collectively identified as EU534-15, with particulate emissions from both controlled by baghouse C534-4016, exhausting to stack EP534-4031.

(5) Two (2) Steel Ladle Treatment Stations No. 4 and No. 5, constructed in 1986, collectively identified as EU534-16, with particulate emissions controlled by

baghouses C534-4017 and 4099, respectively, exhausting at respective stacks EP534-4031 and 4099.

(6) One (1) Vacuum Degasser, identified as EU534-19, constructed in 1989, with a nominal capacity of 245 tons per hour of hot steel, utilizing a steam ejector identified as C534-4019 for vessel evacuation, with exhausts to stack EP534-4034 which is equipped with a CO flare, identified as C534-4020.

(7) Two (2) Continuous Casters, each with a nominal capacity of 1000 tons of molten steel per hour, consisting of:

(A) Continuous Caster #1 constructed in 1975 and modified in 1984, identified as EU595-24, equipped with a demister identified as C595-4501, exhausting to stack EP595-4501; and

(B) Continuous Caster #2 constructed in 1985, identified as EU595-25, equipped with three (3) demisters identified as C595-4504, exhausting to two stacks, collectively identified as EP595-4504.

(8) One (1) natural gas fired FM boiler for the BOF Shop, constructed in 1968, identified as EU534-23, with an estimated capacity of 50 MMBtu/hr heat input, exhausting to stack EP534-4018.

(9) Steel making material handling operations consisting of:

(A) One (1) Track hopper, constructed in 1989, identified as EU 534-21, with particulate emissions controlled by baghouse C534-4013, exhausting to stack EP534-4021.

(B) Two (2) Junction Houses, constructed in 1968 and modified in 1996, identified as H1 and H2, enclosing the transfer points between conveyors L2 and L3, and L3 and L4, respectively, with particulate emissions controlled by two (2) baghouses, identified as C534-4014 and 15, respectively, with each exhausting to respective stacks EP534-4027 and 28.

(C) Three (3) BOF weigh hoppers constructed in 1968 and modified in 1996, collectively identified as EU534-36, with particulate emissions controlled by two (2) baghouses, collectively identified as C534-4010, exhausting to respective stacks EP534-4020 and 4026.

(D) Two (2) BOF vessel storage bins, constructed in 1968 and modified in 1996, collectively identified as EU534-33, with particulate emissions from both controlled by baghouse C534-4009, exhausting at stack EP534-4019.

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

(F) One (1) lime-spar storage tank, with throughput capacity 20 tons/hr and using pneumatic method for tank filling, approved in 2012 for Construction, controlled by dust collector.

(10) Additional steel making activities consisting of:

(A) Eight (8) steel ladle and sub car dryers (including a torpedo car dryer), constructed in 1982, collectively identified as EU534-17, with fugitive emissions reporting to roof monitor EP534-4003.

(B) Teeming Aisles, constructed in 1969, collectively identified as EU534-18, with fugitive emissions reporting to roof monitor EP534-4003.

(C) Vacuum Degasser ladle dryers and preheaters, constructed in 1989. collectively identified as EU534-22, all using natural gas as fuel with nominal capacities of 7 MMBtu/hr for the preheat burner, 9 MMBtu/hr for the refractory dryer burner, and 4.5 MMBtu/hr for the refractory dryer burner, with all collectively exhausting at stack EP534-4036.

(D) BOF Auxiliaries collectively identified as EU534-40, consisting of fugitive emissions EP534-4004, 4005, 4007, and 4051.

(g) One (1) Slab/Plate Mill Complex consisting of the following operations and equipment:

(1) Various natural gas-fired portable and permanent cutting units with fugitive emissions reporting to roof monitors EP 673-6604, EP 673-6605 and EP 673-6606.

(2) No. 2 Slab Yard operations consisting of:

(A) Three (3) natural gas-fired Slab Preheater Furnaces Nos. 1, 2 & 3, constructed in 1964, with estimated nominal capacities of 16 MMBtu/hr heat input each for No. 1 & No. 2, and 5 MMBtu/hr heat input for No. 3, with fugitive emissions from each reporting to roof monitor EP673-6605.

(3) No. 3 Slab Yard operations consisting of:

(A) Three (3) natural gas-fired Slab Preheater Furnaces Nos. 4, 5, and 6, constructed in 1968, with estimated nominal capacities of 25 MMBtu/hr heat input for each, with fugitive emissions from each reporting to roof monitor EP673-6604.

(B) One (1) Slab Grinder, constructed in 1985, with particulate emissions controlled by baghouse C673-6606, exhausting at stack EP673-6603.

(4) 160 Inch Plate Mill operations consisting of:

(A) One (1) Slab Reheat Furnace No. 1 – Continuous Pusher, capable of firing natural gas, coke oven gas, fuel oil (including No. 2 and No. 6), constructed in 1964, with an estimated furnace nominal rated capacity of 500 MMBtu/hr heat input, equipped with low NOx burners, with emissions exhausting at stack EP673-6503.

(B) One (1) Slab Reheat Furnace No. 2 - Continuous Pusher, capable of firing natural gas, coke oven gas, fuel oil (including No. 2 and No. 6), constructed in 1964, with an estimated furnace nominal rated capacity of 500 MMBtu/hr heat input, equipped with low NOx burners, with emissions exhausting at stack EP673-6504.

(C) One (1) In and Out Reheat Furnace No. 5, capable of firing natural gas, coke oven gas, fuel oil (including No. 2 and No. 6), constructed in 1964,

with an estimated nominal rated capacity of 70 MMBtu/hr heat input, with emissions exhausting at stack EP673-6501.

(D) Two (2) In and Out Reheat Furnaces No. 6 and No. 7, capable of firing natural gas, coke oven gas, fuel oil (including No. 2 and No. 6), with No. 6 constructed in 1967 and No. 7 constructed in 1971each with estimated nominal rated capacities of 70 MMBtu/hr heat input, with emissions collectively exhausting at stack EP673-6502.

(E) One (1) Rolling Process, constructed in 1964, with fugitive emissions reporting to roof monitor EP673-6507.

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

(A) One (1) Car Bottom Furnace

(i) One (1) natural gas-fired Car Bottom Furnace (Normalizing and Annealing), permitted in 2010 for construction, with an estimated nominal capacity of 26 MMBtu/hr heat input, vented to roof monitor EP673-6508.

(B) One (1) natural gas-fired Continuous Hardening and Normalizing Furnace, constructed in 1966 and permitted for modification in 2010, with an estimated nominal capacity of 100 MMBtu/hr heat input, vented to roof monitor EP673-6508.

(C) One (1) natural gas-fired Continuous Tempering Furnace, constructed in 1966 and permitted for modification in 2010, with an estimated nominal capacity of 100 MMBtu/hr heat input, vented to roof monitor EP673-6508.

(D) One (1) shot blaster, permitted in 2010 for construction, exhausting through a baghouse inside the building.

(E) One (1) plate coating system consisting of a pre-heating oven with a heat input capacity of 5.0 MMBtu/hr and post application dryer (that uses the gases from the pre-heating oven), permitted in 2010 for construction.

(F) One (1) mist cooling system, permitted in 2010 for construction.

(G) One (1) plate stenciling system, permitted in 2010 for construction.

(H) One (1) plasma test coupon cutter, permitted in 2010 for construction.

(6) 110 Inch Plate Mill operations consisting of:

(A) Two (2) Slab Reheat Furnaces- Continuous Walking Beam No. 1 and No. 2, capable of firing natural gas, coke oven gas, fuel oil (including No. 2 and No. 6), both constructed in 1977, each with nominal capacities of 380 MMBtu/hr heat input, equipped with low NOx burners, with emissions collectively exhausting at stack EP674-7001.

(B) One (1) Normalizing Furnace, capable of firing natural gas, and #1 and #2 fuel oil, constructed in 1979, with a nominal capacity of 82 MMBtu/hr heat input, and emissions exhausting to stack EP674-7005.

(C) One (1) Rolling Process, constructed in 1977, with fugitive emissions reporting to roof monitor EP674-7003.

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

(1) Various natural gas-fired portable cutting torches, six (6) cutting tables using one natural gas/oxygen torch per table, approved for construction in 2008, and hand scarfers with fugitive emissions reporting to roof monitors EP670-5501, 5502, and 5516.

(2) One (1) reheat furnace No. 1, capable of firing natural gas, coke oven gas, and/or propane, constructed in 1966, with a nominal capacity of 730 MMBtu/hr of heat input, with exhausts at stacks EP670-5504 and 5505.

(3) One (1) reheat furnace No. 2, capable of firing natural gas, coke oven gas, and/or propane, constructed in 1966, with a nominal capacity of 730 MMBtu/hr of heat input, with exhausts at stacks EP670-5506 and 5507.

(4) One (1) reheat furnace No. 3, capable of firing natural gas, coke oven gas, and/or propane, constructed in 1966, with a nominal capacity of 730 MMBtu/hr of heat input, with exhausts at stacks EP670-5508 and 5509.

(5) One (1) hot strip mill rolling process constructed in 1966 with fugitive emissions reporting to roof monitors EP670-5510, 5511, and 5512.

(6) Gantry burners.

(7) Two (2) natural gas-fired Walking Beam Furnaces, identified as HSM WBF No. 1 and HSM WBF No .2, equipped with low NOx burners, each with nominal heat input rate of 820 million British thermal units per hour (MMBtu/hr) and each nominal production capacity of 500 tons of slab steel per hour, approved in 2017 to replace existing three (3) existing pusher type Reheat Furnaces.

(i) Cold Sheet Mill operations and equipment with a nominal capacity of 263 tons per hour of treated steel:

(1) Two (2) Pickle Lines, Nos. 1 & 2, with No. 1 constructed in 1965 and No. 2 constructed in 1968, each having four (4) acid process tanks with a storage capacity of 35,000 gallons, one (1) rinse enclosure and one rinse tank. Acid fumes on each line are captured and ducted thru a two (2) scrubber system each scrubber capable of serving either or both lines with both scrubbers exhausting at stack EP672-6001. The above lines are served by a system of six (6) raw acid storage tanks which vent thru a common header terminating at a water/limestone filled sump.

(2) One (1) 80 inch five (5) stand tandem mill constructed in 1965 with emissions controlled by a mist eliminator exhausting at stack EP672-6003.

(3) A natural gas fired batch annealing process constructed in 1965 consisting of 23 furnaces each with ratings less than 10 MMBtu/hr and two (2) furnaces with a maximum heat input of 11.2 MMBtu/hr each with emissions reporting to roof monitor EP 672-6009.

(4) One (1) CHTL line constructed in1983 and consisting of natural gas fired preheat, heat and soak furnaces with a combined rated capacity of 76 MMBtu/hr. exhausting at stacks EP672-6014, 15; a natural gas fired reheat furnace with an

estimated capacity of 34 MMBtu/hr. exhausting at stack EP672-6017; and a pickle tank with fumes passing thru a scrubber and exhausting at stack 672-6022.

(5) One (1) hot dip coating line (HDCL) for hot galvanizing, galvannealing, chemical treatment and cleaning of steel constructed in 1992 having a nominal capacity of 140 tons of steel coil per hour with the cleaning section fumes (excluding the chemical treatment portion) passing thru a scrubber and exhausting at stack EP672-6022 and a radiant tube furnace constructed in 1992 with a rated capacity of 95 MMBtu/hr. with NOx emissions controlled by a Selective Catalytic control device equipped with a continuous NOx parametric monitoring system that exhaust at stack 672-6023.

(6) One (1) temper mill constructed in 1965 with emissions controlled by a mist eliminator reporting to monitor EP672-6024.

(7) One (1) cold mill finishing operations and shipping constructed in 1965 with emissions reporting to roof monitor EP672-6034.

(j) One (1) Power Station, consisting of the following boilers:

(1) No. 7 boiler, capable of firing natural gas, coke oven gas, and blast furnace gas, and fuel oil constructed in 1976 and modified in 1990, with a rated capacity of 650 MMBtu/hr heat input, with emissions exhausting at stack EP460-2501;

(2) No. 8 boiler, capable of firing natural gas, coke oven gas, blast furnace gas, and No. 2 and No. 6-fuel oil constructed in 1970, with a rated capacity of 650 MMBtu/hr heat input, with emissions exhausting at stack EP460-2502;

(3) No. 9 boiler, capable of firing natural gas, coke oven gas, blast furnace gas, and No. 2 and No. 6-fuel oil constructed in 1970, with a rated capacity of 650 MMBtu/hr heat input, with emissions exhausting at stack EP460-2503;

(4) No. 10 boiler, capable of firing natural gas, coke oven gas, blast furnace gas, and No. 2 and No. 6-fuel oil constructed in 1969, with a rated capacity of 650 MMBtu/hr heat input, with emissions exhausting at stack EP460-2504;

(5) No. 11 boiler, capable of firing natural gas, coke oven gas, blast furnace gas, and No. 2 and No. 6-fuel oil constructed in 1968, with a rated capacity of 650 MMBtu/hr heat input, with emissions exhausting at stack EP460-2505; and

(6) No. 12 boiler, capable of firing natural gas, coke oven gas, blast furnace gas, and No. 2 and No. 6-fuel oil constructed in 1968, with rated capacity of 650 MMBtu/hr heat input, with emissions exhausting at stack EP460-2506.

(k) Service shops and technical maintenance operations, consisting of:

(1) No. 1 roll shop north shot blast booth constructed in 1967, with particulate controlled by a baghouse exhausting to stack EP410-1001, and fugitive emissions reporting to roof monitor EP410-1003.

(2) No. 1 roll shop south shot blast booth constructed in 1965, with particulate controlled by a baghouse, exhausting to stack EP410-1002, and fugitive emissions reporting to roof monitor EP410-1003.

(3) No. 2 roll shop shot blast booth constructed in 1966, with particulate controlled by a baghouse, exhausting to stack EP411-1502, and fugitive emissions reporting to roof monitor EP411-1501.

(l) Fugitive Dust Emissions Operations

(1) Coal and Coke Storage and Handling:

(A) Coal and coke piles, with respective fugitive emissions.

(B) Coal preparation process (Blending Building), with particulate emissions controlled by dust suppressant spray reporting to roof monitors EP512-3005 through 3011.

(C) Coke handling and screening process, respectively, with fugitive emissions and roof monitor.

(D) One (1) Stacker/Reclaimers in the coke oven department to stack and reclaim the coal.

(2) Sinter Plant operations:

(A) Bay plant piles containing revert materials, with fugitive emissions.

(B) Sinter bedding piles with fugitive emissions.

(C) One (1) Stacker/Reclaimer to stack and reclaim Bedding Piles.

(D) Bedding plant material transfer, material conveyors, and junction houses, with fugitive emissions venting through any of six (6) separate openings in the sides of the building.

(3) Blast Furnace operations:

(A) C Casthouse Slag Pit fugitive emissions.

(B) D Casthouse Slag Pit fugitive emissions.

(C) Beach Iron operation fugitive emissions, with existing partial enclosure and carbon dioxide suppressant system.

(D) Ore Dock Loading/Unloading fugitive emissions.

(E) Ore Field fugitive emissions.

(F) Two (2) Stacker/Reclaimers in the material handling portion of the Blast Furnace that stack and reclaim the ores.

(4) Unregulated and regulated roads, consisting of:

(A) Paved and unpaved roads, with fugitive emissions.

(B) Paved and unpaved slab haul roads, with fugitive emissions.

(C) Regulated unpaved roads, with fugitive emissions.

(D) Regulated paved roads, with fugitive emissions.

(E) One (1) open air clean fill storage area, with fugitive emissions.

(F) One (1) open air BOF land farming area for BOF slurry, with fugitive emissions.

(G) One (1) open air mill scale piles area, with fugitive emission.

(H) Paved and unpaved surfaces at Deerfield Storage Facility.

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

Cleveland-Cliffs Burns Harbor LLC (Plant ID 127-00001) also includes the following insignificant activities which are specifically regulated, as defined in 326 IAC 2-7-1(21):

(a) A petroleum fuel, other than gasoline, dispensing facility with monthly throughput rate of less than 10,000 gallons.

(b) The following VOC and HAP storage containers:

(1) Storage tanks with an estimated capacity less than or equal to 1,000 gallons and annual throughput less than 12,000 gallons.

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

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

(d) Cleaners and solvents characterized as follows:

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

(2) Having a vapor pressure equal to or less than 0.7 kPA; 5mm Hg; or 0.1 psi measured at 20 degrees Celsius C (68°F); the use of which for all cleaners and solvents combined does not exceed 145 gallons per 12 months.

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

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

(1) Cutting 200,000 linear feet or less of one (1) inch plate or equivalent.

(2) Using 80 tons or less of welding consumables. [326 IAC 6-3-2]

(g) Conveyors as follows: Covered conveyor for coal or coke conveying of less than or equal to 360 tons per day. [326 IAC 6-3-2]

(h) Coal bunker and coal scale exhausts and associated dust collector vents. [326 IAC 6-3-2]

(i) Grinding and machining operations controlled with fabric filters, scrubbers, mist collectors, wet collectors and electrostatic precipitators with a design grain loading of less

than or equal to 0.03 grains per actual cubic foot and a gas flow rate less than or equal to 4000 actual cubic feet per minute, including the following: deburring; buffing; polishing; abrasive blasting; pneumatic conveying; and woodworking operations. [326 IAC 6-3-2]

(j) Vents from ash transport systems not operated at positive pressure. [326 IAC 6-3-2]

(k) One (1) mist cooling system, permitted in 2010 for construction.

(l) One (1) plasma test coupon cutter, permitted in 2010 for construction.

(m) Generators:

(1) Two (2) natural gas-fired SI power station emergency generators, identified as PSGEN 1, PSGEN 2, each with a capacity of 670 HP, constructed in 2017.

(2) One (1) natural gas-fired SI SDO Building emergency generator, identified as SDOGEN with rated capacity of 96 Horsepower (HP), constructed in 2015.

(3) One (1) propane-fired North Gate non-emergency generator, identified as NGGEN, with rated capacity of 21.5 HP, constructed in 2016.

(4) One (1) diesel-fired compression ignition (CI) Coke Oven Blender fire pump, with a rated capacity of 185 HP, constructed in 2000.

(5) One (1) diesel-fired CI SW of J5 fire pump, with a rated capacity of 208 HP, constructed in 1993.

(6) One (1) natural gas-fired SI main office emergency generator, with rated capacity of 67 Horsepower (HP), constructed in October 2005.

(7) One (1) propane-fired SI Main Gate Building emergency generator, with rated capacity of 27 Horsepower (HP) constructed in 2010.

(8) One (1) diesel-fueled CI Sanitary Secondary Waste Treatment Plant emergency generator, identified as TPGEN, constructed in 2021, with a rated capacity of 619 horsepower (HP).

[Under 40 CFR 60, Subpart IIII, this emergency diesel-fueled generator is considered an affected facility]
[Under 40 CFR 63, Subpart ZZZZ, this emergency diesel-fueled generator is considered an affected facility]

(n) Hot water heaters:

(1) North Welfare East natural gas-fired water heater (COB), with 130 gallon capacity and heat input of 0.3999 MMBtu/hr.

(2) North Welfare West natural gas-fired water heater (COB), with 130 gallon capacity and heat input of 0.3999 MMBtu/hr.

(3) South Welfare West natural gas-fired water heater (COB), with 130 gallon capacity and heat input of 0.3999 MMBtu/hr.

(4) Blast Furnace Welfare East natural gas-fired water heater (SHW), with 130 gallon capacity and heat input of 0.4999 MMBtu/hr.

(5) Blast Furnace Welfare East natural gas-fired water heater (SHW), with 130 gallon capacity and heat input of 0.3999 MMBtu/hr.

(6) Blast Furnace Welfare West natural gas-fired water heater (SHW), with 130 gallon capacity and heat input of 0.3999 MMBtu/hr.

(7) Sinter Plant Welfare West natural gas-fired water heater (SHW), with 130 gallon capacity and heat input of 0.3999 MMBtu/hr.

(8) Sinter Plant Welfare East natural gas-fired water heater (COB), with 130 gallon capacity and heat input of 0.3999 MMBtu/hr.

(9) Sinter Plant Welfare East natural gas-fired water heater (COB), with 130 gallon capacity and heat input of 0.3999 MMBtu/hr.

(10) BOF Welfare West natural gas-fired water heater (SHW), with 250 gallon capacity and heat input of 1 MMBtu/hr.

(11) BOF Welfare East natural gas-fired water heater (SHW), with 250 gallon capacity and heat input of 1 MMBtu/hr.

(12) Shops Welfare East natural gas-fired water heater, (SHW), with 250 gallon capacity and heat input of 1 MMBtu/hr.

(13) Shops Welfare West natural gas-fired water heater, (SHW), with 250 gallon capacity and heat input of 1 MMBtu/hr.

(14) Dock Welfare natural gas-fired water heater, (SHW), with 130 gallon capacity and heat input of 0.4999 MMBtu/hr.

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

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

(a) It is a major source, as defined in 326 IAC 2-7-1(22);

(b) It is a source in a source category designated by the United States Environmental Protection Agency (U.S. EPA) under 40 CFR 70.3 (Part 70 - Applicability).

SECTION B GENERAL CONDITIONS

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

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

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

(a) This permit, T127-40675-00001, 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 T127-40675-00001 and issued pursuant to permitting programs approved into the state implementation plan have been either:

(1) incorporated as originally stated,

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

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

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

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

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

B.15 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.

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

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

C.2 Opacity [326 IAC 5-1]

Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-1 (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 forty percent (40%) in any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.

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

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

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

C.4 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.5 Stack Height [326 IAC 1-7]

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

C.6 Asbestos Abatement Projects [326 IAC 14-10] [326 IAC 18] [40 CFR 61, Subpart M]

The Permittee shall comply with the applicable requirements of 326 IAC 14-10, 326 IAC 18, and 40 CFR 61.140. 326 IAC 14-10 and 326 IAC 18 are not federally enforceable.

C.7 Source Specific and Facility Emission Limitations for TSP in Porter County [326 IAC 6-6]

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

C.8 Porter County Sulfur Dioxide Limitations [326 IAC 7-4-14]

Pursuant to 326 IAC 7-4-14(1), the facilities located at Cleveland-Cliffs Burns Harbor LLC shall comply with the following sulfur dioxide emission limitations contained therein, and other requirements of this rule, unless otherwise specified, and in accordance with Section D- Facility Operation Conditions, of this permit.

(a) Pursuant to 326 IAC 7-4-14(1)(A)(i) through (v), the following facilities shall burn natural gas only:
- (i) BOF FM Boiler (EU534-23),
- (ii) Continuous Hardening and Annealing Furnace (EU673-24),
- (iii) 160 inch Plate Mill Boilers No.2 and 4,
- (iv) 24 Batch Annealing Furnaces (EU672-05),
- (v) Continuous Heat Treat line (CHTL) Preheat, Heating, and Soaking, and Reheat (EU672-07 and 08).

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

		SO_2 Emission Limitations	
Rule Cite	**Facility**	**lb/MMBtu**	**lb/hr**
326 IAC 7-4-14 (1)(B)(i)	Blast Furnace C Stoves (EP520-3547)	0.83	545
326 IAC 7-4-14 (1)(B)(ii)	Blast Furnace D Stoves (EP520-3560)	0.83	545
326 IAC 7-4-14 (1)(B)((iii)	Sinter Plant Windbox (EP520-3513)	1.0 lb/ton	400
326 IAC 7-4-14 (1)(B)(iv)	No.1 Coke Battery Underfire (EU512-08)	1.73	803
326 IAC 7-4-14 (1)(B)(v)	No.2 Coke Battery Underfire (EU512-16)	1.96	911
326 IAC 7-4-14 (1)(B)(vi)	Slab Mill Soaking Pits: (AA) Not more than nine (9) of thirty-two (32) horizontally discharged soaking pits may be fired on coke oven gas at the same time with total sulfur dioxide emissions not to exceed four hundred eighty-two (482) pounds per hour. (BB) The remaining twenty-three (23) of thirty-two (32) horizontally discharged soaking pits may burn blast furnace or natural gas, or both, with total sulfur dioxide emissions not to exceed twenty-four (24) pounds per hour. (CC) The four (4) vertically discharged soaking pits may burn blast furnace or natural gas, or both, with total sulfur dioxide emissions not to exceed four (4) pounds per hour.		

Rule Cite	Facility	SO_2 Emission Limitations	
		lb/MMBtu	lb/hr
326 IAC 7-4-14 (1)(B)(vii)	160 Inch Plate Mill Continuous Reheat Furnace No.1 and Boiler No. 1 (EP673-6503)	1.96	299
326 IAC 7-4-14 (1)(B)(viii)	160 Inch Plate Mill Continuous Reheat Furnace No.2 (EP673-6504) and Boiler No. 3	1.96	299
326 IAC 7-4-14 (1)(B)(ix)	80 Inch Hot Strip Mill Furnace No.1, 2 and 3 (EP670-5504 to 5509)	1.96	79 each
326 IAC 7-4-14 (1)(B)(x)	110 Inch Plate Mill Furnaces No.1 and 2 (EP674-7001)	1.07	88
326 IAC 7-4-14 (1)(B)(xi)	110 Inch Plate Mill Normalizing Furnace	1.07	88
326 IAC 7-4-14 (1)(B)(xii)	160 Inch Plate Mill In & Out Furnaces No. 4 and 5 (EP673-6501)	1.96	274
326 IAC 7-4-14 (1)(B)(xiii)	160 Inch Plate Mill In and Out Furnaces No. 6 and 7 (EP673-6502)	1.96	274
326 IAC 7-4-14 (1)(B)(xiv)	160 Inch Plate Mill In & Out Furnaces No. 8 (EP673-6505)	1.96	176
326 IAC 7-4-14 (1)(B)(xv)	Power Station Boiler No.7 (EP460-2501)	0.8	520
326 IAC 7-4-14 (1)(B)(xvi)	Power Station Boilers No.8, 9, 10, 11, and 12 (EP460-2502 to 2506)	1.45	2,798

(c) Under normal operating conditions, the Permittee shall be subject to the limitations contained in 326 IAC 7-4-14(1)(B), which are listed throughout this permit. However, in the event that the Permittee combusts fuel oil in any of the furnaces at the hot strip mill, it will become subject to the limitations under 326 IAC 7-4-14(a(C), instead of those contained in 326 IAC 7-4-14(1)(B).

(d) Pursuant to 326 IAC 7-4-14(1)(C), as an alternative to the sulfur dioxide emission limitations specified in clause (B), Cleveland-Cliffs Burns Harbor LLC shall comply with the sulfur dioxide emission limitations and other requirements as follows:

FACILITY DESCRIPTION	EMISSION LIMITATIONS	
	lbs/MMBtu	lbs/hr
(i) Blast Furnace C Stoves	0.75	498
(ii) Blast Furnace D Stoves	0.75	498
(iii) Sinter Plant Windbox	1.0 lb/ton process material	400
(iv) No. 1 Coke Battery Underfire	1.57	730
(v) No. 2 Coke Battery Underfire	1.78	828
(vi) Slab Mill Soaking Pits	(AA) Not more than six (6) of thirty-two (32) horizontally discharged soaking pits may be fired on coke oven gas at the same time with total sulfur dioxide	

FACILITY DESCRIPTION	EMISSION LIMITATIONS	
	lbs/MMBtu	lbs/hr
	emissions not to exceed two hundred ninety-two (292) pounds per hour. (BB) The remaining twenty-sixtotal sulfur dioxide emissions not to exceed two hundred ninety-two (292) pounds per hour. (BB) The remaining twenty-six (26) of thirty-two (32) horizontally discharged soaking pits may burn blast furnace or natural gas, or both, with total sulfur dioxide emissions not to exceed twenty-seven (27) pounds per hour. (CC) The four (4) vertically discharged soaking pits may burn blast furnace or natural gas, or both, with total sulfur dioxide emissions not to exceed four (4) pounds per hour.	
(vii) 160 inch Plate Mill Continuous Reheat Furnace No. 1 and Boiler No. 1	1.78	293
(viii) 160 inch Plate Mill Continuous Reheat Furnace No. 2 and Boiler No. 3	1.78	293
(ix) 80 inch Hot Strip Mill Furnace No. 1, 2, and 3	1.78	483 each
(x) 110 inch Plate Mill Furnaces No. 1 and 2	1.78	401
(xi) 110 inch Plate Mill Normalizing Furnace	1.07	88
(xii) 160 inch Plate Mill I & O Furnaces No. 4 and 5	1.78	249

FACILITY DESCRIPTION	EMISSION LIMITATIONS	
	lbs/MMBtu	lbs/hr
If 160 inch Plate Mill I & O Furnaces No. 6 or 7, or both, are in operation on a fuel other than natural gas, Furnaces No. 4 and 5 shall not operate or shall burn natural gas only.		
(xiii) 160 inch Plate Mill I & O Furnaces No. 6 and 7 1.78 249 If 160 inch Plate Mill I & O Furnaces No. 4 or 5, or both, are in operation on a fuel other than natural gas, Furnaces No. 6 and 7 shall not operate or shall burn natural gas only.	1.78	249
(xiv) 160 inch Plate Mill I & O Furnace No. 8	1.78	160
(xvii) Cleveland-Cliffs Burns Harbor LLC shall notify the department at least twenty-four (24) hours prior to reliance on the alternative set of limits specified in items (i) through (xvi). Cleveland-Cliffs Burns Harbor LLC shall maintain records of fuel type and operational status of facilities listed in items (xii) and (xiii) and shall make the records available to the department upon request.		
(xviii) For the purposes of 326 IAC 7-2-1(c)(2), compliance shall be determined based on separate calendar month averages for the set of requirements specified in this clause and for the set of requirements specified in clause (B).		

(e) Pursuant to 326 IAC 7-4-14(1)(D):
Coke oven gas usage at facilities other than the No. 1 and 2 Coke Battery Underfire Stacks shall be restricted to not more than seventy-five (75) million cubic feet per day. Total sulfur dioxide emissions from the facilities listed in clause (B)(i) through (B)(iii), (B)(vi)(AA) through (B)(vi)(BB), (B)(vii) through (B)(x), and (B)(xii) through (B)(xvi) shall not exceed four thousand four hundred twenty-nine (4,429) pounds per hour. During periods in which the limits contained in clause (C) are in effect, coke oven gas usage at facilities other than the No. 1 and 2 Coke Battery Underfire Stacks shall be restricted to not more than seventy (70) million cubic feet per day, and total sulfur dioxide emissions from the facilities listed in clause (C)(i) through (C)(iii), (C)(vi)(AA) through (C)(vi)(BB), (C)(vii) through (C)(x), and (C)(xii) through (C)(xvi) shall not exceed four thousand six hundred thirty (4,630) pounds per hour.

(f) Cleveland-Cliffs Burns Harbor LLC shall achieve compliance with the requirements specified in clause (B) or (C) prior to December 31, 1988. Thereafter, Cleveland-Cliffs Burns Harbor LLC shall submit a report to the department within thirty (30) days following the end of each calendar quarter containing the following information:

(i) Records of the total coke oven gas, blast furnace gas, fuel oil, and natural gas usage for each day at each facility listed in clauses (B) and (C).

(ii) Records of the:

(AA) average sulfur content and heating value as determined per the procedures specified in clause (F) for each fuel type used during the calendar quarter; and

(BB) maximum number of slab mill soaking pits burning coke oven gas at any given time during each day.

(iii) The calculated sulfur dioxide emission rate in the applicable emission units (pounds per hour, pounds per million Btu, or pounds per ton) for each facility for each day and the average sulfur dioxide emissions from the facilities listed in clause (C)(i) through (C)(iii), (C)(vi)(AA) through (C)(vi)(BB), (C)(vii) through (C)(x), and (C)(xii) through (C)(xvi) for each day in pounds per hour during the calendar quarter.

(g) Cleveland-Cliffs Burns Harbor LLC shall submit a sampling and analysis protocol to the department by December 31, 1988. The protocol shall:

(i) contain a description of planned procedures for:

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

(BB) analysis of the sulfur content; and

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

(ii) specify the frequency of sampling, analysis, and measurement for each:

(AA) fuel and material; and

(BB) facility.

The department shall incorporate the protocol into the source's operation permit per procedures specified in 326 IAC 2. The department may revise the protocol as necessary to establish acceptable sampling, analysis, and measurements procedures and frequency. The department may also require that a source conduct a stack test at any facility listed in this subdivision within thirty (30) days of written notification by the department.

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

C.9 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.10 Source Specific and Facility Emission Limitations for TSP in Porter County - Testing [326 IAC 6-6]

(a) Pursuant to 326 IAC 6-6-2(j)(4), the commissioner may require stack tests in addition to the specific requirements of 326 IAC 6-6, Source Specific and Facility Emission Limitations for TSP in Porter County. When such testing is required, the Permittee shall permit the performance of stack tests in accordance with 40 CFR 60, Appendix A, Methods 1-5.

(b) Pursuant to 326 IAC 6-6-2(o), testing required by the commissioner to determine the amount of particulate matter emitted from any non-stack source or facility subject to the requirements of 326 IAC 6-6 shall be conducted in accordance with procedures approved by the commissioner.

326 IAC 6-6 is not federally enforceable.

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

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

The commissioner may require stack testing, monitoring, or reporting at any time to assure compliance with all applicable requirements by issuing an order under 326 IAC 2-1.1-11. Any monitoring or testing shall be performed in accordance with 326 IAC 3 or other methods approved by the commissioner or the U. S. EPA. 326 IAC 2-1.1-11 is not federally enforceable.

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

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

(a) All lb/ton (pound per ton) emission factor limits are expressed as “pounds of particulate emissions per ton of product” unless otherwise stated. By-products which may be sold as product shall not be included under the term “product.”

(b) All lb/MMBtu (pounds per million Btu) emission factor limits are expressed as “pounds of particulate emissions per million Btu of fuel(s) fired in the source” unless otherwise stated.

(c) Fuel usage data may be used to determine compliance for any non-fossil-fuel-fired source and any fossil fuel-fired source that does not have a gas cleaning device which is used to reduce particulate emissions to the atmosphere, provided that the procedures under 326 IAC 6-6-2(d)(1) through (d)(7), unless otherwise specified (see Commissioner’s Order #2006-01 dated October 23, 2006), are followed.

(d) If a compliance determination based on fuel usage data does not agree with a compliance determination based on stack test data, the determination based on stack test data shall govern. Stack test data may reflect a total sampling time of less than twenty-four (24) hours and be acceptable for such a compliance determination. [326 IAC 6-6-2(f)]

(e) Application for an alternative source-specific opacity limit may not be based on fuel usage data. [326 IAC 6-6-2(g)]

(f) Compliance with applicable particulate emission limitations for stack sources for which compliance is not based on fuel monitoring shall be determined on the basis of opacity

observations performed in accordance with 326 IAC 5-1 and the exceptions to 326 IAC 5-1, as listed in 326 IAC 6-6-2(j).

326 IAC 6-6 is not federally enforceable.

C.13 Porter County Sulfur Dioxide Emission Limitations - Sulfur Dioxide (SO_2) Fuel Sampling and Analysis (Entire Source) [326 IAC 7-4-14(1)(F)]

(a) Pursuant to 326 IAC 7-4-14(1)(F), and in order to comply with sulfur dioxide limitations in the D sections, the Permittee shall follow the Sulfur Dioxide (SO_2) Fuel Sampling and Analysis protocol; and

(b) Pursuant to CP127-2725-00001, issued January 28, 1994, for Coke Battery 2, the determination of heat content procedure outlined in the protocol submitted March 24, 2000, shall continue to be implemented.

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

C.14 Compliance Monitoring [326 IAC 2-7-5(3)][326 IAC 2-7-6(1)][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.15 Instrument Specifications [326 IAC 2-1.1-11] [326 IAC 2-7-5(3)] [326 IAC 2-7-6(1)]

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

326 IAC 2-1.1-11 is not federally enforceable.

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

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

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

(a) The Permittee shall 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.17 Risk Management Plan [326 IAC 2-7-5(12)] [40 CFR 68]

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

C.18 Response to Excursions or Exceedances [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 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)(a)(2) 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)(a)(2) 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.19 Actions Related to Noncompliance Demonstrated by a Stack Test [326 IAC 2-7-5][326 IAC 2-7-6]

(a) When the results of a stack test performed in conformance with Section C - Performance Testing, of this permit exceed the level specified in any condition of this permit, the Permittee shall 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.20 Emission Statement [326 IAC 2-7-5(3)(C)(iii)][326 IAC 2-7-5(7)][326 IAC 2-7-19(c)][326 IAC 2-6]

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

(a) Records of all required monitoring data, reports and support information required by this permit shall be retained for a period of at least five (5) years from the date of monitoring sample, measurement, report, or application. 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.22 General Reporting Requirements [326 IAC 2-7-5(3)(C)] [326 IAC 2-1.1-11] [40 CFR 64][326 IAC 3-8] [326 IAC 2-2][326 IAC 2-3]

(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.

326 IAC 2-1.1-11 is not federally enforceable.

C.23 Source Specific and Facility Emission Limitations for TSP in Porter County - Record Keeping and Reporting Requirements [326 IAC 6-6]

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

(a) Fuel usage data may be used to determine compliance for any non-fossil-fuel-fired source and any fossil fuel-fired source that does not have a gas cleaning device which is used to reduce particulate emissions to the atmosphere, provided that the following procedures are followed:

(1) The Permittee shall collect fuel usage data at least once per month and shall record them in a log which is readily available for inspection. Records must be retained for two (2) years from the date of collection.

(2) The following fuel usage data shall be recorded for each source monthly:

(A) number of hours in operation;
(B) cubic feet of each gaseous fuel fired;
(C) gallons of each liquid fuel fired;
(D) pounds of each solid fuel fired.

(3) Once each calendar quarter the Permittee shall conduct sampling and analysis to determine the heat content factors (i.e., H_i) contained in the equations set forth in 326 IAC 6-6-2(d)(4).

(4) Once each calendar quarter the Permittee shall conduct sampling and analysis to determine the sulfur content of No.6 fuel oil and shall calculate the emission factor for this fuel using the equation in 326 IAC 6-6-2(d)(4).

(5) Within thirty (30) days of the end of each calendar quarter the Permittee shall submit to the commissioner a written report of any emissions exceeding the applicable limits and the nature and cause of the excess emissions, if known.

(6) Results of the calculations performed and documented for 326 IAC 6-6-2(d)(4) within thirty (30) days of the end of each monthly monitoring period must be retained for two (2) years. An equivalent alternate frequency may be used with the prior approval of the commissioner.

326 IAC 6-6 is not federally enforceable.

C.24 Porter County Sulfur Dioxide Emission Limitations - Record Keeping and Reporting Requirements [326 IAC 7-4-14(1)(E)]

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

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

(b) Records of the average sulfur content and heating value as determined per the procedures specified in clause 326 IAC 7-4-14(1)(F) for each fuel type used during the calendar quarter.

(c) The calculated sulfur dioxide emission rate in the applicable emission units (pounds per hour, pounds per million Btu, and/or pounds per ton) for each facility for each day and the average sulfur dioxide emissions from the facilities listed in 326 IAC 7-4-14(1)(C)(i) through (C)(iv), (C)(vii)(AA) through (C)(vii)(BB), (C)(viii) through (C)(xi), and (C)(xiii) through (C)(xvii) for each day in pounds per hour during the calendar quarter.

Stratospheric Ozone Protection

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

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

SECTION D.1 EMISSIONS UNIT OPERATION CONDITIONS

Emission Unit Description:

(a) A Coke Oven process plant consisting of two (2) Coke Batteries, #1 and #2, with #1 modified in 1983 and a #2 pad-up rebuild in 1994, each consisting of eighty-two (82) ovens, with nominal capacities 160 tons per hour and 140 tons per hour of dry coal, respectively, consisting of the following:

(1) Batteries #1 & #2:

(A) Battery #1 underfire, identified as EU512-08, with an estimated nominal heat input of 465 MMBtu/hr, and opacity measured by a continuous opacity monitor, exhausting at stack EP512-3026.

(B) Battery #2 underfire, identified as EU512-16, with an estimated nominal heat input of 420 MMBtu/hr, and opacity measured by a continuous opacity monitor, exhausting at stack EP512-3027.

(C) Pushing operations, identified as EU512-06 and 14, respectively, with particulate emissions for each battery controlled by baghouse C512-3024 exhausting at stack EP512-3024, and baghouse C512-3018 exhausting to stack EP512-3018. Each baghouse has the ability to control particulate emissions from either or both batteries.

(D) Battery #1 gas collector main pressure valves, identified as EU512-07, exhausting to four (4) stacks collectively identified as EP512-3086 equipped with four (4) flares collectively identified as C512-3015.

(E) Battery #2 gas collector main pressure valves, identified as EU512-15, exhausting to six (6) stacks collectively identified as EP512-3087 equipped with six (6) flares collectively identified as C512-3016.

(F) Quenching operations, identified as EU512-09 and 17, respectively with emissions exiting stations EP512-3081 and 3082, including quench towers (servicing either battery) equipped with baffles and sprays.

(G) Batteries #1 and #2 fugitive emissions are generated from the following:

(i) Charging operations, identified as EU512-04 and 12, respectively, with fugitive emissions EP512-3016 and 3022, respectively;
(ii) Lids (four on each oven), identified as EU512-03 and 11, respectively, with fugitive emissions EP512-3015 and 3021, respectively;
(iii) Offtake Systems including emission from mini-stand pipe, identified as EU512-02 and 10, respectively, with fugitive emissions EP512-3014 and 3020, respectively; and
(iv) Doors, identified as EU512-05 and 13, with fugitive emissions EP512-3017 and 3023.
(v) A Cold Screening operation consisting of material conveyor and junction houses.

(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.1.1 Prevention of Significant Deterioration (PSD) Minor Limit [326 IAC 2-2] and Emission Offset (EO) Minor Limit [326 IAC 2-3]

Pursuant to CP127-2725-00001, issued January 28, 1994, Significant Modification 127-15656-00001, issued on October 17, 2002, and Administrative Amendment 127-19106-00001, issued on July 16, 2004 and revised by T127-31788-00001, issued on August 12, 2014 for Coke Battery #2:

(a) The amount of nitrogen oxide (NOx) emissions from Coke Battery #2 (underfire EP512-3027), shall be limited to less than 650 tons per twelve consecutive month period with compliance determined at the end of each month;.

(b) The amount of coal processed through Coke Battery #2 shall be less than 1,279,268.70 tons of dry coal per twelve (12) consecutive month period, with compliance determined at the end of each month;

(c) The Coke Battery #2 shall generate and supply to the steel manufacturing plant at least 1,793,385,000 cubic feet of coke oven gas per twelve (12) consecutive months with compliance demonstrated at the end of each month, excluding any hours when the Coke Battery #2 is not in operation.

(d) For Coke Battery #2, the underfiring (EU512-16) PM emissions shall be limited to 0.129 lbs/ton of coal.

(e) For Coke Battery #2, the total dissolved solids (TDS) shall not exceed an average of 500 milligrams per liter when evaporated at a temperature of 103 to 105 degrees centigrade to ensure PM emissions do not exceed 0.31 lb/ton of coal.

(f) Visible emissions from the combustion stack (EP512-3027) shall not exceed 20% opacity (as an established alternate opacity limitation approved by the Air Pollution Control Board on March 2, 1983) averaged over a 2-hour period.

(g) For Coke Battery #2, the visible emissions limit from the baghouse stack (pushing) shall not exceed 20% opacity averaged over a 6-minute average from baghouse stack.

(h) Visible emissions from Coke Battery #1 shall be limited as follows after November 15, 1993 as determined by EPA Method 303 to: door leaks, 7.0%; offtake leaks, 4.2%; and lid leaks 0.83%; and charging emissions to 12 seconds all based on a 30 day rolling average.

Compliance with the above limits in combination with Conditions D.1.2(b), D.1.3(b), D.1.4(b), D.1.5(a) and (b), D.3.1(b), D. 3.2, D.5.5, D.6.1(b), D.12.1 of Part 70 Permit T127-31788-00001 will render the requirements of the Prevention of Significant Deterioration, 326 IAC 2-2, and Emissions Offset rule 326 IAC 2-3 not applicable for particulate matter (PM & PM10), sulfur dioxide, carbon monoxide, volatile organic compounds, and nitrogen oxide emissions at Coke Battery #2.

D.1.2 Source Specific and Facility Emission Limitations for TSP in Porter County [326 IAC 6-6]

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

(a) Coke Oven Battery No.1 Underfiring (EU512-08) shall not exceed 0.129 lb/ton of coal.

(b) Coke Oven Battery No.2 Underfiring (EU512-16) shall not exceed 0.129 lb/ton of coal.

(c) Coke Oven Battery Charging, Lids, Offtakes, Collector Mains, Doors, Pushing and Quenching shall not exceed those listed in 326 IAC 11-3.

These conditions are not federally enforceable.

D.1.3 Particulate Emission Limitations for Manufacturing Processes [326 IAC 6-3-2]

(a) Pursuant to 326 IAC 6-3-2(e), the allowable particulate emission from the Battery #1 and Battery #2 gas collector main pressure valves, quenching, charging, offtakes, coke oven doors, cold screening/material conveying, coke by-product recovery operations shall not exceed the pound per hour emission rate established as E in the following equation:

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

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

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

D.1.4 Coke Oven Batteries [326 IAC 11-3]

(a) Pursuant to CP127-2725-00001, issued January 28, 1994, the visible emissions for Coke Battery #2, and pursuant to 326 IAC 11-3, visible emissions from Coke Battery #1 shall be limited as follows:

(1) Pursuant to 326 IAC 11-3-2(b)(4), emissions from the charging systems (EU512-04, 52), including any open charge port, offtake system (EP512-3014), mobile jumper pipe, or larry car, shall not be visible for more than a cumulative total of one hundred twenty-five (125) seconds during five (5) consecutive charging periods. Pursuant to 326 IAC 11-3-2(b)(5), one charge out of twenty (20) consecutive charges shall be exempt from the total seconds of charging using procedures set forth in 326 IAC 11-3-4(a).

(2) Pursuant to 326 IAC 11-3-2(c)(4), no visible emissions shall be permitted from more than three percent (3%) of the total charge port lids (EU512-03, 11).

(3) Pursuant to 326 IAC 11-3-2(d)(4), no visible emissions shall be permitted from more than ten percent (10%) of the total offtake piping (EU512-02, 10).

(4) Pursuant to 326 IAC 11-3-2(e)(4), no visible emissions shall be permitted from more than three (3) points on the gas collect main (EU512-07, 15), excluding the connection with the standpipes.

(5) Pursuant to 326 IAC 11-3-2(f)(4), no emissions shall be permitted from more than ten percent (10%) of the total coke oven doors (EU512-05, 13), plus four doors, on any coke oven battery.

(b) Pursuant to 326 IAC 11-3-2(g), Coke Battery #1 and #2 pushing emission requirements shall be as follows:

(1) All coke oven batteries shall be equipped with a device capable of capturing and collecting coke-side particulate matter such that the effluent gas emissions contain no more than four-hundredths (0.04) gram per two (2.0) kilograms of

coke pushed, and in addition, pursuant to CP127-2725-00001, issued January 28, 1994, for Coke Battery #2, the effluent gas particulate emissions shall not exceed 0.04 lbs/ton of the coke pushed after control.

(2) Such device shall be designed and operated in compliance with an operating permit to collect ninety percent (90%) of the pushing emissions. If the construction and design of the device have been approved by the commissioner by granting the permit, the device, if operated properly in compliance with the permit conditions, will be assumed to be collecting ninety (90%) of the pushing emissions. The permit shall be submitted to U.S. EPA as a SIP revision.

(c) Pursuant to 326 IAC 11-3-2(h), Coke Battery #1 quenching emissions requirements shall be as follows:

(1) Quench towers serving coke oven battery No.1 shall not have visible emissions from the quenching of coke with the direct application of water to hot coke unless quenching is conducted under a tower equipped with efficient baffles to impede the release of particulates into the atmosphere (EP512-3081 and 3082). Efficient baffles are baffles taking the form of slats, louvers, screens, or other impediments placed in a configuration within a quench tower to force a change of direction and reduction of velocity of the steam plume to aid in the reduction of particulate matter emitted.

(2) The quench tower makeup (when servicing coke oven battery No.1 only) must contain a total dissolved solids content of no more than one thousand five hundred (1,500) milligrams per liter. If an individual facility or source is required to comply with conflicting Indiana water pollution control requirements, the commissioner may revise quenching requirements of this subsection on a case-by-case basis.

(d) Pursuant to 326 IAC 11-3-2(i), underfire emissions requirements shall be as follows:

(1) For the Coke Battery #1 underfire stack (EP512-3026), and Coke Battery 2 underfire stack (EP512-3027), visible emissions shall comply with 326 IAC 5-1.

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

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

D.1.5 Testing Requirements [326 IAC 6-6-2(e)(1)]

In order to demonstrate compliance with Condition D.1.2(c) and D.1.4(b), the Permittee shall perform PM testing for the Coke Batteries #1 and #2 pushing emission control stacks (EP512-3024, 3018), utilizing methods approved by the Commissioner at least once every four (4) years from the date of the most recent valid compliance demonstration. Testing shall be conducted in accordance with the provisions of 326 IAC3-6 (Source Sampling Procedures). Section C - Performance Testing contains the Permittee's obligation with regard to the performance testing required by this condition.

D.1.6 Methods to Determine Compliance [326 IAC 6-6-2]

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

(1) The water as applied to the coke shall be sampled once per calendar quarter. Samples shall be collected once per day per tower for five (5) consecutive days and shall be composited into one (1) sample for each tower.

(2) Each composite sample shall be analyzed for total dissolved solids (TDS), in accordance with ASTM D1888-78, Method A or an equivalent method approved by the commissioner, with the results expressed in milligrams per liter (mg/l).

(3) Compliance shall be determined on the basis of the results of the composite sample for each tower. Alternate testing and/or analysis intervals may be used with prior approval of the board.

(b) Pursuant to 326 IAC 6-6-2(n), in determining compliance for coke oven pushing, charging, oven door leaks, and charging lid and offtake leaks, the requirements specified under 326 IAC 11-3 shall govern.

These conditions are not federally enforceable.

D.1.7 Opacity [326 IAC 11-3-2(g)]

Pursuant to CP 127-2725-00001, issued on January 28, 1994 and 326 IAC 11-3-2(g), Coke Battery No. 2 pushing fugitive visible emissions shall not exceed twenty percent (20%) opacity over a six-minute average in accordance with 40 CFR Part 60, Appendix A, Method 9. Pushing fugitive visible emission readings shall begin upon the inspector's first observation of movement of coke into the quench car and shall continue for a total of six (6) consecutive 15-second readings of the fugitive emissions escaping the hood. Pushing fugitive visible emission readings from four (4) ovens undergoing successive pushes (unless obscured) shall be considered consecutive for gathering the 24 consecutive readings used to calculate the 6-minute average opacity under Method 9. If during the 24 consecutive readings any reading(s) becomes obscured, the next reading will be taken on the next successive push to gather the 24 consecutive readings. Visible emissions shall be read above the top of the battery with the observer in a position on the ground outside the quench car tracks that provides an unobstructed view and avoids interferences (i.e., emissions from open standpipes and charging).

D.1.8 Compliance Determination for Charging [326 IAC 11-3-4(a)]

(a) Pursuant to 326 IAC 11-3-4(a), and in order to demonstrate compliance with condition D.1.4, observations shall be made, and the identity recorded, from any point or points on the topside of a coke oven battery such that the observer can obtain an unobstructed view of the charging operation. The observer shall keep cumulative time of the total number of seconds charging emissions are visible. Time is started when a visible emission appears and is stopped when the visible emission expires. This procedure shall continue throughout the entire charging period. Visible emissions occurring simultaneously from two (2) or more separate points shall be timed as one (1).

(b) Visible emissions shall not be timed from:

(1) Burning coal spilled on the top of the oven or oven lids during charging.

(2) Any equipment other than the charging system or charge ports.

(3) Standpipes during charging.

(4) Charge port lids and the standpipe on the oven most recently charged.

(5) Coke oven doors which may be wind-blown across the topside of a coke oven battery.

(6) Steam from uncombined water.

(c) The time retained is the total time visible emissions are observed during a charge and shall be recorded on a data sheet. If the observations of a consecutive set of five (5) charges are interrupted by an event not in the control of the observer, for example, momentary interference by a passing quench car plume, then the data for the interrupted charge(s) shall be discarded and additional consecutive charges shall be observed. Five (5) charges observed as such shall be treated as consecutive charges.

(d) The observer shall discard the data for the charge observed, during each set, which contains the greatest cumulative total number of seconds during which emissions are visible. A set shall consist of the total number of consecutive charges read by the observer during any one (1) observation period, but in no event shall a set exceed twenty (20) consecutive charges.

D.1.9 Compliance Determination for Charge Port Lids and Offtake Piping [326 IAC 11-3-4(b)]

Pursuant to 326 IAC 11-3-4(b), and in order to determine compliance with condition D.1.4, the observer shall walk the length of the topside of a coke oven battery, on a line down the middle of the battery, or as close as safety permits, to record the identity of standpipes in a single traverse and charge port lids in a single traverse that have any visible emissions.

(a) Visible emissions shall not be counted from:

(1) Burning coal spilled on the top of the oven or oven lids.

(2) Charge port lids and standpipe lids, from a maximum of three (3) ovens that are opened during a decarbonization period or charging period.

(3) The standpipe on an oven being charged.

(4) Resulting from maintenance work.

(5) Steam caused by the vaporization of wet luting material.

(6) Steam from uncombined water.

(b) Visible emissions from charge port lids shall include all emissions from the charge port casting/lid interface.

(c) Visible emissions from the off take piping assembly shall include any leaks from:

(1) Cracks and/or defects in the piping itself.

(2) Flanged joints of any pipes; including the final joint with the collector main.

(3) The standpipe base.

(4) The standpipe lid or along its seal with the standpipe.

(5) Offtake piping assembly which are not contained in one (1) of the categories in this subdivision.

D.1.10 Compliance Determination for Oven Doors [326 IAC 11-3-4(c)]

(a) Pursuant to 326 IAC 11-3-4(c), and in order to demonstrate compliance with condition D.1.4, an observer shall record the starting time of the inspection, then shall move steadily along the push-side or coke-side of a coke oven battery, stopping only to record

the identity of any doors of ovens not temporarily or permanently taken out of service that have visible emissions, but not including visible emissions due to steam from uncombined water. The inspector shall have any of the following options:

(1) To wait for any doors which are blocked from the inspector's view to become unobstructed.

(2) To continue the inspection and return when the view of the doors becomes unobstructed.

(3) To exclude the obstructed doors from the calculation of the total number of doors observed.

(b) The finishing time of the inspection shall be recorded followed by the inspector repeating the same procedure on the opposite side of the same battery. The inspector shall be positioned either outside of the quench car tracks on the coke-side of the battery or outside of the push-side bench. After a brief scan of a coke oven door, the observer shall proceed in the inspection checking each succeeding door in a like manner.

D.1.11 Compliance Determination for the Gas Collector Main [326 IAC 11-3-4(e)]

Pursuant to 326 IAC 11-3-4(e), and in order to determine compliance with condition D.1.4, the observer shall walk the length of the topside of the gas collector main, to record the number of points in a single traverse from which emissions are visible.

D.1.12 Continuous Opacity Monitoring [326 IAC 3-5]

The continuous opacity monitoring system installed on the Coke Battery #1 and #2 underfire stacks (EP512-3026, 3027) shall be calibrated, maintained, operated, and certified in accordance with, and meet the performance specifications of, 326 IAC 3, Monitoring Requirements.

D.1.13 Particulate Control

Pursuant to CP127-2725-00001, issued January 28, 1994, for Coke Battery #2 pushing (EU512-14) particulate emissions shall be collected by a Minister Stein type hood and evacuated to a baghouse.

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

D.1.14 Operation Condition Monitoring

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

(a) To demonstrate compliance with condition D.1.1 (b), the Permittee shall determine and document the moisture content of coal charged through the Coke Battery No.2 by following these coal sampling and analysis procedures:

(1) The coal sample acquisition point shall be at a location where representative samples of the total coal flow to be charged to the ovens may be obtained.

(2) The sample collected shall be analyzed in accordance with the methods specified in ASTM D 3173 using a moisture determination balance analyzer or equivalent methods.

(3) Coal samples shall be collected for analysis at a minimum of once per week.

For weeks that no samples were collected, the moisture content to be used for determination shall be the average of the moisture content of the 5 most recent consecutive samples taken.

(4) The daily dry tons calculated above will be summed each month for a monthly total.

(b) To modify or use other equivalent coal sampling and analysis procedures, the Permittee shall submit documentation of the procedures and results to IDEM OAQ for approval.

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

D.1.15 Record Keeping Requirements

(a) Pursuant to Significant Modification 127-15656-00001, issued October 17, 2002, Coke Battery #2 shall maintain records of NOx emissions, dry coal processed and coke oven gas generated and supplied to the steel manufacturing facilities at the plant on a quarterly basis to demonstrate the compliance status with condition D.1.1(c).

(b) To document the compliance status with Condition D.1.2, the Permittee shall keep records in accordance with C.12 and Section C – Record Keeping and Reporting Requirements, of this permit. Part of this condition implementing the requirements of 326 IAC 6-6 is not federally enforceable.

(c) Pursuant to Permit Modification 127-19106-00001, issued July 16, 2004, for Coke Battery No.2, to document compliance status with condition D.1.1 (b) the Permittee shall document:

(1) The Permittee shall determine and document the actual amount of dry coal charged through the Coke Battery No.2.

(2) The moisture content of coal charged through the Coke Battery No.2 by following these coal sampling and analysis procedures:

(A) The coal sample acquisition point shall be at a location where representative samples of the total coal flow to be charged to the ovens may be obtained.

(B) The sample collected shall be analyzed in accordance with the methods specified in ASTM D 3173 using a moisture determination balance analyzer or equivalent methods.

(C) Coal samples shall be collected for analysis at a minimum of once per week.

For weeks that no samples were collected, the moisture content to be used for determination shall be the average of the moisture content of the 5 most recent consecutive samples taken.

(D) The daily dry tons calculated above will be summed each month for a monthly total.

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

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

D.1.16 Reporting Requirements

Pursuant to CP127-2725-00001, issued January 28, 1994, for Coke Battery #2, monthly summaries of the information to document the compliance status with conditions D.1.1 (a). (b), and (c) of this permit shall be submitted, using the reporting forms located at the end of this permit, or their equivalent, not later than thirty (30) days following the end of each calendar quarter. These reports shall include the information required to demonstrate compliance with D.1.1 (a) (b) (c), including tons of NOx, tons of dry coal and coke oven gas supplied to the steel manufacturing plant from #2 COB. 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 C - General Reporting contains the Permittee’s obligation with regard to the reporting required by this condition.

SECTION D.2 EMISSIONS UNIT OPERATION CONDITIONS

Emission Unit Description:

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

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

EP512-3012	Tar Loading facility
EP512-3049	Flushing Liquor Header
EP512-3054	500 gallon open Surge Tank
EP512-3055	Flushing Liquor Sump
EP512-3056	Ammonia Absorber Recirculation Tank
EP512-3059	Waste Water Sump #8
EP512-3060	Two (2) Waste Ammonia Liquor Clarifiers [both currently out of service]
EP512-3070	Ammonia Absorber Gas Drips Sump
EP512-3080	Crystallizer Hotwell Sump
EP512-3088	No.9 Sump
EP512-3041	Barometric Condenser
EP512-3042	30,000 gallon Sulfuric Acid Tank
EP512-3043	20,000 gallon Sulfuric Acid Tank [currently out of service]
EP512-3044	Ball Mill
EP512-3201	7,500 gallon Primary tar sludge storage/process tank
EP512-3202	7,500 gallon Secondary tar sludge storage/process tank

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

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

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

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

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

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

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

SECTION D.3 EMISSIONS UNIT OPERATION CONDITIONS

Emission Unit Description:

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

(1) A raw coal receipt, storage and handling subsystem consisting of conveyors, junction houses, and radial stacker capable of delivering 2300 tons of coal per hour to a storage pile with emission points EP520-3569 and 3570.

(2) A coal reclamation subsystem with bulldozer, reclaim hoppers, under and above ground conveyors with junction houses, and coal screen with pre crusher, delivering coal to the Coal Preparation Plant.

(3) A building enclosed Coal Preparation Plant consisting of the following:

(A) Distribution conveyor and two (2) raw coal storage bins equipped with bin filters and screw feeders.

(B) Two (2) natural gas coal dryers (25 MMBtu/hour each), two (2) granulation mills with spinner separators and cyclones exhausting and transporting undersize coal and transport air to two (2) baghouses. A portion of the baghouses exhaust is returned to the pulverization mills and the remaining exhaust exits through two (2) stacks.

(C) Coal product storage and injection system with product screens (2), storage bins (4) with filters, weight hoppers (4), distribution bins (4) with filters, injectors and lock hoppers with filters (8) and related pipework that delivers granulated coal to C and D Blast Furnaces.

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

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

D.3.1 Prevention of Significant Deterioration (PSD) Minor Limit [326 IAC 2-2]

Pursuant to CP127-2802-00001, issued August 4, 1993 and revised by Title V 127-6301-00001, issued on December 27, 2007, the Permittee shall comply with the following:

(a) the raw coal storage bins, two (2) granulation mills, coal product storage bins, distribution bins and the lock hopper vents shall be controlled with bin filters or baghouses;

(b) particulate emissions from the following vents shall be less than:

(1) 0.041 lb/hr for each of the 2 raw coal bin vent units.

(2) 0.72 lb/hr for each of the two (2) granulation mill baghouses.

(3) 0.034 lb/ hr for each of the 4 bin filter vent units.

(4) 0.034 lb/ hr for each of the 4 distribution bin filter vent units.

(5) 0.075 lb/hr for each of the 8 lock hopper filter vent units.

(c) the visible emissions from the baghouses and bin filters shall be limited to 20% opacity;

(d) the opacity from the coal reclamation subsystem shall not exceed 20% using a six-minute average; and

(e) the baghouses or bin filters referenced in part (a) of this condition shall be in operation at all times when the associated process is operating.

Compliance with above limits and limit in Condition D.5.2 shall render the requirements of 326 IAC 2-2 (PSD) not applicable the 1993 modification.

D.3.2 Prevention of Significant Deterioration (PSD) Minor Limit [326 IAC 2-2] and Emission Offset (EO) Minor Limit [326 IAC 2-3

Pursuant to CP127-2725-00001, issued January 28, 1994, the dryers (BFGCI milling operations 1 and 2) for the blast furnace granulated coal injection system shall be restricted to the use of natural gas only.

D.3.3 Particulate Emission Limitations for Manufacturing Processes [326 IAC 6-3-2]

(a) Pursuant to 326 IAC 6-3-2(e), the allowable particulate emission from the Blast Furnace Granulated Injection (BFGCI) raw coal handling and storage, and coal reclamation shall not exceed the pound per hour emission rate established as E in the following equation:

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

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

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

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

D.3.4 Particulate Controls

In order to ensure compliance with Condition D.3.1, the baghouses and bin filters for particulate control shall be in operation and control emissions from the granulation mills and coal storage bins, respectively, at all times these units are in operation.

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

D.3.5 Parametric Monitoring [40 CFR 64]

The Permittee shall record the pressure drop across the baghouse, used in conjunction with the blast furnace granulation milling operations referred to in D.3(c)(3)(B) of the facility description above, once per day when the facility is in operation. When for any daily reading, the pressure drop across the baghouse is outside the normal range, the Permittee shall take reasonable response. The normal range for this unit is a pressure drop between 0.5 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. Failure to take response steps shall be considered a deviation from this permit.

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

D.3.5 Baghouse Failure [40 CFR 64]

For the granulation mill baghouse, 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).

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

D.3.6 Record Keeping Requirements

(a) To document the compliance status with Condition D.3.4, the Permittee shall maintain daily records of the pressure drop across the baghouse controlling the blast furnace granulation milling operations. The Permittee shall include in its daily record when a pressure drop reading is not taken and the reason for the lack of readings, (e.g. the process did not operate that day).

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

SECTION D.4 EMISSIONS UNIT OPERATION CONDITIONS

Emission Unit Description:

(d) A Continuous Sintering process plant with a nominal throughput of 535 tons per hour of sinter constructed in 1968, located in the Blast Furnaces Department consisting of the following:

(1) One (1) mixing drum identified as EU520-04, with emissions controlled by one (1) Venturi wet scrubber identified as C520-3502, exhausting at stack EP520-3512.

(2) One (1) sintering operation, consisting of twelve (12) windboxes, collectively identified as EU520-05, with emissions exhausting through one (1) multiclone, consisting of eight (8) cyclones followed in series by one (1) Venturi scrubber and mist eliminator, collectively identified as C520-3503, with VOC emissions monitored by a Continuous Emissions Monitor System (CEMS), exhausting at stack EP520-3513.

(3) A miscellaneous Cold Screening material handling operation consisting of material conveyor and junction houses, identified as EU520-06, with particulate emissions controlled by one (1) dedust baghouse, identified as C520-3501, exhausting at stack EP520-3511, and fugitive emissions reporting to monitors EP520-3510 and 15.

(4) A finished sinter cooler operation, identified as EU520-24, with fugitive emissions identified as EP520-3514.

(5) A Cold Screening operation consisting of material conveyor and junction houses.

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

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

D.4.1 Particulate Emission Limitations for Manufacturing Processes [326 IAC 6-3-2]

Pursuant to 326 IAC 6-3-2(e), the allowable particulate emission from the Sinter Plant Finished Sinter Cooler, EU520-24 and Cold Screening operations consisting of material conveyor and junction houses shall not exceed the pound per hour emission rate established as E in the following equation:

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

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

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

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

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

(a) The Sinter Plant Windbox Scrubber (EP520-3513) annual particulate matter emissions shall not exceed 0.277 pounds per ton of sinter processed.

(b) The Sinter Plant Miscellaneous Material Handling operations Dedust Baghouse (EP 520-3511) annual particulate matter emissions shall not exceed 42.9 pounds per hour.

(c) The Sinter Plant Mixing Drum Scrubber (EP 520-3512) annual particulate matter emissions shall not exceed 4.7 pounds per hour.

These conditions are not federally enforceable.

D.4.3 Sinter Plants [326 IAC 8-13]

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

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

(2) Except as provided in 326 IAC 8-13-3(b)(3), on any day from May 1 through September 30, the sinter plant windbox exhaust VOC emissions (the maximum daily limit) shall not exceed 3,150 pounds of VOC.

(3) On any day from May 1 through September 30 when ozone levels in Lake, Porter, or LaPorte Counties are expected to exceed the national ambient air quality standard for ozone (based on the IDEM ozone action day as the predictor), the sinter plant windbox exhaust VOC emissions (the lower daily limit) shall not exceed the VOC emission limit of 2,924 pounds of VOC.

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

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

(b) Pursuant to 326 IAC 8-13-4(b)(8) and the approval letter for the Permittee's High Ozone Day Action Plan, dated September 1, 1999, the Permittee shall complete the plan's requirements, which includes, but is not limited to, the following:

(1) Seek to limit mill scale in the five-day bedded pile to less than one percent (1%) free oil and grease;

(2) Monitor pounds of emissions on an hourly basis; and

(3) If it appears that emissions for the day may exceed allowable pounds, operating parameters will be adjusted by the Permittee, including potentially curtailing production, to ensure demonstrating compliance with the allowable pounds.

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

D.4.4 Testing Requirements [326 IAC 6-6]

Pursuant to 326 IAC 6-6-2(e)(1), Methods to determine compliance, for the particulate emission limitations contained in condition D.4.2, when required by the commissioner, the Permittee shall make any stack modifications necessary to permit a stack test in accordance with 40 CFR 60,

Appendix A, Methods 1-5. The following are emission points for which stack tests are required to determine compliance with particulate emission limitations:

(1) The sinter plant windbox scrubber stack shall be tested to determine compliance with particulate emission limitations once in each two (2) year period.

(2) The sinter plant dedusting baghouse shall be tested to determine compliance with particulate emission limitations once in each two (2) year period.

This condition is not federally enforceable.

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

D.4.5 Continuous Emissions Monitoring (VOC)[326 IAC 8-13-8][326 IAC 3-5] [40 CFR 63.7824(g)]

The Permittee shall operate the continuous emissions monitoring system (CEMS) for the measurement of VOC emissions discharged into the atmosphere from the Sinter Plant Windbox operation stacks (C520-3503), in accordance with 326 IAC 8-13-8, and 326 IAC 3-5.

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

(b) The Permittee shall demonstrate compliance with condition D.4.3 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.

The VOC CEM has been approved by IDEM for monitoring VOC emissions from this sinter plant windbox exhaust stack pursuant to 40 CFR 63.7824(g).

D.4.6 VOC Monitoring Downtime [326 IAC 2-7-6] [326 IAC 2-7-5(3)] [326 IAC 8-13-5(d)]

Whenever the VOC CEMS is malfunctioning or down for repairs or adjustments, the Permittee shall return the CEMS to operation as quickly as practicable in accordance with 40 CFR 63.6 and 63.8.

D.4.7 Control Equipment Failure

In the event that windbox scrubber failure is observed, the failure shall be addressed in accordance with the provisions of NESHAP, 40 CFR Part 63, Subpart FFFFF for the Integrated Iron and Steel Manufacturing.

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

D.4.8 Record Keeping Requirements

(a) To document compliance with D.4.2, the Permittee shall keep records in accordance with C.23, and Section C - Record Keeping and Reporting Requirements, of this permit. Part of this condition implementing the requirements of 326 IAC 6-6 is not federally enforceable.

(b) Pursuant to 326 IAC 8-13-8 (Continuous emissions monitoring), the Permittee shall demonstrate compliance with condition D.4.3 by complying with the recordkeeping requirements in 326 IAC 3-5, and the following for the period May 1 through September 30:

(1) The VOC emitted each day.

(2) The cumulative total of VOC emitted.

(3) The sinter produced each operating day.

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

D.4.9 Reporting Requirements

(a) Pursuant to 326 IAC 8-13-8(a), not later than (30) days of the exceedance of an applicable VOC emission limit in condition D.4.3, the Permittee shall submit a report containing the following:

(1) The name and location of the source.

(2) The nature of the exceedance.

(3) The date of the occurrence.

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

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

(b) Pursuant to 326 IAC 8-13-8(a)(4), the Permittee shall demonstrate compliance with condition D.4.3, by submitting the CEM certification reports according to the procedures and schedule in 326 IAC 3-5. 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.5 EMISSIONS UNIT OPERATION CONDITIONS

Emission Unit Description:

(e) Two (2) Blast Furnaces, designated as Blast Furnace C and Blast Furnace D, comprised of the following facilities and process equipment:

(1) C Blast Furnace constructed in 1971, with a nominal (combined with D furnace) capacity of 623 tons per hour of iron including an integral gas cleaning system consisting of various components including a dust catcher, separator, and 2 scrubbers (primary and secondary), which provides clean fuel to the plant fuel distribution system with excess gas flared at stack EP520-3540.

(2) C Blast Furnace Stoves, exhausting to combustion stack (EP520-3547) with an estimated heat input rate of 660 MMBtu/hr.

(3) C Furnaces with East and West casthouses with iron and slag runner fugitive emissions reporting to roof monitors EP520-3543 and 3545 respectively and tap hole and tilting runner emissions controlled by MACT baghouse installed in 2007.

(4) D Blast Furnace constructed in 1968, with a nominal (combined with C furnace) capacity of 623 tons per hour of iron, including a integral gas cleaning system consisting of various components including a dust catcher, separator, and 2 scrubbers (primary and secondary), which provides clean fuel to the plant fuel distribution system with excess gas flared at stack EP520-3553.

(5) D Blast Furnace Stoves, exhausting to combustion stack (EP520-3560) with an estimated heat input rate of 660 MMBtu/hr.

(6) D Furnaces with East and West casthouses with iron and slag runner fugitive emissions reporting to roof monitors EP520-3556 and 3558 respectively and respectively and tap hole and tilting runner emissions controlled by MACT baghouse installed in 2007.

(7) Blast Furnaces material handling and miscellaneous activities constructed in 1968:

(A) One (1) rail car dumper, with one (1) truck hopper, with emissions from car dumper controlled by baghouse C520-3506, and exhausting to stacks EP520-3520 and 3532 and fugitive emissions exhausting to building and ambient air (from truck hopper).

(B) One (1) railcar thaw shed constructed in 1969 with natural gas heaters used seasonally.

(C) Raw material handling operations with conveyors with transfer stations.

(D) Material Piles and Stacker/Reclaimers.

(E) C and D Stockhouses.

(8) One (1) stacker replacement project, approved in 2014 for construction, including the following:

(a) Two (2) drag belt feeder hopper-conveyors, identified as EURTF1 and EURTF2, with maximum capacity of material transfer at 1,000 tons per hour, each.

(b) Two (2) drag belt feeder hopper-conveyors, identified as EURTF3 and EURTF4, with maximum capacity of material transfer at 2,500 tons per hour, each.
(c) One (1) drag belt feeder conveyor, identified as EURTF5, with a maximum capacity of material transfer at 2,000 tons per hour.
(d) One (1) vertical stacker, identified as EURTF6, with hopper-conveyor with maximum capacity of material transfer at 2,500 tons per hour.
(e) Five (5) portable diesel generators, each with a maximum capacity of 125 KW (167.6 HP).

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

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

D.5.1 Source Specific and Facility Emission Limitations for TSP in Porter County [326 IAC 6-6-4]

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

(a) Blast Furnace Casting shall not exceed 0.6 lb/ton of iron.

(b) Blast Furnace Stoves (EP520-3547, 3560) shall not exceed 0.016 lb/MMBtu.

(c) Blast Furnace Flare (EP520-3540, 3553) shall not exceed 0.017 lb/MMBtu.

(d) Blast Furnace Car Dumper Baghouse (C520-3506) shall not exceed 20.6 lb/hr.

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

D.5.2 Prevention of Significant Deterioration (PSD) Minor Limit [326 IAC 2-2]

Pursuant to CP127-2802-00001, issued August 4, 1993, the Permittee shall comply with the following:

(a) the combined production rate of blast furnaces C and D shall be less than 5,460,000 tons per 12 consecutive month period with compliance determined monthly.

(b) the point source and fugitive emissions from the car dump (EU520-08) shall not exceed 7.2 lb/hr (not applicable when dumping material other than GCI coal).

Compliance with the above limits and limits in Condition D.3.1 shall render 326 IAC 2-2 not applicable for the 1993 modification.

In order to render 326 IAC 2-2 not applicable to the stacker replacement project, permitted in SSM No. 127-34963-00001, the Permittee shall comply with the following:

(c) The total throughput of material handled by the five (5) hopper-conveyors identified as EURTF1 through EURTF5 shall not exceed 4,000,000 tons per twelve (12) consecutive month period, with compliance determined at the end of each month.

(d) The fugitive emissions of PM, PM10, and PM2.5 for the front end loader reclaim process serving EURTF1 through EURTF5 (after control) shall be no greater than 14.10 lb/hr, 3.18 lb/hr and 0.32 lb/hr, respectively.

(e) The throughput of material handled by the vertical stacker-conveyor identified as EURTF6 shall not exceed 750,000 tons per twelve consecutive month period, with compliance determined at the end of each month.

(f) The fugitive emissions of PM, PM10, and PM2.5 for the front end loader reclaim process serving vertical stacker (after control) shall be no greater than 0.50 lb/hr, 0.11 lb/hr and 0.01 lb/hr, respectively.

(g) The five (5) portable generators used for the material handling equipment associated with EURTF1 through EURTF6 shall be operated for a total of no greater than 21,900 hours per twelve (12) consecutive month period, with compliance determined at the end of each month.

Compliance with these limits shall limit the potential to emit from the stacker replacement project permitted in 2014 to less than twenty-five (25) tons of PM per year, less than fifteen (15) tons of PM_{10} per year, ten (10) tons of direct $PM_{2.5}$ per year and shall render the requirements of 326 IAC 2-2 not applicable to this 2014 modification.

D.5.3 Particulate Matter (PM)

Pursuant to CP127-2802-00001, issued August 4, 1993, the emissions from the following vent shall not exceed the following:

(a) Visible emissions from the car dumper baghouse shall not exceed 20% opacity.

(b) The car dumper baghouse is in operation at all times that the coal dump hopper is operating; and

(c) The point and fugitive emissions, including the slag handling (EU520-20, 21), not limited by 326 IAC 6-6 shall not exceed 20% opacity.

D.5.4 Particulate Emission Limitations for Manufacturing Processes [326 IAC 6-3-2]

(a) Pursuant to 326 IAC 6-3-2(e), the allowable PM emission rate, the rail car thaw shed, material handling transfer stations, material piles and stacker/reclaimers, C and D Stockhouses shall not exceed 71.62 pounds per hour each, when operating at a process weight rate of 623 tons per hour. The pounds per hour limitation are calculated with the following equation:

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

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

(b) Pursuant to 326 IAC 6-3-2 (Particulate emission limitations), when the process weight exceeds two hundred (200) tons/hour calculated from the above equation, provided the concentration of particulate matter in the discharge gases to the atmosphere shall be less than one-tenth (0.10) pound per one thousand (1,000) pounds of gases.

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

D.5.5 Particulate Matter [326 IAC 6-6-2] [326 IAC 6-6-4]

(a) To demonstrate compliance with the limitations set forth in D.5.1(b), the Permittee shall calculate monthly the pounds of particulate matter emitted per MMBtu in accordance with 326 IAC 6-6-2(d):

$$\frac{(F_1 \times E_1) + (F_i \times E_i)}{(F_1 \times H_1) + (F_i \times H_i)} = T_h$$

Where: F[I] through F[i] = the quantities (e.g., million cu.ft.) of each fuel type used in one (1) month.
H[I] through H[i] = the heat content factors (e.g., BTU/cu.ft.) corresponding to the fuel types used; the most recent heat content factors obtained by the procedures required by D.5.6(b) shall be used.
E[I] through E[i] = the emissions factors (e.g., lb/million cu. Ft.) corresponding to the fuel types used; the most recent emissions factors obtained by the procedures required by D.5.6(b) shall be used.
T[h] = Total emissions in lbs/MMBtu.

(b) Once each calendar quarter, the Permittee is to conduct sampling and analysis to determine the heat content factors contained in the equation set forth above.

(c) To demonstrate compliance with the particulate limitations in D.5.1(c), the Permittee shall calculate monthly the pounds of particulate matter emitted per MMBtu.

Pursuant to the Notice of Decision issued by IDEM on October 23, 2006 to the Permittee under 326 IAC 6-6-2(d)(3), the Permittee is authorized to utilize the following equivalent alternative calculation method to demonstrate compliance:

The source shall utilize the calculation method under 326 IAC 6-6-2(d), except that if the tested heat input value is below 86 Btu/cubic foot, the source shall use 86 Btu/ cubic foot in the relevant calculation as the heat value of the blast furnace gas.

(d) To demonstrate compliance with the particulate limitations in D.5.1 (a), the Permittee shall perform MACT parametric monitoring to ensure proper operation of the capture and control system for casting emissions.

This condition is not federally enforceable.

D.5.6 Wet Suppression Compliance Monitoring

In order to demonstrate compliance with Condition D.5.2(d) and (f), the Permittee shall use wet suppression (watering of unpaved surfaces where front end loaders are operating) to control emissions of PM, PM_{10} and $PM_{2.5}$ from the front end loader reclaim process serving hopper-conveyors EURTF1-EURTF5 and the front end loader reclaim process serving vertical stacker/reclaimer when these emission units are in operation. The wet suppression shall be applied at a frequency of once every four (4) hours except for the following time periods:

(i) During precipitation

(ii) When ambient air temperature is at or below freezing temperature.

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

D.5.7 Baghouse Parametric Monitoring [40 CFR 64]

The Permittee shall record the pressure drop across the baghouse used in conjunction with the Rail Car Dumper, at least once per day when the respective facilities are in operation. When for any one reading, the pressure drop across the baghouse is outside the normal range, the Permittee shall take reasonable response steps. The normal range for this unit is a pressure drop between 1.0 and 6.0 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 from 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, and shall be calibrated or replaced at least once every six (6) months.

D.5.8 Visible Emissions Notations [40 CFR 64]

(a) Visible emission notations of rail car dumper baghouse stack shall be performed once per day during normal daylight operations. A visible emission notation does not need to be taken if the process did not operate that day.

(b) In the case of batch or discontinuous operations, readings shall be taken during normal operations.

(c) If visible emissions are observed, and corrective actions cannot be initiated within one hour of the observation, the Permittee shall record the reason that corrective action cannot be taken within the hour and an employee certified to perform an EPA Method 9 evaluation shall determine whether opacity exceeds forty percent (40%) in one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4; and:

(1) If the opacity exceeds forty percent (40%) per Method 9, the Permittee shall shut down the associated process as soon as practicable, unless either: (1) the Permittee is able to bring opacity to under forty percent (40%) per Method 9 within a reasonable period of time; or (2) the situation qualifies as an "emergency" under 326 IAC 2-7-1(12). If the Permittee continues to operate the associated process after determining that opacity exceeds forty percent (40%) per Method 9, then the Permittee shall perform an additional Method 9 reading once every four daylight hours until opacity is returned to under forty percent (40%). Once the Permittee is able to return opacity to under forty percent (40%) per this subsection (d)(i), then Permittee shall perform response actions according to subsection (d)(ii) and/or d(iii), as appropriate.

(2) If opacity does not exceed forty percent (40%) per the Method 9 observation referenced above, inspection of the baghouse shall be scheduled at the next available process downtime. Repairs shall be scheduled as expeditiously as practical, based on the inspection results.

(3) If opacity exceeds twenty percent (20%) per any Method 9 observations referenced above, the Permittee must notify IDEM, if the Permittee anticipates that operations will continue for ten (10) days or more before the failed baghouse units will be repaired or replaced.

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

D.5.9 Record Keeping Requirements

(a) To document the compliance status with Conditions D.5.1 and D.5.2, the Permittee shall keep records of the parameters in (1) through (6) below. Records maintained for (1) through (6) shall be taken as stated below and shall be complete and sufficient to establish compliance with the particulate emission limit established in Condition D.5.1. Records necessary to demonstrate the compliance status shall be available not later than 30 days after the end of each compliance period. Part of this condition implementing the requirements of 326 IAC 6-6 is not federally enforceable.

(1) Fuel usage amount and fuel type for each month.

(2) Heat content factors from each fuel determined from quarterly sampling and analysis required in D.5.5(b).

(3) The monthly calculated particulate emissions in pounds per million Btu, required in D.5.5(c).

(4) The combined monthly production rate of blast furnaces C and D.

(5) The monthly throughput for units EURTF1 through EURTF6.

(6) The total monthly hours of operation of the five (5) generators permitted in 2014.

(b) To document the compliance status with Condition D.5.8, the Permittee shall maintain records of visible emission notations. The Permittee shall include in its records when a reading is not taken and the reason for the lack of a visible emission reading, (e.g. the process did not operate that day).

(c) To document the compliance status with Condition D.5.2, the Permittee shall maintain records of the blast furnaces C and D combined hot metal monthly production.

(d) To document the compliance status Condition D.5.7, the Permittee shall maintain once per day records of the pressure drop across the baghouse used in conjunction with the Rail Car Dumper, during normal operation and the reason for the lack of pressure drop notation (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 record keeping required by this condition.

D.5.10 Reporting Requirements

Monthly summary of the information to document the compliance status with Condition D.5.2 shall be submitted to IDEM, OAQ on a quarterly basis, using the reporting forms located at the end of this permit, or their equivalent, not later than thirty (30) days following the end of each calendar quarter. 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.6 EMISSIONS UNIT OPERATION CONDITIONS

Emission Unit Description:

(f) A Basic Oxygen Furnace (BOF) Shop operation located in the Steelmaking Department consisting of the following:

(1) Three (3) Hot Metal Transfer/Desulfurization and Skimming Stations, with an annual total combined nominal input of 623 tons per hour of hot metal per month, with #1 & #2 constructed in 1968, and #3 in 1978 and modified in 1992, each identified as EU534-01, 02, and 03, respectively. #1 Hot Metal Transfer/ Desulfurization and Skimming Station have particulate emissions controlled by the MACT baghouse installed in May 2007, exhausting at the stack for the MACT baghouse. #2 Hot Metal Transfer/Desulfurization and Skimming Station has particulate emissions controlled by baghouses C534-4001 and 4002 that have been ducted in parallel, exhausting at stacks EP534-4001 and 4002 respectively, and #3 Hot Metal Transfer/Desulfurization and Skimming Station has particulate emissions controlled by baghouse C534-4003, exhausting at stacks EP534-4008.

(2) Three (3) BOF Shop vessels, with #1 & #2 constructed in 1968 and #3 in 1978, identified as EU534-06a (No. 1), EU534-06b (No. 2), and EU534-07(No. 3), each with a nominal capacity of 300 tons per heat of liquid steel with a combined estimated capacity of 500 tons per hour of molten steel, emissions from vessels No. 1 and No. 2 (EU534-06a, 06b) controlled by three (3) scrubbers, numbered #2, #3, and #4 in parallel, collectively identified as C534-4004, each exhausting at respective stacks EP534-4013, 4014, and 4015, respectively, and emissions from vessel No. 3 (EU534-07) controlled by scrubber C534-4007 exhausting to stack EP534-4017, equipped with CO flare C534-4008. The three BOF vessels have secondary capture hood ducted to a MACT baghouse installed in May 2007.

(3) Refining Cycles for three BOF Shop vessels, identified as EU534-10 for vessels No. 1 and No. 2 (EU534-06a, EU534-06b), and EU534-11 for vessel No. 3 (EU534-07), using the respective exhausts and emissions control equipment for the associated BOF Shop vessels listed above.

(4) Three (3) Molten Steel Ladle Addition Stations consisting of:

(A) Station No. 1 argon stirring, constructed in 1968 and steel desulfurization approved in 2012 for construction, identified as EU534-14, with fugitive emissions reporting to roof monitor EP534-4003 and exhausting to the MACT baghouse installed in May 2007; and

(B) Stations No. 2 and No. 3 stirring and desulfurization and alloy addition, constructed in 1978 (steel desulfurization upgrade approved in 2012 for construction), collectively identified as EU534-15, with particulate emissions from both controlled by baghouse C534-4016, exhausting to stack EP534-4031.

(5) Two (2) Steel Ladle Treatment Stations No. 4 and No. 5, constructed in 1986, collectively identified as EU534-16, with particulate emissions controlled by baghouses C534-4017 and 4099, respectively, exhausting at respective stacks EP534-4031 and 4099.

(6) One (1) Vacuum Degasser, identified as EU534-19, constructed in 1989, with a nominal capacity of 245 tons per hour of hot steel, utilizing a steam ejector identified as C534-4019 for vessel evacuation, with exhausts to stack EP534-4034 which is equipped with a CO flare, identified as C534-4020.

(7) Two (2) Continuous Casters, each with a nominal capacity of 1000 tons of molten steel per hour, consisting of:

(A) Continuous Caster #1 constructed in 1975 and modified in 1984, identified as EU595-24, equipped with a demister identified as C595-4501, exhausting to stack EP595-4501; and

(B) Continuous Caster #2 constructed in 1985, identified as EU595-25, equipped with three (3) demisters identified as C595-4504, exhausting to two stacks, collectively identified as EP595-4504.

(8) One (1) natural gas fired FM boiler for the BOF Shop, constructed in 1968, identified as EU534-23, with an estimated capacity of 50 MMBtu/hr heat input, exhausting to stack EP534-4018.

(9) Steel making material handling operations consisting of:

(A) One (1) Track hopper, constructed in 1989, identified as EU 534- 21, with particulate emissions controlled by baghouse C534-4013, exhausting to stack EP534-4021.

(B) Two (2) Junction Houses, constructed in 1968 and modified in 1996, identified as H1 and H2, enclosing the transfer points between conveyors L2 and L3, and L3 and L4, respectively, with particulate emissions controlled by two (2) baghouses, identified as C534-4014 and 15, respectively, with each exhausting to respective stacks EP534-4027 and 28.

(C) Three (3) BOF weigh hoppers constructed in 1968 and modified in 1996, collectively identified as EU534-36, with particulate emissions controlled by two (2) baghouses, collectively identified as C534-4010, exhausting to respective stacks EP534-4020 and 4026.

(D) Two (2) BOF vessel storage bins, constructed in 1968 and modified in 1996, collectively identified as EU534-33, with particulate emissions from both controlled by baghouse C534-4009, exhausting at stack EP534-4019.

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

(F) One (1) lime-spar storage tank, with throughput capacity 20 tons/hr and using pneumatic method for tank filling, approved in 2012 for Construction, controlled by dust collector.

(10) Additional steel making activities consisting of:

(A) Eight (8) steel ladle and sub car dryers (including a torpedo car dryer), constructed in 1982, collectively identified as EU534-17, with fugitive emissions reporting to roof monitor EP534-4003.

(B) Teeming Aisles, constructed in 1969, collectively identified as EU534-18, with fugitive emissions reporting to roof monitor EP534-4003.

(C) Vacuum Degasser ladle dryers and preheaters, constructed in 1989, collectively identified as EU534-22, all using natural gas as fuel with nominal capacities of 7MMBtu/hr for the preheat burner, 9 MMBtu/hr for the refractory dryer burner, and 4.5 MMBtu/hr for the refractory dryer burner, with all collectively exhausting at stack EP534-4036.

(D) BOF Auxiliaries collectively identified as EU534-40, consisting of fugitive emissions EP534-4004, 4005, 4007, and 4051.

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

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

D.6.1 Prevention of Significant Deterioration (PSD) Minor Limit [326 IAC 2-2]

(a) Pursuant to CP 127-2480-00001, issued November 12, 1992, the PM shall not exceed 31.3 lbs/hour for the Baghouse, identified as C534-4003 that serves #3 Hot Metal Desulfurization Station.

Compliance with the above Condition D.6.1(a) shall render the PSD rule, 326 IAC 2-2, not applicable to the 1992 modification.

(b) Pursuant to CP 127-2725-00001, issued on January 28, 1994 and revised in Significant Modification 127-15656-00001, issued October 17, 2002, the Vacuum Degasser (EU534-19) shall not remove more than 0.04% carbon from the steel based on a twelve month period rolled on a monthly basis and the production level shall be less than 2,146,511 tons of hot steel, per twelve consecutive month period with compliance determined at the end of each month.

Compliance with the above Condition D.6.1(b) in combination with Conditions D.1.1(c), shall limit CO emissions to less than the PSD significant emissions rate (SER) of 100 tons per year for CO and render the requirements of the Prevention of Significant Deterioration, 326 IAC 2-2, not applicable for the 1994 modification.

(c) The PM, PM10 and PM2.5 emissions from the lime-spar storage tank shall not exceed 0.15 (fifteen hundredths) pounds/hr.

Compliance with this limit, in conjunction with the paved road emissions due to lime-spar transportation by truck, and the emissions increase based on the ATPA evaluation conducted by the Permittee, will limit the PM, PM10 and PM2.5 to less than 25, 15 and 10 tons per year, respectively and render 326 IAC 2-2, PSD not applicable **to** the 2012 modification.

D.6.2 Particulate Emission Limitations for Manufacturing Processes [326 IAC 6-3-2]

(a) Pursuant to 326 IAC 6-3-2 the particulate emissions from the following units shall be limited as follows when operating at the listed process weight rate.

Unit	Process Weight Rate (tons/hr)	Emission Limit (lb/hr)
Molten Steel Ladle Addition Station 1 (EU534-14)	167	56.6
Steel ladle and sub car dryers (EU534-17)	623	71.6
Vacuum Degasser ladle dryers and preheaters (EU534-22)	623	71.6
BOF Auxiliaries (EU534-40)	623	71.6

(b) Pursuant to 326 IAC 6-3-2(e), the allowable particulate emission from the Vacuum Degasser Material handling for alloy addition, identified as EU534-20 shall not exceed the pound per hour emission rate established as E in the following equation:

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

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

The pounds per hour limitation in (a) was calculated using the equation in (b):

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

(d) Pursuant to 326 IAC 6-3-2, allowable particulate emission rate from the lime-spar storage tank shall not exceed 30.5 lb/hr when operating at the process weight rate 20 tons/hr.

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

Interpolation of the data for the process weight rate up to sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

$E = 4.10\ P^{0.67}$ where E = rate of emission in pounds per hour and
P = process weight rate in tons per hour

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

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

(a) The BOF Shop Nos. 1 and 2 vessel scrubber stacks [three (3) stacks (EP534-4013, 14, 15) collectively restricted to limit] shall not exceed 0.09 pounds per ton of liquid steel.

(b) The BOF Shop Nos. 1 and 2 vessel (EU534-06) charging and tapping shall not exceed 0.35 lb/ton of liquid steel.

(c) The BOF Shop No.3 vessel scrubber stack (EP534-4017) shall not exceed 0.022 grains/dscf.

(d) The BOF Shop No.3 vessel charging and tapping (EU534-07) shall not exceed 0.05 lb/ton of liquid steel.

(e) BOF Shop Teeming operation (EU534-18) shall not exceed 0.07 pounds per ton of liquid steel.

(f) The BOF Desulfurization baghouse (steel ladle desulfurization baghouse, C534-4016) shall not exceed 6.0 pounds per hour.

(g) The Track Hopper Building particulate matter emissions (C534-4013) shall not exceed 1.2 pounds per hour.

(h) The Conveyor Junction H1 particulate matter emissions (C534-4014) shall not exceed 0.6 pounds per hour.

(i) The Conveyor Junction H2 particulate matter emissions (C534-4015) shall not exceed 0.6 pounds per hour.

(j) The BOF No.1 vessel storage bins baghouse (C534-4009) particulate matter emissions shall not exceed 1.7 pounds per hour.

(k) The BOF No.2 vessel storage bins baghouse (C534-4009) particulate matter emissions shall not exceed 1.7 pounds per hour.

(l) The BOF No.1 vessel weigh hopper baghouses (C534-4010a, 10b) particulate matter emissions for the BOF No.1 vessel, shall not exceed 2.2 pounds per hour.

(m) The BOF No.2 vessel weigh hopper baghouses (C534-4010a, 10b) particulate matter emissions for the BOF No.2 vessel, shall not exceed 2.2 pounds per hour.

(n) The Continuous Casters (EU595-24 and 25) shall not exceed 0.015 lb/ton of liquid steel cast, on an annual basis.

(o) The BOF Shop FM Boiler (EP534-4018) annual particulate matter emissions shall not exceed 0.005 lb/MMBtu.

These conditions are not federally enforceable.

D.6.4 Carbon Monoxide Emission Limits [326 IAC 9-1-2]

Pursuant to 326 IAC 9-1-2(2), no carbon monoxide shall be discharged from the No.3 BOF shop vessel (EU534-07, 11), unless the waste gas stream is burned in one of the following: a direct-flame afterburner, boiler or recuperative incinerator. In instances where carbon monoxide destruction is not required, carbon monoxide emissions shall be released at such elevation that the maximum ground level concentration from the No. 3 BOF Shop Vessel shall not exceed twenty-percent (20%) of the maximum one (1) hour Indiana ambient air quality value for carbon monoxide.

D.6.5 Prevention of Significant Deterioration (PSD) Minor Limit [326 IAC 2-2]

Pursuant to PC (64)1788, issued February 14, 1990, the Vacuum Degasser facility shall have the following limits. These short term emissions limits are intended to make the tons per year limitations in PC (64)1788 enforceable:

(a) Particulate matter emissions from the vacuum degasser steam ejector discharge flare stack (EP534-4034) shall be limited to 2.06 lbs/hr.

(b) PM10 emissions from the vacuum degasser steam ejector discharge flare stack (EP534-4034) shall be limited to 1.03 lbs/hr.

(c) Particulate matter generated by the vacuum degasser alloy additive material handling equipment consisting of 18 alloy storage bins (EU534-20), 3 weigh hoppers (EU 534-36) and conveyor transfer points shall be captured and vented to the vacuum degasser material handling baghouse (C534-4018) and shall comply with the following limits:

(1) Particulate matter emissions shall be limited to 2.31 lbs/hr.

(2) PM10 emissions shall be limited to 1.16 lbs/hr.

(d) The vacuum degasser refractory drying and preheating burners (EU534-22) shall burn only natural gas and be limited to the following maximum heat input rates:

(1)	Vessel preheat burner	7 million Btu per hour
(2)	Refractory dryer burner	9 million Btu per hour
(3)	Refractory dryer burner	4.5 million Btu per hour

(e) The visible emissions from any stack, other process exhaust, building roof monitor, or building opening due to the operations of the vacuum degasser process (EU534-19), the vacuum degasser alloy material handling system (EU534-20) and the vacuum degasser vessel preheat and refractory dryer burners (EU534-22) shall not exceed five percent (5%) opacity, as determined by 40 CFR 60 appendix A, Method 9 and 326 IAC 5-1.

(f) The vacuum degassing equipment shall be operated and maintained in accordance with the manufacturer's specifications.

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

D.6.6 Testing Requirements

(a) In order to demonstrate compliance with Condition D.6.1(a), the Permittee shall perform PM testing of the Baghouse, identified as C534-4003 associated with the #3 Hot Metal Desulfurization Station, utilizing methods as approved by the Commissioner, at least once every five (5) calendar years from the date of the most recent valid compliance demonstration. Testing performed and required in NESHAP, 40 CFR 63, Subpart FFFFF may satisfy the performance testing required by this condition. 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.

(b) Pursuant to 326 IAC 6-6-2(e), for the particulate emission limitations contained in condition D.6.3, when required by the commissioner, the Permittee shall make any stack modifications necessary to permit a stack test in accordance with 40 CFR 60, Appendix A, Methods 1-5 or methods as approved by the Commissioner. 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.

The following are sources for which stack tests are required to determine compliance with particulate emission limitations:

The BOF Shop: Nos. 1 and 2 Vessel Scrubber stacks (three (3) stacks, EP534-4013, 14, 15) shall be tested once in each four (4) year period.

This Condition (D.6.6(b) is not federally enforceable.

D.6.7 Particulate Matter (PM) [326 IAC 2-7-6(1), (6)] [326 IAC 2-1.1-11]

(a) The Permittee shall maintain a single time-measuring instrument which shall be used in recording daily the time and duration of each steel production cycle, and the time and duration of any diversion of exhaust gases from the main stack (EP534-4017) servicing the BOF Shop Vessel No.3.

(b) The Permittee shall calibrate, maintain, and continuously operate monitoring devices for the BOF Shop vessel No.3 (EU534-07, 11) Venturi scrubber emission control equipment (C534-4007) as follows:

(1) A monitoring device for the continuous measurement of the pressure loss through the Venturi constriction of the control equipment. The monitoring device is to be certified by the manufacturer to be accurate within ±250 Pa (±1 inch water).

(2) A monitoring device for the continual measurement of the water flow to the control equipment. The monitoring device is to be certified by the manufacturer to be accurate within ±5 percent of the design water supply pressure. The monitoring device's pressure sensor or pressure tap must be located close to the water discharge point. The Administrator must be consulted for approval in advance of selecting alternative locations for the pressure sensor or tap.

(3) All monitoring devices shall be synchronized each day with the time-measuring instrument used under paragraph (a) of this condition. The chart recorder error directly after synchronization shall not exceed 0.08 cm (1/32 inch).

(4) All monitoring devices shall use chart recorders which are operated at a minimum chart speed of 3.8 cm/hr (1.5 in/hr).

(5) All monitoring devices are to be recalibrated annually, and at other times as the Administrator may require, in accordance with the procedures under 40 CFR 60.13(b).

D.6.8 Carbon Monoxide

(a) Pursuant to PC (64)1788, issued February 14, 1990, the carbon monoxide bearing process gas streams from the vacuum degasser (i.e., degassing/ decarbonization process vacuum system exhaust and the recycled water system carbon monoxide scrubber/stripper exhaust) (C534-4019) shall be controlled by flare (C534-4020) equipped with a natural gas pilot burner ring.

(b) To demonstrate compliance with condition D.6.1(b), the Permittee shall use the procedures in 40 CFR Part 98, Subpart Q for Mandatory Greenhouse Gas Reporting from Iron and Steel production.

D.6.9 Control Operation

In order to comply with Condition D.6.1(c), the dust collector equipped on the lime-spar storage tank for particulate control shall be in operation and control emissions at all times when the lime-spar storage tank is in operation.

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

D.6.10 Baghouse Parametric Monitoring [40 CFR 64]

(a) The Permittee shall record the pressure drop across the baghouse used in conjunction with the 534-31 BOF Junction House H1 and H2 at least once per day when the process is in operation. When for any one reading, the pressure drop across the baghouse is outside the normal range, the Permittee shall take reasonable response steps. The normal range for this unit is a pressure drop between 1.0 and 6.0 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 from this permit.

(b) The Permittee shall record the pressure drop across Baghouse C534-4009 used in conjunction with the two (2) BOF Vessel Storage Bins, identified as EU534-33 at least once per day when the process is in operation. When for any one reading, the pressure drop across the baghouse is outside the normal range, the Permittee shall take reasonable response steps. The normal range for this unit is a pressure drop between 1.0 and 6.0 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 from this permit.

(c) The Permittee shall record the pressure drop across each of the two (2) Baghouses collectively identified as C534-4010 used in conjunction with the three (3) BOF Weight Hoppers, collectively identified as EU534-36 at least once per day when the process is in operation. When for any one reading, the pressure drop across the baghouse is outside the normal range, the Permittee shall take reasonable response steps. The normal range for this unit is a pressure drop between 1.0 and 6.0 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 from this permit.

(d) The Permittee shall record the pressure drop across Baghouse, C534-4018 used in conjunction with the Vacuum Degasser Material Handling, EU534-20 at least once per day when the process is in operation. When for any one reading, the pressure drop across the baghouse is outside the normal range, the Permittee shall take reasonable response steps. The normal range for this unit is a pressure drop between 4.0 and 10.0 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 from this permit.

(e) The Permittee shall record the pressure drop across the baghouse used in conjunction with the Track Hopper, EU534-21, at least once per day when the hopper is in operation. When for any one reading, the pressure drop across the baghouse is outside the normal range, the Permittee shall take reasonable response steps. The normal range for this unit is a pressure drop between 1.0 and 6.0 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 from this permit.

(f) The Permittee shall operate and maintain the bag leak detection system (BLDS) at all times the associated baghouse for #3 Hot Metal Desulfurization Station is operating, in accordance with the monitoring parameters required in 40 CFR 63, Subpart FFFFF, to ensure the continuous compliance with Condition D.6.1(a).

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.

D.6.11 Control Equipment Failure

(a) For a single compartment baghouse controlling emissions from a batch process (including the baghouses identified in the source descriptions at D.6(9)), in the event of a bag failure, the Permittee shall repair or replace the failed bag as soon as practicable and in any case, within 24 hours of discovery of the bag failure. Operations may also continue 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) In the event that flare failure has been observed, the failed flare must be repaired or replaced as soon as practicable. If it is determined that the flare failure cannot be corrected within twenty-four (24) hours of the failure being identified, then the Permittee shall commence the shut down process and completely shut down within 24 hours after making the determination that the failure cannot be corrected. The process may not be returned to normal operations until the flare failure is corrected. Operations may continue or be restarted 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).

D.6.12 Visible Emissions Notations

(a) Visible emission notations of the dust collector equipped on the lime-spar storage tank shall be performed once per week during normal daylight operations. A trained employee shall record whether emissions are normal or abnormal.

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

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

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

(e) If abnormal emissions are observed, the Permittee shall take reasonable response steps. 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.

D.6.13 Broken or Failed dust collector Detection

(a) For a single compartment dust collector 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 dust collector 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 emissions unit. 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).

Dust collector failure can be indicated by a significant drop in the dust collector'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.

D.6.14 Flares Operating Parameters [40 CFR Part 64]

The pilot lights flame from Flares, C534-4008 and C534-4020 shall be monitored when the BOF Shop Vessel No. 3, EU534-07 and Refining Cycle, EU534-11; and Vacuum Degasser, EU534-19 are in operation using a thermocouple, flame ionization, optical scanning or any equivalent device to detect the presence of the flame.

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

D.6.15 Record Keeping Requirements

(a) To document the compliance status with Condition D.6.1(a), the Permittee shall maintain information required for continuous compliance found under 40 CFR Part 63, Subpart FFFFF as provided in Condition E.3.2 (included as Attachment C of this permit).

(b) To document the compliance status with condition D.6.1(b), the Permittee shall maintain records of the monthly steel carbon content and the steel production level.

(c) To document compliance with condition D.6.3, the Permittee shall maintain records in accordance with C.23, and Section C - Record Keeping and Reporting Requirements, of this permit. Part of this condition implementing the requirements of 326 IAC 6-6 is not federally enforceable.

(d) To document the compliance status with Condition D.6.12, the Permittee shall maintain a weekly record of visible emission notations of the exhaust from dust collector equipped on the lime-spar storage tank. The Permittee shall include in its weekly 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 Condition D.6.10, the Permittee shall maintain once per day records of the pressure drop across the baghouses used in conjunction with the 534-31 BOF Junction House H1 and H2, two (2) BOF Vessel Storage Bins, identified as EU534-33, three (3) BOF Weight Hoppers, collectively identified as EU534-36, #3 Hot Metal Desulfurization Station and Vacuum Degasser Material Handling, EU534-20 during normal operation and the reason for the lack of pressure drop notation (e.g. the process did not operate that day).

(f) Description and duration of all periods when the dust collector associated with the lime spar storage tank was not operating for a period exceeding one (1) hour and length of time the control device was not operating.

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

D.6.16 Reporting Requirements

Monthly summary of the hot iron throughput in tons per month to document the compliance status with condition D.6.1 (b) shall be submitted to the address listed in Section C - General Reporting Requirements, of this permit, using the reporting forms located at the end of this permit, or their equivalent, not later than thirty (30) **days following the end of each calendar quarter**. These reports shall include total tonnage of hot iron processed through the three stations. 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.7 EMISSIONS UNIT OPERATION CONDITIONS

Emission Unit Description:

(g) One (1) Slab/Plate Mill Complex consisting of the following operations and equipment:

(1) Various natural gas-fired portable and permanent cutting units with fugitive emissions reporting to roof monitors EP 673-6604, EP 673-6605 and EP 673-6606.

(2) No. 2 Slab Yard operations consisting of:

(A) Three (3) natural gas-fired Slab Preheater Furnaces Nos. 1, 2 & 3, constructed in 1964, with estimated nominal capacities of 16 MMBtu/hr heat input each for No. 1 & No. 2, and 5 MMBtu/hr heat input for No. 3, with fugitive emissions from each reporting to roof monitor EP673-6605.

(3) No. 3 Slab Yard operations consisting of:

(A) Three (3) natural gas-fired Slab Preheater Furnaces Nos. 4, 5, and 6, constructed in 1968, with estimated nominal capacities of 25 MMBtu/hr heat input for each, with fugitive emissions from each reporting to roof monitor EP673-6604.

(B) One (1) Slab Grinder, constructed in 1985, with particulate emissions controlled by baghouse C673-6606, exhausting at stack EP673-6603.

(4) 160 Inch Plate Mill operations consisting of:

(A) One (1) Slab Reheat Furnace No. 1 – Continuous Pusher, capable of firing natural gas, coke oven gas, fuel oil (including No. 2 and No. 6), constructed in 1964, with an estimated furnace nominal rated capacity of 500 MMBtu/hr heat input, equipped with low NOx burners, with emissions exhausting at stack EP673-6503.

(B) One (1) Slab Reheat Furnace No. 2 - Continuous Pusher, capable of firing natural gas, coke oven gas, fuel oil (including No. 2 and No. 6), constructed in 1964, with an estimated furnace nominal rated capacity of 500 MMBtu/hr heat input, equipped with low NOx burners, with emissions exhausting at stack EP673-6504.

(C) One (1) In and Out Reheat Furnace No. 5, capable of firing natural gas, coke oven gas, fuel oil (including No. 2 and No. 6), constructed in 1964, with an estimated nominal rated capacity of 70 MMBtu/hr heat input, with emissions exhausting at stack EP673-6501.

(D) Two (2) In and Out Reheat Furnaces No. 6 and No. 7, capable of firing natural gas, coke oven gas, fuel oil (including No. 2 and No. 6), with No. 6 constructed in 1967 and No. 7 constructed in 1971each with estimated nominal rated capacities of 70 MMBtu/hr heat input, with emissions collectively exhausting at stack EP673-6502.

(E) One (1) Rolling Process, constructed in 1964, with fugitive emissions reporting to roof monitor EP673-6507.

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

(A) One (1) Car Bottom Furnace

(i) One (1) natural gas-fired Car Bottom Furnace (Normalizing and Annealing), permitted in 2010 for construction, with an estimated nominal capacity of 26 MMBtu/hr heat input, vented to roof monitor EP673-6508.

(B) One (1) natural gas-fired Continuous Hardening and Normalizing Furnace, constructed in 1966 and permitted for modification, with an estimated nominal capacity of 100 MMBtu/hr heat input, vented to roof monitor EP673-6508.

(C) One (1) natural gas-fired Continuous Tempering Furnace, constructed in 1966 and permitted for modification in 2010, with an estimated nominal capacity of 100 MMBtu/hr heat input, vented to roof monitor EP673-6508.

(D) One (1) shot blaster, permitted in 2010 for construction, exhausting through a baghouse inside the building.

(E) One (1) plate coating system consisting of a pre-heating oven with a heat input capacity of 5.0 MMBtu/hr and post application dryer (that uses the gases from the pre-heating oven), permitted in 2010 for construction.

(F) One (1) mist cooling system, permitted in 2010 for construction.

(G) One (1) plate stenciling system, permitted in 2010 for construction.

(H) One (1) plasma test coupon cutter, permitted in 2010 for construction.

(6) 110 Inch Plate Mill operations consisting of:

(A) Two (2) Slab Reheat Furnaces- Continuous Walking Beam No. 1 and No. 2, capable of firing natural gas, coke oven gas, fuel oil (including No. 2 and No. 6), both constructed in 1977, each with nominal capacities of 380 MMBtu/hr heat input, equipped with low NOx burners, with emissions collectively exhausting at stack EP674-7001.

(B) One (1) Normalizing Furnace, capable of firing natural gas, and #1 and #2 fuel oil, constructed in 1979, with a nominal capacity of 82 MMBtu/hr heat input, and emissions exhausting to stack EP674-7005.

(C) One (1) Rolling Process, constructed in 1977, with fugitive emissions reporting to roof monitor EP674-7003.

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

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

D.7.1 Prevention of Significant Deterioration (PSD) Minor Limit [326 IAC 2-2] and Emission Offset (EO) Minor Limit [326 IAC 2-3]

(a) In order to render the requirements of 326 IAC 2-2 and 326 IAC 2-3 not applicable, the Permittee shall comply with the following limits:

The PM, PM10 and PM2.5 emissions shall not exceed the pound per hour limits below:

Emission Unit	PM Emission Limit (lb/hr)	PM10 Emission Limit (lb/hr)	PM2.5 Emission Limit (lb/hr)
Shot Blaster	1.185	1.185	1.178
Coating System	0.363	0.363	0.363

Compliance with the above limits, combined with the potential to emit PM, PM10, and PM2.5 from other emission units from this modification shall limit the PM, PM10 and PM2.5 emissions from the modification to less than twenty-five (25), fifteen (15) and ten (10) tons per year, respectively, and render the requirements of 326 IAC 2-2 and 326 IAC 2-3 not applicable.

(b) In order to render the requirements of 326 IAC 2-2 not applicable, the NOx emissions from the Car Bottom Furnace, permitted in 2010 for construction, shall not exceed 8.49 tons per twelve (12) consecutive month period.

Compliance with this limit and the potential to emit NOx from other emission units from this modification shall limit NOx emissions from the modification to less than forty (40) tons per per year and render the requirements of 326 IAC 2-2 not applicable.

D.7.2 Particulate Emission Limitations for Manufacturing Processes [326 IAC 6-3-2]

(a) Pursuant to 326 IAC 6-3-2(e), the allowable particulate emission rate from the portable and permanent cutting units, No. 2 Slab Yard, No. 3 Slab Yard, Slab Grinder, 160 inch Plate Mill Rolling process, Steel Plate Continuous Hardening and Normalizing Furnace, Steel Plate Continuous Tempering Furnace, plate coating system,110 inch Plate Mill Rolling process, Slab Preheater Furnaces Nos. 4, 5, and 6 shall each not exceed the pound per hour emission rate established as E in the following formula:

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

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

(b) Pursuant to 326 IAC 6-3-2 (Particulate Emissions Limitations), when the process weight exceeds two hundred (200) tons/hour the maximum allowable emission may exceed that calculated from the above equation, provided the concentration of particulate matter in the discharge gases to the atmosphere shall be less than one-tenth (0.10) pound per one thousand (1,000) pounds of gases.

(c) Pursuant to 326 IAC 6-3-2, the particulate matter emissions from the shot blaster operations shall be limited to 52.47 pounds of particulate emissions per hour when operating at a process weight rate of 225,000 pounds per hour. The pound per hour limitation was calculated with the equation above.

D.7.3 Source Specific and Facility Emission Limitations for TSP in Porter County [326 IAC 6-6]

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

(a) The 160 Inch Plate Mill Furnace No.1 (EP673-6503) annual particulate matter emissions shall not exceed 0.082 lb/MMBtu.

(b) The 160 Inch Plate Mill Furnace No. 2 (EP673-6504) annual particulate matter emissions shall not exceed 0.082 lb/MMBtu.

(c) The 110 Inch Plate Mill Slab Reheat Furnaces No.1 and 2 (EP674-7001) annual particulate matter emissions shall not exceed 0.080 lb/MMBtu.

(d) The 160 Inch Plate Mill In & Out Furnaces No.5, 6 and 7 (EP673-6501 and 6502) annual particulate matter emissions shall not exceed 0.088 lb/MMBtu.

(e) The 110 Inch Plate Mill Normalizing Furnace (EP674-7005) annual particulate matter emissions shall not exceed 0.015 lb/MMBtu.

(f) The 160 Inch Plate Mill Normalizing Furnace and Continuous Tempering Furnace annual particulate matter emissions shall each not exceed 0.005 lb/MMBtu.

These conditions are not federally enforceable.

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

D.7.4 Particulate Control

(a) The baghouse shall be in operation and control emissions from the shot blaster at all times the equipment is in operation.

(b) The dry filter shall be in operation and control emissions from the Plate Coating System at all times the equipment is in operation; and the Permittee shall operate the control device in accordance with manufacturer's specification.

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

D.7.5 Nitrogen Oxides Emissions

Compliance with the NOx emissions limit in condition D.7.1(b) shall be determined by the summation of twelve (12) consecutive monthly emission rates calculated by the following equation:

$$E_{NOx} = \frac{(EF * Q)}{2000 \text{ lbs/ton}}$$

Where:

E_{NOx} = Emissions of NOx in tons per month
EF = Compliance emission factor for NOx shall be 100 pounds NOx per million cubic feet of gas unless an approved stack test is conducted and an alternate emission factor is established
Q = Natural Gas consumption in MMcf per month

D.7.6 Visible Emissions Notations

(a) When combusting liquid fuels, visible emission notations of the stack exhausts at the 160 Inch Plate Mill (EP673-6503, 6504, 6501, 6502, 6505) and the 110 Inch Plate Mill (EP674-7001, 7005), shall be performed once per day during normal daylight operations.

(b) Visible emission notations of the Slab Grinder stack (EP673-6603) shall be performed once per day during normal daylight operations, except if the unit is not in operation. A trained employee shall record whether emissions are normal or abnormal. A visible emission notation does not need to be taken if the process did not operate that day.

(c) In the case of batch or discontinuous operations, readings shall be taken during normal operations.

(d) If visible emissions are observed, and corrective actions cannot be initiated within one hour of the observation, the Permittee shall record the reason that corrective action cannot be taken within the hour and an employee certified to perform an EPA Method 9 evaluation shall determine whether opacity exceeds forty percent (40%) in one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4; and:

(1) If the opacity exceeds forty percent (40%) per Method 9, the Permittee shall shut down the associated process as soon as practicable, unless either: (1) the Permittee is able to bring opacity to under forty percent (40%) per Method 9 within a reasonable period of time; or (2) the situation qualifies as an "emergency" under 326 IAC 2-7-1(12). If the Permittee continues to operate the associated process after determining that opacity exceeds forty percent (40%) per Method 9, then the Permittee shall perform an additional Method 9 reading once every four daylight hours until opacity is returned to under forty percent (40%). Once the Permittee is able to return opacity to under forty percent (40%) per this subsection (d)(i), then Permittee shall perform response actions according to subsection (d)(ii) and/or d(iii), as appropriate.

(2) If opacity does not exceed forty percent (40%) per the Method 9 observation referenced above, inspection of the baghouse shall be scheduled at the next available process downtime. Repairs shall be scheduled as expeditiously as practical, based on the inspection results.

(3) If opacity exceeds twenty percent (20%) per any Method 9 observations referenced above, the Permittee must notify IDEM, if the Permittee anticipates that operations will continue for ten (10) days or more before the failed baghouse units will be repaired or replaced.

D.7.7 Monitoring

(a) On the days the Plate Coating System is in operation, the Permittee shall perform daily inspections to verify the placement, integrity and particulate loading of the filters. To monitor the performance of the dry filters, weekly observations shall be made of the overspray from the surface coating booth vent while the booth is in operation. If a condition exists which should result in a response step, the Permittee shall take reasonable response steps. 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.

(b) Monthly inspections shall be performed of the coating emissions from the vent and the presence of overspray. When there is a noticeable change in overspray emissions, or when evidence of overspray emissions is observed, the Permittee shall take reasonable response steps. 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.

D.7.8 Parametric Monitoring

The Permittee shall record the pressure drop across the baghouse used in conjunction with the shot blaster at least once per day when this facility is in operation. When for any one reading, the pressure drop across the baghouse is outside the normal range, the Permittee shall take reasonable response steps. The normal range for this unit is a pressure drop between 0.5 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 from 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, and shall be calibrated or replaced at least once every six (6) months.

D.7.9 Baghouse Failure

(a) For a single compartment baghouses 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 have been repaired or replaced. The emissions unit shall be shut down no later than the completion of the processing of the material in emissions unit. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions).

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

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

D.7.10 Record Keeping Requirements

(a) To document the compliance status with condition D.7.1(a), the Permittee shall maintain records of the lbs/hr PM emissions for the shot blaster and Plate Coating System.

(b) To document the compliance status with condition D.7.1(b), the Permittee shall maintain records of the natural gas fuel usage for the Car Bottom Furnace.

(c) To document the compliance status with condition D.7.3, the Permittee shall maintain records of PM emissions. This condition implementing the requirements of 326 IAC 6-6 is not federally enforceable.

(d) To document the compliance status with condition D.7.6, the Permittee shall maintain records of visible emission notations of the 160 Inch Plate Mill, 110 Inch Plate Mill and Slab Grinder stack exhausts specified. The Permittee shall include in its records 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 or that natural gas was sole fuel).

(e) To document the compliance status with condition D.7.7, the Permittee shall maintain a log of weekly overspray observations, daily and monthly inspections. The Permittee shall include in its daily record when an inspection is not taken and the reason for the lack of an inspection (e.g. the process did not operate that day).

(f) To document the compliance status with Condition D.7.8, the Permittee shall maintain daily records of the pressure drop across the baghouse controlling the shot blaster. The Permittee shall include in its daily record when a pressure drop reading is not taken and the reason for the lack of readings (e.g. the process did not operate that day).

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

D.7.11 Reporting Requirements

Monthly summary of the information to document the compliance status with condition D.7.1(b) shall be submitted not later than thirty (30) days following the end of each calendar quarter.

Section C - General Reporting contains the Permittee's obligation with regard to the reporting required by this condition. This report shall include the total amount of natural gas used for the Car Bottom Furnace, permitted in 2010 for construction, on a monthly basis. 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.8 ENISSION UNIT OPERATION CONDITIONS

Emission Unit Description:

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

(1) Various natural gas-fired portable cutting torches, six (6) cutting tables using one natural gas/oxygen torch per table, approved for construction in 2008, and hand scarfers with fugitive emissions reporting to roof monitors EP670-5501, 5502, and 5516.

(2) One (1) reheat furnace No. 1, capable of firing natural gas, coke oven gas, and/or propane, constructed in 1966, with a nominal capacity of 730 MMBtu/hr of heat input, with exhausts at stacks EP670-5504 and 5505.

(3) One (1) reheat furnace No. 2, capable of firing natural gas, coke oven gas, and/or propane, constructed in 1966, with a nominal capacity of 730 MMBtu/hr of heat input, with exhausts at stacks EP670-5506 and 5507.

(4) One (1) reheat furnace No. 3, capable of firing natural gas, coke oven gas, and/or propane, constructed in 1966, with a nominal capacity of 730 MMBtu/hr of heat input, with exhausts at stacks EP670-5508 and 5509.

(5) One (1) hot strip mill rolling process constructed in 1966 with fugitive emissions reporting to roof monitors EP670-5510, 5511, and 5512.

(6) Gantry burners.

(7) Two (2) natural gas-fired Walking Beam Furnaces, identified as HSM WBF No. 1 and HSM WBF No .2, equipped with low NOx burners, each with nominal heat input rate of 820 million British thermal units per hour (MMBtu/hr) and each nominal production capacity of 500 tons of slab steel per hour, approved in 2017 to replace existing three (3) existing pusher type Reheat Furnaces.

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

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

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

Pursuant to 326 IAC 6-3-2(e), the particulate from the Hot Strip mill rolling process, shall not exceed the pound per hour emission rate established as E in the following formula:

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

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

Pursuant to 326 IAC 6-3-2 (Particulate Emissions Limitations), when the process weight exceeds two hundred (200) tons/hour the maximum allowable emission may exceed that calculated from the above equation, provided the concentration of particulate matter in the discharge gases to the atmosphere shall be less than one-tenth (0.10) pound per one thousand (1,000) pounds of gases.

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

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

(a) The 80 inch Hot Strip Mill Furnace No.1 (EP670-5504, 5505) annual particulate matter emissions shall not exceed 0.085 lb/MMBtu.

(b) The 80 inch Hot Strip Mill Furnace No.2 (EP670-5506, 5507) annual particulate matter emissions shall not exceed the collective limit of 0.084 lb/MMBtu.

(c) The 80 inch Hot Strip Mill Furnace No.3 (EP670-5508, 5509) annual particulate matter emissions shall not exceed 0.084 lb/MMBtu.

These conditions are not federally enforceable.

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

D.8.3 Particulate Matter [326 IAC 6-6-2] [326 IAC 6-6-4]

(a) To demonstrate compliance with the limitations set forth in D.8.2, the Permittee shall calculate monthly the pounds of particulate matter emitted per MMBtu in accordance with 326 IAC 6-6-2(d):

$$\frac{(F_1 \times E_1) + (F_i \times E_i)}{(F_1 \times H_1) + (F_i \times H_i)} = T_h$$

Where: F[l] through F[i] = the quantities (e.g., million cu.ft.) of each fuel type used in one (1) month.
H[l] through H[i] = the heat content factors (e.g., BTU/cu.ft.) corresponding to the fuel types used; the most recent heat content factors obtained by the procedures required by D.8.5(b) shall be used.
E[l] through E[i] = the emissions factors (e.g., lb/million cu. Ft.) corresponding to the fuel types used; the most recent emissions factors obtained by the procedures required by D.8.5(b) shall be used.
T[h] = Total emissions in lbs/MMBtu.

(b) Once each calendar quarter, the Permittee is to conduct sampling and analysis to determine the heat content factors contained in the equation set forth above.

D.8.4 Decommission Requirement for the Three (3) Reheat Furnaces

(a) The reheat furnaces, identified as reheat furnaces No. 1 through 3, shall be shut down and removed from service no later than 180 days from the first start-up date of the two (2) natural gas-fired Walking Beam Furnaces, identified as HSM WBF No. 1 and HSM WBF No .2

(b) Within thirty (30) days after the date the reheat furnaces, identified as reheat furnaces No. 1 through 3, have been removed from service, the Permittee shall provide a notification to IDEM indicating the date the reheat furnaces, identified as reheat furnaces No. 1 through 3 were decommissioned.

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

D.8.5 Record Keeping Requirements

(a) To document the compliance status with condition D.8.2, the Permittee shall maintain records in accordance with C.23 and Section C– Record Keeping and Reporting Requirements, of this permit. Part of this condition implementing the requirements of 326 IAC 6-6 is not federally enforceable.

(b) Section C - General Record Keeping Requirements contains the Permittee's obligation with regard to the records required to be maintained by this condition.

SECTION D.9 EMISSIONS UNIT OPERATION CONDITIONS

Emission Unit Description:

(i) Cold Sheet Mill operations and equipment with a nominal capacity of 263 tons per hour of treated steel:

(1) Two (2) Pickle Lines, Nos. 1 & 2, with No. 1 constructed in 1965 and No. 2 constructed in 1968, each having four (4) acid process tanks with a storage capacity of 35,000 gallons, one (1) rinse enclosure and one rinse tank. Acid fumes on each line are captured and ducted thru a two (2) scrubber system each scrubber capable of serving either or both lines with both scrubbers exhausting at stack EP672-6001. The above lines are served by a system of six (6) raw acid storage tanks which vent thru a common header terminating at a water/limestone filled sump.

(2) One (1) 80 inch five (5) stand tandem mill constructed in 1965 with emissions controlled by a mist eliminator exhausting at stack EP672-6003.

(3) A natural gas fired batch annealing process constructed in 1965 consisting of 23 furnaces each with ratings less than 10 MMBtu/hr and two (2) furnaces with a maximum heat input of 11.2 MMBtu/hr each with emissions reporting to roof monitor EP 672-6009.

(4) One (1) CHTL line constructed in1983 and consisting of natural gas fired preheat, heat and soak furnaces with a combined rated capacity of 76 MMBtu/hr. exhausting at stacks EP672-6014, 15; a natural gas fired reheat furnace with an estimated capacity of 34 MMBtu/hr. exhausting at stack EP672-6017; and a pickle tank with fumes passing thru a scrubber and exhausting at stack 672-6022.

(5) One (1) hot dip coating line (HDCL) for hot galvanizing, galvannealing, chemical treatment and cleaning of steel constructed in 1992 having a nominal capacity of 140 tons of steel coil per hour with the cleaning section fumes (excluding the chemical treatment portion) passing thru a scrubber and exhausting at stack EP672-6022 and a radiant tube furnace constructed in 1992 with a rated capacity of 95 MMBtu/hr. with NOx emissions controlled by a Selective Catalytic control device equipped with a continuous NOx parametric monitoring system that exhaust at stack 672-6023.

(6) One (1) temper mill constructed in 1965 with emissions controlled by a mist eliminator reporting to monitor EP672-6024.

(7) One (1) cold mill finishing operations and shipping constructed in 1965 with emissions reporting to roof monitor EP672-6034.

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

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

D.9.1 Particulate Emission Limitations for Manufacturing Processes [326 IAC 6-3-2]

(a) Pursuant to 326 IAC 6-3-2(e), the allowable particulate emission rate from the tandem mill, temper mill, pickling process, hot dip coating (HDCL) and cold mill finishing shall not exceed the pound per hour emission rate established as E in the following equation:

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

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

(b) Pursuant to 326 IAC 6-3-2 (Particulate Emissions Limitations), when the process weight exceeds two hundred (200) tons/hour the maximum allowable emission may exceed that calculated from the above equation, provided the concentration of particulate matter in the discharge gases to the atmosphere shall be less than one-tenth (0.10) pound per one thousand (1,000) pounds of gases.

D.9.2 Source Specific and Facility Emission Limitations for TSP in Porter County [326 IAC 6-6]

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

(a) The Continuous Anneal Furnace (CHTL, EP672-6014) annual particulate matter emissions shall not exceed 0.005 lb/MMBtu.

(b) The 25 Batch Annealing Furnaces (EP672-6009) annual particulate matter emissions shall not exceed the collective limit of 0.015 lb/MMBtu.

(c) The Continuous Anneal Preheating (CHTL, EP672-6014) annual particulate matter emissions shall not exceed 0.005 lb/MMBtu.

(d) The Continuous Anneal Heating and Soaking (CHTL, EP672-6015) annual particulate matter emissions shall not exceed 0.005 lb/MMBtu.

(e) The Continuous Anneal Reheating (CHTL, EP672-6017) annual particulate matter emissions shall not exceed 0.005 lb/MMBtu.

These conditions are not federally enforceable.

D.9.3 Emission Offset Minor Limit [326 IAC 2-3]

Pursuant to Construction Permit 127-1989-00001, issued February 14, 1992, NOx emissions from the Selective Catalytic Control device associated with the Hot Dip Coating Line (HDCL) shall not exceed 2.99 pounds per hour. Compliance with this limit shall render the Emission Offset rule, 326 IAC 2-3, not applicable.

D.9.4 Prevention of Significant Deterioration (PSD) Minor Limit [326 IAC 2-2]

Pursuant to Construction Permit 127-1989-00001, issued February 14, 1992, the particulate matter emissions from the HDCL scrubber (C672-6007) shall not exceed 1.29 lb/hr. Compliance with this limit shall render the PSD rule, 326 IAC 2-2, not applicable.

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

D.9.5 Testing Requirements [326 IAC 2-7-6(1), (6)] [326 IAC 2-1.1-11]

(a) Within five (5) years after the most recent compliance demonstration, the Permittee shall perform NOx testing on the Selective Catalytic Control device associated with the HDCL to determine compliance with the NOx limitations in condition D.9.3, utilizing methods as approved by the Commissioner. This test shall be repeated at least once every five (5) calendar years following this valid compliance demonstration.

(b) Pursuant to 40 CFR § 63.1162(a)(1), the Permittee shall conduct performance test for HCL exiting the control device for No. 1 and No. 2 Pickle Lines no less frequent than twice per Part 70 Permit term.

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 performance testing required by this condition. 326 IAC 2-1.1-11 is not federally enforceable.

D.9.6 Nitrogen Oxides

Pursuant to Construction Permit 127-1989-00001, issued February 14, 1992; the Permittee shall comply with the following:

(a) In order to ensure proper operation of the catalytic reduction/NOx control device (C672-6008), the Permittee shall certify and maintain a continuous NOx parametric monitoring system within 180 days of permit issuance.

(b) The continuous NOx parametric monitoring system shall be calibrated and operated to measure the outlet concentration of nitrogen oxides emissions in the SCR exhaust stack through which the HDCL annealing furnace is exhausted (EP672-6023).

(c) Relative Accuracy Test Audits (RATAs) must be performed on the analyzer no less than once every 5 years.

(d) Daily calibrations shall be performed according to section 4.0 of 40 CFR 60 Appendix F. The Permittee shall respond to monitor out of control periods as defined in Section 4.3.1 of Appendix F.

(e) Quarterly Cylinder Gas Audits shall be performed in any quarter where a RATA is not conducted.

(f) If the NOx parametric monitoring system is down for more than 5 days, moles of ammonia injected shall be monitored and maintained per manufacturer’s suggested default ratio of at least 1:1 moles of ammonia per mole of NOx measured at the SCR inlet.

D.9.7 Control Device Failure

Control device for Nos. 1 & 2 Pickle Lines failure shall be addressed in accordance with the provisions of Steel Pickling NESHAP, 40 CFR Part 63, Subpart CCC.

D.9.8 Particulate Matter [326 IAC 6-6-2] [326 IAC 6-6-4]

(a) To demonstrate compliance with the limitations set forth in D.9.2, the Permittee shall calculate monthly the pounds of particulate matter emitted per MMBtu in accordance with 326 IAC 6-6-2(d):

$$\frac{(F_1 \times E_1) + (F_i \times E_i)}{(F_1 \times H_1) + (F_i \times H_i)} = T_h$$

Where: F[l] through F[i] = the quantities (e.g., million cu.ft.) of each fuel type used in one (1) month.
H[l] through H[i] = the heat content factors (e.g., BTU/cu.ft.) corresponding to the fuel types used; the most recent heat content factors obtained by the procedures required by D.9.8(b) shall be used.
E[l] through E[i] = the emissions factors (e.g., lb/million cu. Ft.) corresponding to the fuel types used; the most recent emissions factors obtained by the procedures required by D.9.8(b) shall be used.
T[h] = Total emissions in lbs/MMBtu.

(b) Once each calendar quarter, the Permittee is to conduct sampling and analysis to determine the heat content factors contained in the equation set forth above.

This condition is not federally enforceable.

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

D.9.9 Record Keeping Requirements

(a) To document the compliance status with conditions D.9.1 (b) and D.9.2, the Permittee shall maintain records in accordance with C.23, C.24 and Section C. – Record Keeping and Reporting Requirements, of this permit. Part of this condition implementing the requirements of 326 IAC 6-6 is not federally enforceable

(b) The following information necessary to document the compliance status with condition D.9.6 shall be maintained.

(1) Permittee shall maintain records of the readings of the continuous NOx parametric monitoring system.

(2) All corrective and preventive actions taken.

(3) All maintenance logs, calibration checks, and other required quality assurance activities.

(4) A log of the hot dip coating line (HDCL or monitoring system downtime with the following information:

(A) Date of emissions unit or monitoring system downtime.
(B) Time of commencement and completion of each downtime.
(C) Reason for each downtime.
(D) Nature of system repairs and adjustments.

(c) Section C. Section C - General Record Keeping Requirements contains the Permittee's obligation with regard to the records required to be maintained by this condition.

D.9.10 Reporting Requirement

A semi-annual report shall be submitted no later than thirty (30) days after the end of the semi-annual period being reported, documenting failed calibrations, monitor downtime and periods of excess emissions shall be submitted to the addresses listed in Section C - General Reporting Requirements of this permit. 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.10 EMISSIONS UNIT OPERATION CONDITIONS

Emission Unit Description:

(j) One (1) Power Station, consisting of the following boilers:

(1) No. 7 boiler, capable of firing natural gas, coke oven gas, and blast furnace gas, constructed in 1976 and modified in 1990, with a rated capacity of 650 MMBtu/hr heat input, with emissions exhausting at stack EP460-2501;

(2) No. 8 boiler, capable of firing natural gas, coke oven gas, blast furnace gas, and No. 2 and No. 6 fuel oil constructed in 1970, with a rated capacity of 650 MMBtu/hr heat input, with emissions exhausting at stack EP460-2502;

(3) No. 9 boiler, capable of firing natural gas, coke oven gas, blast furnace gas, and No. 2 and No. 6 fuel oil constructed in 1970, with a rated capacity of 650 MMBtu/hr heat input, with emissions exhausting at stack EP460-2503;

(4) No. 10 boiler, capable of firing natural gas, coke oven gas, blast furnace gas, and No. 2 and No. 6 fuel oil constructed in 1969, with a rated capacity of 650 MMBtu/hr heat input, with emissions exhausting at stack EP460-2504;

(5) No. 11 boiler, capable of firing natural gas, coke oven gas, blast furnace gas, and No. 2 and No. 6 fuel oil constructed in 1968, with a rated capacity of 650 MMBtu/hr heat input, with emissions exhausting at stack EP460-2505; and

(6) No. 12 boiler, capable of firing natural gas, coke oven gas, blast furnace gas, and No. 2 and No. 6 fuel oil constructed in 1968, with rated capacity of 650 MMBtu/hr heat input, with emissions exhausting at stack EP460-2506.

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

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

D.10.1 Source Specific and Facility Emission Limitations for TSP in Porter County [326 IAC 6-6]

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

(a) The Power Station Boiler Nos. 8, 9, 10, 11, and 12 (EP460-2502 to 2506) annual particulate matter emissions shall not exceed the collective limit of 0.088 lb/MMBtu.

(b) The Power Station Boiler No.7 (EP460-2501) annual particulate matter emissions shall not exceed 0.10 lb/MMBtu.

These conditions are not federally enforceable.

D.10.2 Nitrogen Oxide Reduction Program for Specific Source Categories [326 IAC 10-3]

(a) Pursuant to 326 IAC 10-3 (Nitrogen Oxide Reduction Program for Specific Source Categories) Section 1(a)(2), this rule applies to affected boilers No.7, No.8, No.9, No.10, No.11, and No.12.

(b) Pursuant to 326 IAC 10-3-3(c), the Permittee shall comply with the following NOx emission limits for each ozone control period:

(1) NOx emissions shall be limited to seventeen-hundreds pound of NOx per million Btus (0.17 lbs/MMBtu) of heat input over the ozone control period from each affected boiler;

(2) Ensure that fifty percent (50%) of the heat input shall be derived from blast furnace gas averaged over the ozone control period.

(3) During periods of blast furnace reline, startup, and period of malfunction, the affected boilers shall not be required to meet the requirement to derive fifty percent (50%) of the heat input from blast furnace gas.

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]

The Permittee shall notify IDEM OAQ Compliance and Enforcement Branch in writing prior to switching to and upon terminating use of No. 6 fuel oil in Power Station Boilers No. 8, No. 9, No. 10, No.11 or No. 12. IDEM may require compliance testing to determine if the facility is in compliance.

D.10.4 Particulate Matter [326 IAC 6-6-4]

(a) To demonstrate compliance with the limitations set forth in D.10.1, the Permittee shall calculate monthly the pounds of particulate matter emitted per MMBtu in accordance with 326 IAC 6-6-2(d):

$$\frac{(F_1 \text{ X } E_1) + (F_i \text{ X } E_i)}{(F_1 \text{ X } H_1) + (F_i \text{ X } H_i)} = T_h$$

Where: F[I] through F[i] = the quantities (e.g., million cu.ft.) of each fuel type used in one (1) month.
H[I] through H[i] = the heat content factors (e.g., BTU/cu.ft.) corresponding to the fuel types used; the most recent heat content factors obtained by the procedures required by D.10.5(b) shall be used.
E[I] through E[i] = the emissions factors (e.g., lb/million cu. Ft.) corresponding to the fuel types used; the most recent emissions factors obtained by the procedures required by D.10.5(b) shall be used.
T[h] = Total emissions in lbs/MMBtu.

(b) Once each calendar quarter, the Permittee is to conduct sampling and analysis to determine the heat content factors contained in the equation set forth above.

This condition is not federally enforceable.

D.10.5 Nitrogen Oxide Reduction Program for Specific Source Categories [326 IAC 10-3]

Pursuant to 326 IAC 10-3-4(c) and 326 IAC 10-3-6:

(a) The Permittee shall monitor fuel usage and percentage of heat input derived from each fuel combusted for Boilers No.7, No. 8, No. 9, No.10, No.11, and No.12 to demonstrate that greater than fifty percent (50%) of the aggregate heat input is derived from blast furnace gas for each ozone control period; and

(b) For purposes of determining the number of violations, if an affected boiler has excess emissions for an ozone control period, each day in the ozone control period constitutes a day in violation unless the Permittee demonstrates that a lesser number of days should

be considered. There shall be no excess NOx emissions for the purposes of this section if the average emission rate for Boilers No.7, No. 8, No. 9, No.10, No.11, and No.12, during the ozone control period is less than the applicable NOx emission rate.

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

D.10.6 Visible Emissions Notations

(a) Except for times when gaseous fuels are the only fuels being combusted, visible emission notations of the stack exhausts for boilers No.8, No.9, No.10, No.11, and No.12 (EP460-2501 to 2506) shall be performed once per day during normal daylight operations while combusting No.2 and/or No.6 fuel oil, including in combination with coke oven gas, blast furnace gas, or natural gas. A trained employee shall record whether emissions are normal or abnormal.

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

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

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

(e) If abnormal emissions are observed, the Permittee shall take reasonable response steps in accordance with Section C - Response to Excursions or Exceedances. Abnormal emissions that do not violate an applicable opacity limit are not a deviation from this permit. Failure to take response steps in accordance with Section C - Response to Excursions or Exceedances, shall be considered a deviation from this permit.

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

D.10.7 Record Keeping Requirements

(a) To document the compliance status with condition D.10.1, the Permittee shall maintain records in accordance with C.23, and Section C – Record Keeping and Reporting Requirements, of this permit. This condition implementing the requirements of 326 IAC 6-6 is not federally enforceable.

(b) To document the compliance status with condition D.10.4, the Permittee shall maintain records of fuel usage in accordance with326 IAC 6-6-2(d)(1) and (2).

(c) To document the compliance status with condition D.10.5, the Permittee shall maintain records of fuel usage and percent heat input for the ozone control period.

(d) To document the compliance status with condition D.10.6, the Permittee shall maintain records of visible emission notations of the stack exhausts for boilers No.8, No.9, No.10, No.11, and No.12 (EP460-2501 to 2506) exhaust while combusting permitted fuels, or a combination thereof. 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 or was only combusting gaseous fuels).

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

D.10.8 Reporting Requirements

To document compliance with Conditions D.10.2 and D.10.5, and pursuant to 326 IAC 10-3-5(e), the Permittee shall submit a report to the IDEM, OAQ documenting compliance with all applicable requirements of this rule in accordance with its site specific compliance plan detailed under 326 IAC 10-3-3(c) for the ozone control period of each year by October 31, beginning in 2004 and each year thereafter.

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.11 EMISSIONS UNIT OPERATION CONDITIONS

Emission Unit Description:

(k) Service shops and technical maintenance operations, consisting of:

(1) No. 1 roll shop north shot blast booth constructed in 1967, with particulate controlled by a baghouse exhausting to stack EP410-1001, and fugitive emissions reporting to roof monitor EP410-1003.

(2) No. 1 roll shop south shot blast booth constructed in 1965, with particulate controlled by a baghouse, exhausting to stack EP410-1002, and fugitive emissions reporting to roof monitor EP410-1003.

(3) No. 2 roll shop shot blast booth constructed in 1966, with particulate controlled by a baghouse, exhausting to stack EP411-1502, and fugitive emissions reporting to roof monitor EP411-1501.

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

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

D.11.1 Source Specific and Facility Emission Limitations for TSP in Porter County [326 IAC 6-6]

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

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

(b) The No.2 Roll Shop Baghouse (EP411-1502) annual particulate matter emissions shall not exceed 0.7 lb/hr.

These conditions are not federally enforceable.

Compliance Determination Requirements

D.11.2 Particulate Controls

In order to ensure compliance with Condition D.11.1, the baghouses for particulate control shall be in operation and control emissions from the No.1 Roll Shop and No.2 Roll Shop at all times these units are in operation.

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

D.11.3 Baghouse Parametric Monitoring [40 CFR 64]

The Permittee shall record the pressure drop across the baghouses used in conjunction with the No. 1 North and South Roll Shop Shot Blasters, at least once per day when the respective facilities are in operation. When for any one reading, the pressure drop across the baghouses is outside the normal range, the Permittee shall take reasonable response steps. The normal range for each these units is a pressure drop between 1.5 and 5.0 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 from 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, and shall be calibrated or replaced at least once every six (6) months.

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

D.11.4 Record Keeping Requirements

(a) To document the compliance status with Conditions D.11.1, the Permittee shall maintain records in accordance with C.23, C.24 and Section C - General Record Keeping Requirements.

(b) To document the compliance status with Condition D.11.2, the Permittee shall maintain daily records of the pressure drop across the baghouse controlling the shot blaster. The Permittee shall include in its daily record when a pressure drop reading is not taken and the reason for the lack of readings (e.g. the process did not operate that day).

(c) Section C. Section C - General Record Keeping Requirements contains the Permittee's obligation with regard to the records required to be maintained by this condition.

SECTION D.12 EMISSIONS UNIT OPERATION CONDITIONS

Emission Unit Description:

(l) Fugitive Dust Emissions Operations

(1) Coal and Coke Storage and Handling:

(A) Coal and coke piles, with respective fugitive emissions.

(B) Coal preparation process (Blending Building), with particulate emissions controlled by dust suppressant spray reporting to roof monitors EP512-3005 through 3011.

(C) Coke handling and screening process, respectively, with fugitive emissions and roof monitor.

(D) One (1) Stacker/Reclaimers in the coke oven department to stack and reclaim the coal.

(2) Sinter Plant operations:

(A) Bay plant piles containing revert materials, with fugitive emissions.

(B) Sinter bedding piles with fugitive emissions.

(C) One Stacker/Reclaimer to stack and reclaim Bedding Piles.

(D) Bedding plant material transfer, material conveyors, and junction houses with fugitive emissions venting through any of six (6) separate openings in sides of the building.

(3) Blast Furnace operations:

(A) C Casthouse Slag Pit fugitive emissions.

(B) D Casthouse Slag Pit fugitive emissions.

(C) Beach Iron operation fugitive emissions, with existing partial enclosure and carbon dioxide suppressant system..

(D) Ore Dock Loading/Unloading fugitive emissions.

(E) Ore Field fugitive emissions.

(F) Two (2) Stacker/Reclaimers in the material handling portion of the Blast Furnace that stack and reclaim the ores.

(4) Unregulated and regulated roads, consisting of:

(A) Paved and unpaved roads, with fugitive emissions.

(B) Paved and unpaved slab haul roads, with fugitive emissions.

(C) Regulated unpaved roads, with fugitive emissions.

(D) Regulated paved roads, with fugitive emissions.

(E) One (1) open air clean fill storage area, with fugitive emissions.

(F) One (1) open air BOF land farming area for BOF slurry, with fugitive emissions.

(G) One (1) open air mill scale piles area, with fugitive emission.

(H) Paved and unpaved surfaces at Deerfield Storage Facility.

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

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

D.12.1 Cleveland-Cliffs Burns Harbor LLC Fugitive Particulate Matter Emission Control Plan [326 IAC 6-6-5]

(a) Pursuant to 326 IAC 6-6-5(a) and (f), Cleveland-Cliffs Burns Harbor LLC Fugitive Particulate Matter Emission Control Plan (FDCP), is included as Attachment A to this permit. This condition is not federally enforceable.

(b) Pursuant to CP 127-2725-00001, issued on January 28, 1994, for Coke Battery 2, the FDCP covering process, material handling fugitives, hoods, ventilation, and outside fugitive emission sources, shall continuously be implemented.

D.12.2 Operation Condition

(a) Pursuant to CP 127-2725-00001, issued January 28, 1994, for Coke Battery 2, the 8,600 feet of the paved slab haul roads shall be maintained in good condition. The PM emissions (EP420-2016) shall not exceed 5.4 lbs/Vehicle Miles Traveled (VMT). The PM10 emissions shall not exceed 1.2 lbs/ VMT.

(b) Pursuant to SSM 127-43979-00001 and as originated in the Consent Decree 2:19-cv-00179 issued on April 1, 2020, all iron beaching events shall be conducted only with the use of the existing partial enclosures and shall include the use of a carbon dioxide gas suppression system to ensure compliance with applicable visible emission limits and fugitive particulate control plan requirements stipulated in Conditions C.2 and D.12.1(a) respectively.

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

D.12.3 Operation Condition Testing

Pursuant to CP 127-2725-00001, issued January 28, 1994, for Coke Battery 2, the sampling of the 8,600 feet of the paved slab haul roads (EU420-10) shall use the procedure specified in U.S. EPA 600/2/79-103, titled “Iron and Steel Open Source Fugitive Emissions Evaluations,” Appendix B. The tests shall be conducted every 14 days April through November except when:

(a) the road is closed and barricaded;

(b) there is 0.1 inch or greater of rainfall in a 24 hour period; or

(c) it is raining on the scheduled test day.

Testing shall be performed on the next available day.

SECTION D.13 EMISSIONS UNIT OPERATION CONDITIONS

Emission Unit Description: Specifically Regulated Insignificant Activities

(a) A petroleum fuel, other than gasoline, dispensing facility with monthly throughput rate of less than 10,000 gallons

(b) The following VOC and HAP storage containers:

(1) Storage tanks with capacity less than or equal to 1,000 gallons and annual throughput less than 12,000gallons.

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

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

(d) Cleaners and solvents characterized as follows:

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

(2) Having a vapor pressure equal to or less than 0.7 kPA; 5mm Hg; or 0.1 psi measured at 20 degrees Celsius C (68°F); the use of which for all cleaners and solvents combined does not exceed 145 gallons per 12 months.

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

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

(1) Cutting 200,000 linear feet or less of one (1) inch plate or equivalent.

(2) Using 80 tons or less of welding consumables. [326 IAC 6-3-2]

(g) Conveyors as follows: Covered conveyor for coal or coke conveying of less than or equal to 360 tons per day. [326 IAC 6-3-2]

(h) Coal bunker and coal scale exhausts and associated dust collector vents. [326 IAC 6-3-2]

(i) Grinding and machining operations controlled with fabric filters, scrubbers, mist collectors wet collectors and electrostatic precipitators with a design grain loading of less than or equal to 0.03 grains per actual cubic foot and a gas flow rate less than or equal to 4000 actual cubic feet per minute, including the following: deburring; buffing; polishing; abrasive blasting; pneumatic conveying; and woodworking operations. [326 IAC 6-3-2]

(j) Vents from ash transport systems not operated at positive pressure. [326 IAC 6-3-2]

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

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

D.13.1 Particulate Emission Limitations For Manufacturing Processes [326 IAC 6-3-2]

Pursuant to 326 IAC 6-3-2(e)(2), particulate emissions from any process not exempt under 326 IAC 6-3-1(b) or (c) which has a maximum process weight rate less than 100 pounds per hour, and the methods in 326 IAC6-3-2(b) through (d) do not apply, shall not exceed 0.551 pounds per hour.

D.13.2 Volatile Organic Compounds (VOC) [326 IAC 8-3-2]

(a) Pursuant to 326 IAC 8-3-2 (Cold Cleaner Degreaser Control Equipment and Operating Requirements), the Permittee shall 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) The owner or operator of a cold cleaner degreaser subject to this subsection shall 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.13.3 Volatile Organic Liquid Storage Vessels [326 IAC 8-9-1]

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

D.13.4 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 cleaner degreasers), the Permittee shall not operate the cold cleaner 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).

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

D.13.5 Particulate Control

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

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

D.13.6 Record Keeping and Reporting Requirements

(a) To document compliance with Condition D.13.3, the Permittee shall:

(1) keep all records required pursuant to 326 IAC 8-9-6 for three (3) years unless specified otherwise. Records required in this section (b) shall be maintained for the life of the vessel.

(2) maintain a record and submit to the department a report containing the following information for each vessel:

(A) The vessel identification number.
(B) The vessel dimensions.
(C) The vessel capacity.

(b) To document the compliance status with Condition D.13.4, 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.

(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).

(c) Section C General Record Keeping Requirements contains the Permittee's obligations with regard to the record keeping required by this condition.

SECTION E.1 NESHAP

Emission Unit Description:

(a) A Coke Oven process plant consisting of two (2) Coke Batteries, #1 and #2, with #1 modified in 1983 and a #2 pad-up rebuild in 1994, each consisting of eighty-two (82) ovens, with nominal capacities 160 tons per hour and 140 tons per hour of dry coal, respectively, consisting of the following:

(1) Batteries #1 & #2:

(A) Battery #1 underfire, identified as EU512-08, with an estimated nominal heat input of 465 MMBtu/hr, and opacity measured by a continuous opacity monitor, exhausting at stack EP512-3026.

(B) Battery #2 underfire, identified as EU512-16, with an estimated nominal heat input of 420 MMBtu/hr, and opacity measured by a continuous opacity monitor, exhausting at stack EP512-3027.

(C) Pushing operations, identified as EU512-06 and 14, respectively, with particulate emissions for each battery controlled by baghouse C512-3024 exhausting at stack EP512-3024, and baghouse C512-3018 exhausting to stack EP512-3018. Each baghouse has the ability to control particulate emissions from either or both batteries.

(D) Quenching operations, identified as EU512-09 and 17, respectively with emissions exiting stations EP512-3081 and 3082, including quench towers (servicing either battery) equipped with baffles and sprays.

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

National Emissions Standards for Hazardous Air Pollutants [326 IAC 2 7 5(1)]

E.1.1 General Provisions Relating to NESHAP [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 units listed above, except as otherwise specified in 40 CFR Part 63, Subpart, CCCCC.

(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

E.1.2 National Emissions Standards for Hazardous Air Pollutants for Coke Ovens: Pushing, Quenching, and Battery Stacks [40 CFR Part 63, Subpart CCCCC] [326 IAC 20-74]

The Permittee shall comply with the following provisions of 40 CFR Part 63, Subpart CCCCC (included as Attachment N to the operating permit), which are incorporated by reference as 326 IAC 20-74, for the emission units listed above:

(1) 40 CFR 63.7282
(2) 40 CFR 63.7283(a), (d)
(3) 40 CFR 63.7290(a)(2), (b)(i)
(4) 40 CFR 63.7291(a)(1), (3) through (6)(i) through (iii), (7)(i) through (iv), (b)
(5) 40 CFR 63.7294(a), (b)
(6) 40 CFR 63.7295(a)(1)(i), (a)(2), (b)
(7) 40 CFR 63.7296
(8) 40 CFR 63.7300
(9) 40 CFR 63.7310
(10) 40 CFR 63.7320(a),(b), (c)
(11) 40 CFR 63.7321
(12) 40 CFR 63.7322(a),(b)(1) through (4)
(13) 40 CFR 63.7323(c),(e)(1)
(14) 40 CFR 63.7324
(15) 40 CFR 63.7325(a)
(16) 40 CFR 63.7326(a)(i), (ii), (b), (c)(1), (d)
(17) 40 CFR 63.7327(a), (d), (e), (f),
(18) 40 CFR 63.7328
(19) 40 CFR 63.7330(a), (d), (e)
(20) 40 CFR 63.7331(a)(1) through (7), (h), (j)
(21) 40 CFR 63.7332,
(22) 40 CFR 63.7333(a), (d)(2), (e), (f)
(23) 40 CFR 63.7334(a)(1) through (6)(i), (7), (8), (d), (e)
(24) 40 CFR 63.7335
(25) 40 CFR 63.7336
(26) 40 CFR 63.7340(a), (d), (e)
(27) 40 CFR 63.7341
(28) 40 CFR 63.7342
(29) 40 CFR 63.7343
(30) 40 CFR 63.7350
(31) 40 CFR 63.7352
(32) Table 1 Applicability of General Provisions to Subpart CCCCC

SECTION E.2 NESHAP

Emission Unit Description:

(a) A Coke Oven process plant consisting of two (2) Coke Batteries, #1 and #2, with #1 modified in 1983 and a #2 pad-up rebuild in 1994, each consisting of eighty-two (82) ovens, with nominal capacities 160 tons per hour and 140 tons per hour of dry coal, respectively, consisting of the following:

(1) Batteries #1 & #2:

(D) Battery #1 gas collector main pressure valves, identified as EU512-07, exhausting to four (4) stacks collectively identified as EP512-3086 equipped with four (4) flares collectively identified as C512-3015.

(E) Battery #2 gas collector main pressure valves, identified as EU512-15, exhausting to six (6) stacks collectively identified as EP512-3087 equipped with six (6) flares collectively identified as C512-3016.

(G) Batteries #1 and #2 fugitive emissions are generated from the following:

(i) Charging operations, identified as EU512-04 and 12, respectively, with fugitive emissions EP512-3016 and 3022, respectively;

(ii) Lids (four on each oven), identified as EU512-03 and 11, respectively, with fugitive emissions EP512-3015 and 3021, respectively;

(iii) Offtake Systems including emission from mini-stand pipe, identified as EU512-02 and 10, respectively, with fugitive emissions EP512-3014 and 3020, respectively; and

(iv) Doors, identified as EU512-05 and 13, with fugitive emissions EP512-3017 and 3023.

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

National Emissions Standards for Hazardous Air Pollutants Requirements [326 IAC 2 7 5(1)]

E.2.1 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 units listed above, except as otherwise specified in 40 CFR Part 63, Subpart L.

(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

E.2.2 National Emissions Standards for Hazardous Air Pollutants for Coke Oven Batteries [40 CFR Part 63, Subpart L] [326 IAC 20-3]

The Permittee shall comply with the following provisions of 40 CFR Part 63, Subpart L (included as Attachment B to the operating permit), which are incorporated by reference as 326 IAC 20-3, for the emission units listed above

Pursuant to 40 CFR Part 63, Subpart L, the Permittee shall comply with the provisions of the National Emissions Standards for Hazardous Air Pollutants for Coke Oven Batteries (included as Attachment B of this permit), which are incorporated by reference as 326 IAC 20-3, as specified as follows:

(1) 40 CFR 63.300(e), (f),
(2) 40 CFR 63.301
(3) 40 CFR 63.304(b)(2)(ii), (iii), (iv), (3)(i), (4)(v)(A)
(4) 40 CFR 63.306(a)(1), (2), (3), (b)(1)(i) through (vi), (b)(2)(i) through(vii), (b)(3)(i) through(vi), (b)(4)(i), (ii), (b)(5)(i) through (iii), (b)(7)(i), (ii), (b)(8), (c)(1)(i)(A) through (C), (c)(1)(ii), (d)(1) through (6)
(5) 40 CFR 63.307(a)(1) through (3), (b)(1) through (3)(i) through (iv), (b)(4), (c), (d), (f)
(6) 40 CFR 63.308
(7) 40 CFR 63.309(a), (b), (c)(1) through (3)(i), (ii), (c)(6), (d)(1), (2), (e), (f), (h)(1), (2)
(8) 40 CFR 63.310(a), (b), (c), (d)(1), (2), (e)(1), (2), (e)(1), (2), (f), (g), (h), (i),
(9) 40 CFR 63.311(d)(1), (2), (3), (e), (f)(3), (4)(i) through (iv), (f)(5), (6), (g)
(10) 40 CFR 63.312(a), (b), (c)(1), (e)

SECTION E.3 NESHAP

Emission Unit Description:

(d) A Continuous Sintering process plant with a nominal throughput of 535 tons per hour of sinter constructed in 1968, located in the Blast Furnaces Department consisting of the following:

(2) One (1) sintering operation, consisting of twelve (12) windboxes, collectively identified as EU520-05, with emissions exhausting through one (1) multiclone, consisting of eight (8) cyclones followed in series by one (1) Venturi scrubber and mist eliminator, collectively identified as C520-3503, with VOC emissions monitored by a Continuous Emissions Monitor System (CEMS), exhausting at stack EP520-3513.

(3) A miscellaneous Cold Screening material handling operation consisting of material conveyor and junction houses, identified as EU520-06, with particulate emissions controlled by one (1) dedust baghouse, identified as C520-3501, exhausting at stack EP520-3511, and fugitive emissions reporting to monitors EP520-3510 and 15.

(4) A finished sinter cooler operation, identified as EU520-24, with fugitive emissions identified as EP520-3514.

(e) Two (2) Blast Furnaces, designated as Blast Furnace C and Blast Furnace D, comprised of the following facilities and process equipment:

(1) C Blast Furnace constructed in 1971 and modified in 1994, with a nominal (combined with D furnace) capacity of 623 tons per hour of iron including an integral gas cleaning system consisting of various components including a dust catcher, separator, and 2 scrubbers (primary and secondary), which provides clean fuel to the plant fuel distribution system with excess gas flared at stack EP520-3540.

(3) C Furnaces with East and West casthouses with iron and slag runner fugitive emissions reporting to roof monitors EP520-3543 and 3545 respectively and tap hole and tilting runner emissions controlled by MACT baghouse installed in 2007.

(4) D Blast Furnace constructed in 1968, with a nominal (combined with C furnace) capacity of 623 tons per hour of iron, including a integral gas cleaning system consisting of various components including a dust catcher, separator, and 2 scrubbers (primary and secondary), which provides clean fuel to the plant fuel distribution system with excess gas flared at stack EP520-3553.

(6) D Furnaces with East and West casthouses with iron and slag runner fugitive emissions reporting to roof monitors EP520-3556 and 3558 respectively and respectively and tap hole and tilting runner emissions controlled by MACT baghouse installed in 2007.

(f) A Basic Oxygen Furnace (BOF) Shop operation located in the Steelmaking Department consisting of the following:

(1) Three (3) Hot Metal Transfer/Desulfurization and Skimming Stations, with an annual total combined nominal input of 623 tons per hour of hot metal per month, with #1 & #2 constructed in 1968, and #3 in 1978 and modified in 1992, each identified as EU534-01, 02, and 03, respectively. #1 Hot Metal Transfer/ Desulfurization and Skimming Station have particulate emissions controlled by the MACT baghouse installed in May 2007, exhausting at the stack for the MACT baghouse. #2 Hot Metal Transfer/Desulfurization and Skimming Station has particulate emissions controlled by baghouses C534-4001 and 4002 that have been ducted in parallel, exhausting at

stacks EP534-4001 and 4002 respectively, and #3 Hot Metal Transfer/Desulfurization and Skimming Station has particulate emissions controlled by baghouse C534-4003, exhausting at stacks EP534-4008.

(2) Three (3) BOF Shop vessels, with #1 & #2 constructed in 1968 and #3 in 1978, identified as EU534-06a (No. 1), EU534-06b (No. 2), and EU534-07(No. 3), each with a nominal capacity of 300 tons per heat of liquid steel with a combined estimated capacity of 500 tons per hour of molten steel, emissions from vessels No. 1 and No. 2 (EU534-06a, 06b) controlled by three (3) scrubbers, numbered #2, #3, and #4 in parallel, collectively identified as C534-4004, each exhausting at respective stacks EP534-4013, 4014, and 4015, respectively, and emissions from vessel No. 3 (EU534-07) controlled by scrubber C534-4007 exhausting to stack EP534-4017. The three BOF vessels have secondary capture hood ducted to a MACT baghouse installed in May 2007.

(3) Refining Cycles for three BOF Shop vessels, identified as EU534-10 for vessels No. 1 and No. 2 (EU534-06a, EU534-06b), and EU534-11 for vessel No. 3 (EU534-07), using the respective exhausts and emissions control equipment for the associated BOF Shop vessels listed above.

(4) Three (3) Molten Steel Ladle Addition Stations consisting of:

(A) Station No. 1 argon stirring, constructed in 1968 and steel desulfurization approved in 2012 for construction, identified as EU534-14, with fugitive emissions reporting to roof monitor EP534-4003 and exhausting to the MACT baghouse installed in May 2007; and

(B) Stations No. 2 and No. 3 stirring and desulfurization and alloy addition, constructed in 1978 (steel desulfurization upgrade approved in 2012 for construction), collectively identified as EU534-15, with particulate emissions from both controlled by baghouse C534-4016, exhausting to stack EP534-4031.

(5) Two (2) Steel Ladle Treatment Stations No. 4 and No. 5, constructed in 1986, collectively identified as EU534-16, with particulate emissions controlled by baghouses C534-4017 and 4099, respectively, exhausting at respective stacks EP534-4031 and 4099.

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

National Emissions Standards for Hazardous Air Pollutants [326 IAC 2 7 5(1)]

E.3.1 General Provisions Relating to NESHAP [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 units 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

E.3.2 National Emissions Standards for Hazardous Air Pollutants for Integrated Iron and Steel Manufacturing Facilities [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 C of this permit), which are incorporated by reference as 326 IAC 20-93, for the emission unit(s) listed above:

(1) 40 CFR 63.7782(a) through (d)
(2) 40 CFR 63.7783(a), (e)
(3) 40 CFR 63.7790(a), (b)(1), (2), (d)(2)
(4) 40 CFR 63.7800(a), (b)(1) through (5), (7)
(5) 40 CFR 63.7810
(6) 40 CFR 63.7820(a), (b)
(7) 40 CFR 63.7821(a), (b), (c)
(8) 40 CFR 63.7822
(9) 40 CFR 63.7823(a), (b), (c),(d)(1), (d)(4), (d)(5), (e)
(10) 40 CFR 63.7824(a), (b), (c), (e), (f)
(11) 40 CFR 63.7824
(12) 40 CFR 63.7826
(13) 40 CFR 63.7830(a), (b), (c), (e)(2)
(14) 40 CFR 63.7831(a)(1) through (7), (b), (c), (d), (e), (f), (g)
(15) 40 CFR 63.7832
(16) 40 CFR 63.7833(a) through (d), (f)(2), (g)(1), (2), (4)
(17) 40 CFR 63.7834
(18) 40 CFR 63.7835
(19) 40 CFR 63.7840(a), (d), (e)
(20) 40 CFR 63.7841
(21) 40 CFR 63.7842(a), (c), (d)
(22) 40 CFR 63.7843
(23) 40 CFR 63.7850
(24) 40 CFR 63.7852

SECTION E.4 NESHAP

Emission Unit Description:

(1) Two (2) Pickle Lines, Nos. 1 & 2, with No. 1 constructed in 1965 and No. 2 constructed in 1968, each having four (4) acid process tanks with a storage capacity of 35,000 gallons, one (1) rinse enclosure and one rinse tank. Acid fumes on each line are captured and ducted thru a two (2) scrubber system each scrubber capable of serving either or both lines with both scrubbers exhausting at stack EP672-6001. The above lines are served by a system of six (6) raw acid storage tanks which vent thru a common header terminating at a water/limestone filled sump.

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

National Emissions Standards for Hazardous Air Pollutants [326 IAC 2 7 5(1)]

E.4.1 General Provisions Relating to NESHAP [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 units 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

E.4.2 National Emissions Standards for Hazardous Air Pollutants for Steel Pickling—HCl Process Facilities and Hydrochloric Acid Regeneration Plants [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 D to the operating permit), which are incorporated by reference as 326 IAC 20-29 for the emission units listed above:

(1) 40 CFR 63.1155(a)(1), (b), (c)
(2) 40 CFR 63.1156
(3) 40 CFR 63.1157(a)(1),
(4) 40 CFR 63.1159(b)
(5) 40 CFR 63.1160(a)(1), (b)(2)(i) through (iv)(A) through (iv)(C), (iv)(E), (v), (vi), (vii)
(6) 40 CFR 63.1161(a), (b), (d),
(7) 40 CFR 63.1162(a)(1), (2), (4) through (6), (c)
(8) 40 CFR 63.1163(a)(2), (d), (e)
(9) 40 CFR 63.1164
(10) 40 CFR 63.1165(a), (b)(1), (3), (c)
(11) Table 1 Applicability of General Provisions (40 CFR Part 63, Subpart A) to Subpart CCC

E.4.3 Testing Requirement [326 IAC 2-7-6(1). (6)] [40 CFR §63.1162(a)(1)]

In order to demonstrate compliance with Condition E.4.2, the Permittee shall perform the testing required under 40 CFR 63, Subpart CCC, for the HCl exiting the control device for No.1 and No.2 Pickle Lines, utilizing methods as approved by the Commissioner, no less frequent than twice per Part 70 Permit term. 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.

SECTION E.5 NESHAP

Emission Unit Description: as pertains to 40 CFR 63, Subpart DDDDD – National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, And Institutional Boilers and Process Heaters

(1) One (1) Power Station, consisting of the following boilers:

(A) No. 7 boiler, capable of firing natural gas, coke oven gas, and blast furnace gas, and fuel oil constructed in 1976 and modified in 1990, with a rated capacity of 650 MMBtu/hr heat input, with emissions exhausting at stack EP460-2501;

(B) No. 8 boiler, capable of firing natural gas, coke oven gas, blast furnace gas, and No. 2 and No. 6 fuel oil constructed in 1970, with a rated capacity of 650 MMBtu/hr heat input, with emissions exhausting at stack EP460-2502;

(C) No. 9 boiler, capable of firing natural gas, coke oven gas, blast furnace gas, and No. 2 and No. 6 fuel oil constructed in 1970, with a rated capacity of 650 MMBtu/hr heat input, with emissions exhausting at stack EP460-2503;

(D) No. 10 boiler, capable of firing natural gas, coke oven gas, blast furnace gas, and No. 2 and No. 6 fuel oil constructed in 1969, with a rated capacity of 650 MMBtu/hr heat input, with emissions exhausting at stack EP460-2504;

(E) No. 11 boiler, capable of firing natural gas, coke oven gas, blast furnace gas, and No. 2 and No. 6 fuel oil constructed in 1968, with a rated capacity of 650 MMBtu/hr heat input, with emissions exhausting at stack EP460-2505; and

(F) No. 12 boiler, capable of firing natural gas, coke oven gas, blast furnace gas, and No. 2 and No. 6 fuel oil constructed in 1968, with rated capacity of 650 MMBtu/hr heat input, with emissions exhausting at stack EP460-2506.

(2) One (1) CHTL line constructed in1983 and consisting of natural gas fired preheat, heat and soak furnaces with a combined rated capacity of 76 MMBtu/hr exhausting at stacks EP672-6014, 15; a natural gas fired reheat furnace with an estimated capacity of 34 MMBtu/hr exhausting at stack EP672-6017; and a pickle tank with fumes passing thru a scrubber and exhausting at stack 672-6022.

(3) One (1) hot dip coating line (HDCL) for hot galvanizing, galvannealing, chemical treatment and cleaning of steel constructed in 1992 having a nominal capacity of 140 tons of steel coil per hour with the cleaning section fumes (excluding the chemical treatment portion) passing thru a scrubber and exhausting at stack EP672-6022 and a radiant tube furnace constructed in 1992 with a rated capacity of 95 MMBtu/hr with NOx emissions controlled by a Selective Catalytic control device equipped with a continuous NOx parametric monitoring system that exhaust at stack 672-6023.

(4) One (1) natural gas-fired FM boiler for the BOF Shop, constructed in 1968, identified as EU534-23, with an estimated capacity of 50 MMBtu/hr heat input exhausting to stack EP534-4018.

(5) Corporate Office #1 natural gas-fired hotwater boiler, (CH), with a heat input capacity of 4.85 MMBtu/hr.

(6) East Office natural gas-fired hotwater boiler, (CH), with a heat input capacity of 4.0 MMBtu/hr.

(7) North Welfare East natural gas-fired water heater (COB), with 130 gallon capacity and heat input of 0.3999 MMBtu/hr.

(8) North Welfare West natural gas-fired water heater (COB), with 130 gallon capacity and heat input of 0.3999 MMBtu/hr.

(9) South Welfare West natural gas-fired water heater (COB), with 130 gallon capacity and heat input of 0.3999 MMBtu/hr.

(10) Blast Furnace Welfare East natural gas-fired water heater (Shw), with 130 gallon capacity and heat input of 0.4999 MMBtu/hr.

(11) Blast Furnace Welfare East natural gas-fired water heater (Shw), with 130 gallon capacity and heat input of 0.3999 MMBtu/hr.

(12) Blast Furnace Welfare West natural gas-fired water heater (Shw), with 130 gallon capacity and heat input of 0.3999 MMBtu/hr.

(13) Sinter Plant Welfare West natural gas-fired water heater (Shw), with 130 gallon capacity and heat input of 0.3999 MMBtu/hr.

(14) Sinter Plant Welfare East natural gas-fired water heater (COB), with 130 gallon capacity and heat input of 0.3999 MMBtu/hr.

(15) Sinter Plant Welfare East natural gas-fired water heater (COB), with 130 gallon capacity and heat input of 0.3999 MMBtu/hr.

(16) BOF Welfare West natural gas-fired water heater (SHW), with 250 gallon capacity and heat input of 1 MMBtu/hr.

(17) BOF Welfare East natural gas-fired water heater (SHW), with 250 gallon capacity and heat input of 1 MMBtu/hr.

(18) Shops Welfare East natural gas-fired water heater, (SHW), with 250 gallon capacity and heat input of 1 MMBtu/hr.

(19) Shops Welfare West natural gas-fired water heater, (SHW), with 250 gallon capacity and heat input of 1 MMBtu/hr.

(20) Dock Welfare natural gas-fired water heater, (Shw), with 130 gallon capacity and heat input of 0.4999 MMBtu/hr.

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

National Emissions Standards for Hazardous Air Pollutants [326 IAC 2 7 5(1)]

E.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 units listed above, except when 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

E.5.2 Applicability of National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers and Process Heaters Requirements [40 CFR Part 63, Subpart DDDDD]

(a) The Permittee shall comply with the following provisions of 40 CFR Part 63, Subpart DDDDD (included as Attachment E to the operating permit), which are incorporated by reference as 326 IAC 20-95, for existing boilers and process heaters constructed before June 4, 2010, unless the emission unit satisfies an exemption in 40 CFR 63.7491(i). Blast-furnace gas fuel-fired boilers and process heaters, as defined in 40 CFR 63.7575, and coke oven gas-fired boilers and process heaters meeting the requirements of 40 CFR 63.7491(i) are exempt from the requirements of Subpart DDDDD. Non-exempt units in the units designed to burn gas 1 fuels subcategory, as defined in 40 CFR 63.7575,and shall be in compliance no later than the compliance date specified in 40 CFR 63.7595, as follows:

(1) 40 CFR § 63.7480
(2) 40 CFR § 63.7485
(3) 40 CFR § 63.7490
(4) 40 CFR § 63.7495(b), (d)
(5) 40 CFR § 63.7499(l), (n)
(6) 40 CFR § 63.7500(a)(1), (a)(3), and (b) through (e)
(7) 40 CFR § 63.7501
(8) 40 CFR § 63.7505(a)
(9) 40 CFR § 63.7510(e), (j)
(10) 40 CFR § 63.7515(d) and (g)
(11) 40 CFR § 63.7530(d) through (f)
(12) 40 CFR § 63.7540(a)(10) through (13)
(13) 40 CFR § 63.7545(a), (e)(1), (e)(6) through (8), and (f) through (h)
(14) 40 CFR § 63.7550(a), (b), (c)(1), (c)(5)(i) through (iv), (c)(5)(xiv), and (h)(3)
(15) 40 CFR § 63.7555(a)(1) and (h)
(16) 40 CFR § 63.7560

(b) The Permittee shall comply with the following provisions of 40 CFR Part 63, Subpart DDDDD (included as Attachment E to the operating permit) which are incorporated by reference as 326 IAC 20-95, for existing boilers and process heaters constructed before June 4, 2010, unless the emission unit satisfies an exemption in 40 CFR 63.7491(i). Blast-furnace gas fuel-fired boilers and process heaters, as defined in 40 CFR 63.7575, and coke oven gas-fired boilers and process heaters meeting the requirements of 40 CFR 63.7491(i) are exempt from the requirements of Subpart DDDDD. Non-exempt units in the units designed to burn liquid fuels subcategory, as defined in 40 CFR 63.7575, shall be in compliance no later than the compliance date specified in 40 CFR 63.7595, as follows:

(1) 40 CFR § 63.7480
(2) 40 CFR § 63.7485
(3) 40 CFR § 63.7490
(4) 40 CFR § 63.7495(b), (d)
(5) 40 CFR § 63.7499(q), (t), (u)
(6) 40 CFR § 63.7500(a) through (c) and (f)
(7) 40 CFR § 63.7501

(8) 40 CFR § 63.7505
(9) 40 CFR § 63.7510(a) through (e) and (j)
(10) 40 CFR § 63.7515
(11) 40 CFR § 63.7520
(12) 40 CFR § 63.7521(a) through (e)
(13) 40 CFR § 63.7522
(14) 40 CFR § 63.7525
(15) 40 CFR § 63.7530
(16) 40 CFR § 63.7533
(17) 40 CFR § 63.7535
(18) 40 CFR § 63.7540
(19) 40 CFR § 63.7541
(20) 40 CFR § 63.7545(a), (d), (e), and (g) through (h)
(21) 40 CFR § 63.7550
(22) 40 CFR § 63.7555(a) through (f) and (i) through (j))
(23) 40 CFR § 63.7560

SECTION E.6 NESHAP

Emission Unit Description:

(m) Generators:

(1) Two (2) natural gas-fired SI power station emergency generators, identified as PSGEN 1, PSGEN 2, each with a capacity of 670 HP, constructed in 2017.

(2) One (1) natural gas-fired SI SDO Building emergency generator, identified as SDOGEN with rated capacity of 96 Horsepower (HP), constructed in 2015.

(3) One (1) propane-fired North Gate non-emergency generator, identified as NGGEN, with rated capacity of 21.5 HP, constructed in 2016.

(4) One (1) diesel-fired compression ignition (CI) Coke Oven Blender fire pump, with a rated capacity of 185 HP, constructed in 2000.

(5) One (1) diesel-fired CI SW of J5 fire pump, with a rated capacity of 208 HP, constructed in 1993.

(6) One (1) natural gas-fired SI main office emergency generator, with rated capacity of 67 Horsepower (HP), constructed in October 2005.

(7) One (1) propane-fired SI Main Gate Building emergency generator, with rated capacity of 27 Horsepower (HP), constructed in 2010.

(8) One (1) diesel-fueled CI Sanitary Secondary Waste Treatment Plant emergency generator, identified as TPGEN, constructed in 2021, with a rated capacity of 619 horsepower (HP).

[Under 40 CFR 60, Subpart IIII, this emergency diesel-fueled generator is considered an affected facility]
[Under 40 CFR 63, Subpart ZZZZ, this emergency diesel-fueled generator is considered an affected facility]

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

National Emissions Standards for Hazardous Air Pollutants [326 IAC 2 7 5(1)]

E.6.1 General Provisions Relating to NESHAP [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 units 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

E.6.2 National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines [40 CFR Part 63, Subpart ZZZZ]

(a) The emergency generator listed at (m)(7) has no applicable requirements under Subpart ZZZZ per 40 CFR 63.6590(c)(6).

(b) The Permittee shall comply with the following provisions of 40 CFR Part 63, Subpart ZZZZ (included as Attachment F to the operating permit), for the emergency generators listed at (m)(1), (m)(2), (m)(3) through (m)(6):

(1) 40 CFR 63.6580
(2) 40 CFR 63.6585(a) and (b)
(3) 40 CFR 63.6590
(4) 40 CFR 63.6595(a)(1)
(5) 40 CFR 63.6600(c)
(6) 40 CFR 63.6602
(7) 40 CFR 63.6605(e)(2), (f), (h)-(j)
(8) 40 CFR 63.6640(a), (b), (e), (f)(1), (f)(2)(i), (f)(3), and (f)(4)
(9) 40 CFR 6650(f)
(10) 40 CFR 6655 (e)(2) and (f)(1)
(11) 40 CFR 6660
(12) 40 CFR 6665
(13) 40 CFR 6670
(14) 40 CFR 6675
(15) Table 2c to Subpart ZZZZ
(16) Table 6 to Subpart ZZZZ, item 9
(17) Table 8 to Subpart ZZZZ

(c) The Permittee shall comply with the following provisions of 40 CFR Part 63, Subpart ZZZZ (included as Attachment F to the operating permit), for the emergency generator listed at (m)(8):

(1) 40 CFR 63.6580
(2) 40 CFR 63.6585(a) and (b)
(3) 40 CFR 63.6590(a)(2)(i) and (b)(1)(i)
(4) 40 CFR 63.6600(c)
(5) 40 CFR 63.6604(c)
(6) 40 CFR 63.6605
(7) 40 CFR 63.6640(f)(1), (f)(2)(i) and (f)(3)
(8) 40 CFR 63.6645(f)

SECTION E.7 NESHAP

Emission Unit Description:

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

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

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

National Emissions Standards for Hazardous Air Pollutants [326 IAC 2 7 5(1)]

E.7.1 General Provisions Relating to NESHAP [40 CFR Part 61, Subpart A]

(a) Pursuant to 40 CFR 61.01 the Permittee shall comply with the provisions of 40 CFR Part 61, Subpart A – General Provisions, which are incorporated by reference as 326 IAC 14-1, for the emission units listed above, except as otherwise specified in 40 CFR Part 61, Subpart L.

(b) Pursuant to 40 CFR 61.04, 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

E.7.2 National Emission Standard for Benzene Emissions from Coke By-Product Recovery Plants [40 CFR Part 61, Subpart L] [326 IAC 14-9]

The Permittee shall comply with the following provisions of 40 CFR Part 61, Subpart L (included as Attachment G to the operating permit), which are incorporated by reference as 326 IAC 14-9 for the emission units listed above:

(1) 40 CFR 61.130(a), (b)
(2) 40 CFR 61.131
(3) 40 CFR 61.132
(4) 40 CFR 61.134

(5) 40 CFR 61.135
(6) 40 CFR 61.136
(7) 40 CFR 61.137
(8) 40 CFR 61.138(a), (b), (c), (e)(1), (2), (4), (f)(1), (2), (3), (4), (6), (g), (h), (i)

SECTION E.8 NESHAP

Emission Unit Description:

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

EP512-3094 Exhauster's Area (Exhausters A, B and C including associated seal pots)

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

National Emissions Standards for Hazardous Air Pollutants [326 IAC 2 7 5(1)]

E.8.1 General Provisions Relating to NESHAP [40 CFR Part 61, Subpart A]

(a) Pursuant to 40 CFR 61.01 the Permittee shall comply with the provisions of 40 CFR Part 61, Subpart A – General Provisions, which are incorporated by reference as 326 IAC 14-1, for the emission units listed above, except as otherwise specified in 40 CFR Part 61, Subpart V.

(b) Pursuant to 40 CFR 61.04, 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

E.8.2 National Emissions Standards for Equipment Leaks (Fugitive Emission Sources) [40 CFR 61, Subpart V] [326 IAC 14-8]

The Permittee shall comply with the following provisions of 40 CFR Part 61, Subpart V (included as Attachment H of this operating permit), which are incorporated by reference as 326 IAC 14-8, for the emission units listed above:

(1) 40 CFR 61.240(a) through (c), (d)(3)
(2) 40 CFR 61.241
(3) 40 CFR 61.242-1
(4) 40 CFR 61.242-2
(5) 40 CFR 61.242-3
(6) 40 CFR 61.242-4
(7) 40 CFR 61.242-5
(8) 40 CFR 61.242-6
(9) 40 CFR 61.242-7
(10) 40 CFR 61.242-8
(11) 40 CFR 61.242-9
(12) 40 CFR 61.242-10
(13) 40 CFR 61.243-1
(14) 40 CFR 61.243-2
(15) 40 CFR 61.244
(16) 40 CFR 61.245
(17) 40 CFR 61.246
(18) 40 CFR 61.247(a)(1), (2), (5), (b), (c), (d), (e), (f)
(19) Table 1 - Surge Control Vessels and Bottoms Receivers at Existing Sources
(20) Table 2 - Surge Control Vessels and Bottom Receivers at New Sources

SECTION E.9 NESHAP

Emission Unit Description:

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

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

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

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

National Emissions Standards for Hazardous Air Pollutants [326 IAC 2 7 5(1)]

E.9.1 General Provisions Relating to NESHAP [40 CFR Part 61, Subpart A]

(a) Pursuant to 40 CFR 61.01 the Permittee shall comply with the provisions of 40 CFR Part 61, Subpart A – General Provisions, which are incorporated by reference as 326 IAC 14-1, for the emission units listed above, except as otherwise specified in 40 CFR Part 61, Subpart FF.

(b) Pursuant to 40 CFR 61.04, 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

E.9.2 National Emissions Standards for Benzene Waste Operations [40 CFR 61, Subpart FF] [

The Permittee shall comply with the following provisions of 40 CFR Part 61, Subpart FF (included as Attachment I of this permit) which are incorporated by reference as 326 IAC 14 for the emission units listed above:

(1) 40 CFR 61.340(a), (c), (d),
(2) 40 CFR 61.341
(3) 40 CFR 61.342(c), (f), (g)
(4) 40 CFR 61.354(a)(1)
(5) 40 CFR 61.355(c)
(6) 40 CFR 61.356(a), (b)
(7) 40 CFR 61.357(a), (d)(6), (7)(i)

SECTION E.10 NSPS

Emission Unit Description:

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

(3) A building enclosed Coal Preparation Plant consisting of the following:

(A) Distribution conveyor and two (2) raw coal storage bins equipped with bin filters and screw feeders.

(B) Two (2) natural gas coal dryers (25 MMBtu/hour each), two (2) granulation mills with spinner separators and cyclones exhausting and transporting undersize coal and transport air to two (2) baghouses. A portion of the baghouses exhaust is returned to the pulverization mills and the remaining exhaust exits through two (2) stacks.

(C) Coal product storage and injection system with product screens (2), storage bins (4) with filters, weight hoppers (4), distribution bins (4) with filters, injectors and lock hoppers with filters (8) and related pipework that delivers granulated coal to C and D Blast Furnaces.

(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)]

E.10.1 General Provisions Relating to New Source Performance Standards [40 CFR Part 60, Subpart A] [326 IAC 12-1]

(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, except as otherwise specified in 40 CFR Part 60, Subpart Y.

(b) Pursuant to 40 CFR 60.19, 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

E.10.2 Standards of Performance for Coal Preparation Plants [40 CFR Part 60, Subpart Y] [326 IAC 12]

The Permittee shall comply with the following provisions of 40 CFR Part 60, Subpart Y (included as Attachment J to the operating permit), which are incorporated by reference as 326 IAC 12, for the emission units listed above:

(1) 40 CFR 60.250(a), (b)
(2) 40 CFR 60.251
(3) 40 CFR 60.252(a)
(4) 40 CFR 60.253(a)

(5) 40 CFR 60.254(a)
(6) 40 CFR 60.255(a)
(7) 40 CFR 60.256(a)

SECTION E.11 NSPS

Emission Unit Description::

(f) A Basic Oxygen Furnace (BOF) Shop operation located in the Steelmaking Department The BOF Shop vessel No.3 (EU534-07, 11) consisting of the following:

(2) BOF vessel No.3, constructed in 1978, identified as EU534-07, (No.3), with a nominal capacity of 300 tons per heat of liquid steel, emissions controlled by scrubber C534-4007 exhausting to stack EP534-4017, equipped with CO flare C534-4008.

(3) Refining Cycle for BOF No.3 vessel, identified as EU534-11, controlled by scrubber C534-4007 exhausting to stack EP534-4017, equipped with CO flare C534-4008.

(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)]

E.11.1 General Provisions Relating to New Source Performance Standards [40 CFR Part 60, Subpart A] [326 IAC 12-1]

(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, except as otherwise specified in 40 CFR Part 60, Subpart N.

(b) Pursuant to 40 CFR 60.19, 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

E.11.2 Standards of Performance for Primary Emissions from Basic Oxygen Process Furnaces [40 CFR Part 60, Subpart N] [326 IAC 12]

The Permittee shall comply with the following provisions of 40 CFR Part 60, Subpart N (included as Attachment K to the operating permit), which are incorporated by reference as 326 IAC 12, for the emission units listed above:

(1) 40 CFR 60.140
(2) 40 CFR 60.141
(3) 40 CFR 60.142(a)
(4) 40 CFR 60.143
(5) 40 CFR 60.144

SECTION E.12 NSPS

Emission Unit Description:

(j) One (1) Power Station, consisting of the following boilers:

(1) No. 7 boiler, capable of firing natural gas, coke oven gas, and blast furnace gas, and fuel oil constructed in 1976 and modified in 1990, with a rated capacity of 650 MMBtu/hr heat input, with emissions exhausting at stack EP460-2501;

(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)]

E.12.1 General Provisions Relating to New Source Performance Standards [40 CFR Part 60, Subpart A] [326 IAC 12-1]

(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, except as otherwise specified in 40 CFR Part 60, Subpart D.

(b) Pursuant to 40 CFR 60.19, 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

E.12.2 Standards of Performance for Fossil-Fuel-Fired Steam Generators [40 CFR Part 60, Subpart D] [326 IAC 12]

The Permittee shall comply with the following provisions of 40 CFR Part 60, Subpart D (included as Attachment L to the operating permit), which are incorporated by reference as 326 IAC 12, for the emission units listed above:

(1) 40 CFR 60.40
(2) 40 CFR 60.41
(3) 40 CFR 60.42(a)(1), (2),
(4) 40 CFR 60.43(b), (c),
(5) 40 CFR 60.44(a)(1), (2)
(6) 40 CFR 60.45
(7) 40 CFR 60.46

SECTION E.13 NSPS

Emission Unit Description:

(m) Generators:

(1) Two (2) natural gas-fired SI power station emergency generators, identified as PSGEN 1, PSGEN 2, each with a capacity of 670 HP, constructed in 2017.

(2) One (1) natural gas-fired SI SDO Building emergency generator, identified as SDOGEN with rated capacity of 96 Horsepower (HP), constructed in 2015.

(3) One (1) propane-fired North Gate non-emergency generator, identified as NGGEN, with rated capacity of 21.5 HP, constructed in 2016.

(7) One (1) propane-fired SI Main Gate Building emergency generator, with rated capacity of 27 Horsepower (HP), constructed in 2010.

(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)]

E.13.1 General Provisions Relating to New Source Performance Standards [40 CFR Part 60, Subpart A] [326 IAC 12-1]

(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, except as otherwise specified in 40 CFR Part 60, Subpart JJJJ.

(b) Pursuant to 40 CFR 60.19, 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

E.13.2 Standard of Performance for Stationary Spark Ignition Internal Combustion Engines [40 CFR Part 60, Subpart JJJJ]

The Permittee shall comply with the following provisions of 40 CFR Part 60, Subpart JJJJ (included as Attachment M to the operating permit), which are incorporated by reference as 326 IAC 12, for the emission units listed above:

(1) 40 CFR Part 60.4230(a)(4)(vi), (6)
(2) 40 CFR Part 60.4233(c)
(3) 40 CFR Part 60.4234
(4) 40 CFR Part 60.4235
(5) 40 CFR Part 60.4236
(6) 40 CFR Part 60.4237
(7) 40 CFR Part 60.4243(a)(1), 40 CFR Part 1068, subparts A-D, as applicable, 60.4243(a)(2)(i), (d), 60.4243(g): If using AFRC
(8) 40 CFR Part 60.4245((a), (b)

(9) 40 CFR Part 60.4246
(10) 40 CFR Part 60.4248
(11) Table 3 to Subpart JJJJ of Part 60 (applicable portions)

SECTION E.14 NSPS

Emission Unit Description:

(m) Generators:

(8) One (1) diesel-fueled CI Sanitary Secondary Waste Treatment Plant emergency generator, identified as TPGEN, constructed in 2021, with a rated capacity of 619 horsepower (HP).

[Under 40 CFR 60, Subpart IIII, this emergency diesel-fueled generator is considered an affected facility]
[Under 40 CFR 63, Subpart ZZZZ, this emergency diesel-fueled generator is considered an affected facility]

(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)]

E.14.1 General Provisions Relating to New Source Performance Standards [40 CFR Part 60, Subpart A] [326 IAC 12-1]

(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, except as otherwise specified in 40 CFR Part 60, Subpart IIII.

(b) Pursuant to 40 CFR 60.19, 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

E.14.2 Standard of Performance for Stationary Compression Ignition Internal Combustion Engines [40 CFR Part 60, Subpart IIII

The Permittee shall comply with the following provisions of 40 CFR Part 60, Subpart IIII (included as Attachment O to the operating permit), which are incorporated by reference as 326 IAC 12, for the emission units listed above:

(1) 40 CFR 60.4200(a)(2)(i) and (a)(4)
(2) 40 CFR 60.4202(a)(2)
(3) 40 CFR 60.4205(b)
(4) 40 CFR 60.4206
(5) 40 CFR 60.4207(b)
(6) 40 CFR 60.4208(a)
(7) 40 CFR 60.4209(a)
(8) 40 CFR 60.4211(a),(c),(f)(2)(i), and (g)(3)
(9) 40 CFR 60.4212(a)
(10) 40 CFR 60.4214(b), and (d)
(11) 40 CFR 60.4218
(12) 40 CFR 60.4219
(13) Table 8 to Subpart IIII of Part 60

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE AND ENFORCEMENT BRANCH
PART 70 OPERATING PERMIT
CERTIFICATION

Source Name: Cleveland-Cliffs Burns Harbor LLC
Source Address: 250 West U.S. Highway 12, Burns Harbor, IN 46304-9745
Part 70 Permit No.: T127-40675-00001

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

Please check what document is being certified:

☐ Annual Compliance Certification Letter

☐ Test Result (specify)

☐ Report (specify)

☐ Notification (specify)

☐ Affidavit (specify)

☐ Other (specify)

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

Signature:
Printed Name:
Title/Position:
Phone:
Date:

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

OFFICE OF AIR QUALITY
COMPLIANCE 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: Cleveland-Cliffs Burns Harbor LLC
Source Address: 250 West U.S. Highway 12, Burns Harbor, IN 46304-9745
Part 70 Permit No.: T127-40675-00001

This form consists of 2 pages **Page 1 of 2**

□ This is an emergency as defined in 326 IAC 2-7-1(12)

- The Permittee must notify the Office of Air Quality (OAQ), within four (**4**) business hours (1-800-451-6027 or 317-233-0178, ask for Compliance Section); and
- The Permittee must submit notice in writing or by facsimile within two (**2**) 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 QUARTERLY REPORT

DRY COAL CHARGED

Source Name: Cleveland-Cliffs Burns Harbor LLC (Plant ID 127-00001)
Source Location: 250 West U.S. Highway 12, Burns Harbor, IN 46304-9745
Part 70 Permit No.: T127-40675-00001
Emission Unit: Coke Battery No.2
Limit: Less than 1,279,268.70 tons of dry coal per twelve consecutive month period with compliance determined at the end of each month.

Reporting Year:_____ **Quarter: _____**

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

Form Completed By: _____

Title/Position: _____

Date: _____

Telephone: _____

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE AND ENFORCEMENT BRANCH

PART 70 QUARTERLY REPORT

Source Name: Cleveland-Cliffs Burns Harbor LLC (Plant ID 127-00001)
Source Location: 250 West U.S. Highway 12, Burns Harbor, IN 46304-9745
Part 70 Permit No.: T127-40675-00001
Emission Unit: Coke Battery #2 (underfire EP512-3027)
Limit: Amount of nitrogen oxide (NOx) emissions shall be limited to less than 650 tons per twelve consecutive month period with compliance determined at the end of each month

Reporting Year:_____ **Quarter: _____**

Month	This Month (tons/month)	Previous 11 Months	12 Month Total (tons/year)

Form Completed By: _____

Title/Position: _____

Date: _____

Telephone: _____

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE AND ENFORCEMENT BRANCH

PART 70 QUARTERLY REPORT

Source Name: Cleveland-Cliffs Burns Harbor LLC (Plant ID 127-00001)
Source Location: 250 West U.S. Highway 12, Burns Harbor, IN 46304-9745
Part 70 Permit No.: T127-40675-00001
Emission Unit: Coke Battery No.2
Limit: Shall generate and supply to the steel manufacturing plant at least 1,793,385,000 cubic feet of coke oven gas per twelve consecutive months with compliance demonstrated at the end of each month, excluding any hours when the Coke Battery #2 is not in operation.

Reporting Year:_____ **Quarter: _____**

Month			
	This Month (tons/month)	Previous 11 Months	12 Month Total (tons/year)

Form Completed By: _____

Title/Position: _____

Date: _____

Telephone: _____

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE AND ENFORCEMENT BRANCH

PART 70 QUARTERLY REPORT

Source Name: Cleveland-Cliffs Burns Harbor LLC (Plant ID 127-00001)
Source Location: 250 West U.S. Highway 12, Burns Harbor, IN 46304-9745
Part 70 Permit No.: T127-40675-00001
Emission Unit: Blast furnaces C and D
Limit: The combined production rate shall be less than 5,460,000 tons per 12 consecutive month period with compliance determined monthly.

Reporting Year:_____ **Quarter: _____**

Month	This Month (tons/month)	Previous 11 Months	12 Month Total (tons/year)

Form Completed By: _____

Title/Position: _____

Date: _____

Telephone: _____

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE AND ENFORCEMENT BRANCH

PART 70 QUARTERLY REPORT

Source Name: Cleveland-Cliffs Burns Harbor LLC (Plant ID 127-00001)
Source Location: 250 West U.S. Highway 12, Burns Harbor, IN 46304-9745
Part 70 Permit No.: T127-40675-00001
Emission Unit: Hopper-Conveyors EURTF1 - EURTF5
Limit: The combined throughput shall be less than 4,000,000 tons per 12 consecutive month period with compliance determined monthly.

Reporting Year:_____ **Quarter: _____**

Month			
	This Month (tons/month)	Previous 11 Months	12 Month Total (tons/year)

Form Completed By: _____

Title/Position: _____

Date: _____

Telephone: _____

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE AND ENFORCEMENT BRANCH

PART 70 QUARTERLY REPORT

Source Name: Cleveland-Cliffs Burns Harbor LLC (Plant ID 127-00001)
Source Location: 250 West U.S. Highway 12, Burns Harbor, IN 46304-9745
Part 70 Permit No.: T127-40675-00001
Emission Unit: Vertical Stacker-Conveyor EURTF6
Limit: The throughput shall be less than 750,000 tons per 12 consecutive month period with compliance determined monthly.

Reporting Year:_____ **Quarter: _____**

Month	This Month (tons/month)	Previous 11 Months	12 Month Total (tons/year)

Form Completed By: _____

Title/Position: _____

Date: _____

Telephone: _____

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE AND ENFORCEMENT BRANCH

PART 70 QUARTERLY REPORT

Source Name: Cleveland-Cliffs Burns Harbor LLC (Plant ID 127-00001)
Source Location: 250 West U.S. Highway 12, Burns Harbor, IN 46304-9745
Part 70 Permit No.: T127-40675-00001
Emission Unit: Five (5) generators permitted in 2014
Limit: Operating hours (total) per 12 consecutive month period shall not exceed 21,900 hours with compliance determined monthly.

Reporting Year:_____ **Quarter: _____**

Month	This Month (hours/month)	Previous 11 Months	12 Month Total (hours/year)

Form Completed By: _____

Title/Position: _____

Date: _____

Telephone: _____

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE AND ENFORCEMENT BRANCH

PART 70 QUARTERLY REPORT

Source Name: Cleveland-Cliffs Burns Harbor LLC (Plant ID 127-00001)
Source Location: 250 West U.S. Highway 12, Burns Harbor, IN 46304-9745
Part 70 Permit No.: T127-40675-00001
Facility: Vacuum Degasser (EU534-19)
Parameter: Steel throughput
Limit: Less than 2,146,511 tons per twelve 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 QUARTERLY REPORT

Source Name: Cleveland-Cliffs Burns Harbor LLC (Plant ID 127-00001)
Source Location: 250 West U.S. Highway 12, Burns Harbor, IN 46304-9745
Part 70 Permit No.: T127-40675-00001
Emission Unit: Car Bottom Furnace,
Parameter: NOx Emissions
Limit: Shall not exceed 8.49 tons per twelve consecutive month period with compliance determined at the end of each month.

Reporting Year:_____ **Quarter: _____**

Month			
	This Month NOx Emissions (tons/month)	**Previous 11 Months** NOx **Emissions**	**12 Month Total NOx Emissions (tons/year)**

Form Completed By: _____

Title/Position: _____

Date: _____

Telephone: _____

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: Cleveland-Cliffs Burns Harbor LLC
Source Address: 250 West U.S. Highway 12, Burns Harbor, IN 46304-9745
Part 70 Permit No.: T127-40675-00001

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: _____

Attachment O

Part 70 Operating Permit No: 127-40675-00001

[Downloaded from the eCFR on May 11, 2021]

Electronic Code of Federal Regulations

Title 40: Protection of Environment

PART 60—STANDARDS OF PERFORMANCE FOR NEW STATIONARY SOURCES

Subpart IIII—Standards of Performance for Stationary Compression Ignition Internal Combustion Engines

Source: 71 FR 39172, July 11, 2006, unless otherwise noted.

What This Subpart Covers

§60.4200 Am I subject to this subpart?

(a) The provisions of this subpart are applicable to manufacturers, owners, and operators of stationary compression ignition (CI) internal combustion engines (ICE) and other persons as specified in paragraphs (a)(1) through (4) of this section. For the purposes of this subpart, the date that construction commences is the date the engine is ordered by the owner or operator.

(1) Manufacturers of stationary CI ICE with a displacement of less than 30 liters per cylinder where the model year is:

(i) 2007 or later, for engines that are not fire pump engines;

(ii) The model year listed in Table 3 to this subpart or later model year, for fire pump engines.

(2) Owners and operators of stationary CI ICE that commence construction after July 11, 2005, where the stationary CI ICE are:

(i) Manufactured after April 1, 2006, and are not fire pump engines, or

(ii) Manufactured as a certified National Fire Protection Association (NFPA) fire pump engine after July 1, 2006.

(3) Owners and operators of any stationary CI ICE that are modified or reconstructed after July 11, 2005 and any person that modifies or reconstructs any stationary CI ICE after July 11, 2005.

(4) The provisions of §60.4208 of this subpart are applicable to all owners and operators of stationary CI ICE that commence construction after July 11, 2005.

(b) The provisions of this subpart are not applicable to stationary CI ICE being tested at a stationary CI ICE test cell/stand.

(c) If you are an owner or operator of an area source subject to this subpart, you are exempt from the obligation to obtain a permit under 40 CFR part 70 or 40 CFR part 71, provided you are not required to obtain a permit under 40 CFR 70.3(a) or 40 CFR 71.3(a) for a reason other than your status as an area source under this subpart. Notwithstanding the previous sentence, you must continue to comply with the provisions of this subpart applicable to area sources.

(d) Stationary CI ICE may be eligible for exemption from the requirements of this subpart as described in 40 CFR part 1068, subpart C (or the exemptions described in 40 CFR part 89, subpart J and 40 CFR part 94, subpart J, for engines that would need to be certified to standards in those parts), except that owners and operators, as well as manufacturers, may be eligible to request an exemption for national security.

(e) Owners and operators of facilities with CI ICE that are acting as temporary replacement units and that are located at a stationary source for less than 1 year and that have been properly certified as meeting the standards that would be applicable to such engine under the appropriate nonroad engine provisions, are not required to meet any other provisions under this subpart with regard to such engines.

[71 FR 39172, July 11, 2006, as amended at 76 FR 37967, June 28, 2011]

Emission Standards for Manufacturers

§60.4201 What emission standards must I meet for non-emergency engines if I am a stationary CI internal combustion engine manufacturer?

(a) Stationary CI internal combustion engine manufacturers must certify their 2007 model year and later non-emergency stationary CI ICE with a maximum engine power less than or equal to 2,237 kilowatt (KW) (3,000 horsepower (HP)) and a displacement of less than 10 liters per cylinder to the certification emission standards for new nonroad CI engines in 40 CFR 89.112, 40 CFR 89.113, 40 CFR 1039.101, 40 CFR 1039.102, 40 CFR 1039.104, 40 CFR 1039.105, 40 CFR 1039.107, and 40 CFR 1039.115, as applicable, for all pollutants, for the same model year and maximum engine power.

(b) Stationary CI internal combustion engine manufacturers must certify their 2007 through 2010 model year non-emergency stationary CI ICE with a maximum engine power greater than 2,237 KW (3,000 HP) and a displacement of less than 10 liters per cylinder to the emission standards in table 1 to this subpart, for all pollutants, for the same maximum engine power.

(c) Stationary CI internal combustion engine manufacturers must certify their 2011 model year and later non-emergency stationary CI ICE with a maximum engine power greater than 2,237 KW (3,000 HP) and a displacement of less than 10 liters per cylinder to the certification emission standards for new nonroad CI engines in 40 CFR 1039.101, 40 CFR 1039.102, 40 CFR 1039.104, 40 CFR 1039.105, 40 CFR 1039.107, and 40 CFR 1039.115, as applicable, for all pollutants, for the same maximum engine power.

(d) Stationary CI internal combustion engine manufacturers must certify the following non-emergency stationary CI ICE to the certification emission standards for new marine CI engines in 40 CFR 94.8, as applicable, for all pollutants, for the same displacement and maximum engine power:

(1) Their 2007 model year through 2012 non-emergency stationary CI ICE with a displacement of greater than or equal to 10 liters per cylinder and less than 30 liters per cylinder;

(2) Their 2013 model year non-emergency stationary CI ICE with a maximum engine power greater than or equal to 3,700 KW (4,958 HP) and a displacement of greater than or equal to 10 liters per cylinder and less than 15 liters per cylinder; and

(3) Their 2013 model year non-emergency stationary CI ICE with a displacement of greater than or equal to 15 liters per cylinder and less than 30 liters per cylinder.

(e) Stationary CI internal combustion engine manufacturers must certify the following non-emergency stationary CI ICE to the certification emission standards and other requirements for new marine CI engines in 40 CFR 1042.101, 40 CFR 1042.107, 40 CFR 1042.110, 40 CFR 1042.115, 40 CFR 1042.120, and 40 CFR 1042.145, as applicable, for all pollutants, for the same displacement and maximum engine power:

(1) Their 2013 model year non-emergency stationary CI ICE with a maximum engine power less than 3,700 KW (4,958 HP) and a displacement of greater than or equal to 10 liters per cylinder and less than 15 liters per cylinder; and

(2) Their 2014 model year and later non-emergency stationary CI ICE with a displacement of greater than or equal to 10 liters per cylinder and less than 30 liters per cylinder.

(f) Notwithstanding the requirements in paragraphs (a) through (c) of this section, stationary non-emergency CI ICE identified in paragraphs (a) and (c) may be certified to the provisions of 40 CFR part 94 or, if Table 1 to 40 CFR 1042.1 identifies 40 CFR part 1042 as being applicable, 40 CFR part 1042, if the engines will be used solely in either or both of the following locations:

(1) Remote areas of Alaska; and

(2) Marine offshore installations.

(g) Notwithstanding the requirements in paragraphs (a) through (f) of this section, stationary CI internal combustion engine manufacturers are not required to certify reconstructed engines; however manufacturers may elect to do so. The reconstructed engine must be certified to the emission standards specified in paragraphs (a) through (e) of this section that are applicable to the model year, maximum engine power, and displacement of the reconstructed stationary CI ICE.

(h) Stationary CI ICE certified to the standards in 40 CFR part 1039 and equipped with auxiliary emission control devices (AECDs) as specified in 40 CFR 1039.665 must meet the Tier 1 certification emission standards for new nonroad CI engines in 40 CFR 89.112 while the AECD is activated during a qualified emergency situation. A qualified emergency situation is defined in 40 CFR 1039.665. When the qualified emergency situation has ended and the AECD is deactivated, the engine must resume meeting the otherwise applicable emission standard specified in this section.

[71 FR 39172, July 11, 2006, as amended at 76 FR 37967, June 28, 2011; 81 FR 44219, July 7, 2016]

§60.4202 What emission standards must I meet for emergency engines if I am a stationary CI internal combustion engine manufacturer?

(a) Stationary CI internal combustion engine manufacturers must certify their 2007 model year and later emergency stationary CI ICE with a maximum engine power less than or equal to 2,237 KW (3,000 HP) and a displacement of less than 10 liters per cylinder that are not fire pump engines to the emission standards specified in paragraphs (a)(1) through (2) of this section.

(1) For engines with a maximum engine power less than 37 KW (50 HP):

(i) The certification emission standards for new nonroad CI engines for the same model year and maximum engine power in 40 CFR 89.112 and 40 CFR 89.113 for all pollutants for model year 2007 engines, and

(ii) The certification emission standards for new nonroad CI engines in 40 CFR 1039.104, 40 CFR 1039.105, 40 CFR 1039.107, 40 CFR 1039.115, and table 2 to this subpart, for 2008 model year and later engines.

(2) For engines with a maximum engine power greater than or equal to 37 KW (50 HP), the certification emission standards for new nonroad CI engines for the same model year and maximum engine power in 40 CFR 89.112 and 40 CFR 89.113 for all pollutants beginning in model year 2007.

(b) Stationary CI internal combustion engine manufacturers must certify their 2007 model year and later emergency stationary CI ICE with a maximum engine power greater than 2,237 KW (3,000 HP) and a displacement of less than 10 liters per cylinder that are not fire pump engines to the emission standards specified in paragraphs (b)(1) through (2) of this section.

(1) For 2007 through 2010 model years, the emission standards in table 1 to this subpart, for all pollutants, for the same maximum engine power.

(2) For 2011 model year and later, the certification emission standards for new nonroad CI engines for engines of the same model year and maximum engine power in 40 CFR 89.112 and 40 CFR 89.113 for all pollutants.

(c) [Reserved]

(d) Beginning with the model years in table 3 to this subpart, stationary CI internal combustion engine manufacturers must certify their fire pump stationary CI ICE to the emission standards in table 4 to this subpart, for all pollutants, for the same model year and NFPA nameplate power.

(e) Stationary CI internal combustion engine manufacturers must certify the following emergency stationary CI ICE that are not fire pump engines to the certification emission standards for new marine CI engines in 40 CFR 94.8, as applicable, for all pollutants, for the same displacement and maximum engine power:

(1) Their 2007 model year through 2012 emergency stationary CI ICE with a displacement of greater than or equal to 10 liters per cylinder and less than 30 liters per cylinder;

(2) Their 2013 model year and later emergency stationary CI ICE with a maximum engine power greater than or equal to 3,700 KW (4,958 HP) and a displacement of greater than or equal to 10 liters per cylinder and less than 15 liters per cylinder;

(3) Their 2013 model year emergency stationary CI ICE with a displacement of greater than or equal to 15 liters per cylinder and less than 30 liters per cylinder; and

(4) Their 2014 model year and later emergency stationary CI ICE with a maximum engine power greater than or equal to 2,000 KW (2,682 HP) and a displacement of greater than or equal to 15 liters per cylinder and less than 30 liters per cylinder.

(f) Stationary CI internal combustion engine manufacturers must certify the following emergency stationary CI ICE to the certification emission standards and other requirements applicable to Tier 3 new marine CI engines in 40 CFR 1042.101, 40 CFR 1042.107, 40 CFR 1042.115, 40 CFR 1042.120, and 40 CFR 1042.145, for all pollutants, for the same displacement and maximum engine power:

(1) Their 2013 model year and later emergency stationary CI ICE with a maximum engine power less than 3,700 KW (4,958 HP) and a displacement of greater than or equal to 10 liters per cylinder and less than 15 liters per cylinder; and

(2) Their 2014 model year and later emergency stationary CI ICE with a maximum engine power less than 2,000 KW (2,682 HP) and a displacement of greater than or equal to 15 liters per cylinder and less than 30 liters per cylinder.

(g) Notwithstanding the requirements in paragraphs (a) through (d) of this section, stationary emergency CI internal combustion engines identified in paragraphs (a) and (c) may be certified to the provisions of 40 CFR part 94 or, if Table 2 to 40 CFR 1042.101 identifies Tier 3 standards as being applicable, the requirements applicable to Tier 3 engines in 40 CFR part 1042, if the engines will be used solely in either or both of the following locations:

(1) Remote areas of Alaska; and

(2) Marine offshore installations.

(h) Notwithstanding the requirements in paragraphs (a) through (f) of this section, stationary CI internal combustion engine manufacturers are not required to certify reconstructed engines; however manufacturers may elect to do so. The reconstructed engine must be certified to the emission standards specified in paragraphs (a) through (f) of this section that are applicable to the model year, maximum engine power and displacement of the reconstructed emergency stationary CI ICE.

[71 FR 39172, July 11, 2006, as amended at 76 FR 37968, June 28, 2011; 81 FR 44219, July 7, 2016]

§60.4203 How long must my engines meet the emission standards if I am a manufacturer of stationary CI internal combustion engines?

Engines manufactured by stationary CI internal combustion engine manufacturers must meet the emission standards as required in §§60.4201 and 60.4202 during the certified emissions life of the engines.

[76 FR 37968, June 28, 2011]

Emission Standards for Owners and Operators

§60.4204 What emission standards must I meet for non-emergency engines if I am an owner or operator of a stationary CI internal combustion engine?

(a) Owners and operators of pre-2007 model year non-emergency stationary CI ICE with a displacement of less than 10 liters per cylinder must comply with the emission standards in table 1 to this subpart. Owners and operators of pre-2007 model year non-emergency stationary CI ICE with a displacement of greater than or equal to 10 liters per cylinder and less than 30 liters per cylinder must comply with the emission standards in 40 CFR 94.8(a)(1).

(b) Owners and operators of 2007 model year and later non-emergency stationary CI ICE with a displacement of less than 30 liters per cylinder must comply with the emission standards for new CI engines in §60.4201 for their 2007 model year and later stationary CI ICE, as applicable.

(c) Owners and operators of non-emergency stationary CI engines with a displacement of greater than or equal to 30 liters per cylinder must meet the following requirements:

(1) For engines installed prior to January 1, 2012, limit the emissions of NO_X in the stationary CI internal combustion engine exhaust to the following:

(i) 17.0 grams per kilowatt-hour (g/KW-hr) (12.7 grams per horsepower-hr (g/HP-hr)) when maximum engine speed is less than 130 revolutions per minute (rpm);

(ii) $45 \cdot n^{-0.2}$ g/KW-hr ($34 \cdot n^{-0.2}$ g/HP-hr) when maximum engine speed is 130 or more but less than 2,000 rpm, where n is maximum engine speed; and

(iii) 9.8 g/KW-hr (7.3 g/HP-hr) when maximum engine speed is 2,000 rpm or more.

(2) For engines installed on or after January 1, 2012 and before January 1, 2016, limit the emissions of NO_X in the stationary CI internal combustion engine exhaust to the following:

(i) 14.4 g/KW-hr (10.7 g/HP-hr) when maximum engine speed is less than 130 rpm;

(ii) $44 \cdot n^{-0.23}$ g/KW-hr ($33 \cdot n^{-0.23}$ g/HP-hr) when maximum engine speed is greater than or equal to 130 but less than 2,000 rpm and where n is maximum engine speed; and

(iii) 7.7 g/KW-hr (5.7 g/HP-hr) when maximum engine speed is greater than or equal to 2,000 rpm.

(3) For engines installed on or after January 1, 2016, limit the emissions of NO_X in the stationary CI internal combustion engine exhaust to the following:

(i) 3.4 g/KW-hr (2.5 g/HP-hr) when maximum engine speed is less than 130 rpm;

(ii) $9.0 \cdot n^{-0.20}$ g/KW-hr ($6.7 \cdot n^{-0.20}$ g/HP-hr) where n (maximum engine speed) is 130 or more but less than 2,000 rpm; and

(iii) 2.0 g/KW-hr (1.5 g/HP-hr) where maximum engine speed is greater than or equal to 2,000 rpm.

(4) Reduce particulate matter (PM) emissions by 60 percent or more, or limit the emissions of PM in the stationary CI internal combustion engine exhaust to 0.15 g/KW-hr (0.11 g/HP-hr).

(d) Owners and operators of non-emergency stationary CI ICE with a displacement of less than 30 liters per cylinder who conduct performance tests in-use must meet the not-to-exceed (NTE) standards as indicated in §60.4212.

(e) Owners and operators of any modified or reconstructed non-emergency stationary CI ICE subject to this subpart must meet the emission standards applicable to the model year, maximum engine power, and displacement of the modified or reconstructed non-emergency stationary CI ICE that are specified in paragraphs (a) through (d) of this section.

(f) Owners and operators of stationary CI ICE certified to the standards in 40 CFR part 1039 and equipped with AECDs as specified in 40 CFR 1039.665 must meet the Tier 1 certification emission standards for new nonroad CI engines in 40 CFR 89.112 while the AECD is activated during a qualified emergency situation. A qualified emergency situation is defined in 40 CFR 1039.665. When the qualified emergency situation has ended and the AECD is deactivated, the engine must resume meeting the otherwise applicable emission standard specified in this section.

[71 FR 39172, July 11, 2006, as amended at 76 FR 37968, June 28, 2011; 81 FR 44219, July 7, 2016]

§60.4205 What emission standards must I meet for emergency engines if I am an owner or operator of a stationary CI internal combustion engine?

(a) Owners and operators of pre-2007 model year emergency stationary CI ICE with a displacement of less than 10 liters per cylinder that are not fire pump engines must comply with the emission standards in Table 1 to this subpart. Owners and operators of pre-2007 model year emergency stationary CI ICE with a displacement of greater than or equal to 10 liters per cylinder and less than 30 liters per cylinder that are not fire pump engines must comply with the emission standards in 40 CFR 94.8(a)(1).

(b) Owners and operators of 2007 model year and later emergency stationary CI ICE with a displacement of less than 30 liters per cylinder that are not fire pump engines must comply with the emission standards for new nonroad CI engines in §60.4202, for all pollutants, for the same model year and maximum engine power for their 2007 model year and later emergency stationary CI ICE.

(c) Owners and operators of fire pump engines with a displacement of less than 30 liters per cylinder must comply with the emission standards in table 4 to this subpart, for all pollutants.

(d) Owners and operators of emergency stationary CI engines with a displacement of greater than or equal to 30 liters per cylinder must meet the requirements in this section.

(1) For engines installed prior to January 1, 2012, limit the emissions of NO_X in the stationary CI internal combustion engine exhaust to the following:

(i) 17.0 g/KW-hr (12.7 g/HP-hr) when maximum engine speed is less than 130 rpm;

(ii) $45 \cdot n^{-0.2}$ g/KW-hr ($34 \cdot n^{-0.2}$ g/HP-hr) when maximum engine speed is 130 or more but less than 2,000 rpm, where n is maximum engine speed; and

(iii) 9.8 g/kW-hr (7.3 g/HP-hr) when maximum engine speed is 2,000 rpm or more.

(2) For engines installed on or after January 1, 2012, limit the emissions of NO_X in the stationary CI internal combustion engine exhaust to the following:

(i) 14.4 g/KW-hr (10.7 g/HP-hr) when maximum engine speed is less than 130 rpm;

(ii) $44 \cdot n^{-0.23}$ g/KW-hr ($33 \cdot n^{-0.23}$ g/HP-hr) when maximum engine speed is greater than or equal to 130 but less than 2,000 rpm and where n is maximum engine speed; and

(iii) 7.7 g/KW-hr (5.7 g/HP-hr) when maximum engine speed is greater than or equal to 2,000 rpm.

(3) Limit the emissions of PM in the stationary CI internal combustion engine exhaust to 0.40 g/KW-hr (0.30 g/HP-hr).

(e) Owners and operators of emergency stationary CI ICE with a displacement of less than 30 liters per cylinder who conduct performance tests in-use must meet the NTE standards as indicated in §60.4212.

(f) Owners and operators of any modified or reconstructed emergency stationary CI ICE subject to this subpart must meet the emission standards applicable to the model year, maximum engine power, and displacement of the modified or reconstructed CI ICE that are specified in paragraphs (a) through (e) of this section.

[71 FR 39172, July 11, 2006, as amended at 76 FR 37969, June 28, 2011]

§60.4206 How long must I meet the emission standards if I am an owner or operator of a stationary CI internal combustion engine?

Owners and operators of stationary CI ICE must operate and maintain stationary CI ICE that achieve the emission standards as required in §§60.4204 and 60.4205 over the entire life of the engine.

[76 FR 37969, June 28, 2011]

Fuel Requirements for Owners and Operators

§60.4207 What fuel requirements must I meet if I am an owner or operator of a stationary CI internal combustion engine subject to this subpart?

(a) [Reserved]

(b) Beginning October 1, 2010, owners and operators of stationary CI ICE subject to this subpart with a displacement of less than 30 liters per cylinder that use diesel fuel must use diesel fuel that meets the requirements of 40 CFR 1090.305 for nonroad diesel fuel, except that any existing diesel fuel purchased (or otherwise obtained) prior to October 1, 2010, may be used until depleted.

(c) [Reserved]

(d) Beginning June 1, 2012, owners and operators of stationary CI ICE subject to this subpart with a displacement of greater than or equal to 30 liters per cylinder must use diesel fuel that meets a maximum per-gallon sulfur content of 1,000 parts per million (ppm).

(e) Stationary CI ICE that have a national security exemption under §60.4200(d) are also exempt from the fuel requirements in this section.

[71 FR 39172, July 11, 2006, as amended at 76 FR 37969, June 28, 2011; 78 FR 6695, Jan. 30, 2013; 85 FR 78463, Dec. 4, 2020]

Other Requirements for Owners and Operators

§60.4208 What is the deadline for importing or installing stationary CI ICE produced in previous model years?

(a) After December 31, 2008, owners and operators may not install stationary CI ICE (excluding fire pump engines) that do not meet the applicable requirements for 2007 model year engines.

(b) After December 31, 2009, owners and operators may not install stationary CI ICE with a maximum engine power of less than 19 KW (25 HP) (excluding fire pump engines) that do not meet the applicable requirements for 2008 model year engines.

(c) After December 31, 2014, owners and operators may not install non-emergency stationary CI ICE with a maximum engine power of greater than or equal to 19 KW (25 HP) and less than 56 KW (75 HP) that do not meet the applicable requirements for 2013 model year non-emergency engines.

(d) After December 31, 2013, owners and operators may not install non-emergency stationary CI ICE with a maximum engine power of greater than or equal to 56 KW (75 HP) and less than 130 KW (175 HP) that do not meet the applicable requirements for 2012 model year non-emergency engines.

(e) After December 31, 2012, owners and operators may not install non-emergency stationary CI ICE with a maximum engine power of greater than or equal to 130 KW (175 HP), including those above 560 KW (750 HP), that do not meet the applicable requirements for 2011 model year non-emergency engines.

(f) After December 31, 2016, owners and operators may not install non-emergency stationary CI ICE with a maximum engine power of greater than or equal to 560 KW (750 HP) that do not meet the applicable requirements for 2015 model year non-emergency engines.

(g) After December 31, 2018, owners and operators may not install non-emergency stationary CI ICE with a maximum engine power greater than or equal to 600 KW (804 HP) and less than 2,000 KW (2,680 HP) and a displacement of greater than or equal to 10 liters per cylinder and less than 30 liters per cylinder that do not meet the applicable requirements for 2017 model year non-emergency engines.

(h) In addition to the requirements specified in §§60.4201, 60.4202, 60.4204, and 60.4205, it is prohibited to import stationary CI ICE with a displacement of less than 30 liters per cylinder that do not meet the applicable requirements specified in paragraphs (a) through (g) of this section after the dates specified in paragraphs (a) through (g) of this section.

(i) The requirements of this section do not apply to owners or operators of stationary CI ICE that have been modified, reconstructed, and do not apply to engines that were removed from one existing location and reinstalled at a new location.

[71 FR 39172, July 11, 2006, as amended at 76 FR 37969, June 28, 2011]

§60.4209 What are the monitoring requirements if I am an owner or operator of a stationary CI internal combustion engine?

If you are an owner or operator, you must meet the monitoring requirements of this section. In addition, you must also meet the monitoring requirements specified in §60.4211.

(a) If you are an owner or operator of an emergency stationary CI internal combustion engine that does not meet the standards applicable to non-emergency engines, you must install a non-resettable hour meter prior to startup of the engine.

(b) If you are an owner or operator of a stationary CI internal combustion engine equipped with a diesel particulate filter to comply with the emission standards in §60.4204, the diesel particulate filter must be installed with a backpressure monitor that notifies the owner or operator when the high backpressure limit of the engine is approached.

[71 FR 39172, July 11, 2006, as amended at 76 FR 37969, June 28, 2011]

Compliance Requirements

§60.4210 What are my compliance requirements if I am a stationary CI internal combustion engine manufacturer?

(a) Stationary CI internal combustion engine manufacturers must certify their stationary CI ICE with a displacement of less than 10 liters per cylinder to the emission standards specified in §60.4201(a) through (c) and §60.4202(a), (b) and (d) using the certification procedures required in 40 CFR part 89, subpart B, or 40 CFR part 1039, subpart C, as applicable, and must test their engines as specified in those parts. For the purposes of this subpart, engines certified to the standards in table 1 to this subpart shall be subject to the same requirements as engines certified to the standards in 40 CFR part 89. For the purposes of this subpart, engines certified to the standards in table 4 to this subpart shall be subject to the same requirements as engines certified to the standards in 40 CFR part 89, except that engines with NFPA nameplate power of less than 37 KW (50 HP) certified to model year 2011 or later standards shall be subject to the same requirements as engines certified to the standards in 40 CFR part 1039.

(b) Stationary CI internal combustion engine manufacturers must certify their stationary CI ICE with a displacement of greater than or equal to 10 liters per cylinder and less than 30 liters per cylinder to the emission standards specified in §60.4201(d) and (e) and §60.4202(e) and (f) using the certification procedures required in 40 CFR part 94, subpart C, or 40 CFR part 1042, subpart C, as applicable, and must test their engines as specified in 40 CFR part 94 or 1042, as applicable.

(c) Stationary CI internal combustion engine manufacturers must meet the requirements of 40 CFR 1039.120, 1039.125, 1039.130, and 1039.135, and 40 CFR part 1068 for engines that are certified to the emission standards in 40 CFR part 1039. Stationary CI internal combustion engine manufacturers must meet the corresponding provisions of 40 CFR part 89, 40 CFR part 94 or 40 CFR part 1042 for engines that would be covered by that part if they were nonroad (including marine) engines. Labels on such engines must refer to stationary engines, rather than or in addition to nonroad or marine engines, as appropriate. Stationary CI internal combustion engine manufacturers must label their engines according to paragraphs (c)(1) through (3) of this section.

(1) Stationary CI internal combustion engines manufactured from January 1, 2006 to March 31, 2006 (January 1, 2006 to June 30, 2006 for fire pump engines), other than those that are part of certified engine families under the nonroad CI engine regulations, must be labeled according to 40 CFR 1039.20.

(2) Stationary CI internal combustion engines manufactured from April 1, 2006 to December 31, 2006 (or, for fire pump engines, July 1, 2006 to December 31 of the year preceding the year listed in table 3 to this subpart) must be labeled according to paragraphs (c)(2)(i) through (iii) of this section:

(i) Stationary CI internal combustion engines that are part of certified engine families under the nonroad regulations must meet the labeling requirements for nonroad CI engines, but do not have to meet the labeling requirements in 40 CFR 1039.20.

(ii) Stationary CI internal combustion engines that meet Tier 1 requirements (or requirements for fire pumps) under this subpart, but do not meet the requirements applicable to nonroad CI engines must be labeled according to 40 CFR 1039.20. The engine manufacturer may add language to the label clarifying that the engine meets Tier 1 requirements (or requirements for fire pumps) of this subpart.

(iii) Stationary CI internal combustion engines manufactured after April 1, 2006 that do not meet Tier 1 requirements of this subpart, or fire pumps engines manufactured after July 1, 2006 that do not meet the requirements for fire pumps under this subpart, may not be used in the U.S. If any such engines are manufactured in the U.S. after April 1, 2006 (July 1, 2006 for fire pump engines), they must be exported or must be brought into compliance with the appropriate standards prior to initial operation. The export provisions of 40 CFR 1068.230 would apply to engines for export and the manufacturers must label such engines according to 40 CFR 1068.230.

(3) Stationary CI internal combustion engines manufactured after January 1, 2007 (for fire pump engines, after January 1 of the year listed in table 3 to this subpart, as applicable) must be labeled according to paragraphs (c)(3)(i) through (iii) of this section.

(i) Stationary CI internal combustion engines that meet the requirements of this subpart and the corresponding requirements for nonroad (including marine) engines of the same model year and HP must be labeled according to the provisions in 40 CFR parts 89, 94, 1039 or 1042, as appropriate.

(ii) Stationary CI internal combustion engines that meet the requirements of this subpart, but are not certified to the standards applicable to nonroad (including marine) engines of the same model year and HP must be labeled according to the provisions in 40 CFR parts 89, 94, 1039 or 1042, as appropriate, but the words “stationary” must be included instead of “nonroad” or “marine” on the label. In addition, such engines must be labeled according to 40 CFR 1039.20.

(iii) Stationary CI internal combustion engines that do not meet the requirements of this subpart must be labeled according to 40 CFR 1068.230 and must be exported under the provisions of 40 CFR 1068.230.

(d) An engine manufacturer certifying an engine family or families to standards under this subpart that are identical to standards applicable under 40 CFR parts 89, 94, 1039 or 1042 for that model year may certify any such family that contains both nonroad (including marine) and stationary engines as a single engine family and/or may include any such family containing stationary engines in the averaging, banking and trading provisions applicable for such engines under those parts.

(e) Manufacturers of engine families discussed in paragraph (d) of this section may meet the labeling requirements referred to in paragraph (c) of this section for stationary CI ICE by either adding a separate label containing the information required in paragraph (c) of this section or by adding the words “and stationary” after the word “nonroad” or “marine,” as appropriate, to the label.

(f) Starting with the model years shown in table 5 to this subpart, stationary CI internal combustion engine manufacturers must add a permanent label stating that the engine is for stationary emergency use only to each new emergency stationary CI internal combustion engine greater than or equal to 19 KW (25 HP) that meets all the emission standards for emergency engines in §60.4202 but does not meet all the emission standards for non-emergency engines in §60.4201. The label must be added according to the labeling requirements specified in 40 CFR 1039.135(b). Engine manufacturers must specify in the owner's manual that operation of emergency engines is limited to emergency operations and required maintenance and testing.

(g) Manufacturers of fire pump engines may use the test cycle in table 6 to this subpart for testing fire pump engines and may test at the NFPA certified nameplate HP, provided that the engine is labeled as “Fire Pump Applications Only”.

(h) Engine manufacturers, including importers, may introduce into commerce uncertified engines or engines certified to earlier standards that were manufactured before the new or changed standards took effect until inventories are depleted, as long as such engines are part of normal inventory. For example, if the engine manufacturers' normal industry practice is to keep on hand a one-month supply of engines based on its projected sales, and a new tier of standards starts to apply for the 2009 model year, the engine manufacturer may manufacture engines based on the normal inventory requirements late in the 2008 model year, and sell those engines for installation. The engine manufacturer may not circumvent the provisions of §60.4201 or §60.4202 by stockpiling engines that are built before new or changed standards take effect. Stockpiling of such engines beyond normal industry practice is a violation of this subpart.

(i) The replacement engine provisions of 40 CFR 89.1003(b)(7), 40 CFR 94.1103(b)(3), 40 CFR 94.1103(b)(4) and 40 CFR 1068.240 are applicable to stationary CI engines replacing existing equipment that is less than 15 years old.

(j) Stationary CI ICE manufacturers may equip their stationary CI internal combustion engines certified to the emission standards in 40 CFR part 1039 with AECDs for qualified emergency situations according to the requirements of 40 CFR 1039.665. Manufacturers of stationary CI ICE equipped with AECDs as allowed by 40 CFR 1039.665 must meet all of the requirements in 40 CFR 1039.665 that apply to manufacturers. Manufacturers must document that the engine complies with the Tier 1 standard in 40 CFR 89.112 when the AECD is activated. Manufacturers must provide any relevant testing, engineering analysis, or other information in sufficient detail to support such statement when applying for certification (including amending an existing certificate) of an engine equipped with an AECD as allowed by 40 CFR 1039.665.

[71 FR 39172, July 11, 2006, as amended at 76 FR 37969, June 28, 2011; 81 FR 44219, July 7, 2016]

§60.4211 What are my compliance requirements if I am an owner or operator of a stationary CI internal combustion engine?

(a) If you are an owner or operator and must comply with the emission standards specified in this subpart, you must do all of the following, except as permitted under paragraph (g) of this section:

(1) Operate and maintain the stationary CI internal combustion engine and control device according to the manufacturer's emission-related written instructions;

(2) Change only those emission-related settings that are permitted by the manufacturer; and

(3) Meet the requirements of 40 CFR parts 89, 94 and/or 1068, as they apply to you.

(b) If you are an owner or operator of a pre-2007 model year stationary CI internal combustion engine and must comply with the emission standards specified in §§60.4204(a) or 60.4205(a), or if you are an owner or operator of a CI fire pump engine that is manufactured prior to the model years in table 3 to this subpart and must comply with the emission standards specified in §60.4205(c), you must demonstrate compliance according to one of the methods specified in paragraphs (b)(1) through (5) of this section.

(1) Purchasing an engine certified according to 40 CFR part 89 or 40 CFR part 94, as applicable, for the same model year and maximum engine power. The engine must be installed and configured according to the manufacturer's specifications.

(2) Keeping records of performance test results for each pollutant for a test conducted on a similar engine. The test must have been conducted using the same methods specified in this subpart and these methods must have been followed correctly.

(3) Keeping records of engine manufacturer data indicating compliance with the standards.

(4) Keeping records of control device vendor data indicating compliance with the standards.

(5) Conducting an initial performance test to demonstrate compliance with the emission standards according to the requirements specified in §60.4212, as applicable.

(c) If you are an owner or operator of a 2007 model year and later stationary CI internal combustion engine and must comply with the emission standards specified in §60.4204(b) or §60.4205(b), or if you are an owner or operator of a CI fire pump engine that is manufactured during or after the model year that applies to your fire pump engine power rating in table 3 to this subpart and must comply with the emission standards specified in §60.4205(c), you must comply by purchasing an engine certified to the emission standards in §60.4204(b), or §60.4205(b) or (c), as applicable, for the same model year and maximum (or in the case of fire pumps, NFPA nameplate) engine power. The engine must be installed and configured according to the manufacturer's emission-related specifications, except as permitted in paragraph (g) of this section.

(d) If you are an owner or operator and must comply with the emission standards specified in §60.4204(c) or §60.4205(d), you must demonstrate compliance according to the requirements specified in paragraphs (d)(1) through (3) of this section.

(1) Conducting an initial performance test to demonstrate initial compliance with the emission standards as specified in §60.4213.

(2) Establishing operating parameters to be monitored continuously to ensure the stationary internal combustion engine continues to meet the emission standards. The owner or operator must petition the Administrator for approval of operating parameters to be monitored continuously. The petition must include the information described in paragraphs (d)(2)(i) through (v) of this section.

(i) Identification of the specific parameters you propose to monitor continuously;

(ii) A discussion of the relationship between these parameters and NO_X and PM emissions, identifying how the emissions of these pollutants change with changes in these parameters, and how limitations on these parameters will serve to limit NO_X and PM emissions;

(iii) A discussion of how you will establish the upper and/or lower values for these parameters which will establish the limits on these parameters in the operating limitations;

(iv) A discussion identifying the methods and the instruments you will use to monitor these parameters, as well as the relative accuracy and precision of these methods and instruments; and

(v) A discussion identifying the frequency and methods for recalibrating the instruments you will use for monitoring these parameters.

(3) For non-emergency engines with a displacement of greater than or equal to 30 liters per cylinder, conducting annual performance tests to demonstrate continuous compliance with the emission standards as specified in §60.4213.

(e) If you are an owner or operator of a modified or reconstructed stationary CI internal combustion engine and must comply with the emission standards specified in §60.4204(e) or §60.4205(f), you must demonstrate compliance according to one of the methods specified in paragraphs (e)(1) or (2) of this section.

(1) Purchasing, or otherwise owning or operating, an engine certified to the emission standards in §60.4204(e) or §60.4205(f), as applicable.

(2) Conducting a performance test to demonstrate initial compliance with the emission standards according to the requirements specified in §60.4212 or §60.4213, as appropriate. The test must be conducted within 60 days after the engine commences operation after the modification or reconstruction.

(f) If you own or operate an emergency stationary ICE, you must operate the emergency stationary ICE according to the requirements in paragraphs (f)(1) through (3) of this section. In order for the engine to be considered an emergency stationary ICE under this subpart, any operation other than emergency operation, maintenance and testing, emergency demand response, and operation in non-emergency situations for 50 hours per year, as described in paragraphs (f)(1) through (3) of this section, is prohibited. If you do not operate the engine according to the requirements in paragraphs (f)(1) through (3) of this section, the engine will not be considered an emergency engine under this subpart and must meet all requirements for non-emergency engines.

(1) There is no time limit on the use of emergency stationary ICE in emergency situations.

(2) You may operate your emergency stationary ICE for any combination of the purposes specified in paragraphs (f)(2)(i) through (iii) of this section for a maximum of 100 hours per calendar year. Any operation for non-emergency situations as allowed by paragraph (f)(3) of this section counts as part of the 100 hours per calendar year allowed by this paragraph (f)(2).

(i) Emergency stationary ICE may be operated for maintenance checks and readiness testing, provided that the tests are recommended by federal, state or local government, the manufacturer, the vendor, the regional transmission organization or equivalent balancing authority and transmission operator, or the insurance company associated with the engine. The owner or operator may petition the Administrator for approval of additional hours to be used for maintenance checks and readiness testing, but a petition is not required if the owner or operator maintains records indicating that federal, state, or local standards require maintenance and testing of emergency ICE beyond 100 hours per calendar year.

(ii) Emergency stationary ICE may be operated for emergency demand response for periods in which the Reliability Coordinator under the North American Electric Reliability Corporation (NERC) Reliability Standard EOP-002-3, Capacity and Energy Emergencies (incorporated by reference, see §60.17), or other authorized entity as determined by the Reliability Coordinator, has declared an Energy Emergency Alert Level 2 as defined in the NERC Reliability Standard EOP-002-3.

(iii) Emergency stationary ICE may be operated for periods where there is a deviation of voltage or frequency of 5 percent or greater below standard voltage or frequency.

(3) Emergency stationary ICE may be operated for up to 50 hours per calendar year in non-emergency situations. The 50 hours of operation in non-emergency situations are counted as part of the 100 hours per calendar year for maintenance and testing and emergency demand response provided in paragraph (f)(2) of this section. Except as provided in paragraph (f)(3)(i) of this section, the 50 hours per calendar year for non-emergency situations cannot be used for peak shaving or non-emergency demand response, or to generate income for a facility to an electric grid or otherwise supply power as part of a financial arrangement with another entity.

(i) The 50 hours per year for non-emergency situations can be used to supply power as part of a financial arrangement with another entity if all of the following conditions are met:

(A) The engine is dispatched by the local balancing authority or local transmission and distribution system operator;

(B) The dispatch is intended to mitigate local transmission and/or distribution limitations so as to avert potential voltage collapse or line overloads that could lead to the interruption of power supply in a local area or region.

(C) The dispatch follows reliability, emergency operation or similar protocols that follow specific NERC, regional, state, public utility commission or local standards or guidelines.

(D) The power is provided only to the facility itself or to support the local transmission and distribution system.

(E) The owner or operator identifies and records the entity that dispatches the engine and the specific NERC, regional, state, public utility commission or local standards or guidelines that are being followed for dispatching the engine. The local balancing authority or local transmission and distribution system operator may keep these records on behalf of the engine owner or operator.

(ii) [Reserved]

(g) If you do not install, configure, operate, and maintain your engine and control device according to the manufacturer's emission-related written instructions, or you change emission-related settings in a way that is not permitted by the manufacturer, you must demonstrate compliance as follows:

(1) If you are an owner or operator of a stationary CI internal combustion engine with maximum engine power less than 100 HP, you must keep a maintenance plan and records of conducted maintenance to demonstrate compliance and must, to the extent practicable, maintain and operate the engine in a manner consistent with good air pollution control practice for minimizing emissions. In addition, if you do not install and configure the engine and control device according to the manufacturer's emission-related written instructions, or you change the emission-related settings in a way that is not permitted by the manufacturer, you must conduct an initial performance test to demonstrate compliance with the applicable emission standards within 1 year of such action.

(2) If you are an owner or operator of a stationary CI internal combustion engine greater than or equal to 100 HP and less than or equal to 500 HP, you must keep a maintenance plan and records of conducted maintenance and must, to the extent practicable, maintain and operate the engine in a manner consistent with good air pollution control practice for minimizing emissions. In addition, you must conduct an initial performance test to demonstrate compliance with the applicable emission standards within 1 year of startup, or within 1 year after an engine and control device is no longer installed, configured, operated, and maintained in accordance with the manufacturer's emission-related written instructions, or within 1 year after you change emission-related settings in a way that is not permitted by the manufacturer.

(3) If you are an owner or operator of a stationary CI internal combustion engine greater than 500 HP, you must keep a maintenance plan and records of conducted maintenance and must, to the extent practicable, maintain and operate the engine in a manner consistent with good air pollution control practice for minimizing emissions. In addition, you must conduct an initial performance test to demonstrate compliance with the applicable emission standards within 1 year of startup, or within 1 year after an engine and control device is no longer installed, configured, operated, and maintained in accordance with the manufacturer's emission-related written instructions, or within 1 year after you change emission-related settings in a way that is not permitted by the manufacturer. You must conduct subsequent

performance testing every 8,760 hours of engine operation or 3 years, whichever comes first, thereafter to demonstrate compliance with the applicable emission standards.

(h) The requirements for operators and prohibited acts specified in 40 CFR 1039.665 apply to owners or operators of stationary CI ICE equipped with AECDs for qualified emergency situations as allowed by 40 CFR 1039.665.

[71 FR 39172, July 11, 2006, as amended at 76 FR 37970, June 28, 2011; 78 FR 6695, Jan. 30, 2013; 81 FR 44219, July 7, 2016]

Testing Requirements for Owners and Operators

§60.4212 What test methods and other procedures must I use if I am an owner or operator of a stationary CI internal combustion engine with a displacement of less than 30 liters per cylinder?

Owners and operators of stationary CI ICE with a displacement of less than 30 liters per cylinder who conduct performance tests pursuant to this subpart must do so according to paragraphs (a) through (e) of this section.

(a) The performance test must be conducted according to the in-use testing procedures in 40 CFR part 1039, subpart F, for stationary CI ICE with a displacement of less than 10 liters per cylinder, and according to 40 CFR part 1042, subpart F, for stationary CI ICE with a displacement of greater than or equal to 10 liters per cylinder and less than 30 liters per cylinder.

(b) Exhaust emissions from stationary CI ICE that are complying with the emission standards for new CI engines in 40 CFR part 1039 must not exceed the not-to-exceed (NTE) standards for the same model year and maximum engine power as required in 40 CFR 1039.101(e) and 40 CFR 1039.102(g)(1), except as specified in 40 CFR 1039.104(d). This requirement starts when NTE requirements take effect for nonroad diesel engines under 40 CFR part 1039.

(c) Exhaust emissions from stationary CI ICE that are complying with the emission standards for new CI engines in 40 CFR 89.112 or 40 CFR 94.8, as applicable, must not exceed the NTE numerical requirements, rounded to the same number of decimal places as the applicable standard in 40 CFR 89.112 or 40 CFR 94.8, as applicable, determined from the following equation:

$$\text{NTE requirement for each pollutant} = (1.25) \times (\text{STD}) \qquad \text{(Eq. 1)}$$

Where:

STD = The standard specified for that pollutant in 40 CFR 89.112 or 40 CFR 94.8, as applicable.

Alternatively, stationary CI ICE that are complying with the emission standards for new CI engines in 40 CFR 89.112 or 40 CFR 94.8 may follow the testing procedures specified in §60.4213 of this subpart, as appropriate.

(d) Exhaust emissions from stationary CI ICE that are complying with the emission standards for pre-2007 model year engines in §60.4204(a), §60.4205(a), or §60.4205(c) must not exceed the NTE numerical requirements, rounded to the same number of decimal places as the applicable standard in §60.4204(a), §60.4205(a), or §60.4205(c), determined from the equation in paragraph (c) of this section.

Where:

STD = The standard specified for that pollutant in §60.4204(a), §60.4205(a), or §60.4205(c).

Alternatively, stationary CI ICE that are complying with the emission standards for pre-2007 model year engines in §60.4204(a), §60.4205(a), or §60.4205(c) may follow the testing procedures specified in §60.4213, as appropriate.

(e) Exhaust emissions from stationary CI ICE that are complying with the emission standards for new CI engines in 40 CFR part 1042 must not exceed the NTE standards for the same model year and maximum engine power as required in 40 CFR 1042.101(c).

[71 FR 39172, July 11, 2006, as amended at 76 FR 37971, June 28, 2011]

§60.4213 What test methods and other procedures must I use if I am an owner or operator of a stationary CI internal combustion engine with a displacement of greater than or equal to 30 liters per cylinder?

Owners and operators of stationary CI ICE with a displacement of greater than or equal to 30 liters per cylinder must conduct performance tests according to paragraphs (a) through (f) of this section.

(a) Each performance test must be conducted according to the requirements in §60.8 and under the specific conditions that this subpart specifies in table 7. The test must be conducted within 10 percent of 100 percent peak (or the highest achievable) load.

(b) You may not conduct performance tests during periods of startup, shutdown, or malfunction, as specified in §60.8(c).

(c) You must conduct three separate test runs for each performance test required in this section, as specified in §60.8(f). Each test run must last at least 1 hour.

(d) To determine compliance with the percent reduction requirement, you must follow the requirements as specified in paragraphs (d)(1) through (3) of this section.

(1) You must use Equation 2 of this section to determine compliance with the percent reduction requirement:

$$\frac{C_i - C_o}{C_i} \times 100 = R \qquad \text{(Eq. 2)}$$

Where:

C_i = concentration of NO_X or PM at the control device inlet,

C_o = concentration of NO_X or PM at the control device outlet, and

R = percent reduction of NO_X or PM emissions.

(2) You must normalize the NO_X or PM concentrations at the inlet and outlet of the control device to a dry basis and to 15 percent oxygen (O_2) using Equation 3 of this section, or an equivalent percent carbon dioxide (CO_2) using the procedures described in paragraph (d)(3) of this section.

$$C_{adj} = C_d \frac{5.9}{20.9 - \%\ O_2} \qquad \text{(Eq. 3)}$$

Where:

C_{adj} = Calculated NO_X or PM concentration adjusted to 15 percent O_2.

C_d = Measured concentration of NO_X or PM, uncorrected.

5.9 = 20.9 percent O_2−15 percent O_2, the defined O_2 correction value, percent.

$\%O_2$ = Measured O_2 concentration, dry basis, percent.

(3) If pollutant concentrations are to be corrected to 15 percent O_2 and CO_2 concentration is measured in lieu of O_2 concentration measurement, a CO_2 correction factor is needed. Calculate the CO_2 correction factor as described in paragraphs (d)(3)(i) through (iii) of this section.

(i) Calculate the fuel-specific F_o value for the fuel burned during the test using values obtained from Method 19, Section 5.2, and the following equation:

$$F_o = \frac{0.209_{F_d}}{F_c} \qquad \text{(Eq. 4)}$$

Where:

F_o = Fuel factor based on the ratio of O_2 volume to the ultimate CO_2 volume produced by the fuel at zero percent excess air.

0.209 = Fraction of air that is O_2, percent/100.

F_d = Ratio of the volume of dry effluent gas to the gross calorific value of the fuel from Method 19, dsm^3/J ($dscf/10^6$ Btu).

F_c = Ratio of the volume of CO_2 produced to the gross calorific value of the fuel from Method 19, dsm^3/J ($dscf/10^6$ Btu).

(ii) Calculate the CO_2 correction factor for correcting measurement data to 15 percent O_2, as follows:

$$X_{CO_2} = \frac{5.9}{F_o} \qquad \text{(Eq. 5)}$$

Where:

X_{CO2} = CO_2 correction factor, percent.

5.9 = 20.9 percent O_2−15 percent O_2, the defined O_2 correction value, percent.

(iii) Calculate the NO_X and PM gas concentrations adjusted to 15 percent O_2 using CO_2 as follows:

$$C_{adj} = C_d \frac{X_{CO_2}}{\%CO_2} \qquad \text{(Eq. 6)}$$

Where:

C_{adj} = Calculated NO_X or PM concentration adjusted to 15 percent O_2.

C_d = Measured concentration of NO_X or PM, uncorrected.

$\%CO_2$ = Measured CO_2 concentration, dry basis, percent.

(e) To determine compliance with the NO_X mass per unit output emission limitation, convert the concentration of NO_X in the engine exhaust using Equation 7 of this section:

$$ER = \frac{C_d \times 1.912 \times 10^{-3} \times Q \times T}{KW\text{-hour}} \qquad (Eq.\ 7)$$

Where:

ER = Emission rate in grams per KW-hour.

C_d = Measured NO_X concentration in ppm.

$1.912x10^{-3}$ = Conversion constant for ppm NO_X to grams per standard cubic meter at 25 degrees Celsius.

Q = Stack gas volumetric flow rate, in standard cubic meter per hour.

T = Time of test run, in hours.

KW-hour = Brake work of the engine, in KW-hour.

(f) To determine compliance with the PM mass per unit output emission limitation, convert the concentration of PM in the engine exhaust using Equation 8 of this section:

$$ER = \frac{C_{adj} \times Q \times T}{KW\text{-hour}} \qquad (Eq.\ 8)$$

Where:

ER = Emission rate in grams per KW-hour.

C_{adj} = Calculated PM concentration in grams per standard cubic meter.

Q = Stack gas volumetric flow rate, in standard cubic meter per hour.

T = Time of test run, in hours.

KW-hour = Energy output of the engine, in KW.

[71 FR 39172, July 11, 2006, as amended at 76 FR 37971, June 28, 2011]

Notification, Reports, and Records for Owners and Operators

§60.4214 What are my notification, reporting, and recordkeeping requirements if I am an owner or operator of a stationary CI internal combustion engine?

(a) Owners and operators of non-emergency stationary CI ICE that are greater than 2,237 KW (3,000 HP), or have a displacement of greater than or equal to 10 liters per cylinder, or are pre-2007 model year engines that are greater than 130 KW (175 HP) and not certified, must meet the requirements of paragraphs (a)(1) and (2) of this section.

(1) Submit an initial notification as required in §60.7(a)(1). The notification must include the information in paragraphs (a)(1)(i) through (v) of this section.

(i) Name and address of the owner or operator;

(ii) The address of the affected source;

(iii) Engine information including make, model, engine family, serial number, model year, maximum engine power, and engine displacement;

(iv) Emission control equipment; and

(v) Fuel used.

(2) Keep records of the information in paragraphs (a)(2)(i) through (iv) of this section.

(i) All notifications submitted to comply with this subpart and all documentation supporting any notification.

(ii) Maintenance conducted on the engine.

(iii) If the stationary CI internal combustion is a certified engine, documentation from the manufacturer that the engine is certified to meet the emission standards.

(iv) If the stationary CI internal combustion is not a certified engine, documentation that the engine meets the emission standards.

(b) If the stationary CI internal combustion engine is an emergency stationary internal combustion engine, the owner or operator is not required to submit an initial notification. Starting with the model years in table 5 to this subpart, if the emergency engine does not meet the standards applicable to non-emergency engines in the applicable model year, the owner or operator must keep records of the operation of the engine in emergency and non-emergency service that are recorded through the non-resettable hour meter. The owner must record the time of operation of the engine and the reason the engine was in operation during that time.

(c) If the stationary CI internal combustion engine is equipped with a diesel particulate filter, the owner or operator must keep records of any corrective action taken after the backpressure monitor has notified the owner or operator that the high backpressure limit of the engine is approached.

(d) If you own or operate an emergency stationary CI ICE with a maximum engine power more than 100 HP that operates or is contractually obligated to be available for more than 15 hours per calendar year for the purposes specified in §60.4211(f)(2)(ii) and (iii) or that operates for the purposes specified in §60.4211(f)(3)(i), you must submit an annual report according to the requirements in paragraphs (d)(1) through (3) of this section.

(1) The report must contain the following information:

(i) Company name and address where the engine is located.

(ii) Date of the report and beginning and ending dates of the reporting period.

(iii) Engine site rating and model year.

(iv) Latitude and longitude of the engine in decimal degrees reported to the fifth decimal place.

(v) Hours operated for the purposes specified in §60.4211(f)(2)(ii) and (iii), including the date, start time, and end time for engine operation for the purposes specified in §60.4211(f)(2)(ii) and (iii).

(vi) Number of hours the engine is contractually obligated to be available for the purposes specified in §60.4211(f)(2)(ii) and (iii).

(vii) Hours spent for operation for the purposes specified in §60.4211(f)(3)(i), including the date, start time, and end time for engine operation for the purposes specified in §60.4211(f)(3)(i). The report must also identify the entity that dispatched the engine and the situation that necessitated the dispatch of the engine.

(2) The first annual report must cover the calendar year 2015 and must be submitted no later than March 31, 2016. Subsequent annual reports for each calendar year must be submitted no later than March 31 of the following calendar year.

(3) The annual report must be submitted electronically using the subpart specific reporting form in the Compliance and Emissions Data Reporting Interface (CEDRI) that is accessed through EPA's Central Data Exchange (CDX) (*www.epa.gov/cdx*). However, if the reporting form specific to this subpart is not available in CEDRI at the time that the report is due, the written report must be submitted to the Administrator at the appropriate address listed in §60.4.

(e) Owners or operators of stationary CI ICE equipped with AECDs pursuant to the requirements of 40 CFR 1039.665 must report the use of AECDs as required by 40 CFR 1039.665(e).

[71 FR 39172, July 11, 2006, as amended at 78 FR 6696, Jan. 30, 2013; 81 FR 44219, July 7, 2016]

Special Requirements

§60.4215 What requirements must I meet for engines used in Guam, American Samoa, or the Commonwealth of the Northern Mariana Islands?

(a) Stationary CI ICE with a displacement of less than 30 liters per cylinder that are used in Guam, American Samoa, or the Commonwealth of the Northern Mariana Islands are required to meet the applicable emission standards in §§60.4202 and 60.4205.

(b) Stationary CI ICE that are used in Guam, American Samoa, or the Commonwealth of the Northern Mariana Islands are not required to meet the fuel requirements in §60.4207.

(c) Stationary CI ICE with a displacement of greater than or equal to 30 liters per cylinder that are used in Guam, American Samoa, or the Commonwealth of the Northern Mariana Islands are required to meet the following emission standards:

(1) For engines installed prior to January 1, 2012, limit the emissions of NO_X in the stationary CI internal combustion engine exhaust to the following:

(i) 17.0 g/KW-hr (12.7 g/HP-hr) when maximum engine speed is less than 130 rpm;

(ii) $45 \cdot n^{-0.2}$ g/KW-hr ($34 \cdot n^{-0.2}$ g/HP-hr) when maximum engine speed is 130 or more but less than 2,000 rpm, where n is maximum engine speed; and

(iii) 9.8 g/KW-hr (7.3 g/HP-hr) when maximum engine speed is 2,000 rpm or more.

(2) For engines installed on or after January 1, 2012, limit the emissions of NO_X in the stationary CI internal combustion engine exhaust to the following:

(i) 14.4 g/KW-hr (10.7 g/HP-hr) when maximum engine speed is less than 130 rpm;

(ii) $44 \cdot n^{-0.23}$ g/KW-hr ($33 \cdot n^{-0.23}$ g/HP-hr) when maximum engine speed is greater than or equal to 130 but less than 2,000 rpm and where n is maximum engine speed; and

(iii) 7.7 g/KW-hr (5.7 g/HP-hr) when maximum engine speed is greater than or equal to 2,000 rpm.

(3) Limit the emissions of PM in the stationary CI internal combustion engine exhaust to 0.40 g/KW-hr (0.30 g/HP-hr).

[71 FR 39172, July 11, 2006, as amended at 76 FR 37971, June 28, 2011]

§60.4216 What requirements must I meet for engines used in Alaska?

(a) Prior to December 1, 2010, owners and operators of stationary CI ICE with a displacement of less than 30 liters per cylinder located in areas of Alaska not accessible by the FAHS should refer to 40 CFR part 69 to determine the diesel fuel requirements applicable to such engines.

(b) Except as indicated in paragraph (c) of this section, manufacturers, owners and operators of stationary CI ICE with a displacement of less than 10 liters per cylinder located in remote areas of Alaska may meet the requirements of this subpart by manufacturing and installing engines meeting the requirements of 40 CFR parts 94 or 1042, as appropriate, rather than the otherwise applicable requirements of 40 CFR parts 89 and 1039, as indicated in §§60.4201(f) and 60.4202(g).

(c) Manufacturers, owners, and operators of stationary CI ICE that are located in remote areas of Alaska may choose to meet the applicable emission standards for emergency engines in §§60.4202 and 60.4205, and not those for non-emergency engines in §§60.4201 and 60.4204, except that for 2014 model year and later non-emergency CI ICE, the owner or operator of any such engine must have that engine certified as meeting at least the Tier 3 PM standards in 40 CFR 89.112 or 40 CFR 1042.101.

(d) The provisions of §60.4207 do not apply to owners and operators of pre-2014 model year stationary CI ICE subject to this subpart that are located in remote areas of Alaska.

(e) The provisions of §60.4208(a) do not apply to owners and operators of stationary CI ICE subject to this subpart that are located in areas of Alaska not accessible by the FAHS until after December 31, 2009.

(f) The provisions of this section and §60.4207 do not prevent owners and operators of stationary CI ICE subject to this subpart that are located in remote areas of Alaska from using fuels mixed with used lubricating oil, in volumes of up to 1.75 percent of the total fuel. The sulfur content of the used lubricating oil must be less than 200 parts per million. The used lubricating oil must meet the on-specification levels and properties for used oil in 40 CFR 279.11.

[76 FR 37971, June 28, 2011, as amended at 81 FR 44219, July 7, 2016; 84 FR 61568, Nov. 13, 2019]

§60.4217 What emission standards must I meet if I am an owner or operator of a stationary internal combustion engine using special fuels?

Owners and operators of stationary CI ICE that do not use diesel fuel may petition the Administrator for approval of alternative emission standards, if they can demonstrate that they use a fuel that is not the fuel on which the manufacturer of the engine certified the engine and that the engine cannot meet the applicable standards required in §60.4204 or §60.4205 using such fuels and that use of such fuel is appropriate and reasonably necessary, considering cost, energy, technical feasibility, human health and environmental, and other factors, for the operation of the engine.

[76 FR 37972, June 28, 2011]

General Provisions

§60.4218 What parts of the General Provisions apply to me?

Table 8 to this subpart shows which parts of the General Provisions in §§60.1 through 60.19 apply to you.

Definitions

§60.4219 What definitions apply to this subpart?

As used in this subpart, all terms not defined herein shall have the meaning given them in the CAA and in subpart A of this part.

Alaska Railbelt Grid means the service areas of the six regulated public utilities that extend from Fairbanks to Anchorage and the Kenai Peninsula. These utilities are Golden Valley Electric Association; Chugach Electric Association; Matanuska Electric Association; Homer Electric Association; Anchorage Municipal Light & Power; and the City of Seward Electric System.

Certified emissions life means the period during which the engine is designed to properly function in terms of reliability and fuel consumption, without being remanufactured, specified as a number of hours of operation or calendar years, whichever comes first. The values for certified emissions life for stationary CI ICE with a displacement of less than 10 liters per cylinder are given in 40 CFR 1039.101(g). The values for certified emissions life for stationary CI ICE with a displacement of greater than or equal to 10 liters per cylinder and less than 30 liters per cylinder are given in 40 CFR 94.9(a).

Combustion turbine means all equipment, including but not limited to the turbine, the fuel, air, lubrication and exhaust gas systems, control systems (except emissions control equipment), and any ancillary components and sub-components comprising any simple cycle combustion turbine, any regenerative/recuperative cycle combustion turbine, the combustion turbine portion of any cogeneration cycle combustion system, or the combustion turbine portion of any combined cycle steam/electric generating system.

Compression ignition means relating to a type of stationary internal combustion engine that is not a spark ignition engine.

Date of manufacture means one of the following things:

(1) For freshly manufactured engines and modified engines, date of manufacture means the date the engine is originally produced.

(2) For reconstructed engines, date of manufacture means the date the engine was originally produced, except as specified in paragraph (3) of this definition.

(3) Reconstructed engines are assigned a new date of manufacture if the fixed capital cost of the new and refurbished components exceeds 75 percent of the fixed capital cost of a comparable entirely new facility. An engine that is produced from a previously used engine block does not retain the date of manufacture of the engine in which the engine block was previously used if the engine is produced using all new components except for the engine block. In these cases, the date of manufacture is the date of reconstruction or the date the new engine is produced.

Diesel fuel means any liquid obtained from the distillation of petroleum with a boiling point of approximately 150 to 360 degrees Celsius. One commonly used form is number 2 distillate oil.

Diesel particulate filter means an emission control technology that reduces PM emissions by trapping the particles in a flow filter substrate and periodically removes the collected particles by either physical action or by oxidizing (burning off) the particles in a process called regeneration.

Emergency stationary internal combustion engine means any stationary reciprocating internal combustion engine that meets all of the criteria in paragraphs (1) through (3) of this definition. All emergency stationary ICE must comply with the requirements specified in §60.4211(f) in order to be considered emergency stationary ICE. If the engine does not comply with the requirements specified in §60.4211(f), then it is not considered to be an emergency stationary ICE under this subpart.

(1) The stationary ICE is operated to provide electrical power or mechanical work during an emergency situation. Examples include stationary ICE used to produce power for critical networks or equipment (including power supplied to portions of a facility) when electric power from the local utility (or the normal power source, if the facility runs on its own power production) is interrupted, or stationary ICE used to pump water in the case of fire or flood, etc.

(2) The stationary ICE is operated under limited circumstances for situations not included in paragraph (1) of this definition, as specified in §60.4211(f).

(3) The stationary ICE operates as part of a financial arrangement with another entity in situations not included in paragraph (1) of this definition only as allowed in §60.4211(f)(2)(ii) or (iii) and §60.4211(f)(3)(i).

Engine manufacturer means the manufacturer of the engine. See the definition of “manufacturer” in this section.

Fire pump engine means an emergency stationary internal combustion engine certified to NFPA requirements that is used to provide power to pump water for fire suppression or protection.

Freshly manufactured engine means an engine that has not been placed into service. An engine becomes freshly manufactured when it is originally produced.

Installed means the engine is placed and secured at the location where it is intended to be operated.

Manufacturer has the meaning given in section 216(1) of the Act. In general, this term includes any person who manufactures a stationary engine for sale in the United States or otherwise introduces a new stationary engine into commerce in the United States. This includes importers who import stationary engines for sale or resale.

Maximum engine power means maximum engine power as defined in 40 CFR 1039.801.

Model year means the calendar year in which an engine is manufactured (see “date of manufacture”), except as follows:

(1) Model year means the annual new model production period of the engine manufacturer in which an engine is manufactured (see “date of manufacture”), if the annual new model production period is different than the calendar year and includes January 1 of the calendar year for which the model year is named. It may not begin before January 2 of the previous calendar year and it must end by December 31 of the named calendar year.

(2) For an engine that is converted to a stationary engine after being placed into service as a nonroad or other non-stationary engine, model year means the calendar year or new model production period in which the engine was manufactured (see “date of manufacture”).

Other internal combustion engine means any internal combustion engine, except combustion turbines, which is not a reciprocating internal combustion engine or rotary internal combustion engine.

Reciprocating internal combustion engine means any internal combustion engine which uses reciprocating motion to convert heat energy into mechanical work.

Remote areas of Alaska means areas of Alaska that meet either paragraph (1) or (2) of this definition.

(1) Areas of Alaska that are not accessible by the Federal Aid Highway System (FAHS).

(2) Areas of Alaska that meet all of the following criteria:

(i) The only connection to the FAHS is through the Alaska Marine Highway System, or the stationary CI ICE operation is within an isolated grid in Alaska that is not connected to the statewide electrical grid referred to as the Alaska Railbelt Grid.

(ii) At least 10 percent of the power generated by the stationary CI ICE on an annual basis is used for residential purposes.

(iii) The generating capacity of the source is less than 12 megawatts, or the stationary CI ICE is used exclusively for backup power for renewable energy.

Rotary internal combustion engine means any internal combustion engine which uses rotary motion to convert heat energy into mechanical work.

Spark ignition means relating to a gasoline, natural gas, or liquefied petroleum gas fueled engine or any other type of engine with a spark plug (or other sparking device) and with operating characteristics significantly similar to the theoretical Otto combustion cycle. Spark ignition engines usually use a throttle to regulate intake air flow to control

power during normal operation. Dual-fuel engines in which a liquid fuel (typically diesel fuel) is used for CI and gaseous fuel (typically natural gas) is used as the primary fuel at an annual average ratio of less than 2 parts diesel fuel to 100 parts total fuel on an energy equivalent basis are spark ignition engines.

Stationary internal combustion engine means any internal combustion engine, except combustion turbines, that converts heat energy into mechanical work and is not mobile. Stationary ICE differ from mobile ICE in that a stationary internal combustion engine is not a nonroad engine as defined at 40 CFR 1068.30 (excluding paragraph (2)(ii) of that definition), and is not used to propel a motor vehicle, aircraft, or a vehicle used solely for competition. Stationary ICE include reciprocating ICE, rotary ICE, and other ICE, except combustion turbines.

Subpart means 40 CFR part 60, subpart IIII.

[71 FR 39172, July 11, 2006, as amended at 76 FR 37972, June 28, 2011; 78 FR 6696, Jan. 30, 2013; 81 FR 44219, July 7, 2016]

Table 1 to Subpart IIII of Part 60—Emission Standards for Stationary Pre-2007 Model Year Engines With a Displacement of <10 Liters per Cylinder and 2007-2010 Model Year Engines >2,237 KW (3,000 HP) and With a Displacement of <10 Liters per Cylinder

[As stated in §§60.4201(b), 60.4202(b), 60.4204(a), and 60.4205(a), you must comply with the following emission standards]

Maximum engine power	Emission standards for stationary pre-2007 model year engines with a displacement of <10 liters per cylinder and 2007-2010 model year engines >2,237 KW (3,000 HP) and with a displacement of <10 liters per cylinder in g/KW-hr (g/HP-hr)				
	NMHC + NO_X	HC	NO_X	CO	PM
KW<8 (HP<11)	10.5 (7.8)			8.0 (6.0)	1.0 (0.75)
8≤KW<19 (11≤HP<25)	9.5 (7.1)			6.6 (4.9)	0.80 (0.60)
19≤KW<37 (25≤HP<50)	9.5 (7.1)			5.5 (4.1)	0.80 (0.60)
37≤KW<56 (50≤HP<75)			9.2 (6.9)		
56≤KW<75 (75≤HP<100)			9.2 (6.9)		
75≤KW<130 (100≤HP<175)			9.2 (6.9)		
130≤KW<225 (175≤HP<300)		1.3 (1.0)	9.2 (6.9)	11.4 (8.5)	0.54 (0.40)
225≤KW<450 (300≤HP<600)		1.3 (1.0)	9.2 (6.9)	11.4 (8.5)	0.54 (0.40)
450≤KW≤560 (600≤HP≤750)		1.3 (1.0)	9.2 (6.9)	11.4 (8.5)	0.54 (0.40)
KW>560 (HP>750)		1.3 (1.0)	9.2 (6.9)	11.4 (8.5)	0.54 (0.40)

Table 2 to Subpart IIII of Part 60—Emission Standards for 2008 Model Year and Later Emergency Stationary CI ICE <37 KW (50 HP) With a Displacement of <10 Liters per Cylinder

[As stated in §60.4202(a)(1), you must comply with the following emission standards]

	Emission standards for 2008 model year and later emergency stationary CI ICE <37 KW (50 HP) with a displacement of <10 liters per cylinder in g/KW-hr (g/HP-hr)			
Engine power	**Model year(s)**	**NO_X + NMHC**	**CO**	**PM**
KW<8 (HP<11)	2008 +	7.5 (5.6)	8.0 (6.0)	0.40 (0.30)
8≤KW<19 (11≤HP<25)	2008 +	7.5 (5.6)	6.6 (4.9)	0.40 (0.30)
19≤KW<37 (25≤HP<50)	2008 +	7.5 (5.6)	5.5 (4.1)	0.30 (0.22)

Table 3 to Subpart IIII of Part 60—Certification Requirements for Stationary Fire Pump Engines

As stated in §60.4202(d), you must certify new stationary fire pump engines beginning with the following model years:

Engine power	**Starting model year engine manufacturers must certify new stationary fire pump engines according to §60.4202(d)[1]**
KW<75 (HP<100)	2011
75≤KW<130 (100≤HP<175)	2010
130≤KW≤560 (175≤HP≤750)	2009
KW>560 (HP>750)	2008

[1]Manufacturers of fire pump stationary CI ICE with a maximum engine power greater than or equal to 37 kW (50 HP) and less than 450 KW (600 HP) and a rated speed of greater than 2,650 revolutions per minute (rpm) are not required to certify such engines until three model years following the model year indicated in this Table 3 for engines in the applicable engine power category.

[71 FR 39172, July 11, 2006, as amended at 76 FR 37972, June 28, 2011]

Table 4 to Subpart IIII of Part 60—Emission Standards for Stationary Fire Pump Engines

[As stated in §§60.4202(d) and 60.4205(c), you must comply with the following emission standards for stationary fire pump engines]

Maximum engine power	**Model year(s)**	**NMHC + NO_X**	**CO**	**PM**
KW<8 (HP<11)	2010 and earlier	10.5 (7.8)	8.0 (6.0)	1.0 (0.75)
	2011 +	7.5 (5.6)		0.40 (0.30)
8≤KW<19 (11≤HP<25)	2010 and earlier	9.5 (7.1)	6.6 (4.9)	0.80 (0.60)
	2011 +	7.5 (5.6)		0.40 (0.30)
19≤KW<37 (25≤HP<50)	2010 and earlier	9.5 (7.1)	5.5 (4.1)	0.80 (0.60)

Maximum engine power	Model year(s)	NMHC + NO_X	CO	PM
	2011 +	7.5 (5.6)		0.30 (0.22)
37≤KW<56 (50≤HP<75)	2010 and earlier	10.5 (7.8)	5.0 (3.7)	0.80 (0.60)
	2011 +[1]	4.7 (3.5)		0.40 (0.30)
56≤KW<75 (75≤HP<100)	2010 and earlier	10.5 (7.8)	5.0 (3.7)	0.80 (0.60)
	2011 +[1]	4.7 (3.5)		0.40 (0.30)
75≤KW<130 (100≤HP<175)	2009 and earlier	10.5 (7.8)	5.0 (3.7)	0.80 (0.60)
	2010 +[2]	4.0 (3.0)		0.30 (0.22)
130≤KW<225 (175≤HP<300)	2008 and earlier	10.5 (7.8)	3.5 (2.6)	0.54 (0.40)
	2009 +[3]	4.0 (3.0)		0.20 (0.15)
225≤KW<450 (300≤HP<600)	2008 and earlier	10.5 (7.8)	3.5 (2.6)	0.54 (0.40)
	2009 +[3]	4.0 (3.0)		0.20 (0.15)
450≤KW≤560 (600≤HP≤750)	2008 and earlier	10.5 (7.8)	3.5 (2.6)	0.54 (0.40)
	2009 +	4.0 (3.0)		0.20 (0.15)
KW>560 (HP>750)	2007 and earlier	10.5 (7.8)	3.5 (2.6)	0.54 (0.40)
	2008 +	6.4 (4.8)		0.20 (0.15)

[1]For model years 2011-2013, manufacturers, owners and operators of fire pump stationary CI ICE in this engine power category with a rated speed of greater than 2,650 revolutions per minute (rpm) may comply with the emission limitations for 2010 model year engines.

[2]For model years 2010-2012, manufacturers, owners and operators of fire pump stationary CI ICE in this engine power category with a rated speed of greater than 2,650 rpm may comply with the emission limitations for 2009 model year engines.

[3]In model years 2009-2011, manufacturers of fire pump stationary CI ICE in this engine power category with a rated speed of greater than 2,650 rpm may comply with the emission limitations for 2008 model year engines.

Table 5 to Subpart IIII of Part 60—Labeling and Recordkeeping Requirements for New Stationary Emergency Engines

[You must comply with the labeling requirements in §60.4210(f) and the recordkeeping requirements in §60.4214(b) for new emergency stationary CI ICE beginning in the following model years:]

Engine power	Starting model year
19≤KW<56 (25≤HP<75)	2013
56≤KW<130 (75≤HP<175)	2012
KW≥130 (HP≥175)	2011

Table 6 to Subpart IIII of Part 60—Optional 3-Mode Test Cycle for Stationary Fire Pump Engines

[As stated in §60.4210(g), manufacturers of fire pump engines may use the following test cycle for testing fire pump engines:]

Mode No.	Engine speed[1]	Torque (percent)[2]	Weighting factors
1	Rated	100	0.30
2	Rated	75	0.50
3	Rated	50	0.20

[1]Engine speed: ±2 percent of point.

[2]Torque: NFPA certified nameplate HP for 100 percent point. All points should be ±2 percent of engine percent load value.

Table 7 to Subpart IIII of Part 60—Requirements for Performance Tests for Stationary CI ICE With a Displacement of ≥30 Liters per Cylinder

As stated in §60.4213, you must comply with the following requirements for performance tests for stationary CI ICE with a displacement of ≥30 liters per cylinder:

Each	Complying with the requirement to	You must	Using	According to the following requirements
1. Stationary CI internal combustion engine with a displacement of ≥ 30 liters per cylinder	a. Reduce NO_X emissions by 90 percent or more;	i. Select the sampling port location and number/location of traverse points at the inlet and outlet of the control device;		(a) For NO_X, O_2, and moisture measurement, ducts ≤6 inches in diameter may be sampled at a single point located at the duct centroid and ducts >6 and ≤12 inches in diameter may be sampled at 3 traverse points located at 16.7, 50.0, and 83.3% of the measurement line ('3-point long line'). If the duct is >12 inches in diameter *and* the sampling port location meets the two and half-diameter criterion of Section 11.1.1 of Method 1 of 40 CFR part 60, appendix A-1, the duct may be sampled at '3-point long line'; otherwise, conduct the stratification testing and select sampling points according to Section 8.1.2 of Method 7E of 40 CFR part 60, appendix A-4.
		ii. Measure O_2 at the inlet and outlet of the control device;	(1) Method 3, 3A, or 3B of 40 CFR part 60, appendix A-2	(b) Measurements to determine O_2 concentration must be made at the same time as the measurements for NO_X concentration.

Each	Complying with the requirement to	You must	Using	According to the following requirements
		iii. If necessary, measure moisture content at the inlet and outlet of the control device; and	(2) Method 4 of 40 CFR part 60, appendix A-3, Method 320 of 40 CFR part 63, appendix A, or ASTM D 6348-03 (incorporated by reference, see §60.17)	(c) Measurements to determine moisture content must be made at the same time as the measurements for NO_X concentration.
		iv. Measure NO_X at the inlet and outlet of the control device.	(3) Method 7E of 40 CFR part 60, appendix A-4, Method 320 of 40 CFR part 63, appendix A, or ASTM D 6348-03 (incorporated by reference, see §60.17)	(d) NO_X concentration must be at 15 percent O_2, dry basis. Results of this test consist of the average of the three 1-hour or longer runs.
	b. Limit the concentration of NO_X in the stationary CI internal combustion engine exhaust.	i. Select the sampling port location and number/location of traverse points at the exhaust of the stationary internal combustion engine;		(a) For NO_X, O_2, and moisture measurement, ducts ≤6 inches in diameter may be sampled at a single point located at the duct centroid and ducts >6 and ≤12 inches in diameter may be sampled at 3 traverse points located at 16.7, 50.0, and 83.3% of the measurement line ('3-point long line'). If the duct is >12 inches in diameter *and* the sampling port location meets the two and half-diameter criterion of Section 11.1.1 of Method 1 of 40 CFR part 60, appendix A-1, the duct may be sampled at '3-point long line'; otherwise, conduct the stratification testing and select sampling points according to Section 8.1.2 of Method 7E of 40 CFR part 60, appendix A-4.
		ii. Determine the O_2 concentration of the stationary internal combustion engine exhaust at the sampling port location;	(1) Method 3, 3A, or 3B of 40 CFR part 60, appendix A-2	(b) Measurements to determine O_2 concentration must be made at the same time as the measurement for NO_X concentration.

Each	Complying with the requirement to	You must	Using	According to the following requirements
		iii. If necessary, measure moisture content of the stationary internal combustion engine exhaust at the sampling port location; and	(2) Method 4 of 40 CFR part 60, appendix A-3, Method 320 of 40 CFR part 63, appendix A, or ASTM D 6348-03 (incorporated by reference, see §60.17)	(c) Measurements to determine moisture content must be made at the same time as the measurement for NO_X concentration.
		iv. Measure NO_X at the exhaust of the stationary internal combustion engine; if using a control device, the sampling site must be located at the outlet of the control device.	(3) Method 7E of 40 CFR part 60, appendix A-4, Method 320 of 40 CFR part 63, appendix A, or ASTM D 6348-03 (incorporated by reference, see §60.17)	(d) NO_X concentration must be at 15 percent O_2, dry basis. Results of this test consist of the average of the three 1-hour or longer runs.
	c. Reduce PM emissions by 60 percent or more	i. Select the sampling port location and the number of traverse points;	(1) Method 1 or 1A of 40 CFR part 60, appendix A-1	(a) Sampling sites must be located at the inlet and outlet of the control device.
		ii. Measure O_2 at the inlet and outlet of the control device;	(2) Method 3, 3A, or 3B of 40 CFR part 60, appendix A-2	(b) Measurements to determine O_2 concentration must be made at the same time as the measurements for PM concentration.
		iii. If necessary, measure moisture content at the inlet and outlet of the control device; and	(3) Method 4 of 40 CFR part 60, appendix A-3	(c) Measurements to determine and moisture content must be made at the same time as the measurements for PM concentration.
		iv. Measure PM at the inlet and outlet of the control device.	(4) Method 5 of 40 CFR part 60, appendix A-3	(d) PM concentration must be at 15 percent O_2, dry basis. Results of this test consist of the average of the three 1-hour or longer runs.
	d. Limit the concentration of PM in the stationary CI internal combustion engine exhaust	i. Select the sampling port location and the number of traverse points;	(1) Method 1 or 1A of 40 CFR part 60, appendix A-1	(a) If using a control device, the sampling site must be located at the outlet of the control device.
		ii. Determine the O_2 concentration of the stationary internal combustion engine exhaust at the sampling port location;	(2) Method 3, 3A, or 3B of 40 CFR part 60, appendix A-2	(b) Measurements to determine O_2 concentration must be made at the same time as the measurements for PM concentration.

Each	Complying with the requirement to	You must	Using	According to the following requirements
		iii. If necessary, measure moisture content of the stationary internal combustion engine exhaust at the sampling port location; and	(3) Method 4 of 40 CFR part 60, appendix A-3	(c) Measurements to determine moisture content must be made at the same time as the measurements for PM concentration.
		iv. Measure PM at the exhaust of the stationary internal combustion engine.	(4) Method 5 of 40 CFR part 60, appendix A-3	(d) PM concentration must be at 15 percent O_2, dry basis. Results of this test consist of the average of the three 1-hour or longer runs.

[79 FR 11251, Feb. 27, 2014]

Table 8 to Subpart IIII of Part 60—Applicability of General Provisions to Subpart IIII

[As stated in §60.4218, you must comply with the following applicable General Provisions:]

General Provisions citation	Subject of citation	Applies to subpart	Explanation
§60.1	General applicability of the General Provisions	Yes	
§60.2	Definitions	Yes	Additional terms defined in §60.4219.
§60.3	Units and abbreviations	Yes	
§60.4	Address	Yes	
§60.5	Determination of construction or modification	Yes	
§60.6	Review of plans	Yes	
§60.7	Notification and Recordkeeping	Yes	Except that §60.7 only applies as specified in §60.4214(a).
§60.8	Performance tests	Yes	Except that §60.8 only applies to stationary CI ICE with a displacement of (≥30 liters per cylinder and engines that are not certified.
§60.9	Availability of information	Yes	
§60.10	State Authority	Yes	
§60.11	Compliance with standards and maintenance requirements	No	Requirements are specified in subpart IIII.
§60.12	Circumvention	Yes	
§60.13	Monitoring requirements	Yes	Except that §60.13 only applies to stationary CI ICE with a displacement of (≥30 liters per cylinder.
§60.14	Modification	Yes	
§60.15	Reconstruction	Yes	
§60.16	Priority list	Yes	

General Provisions citation	Subject of citation	Applies to subpart	Explanation
§60.17	Incorporations by reference	Yes	
§60.18	General control device requirements	No	
§60.19	General notification and reporting requirements	Yes	

Indiana Department of Environmental Management
Office of Air Quality

Addendum to the Technical Support Document (ATSD) for a Part 70 Significant Source Modification and Significant Permit Modification

Source Background and Description

Source Name:	**Cleveland-Cliffs Burns Harbor, LLC**
Source Location:	**250 W US Highway 12, Burns Harbor, Indiana 46304**
County:	**Porter (Westchester Township)**
SIC Code:	**3312 (Steel Works, Blast Furnaces & Rolling Mills)**
Operation Permit No.:	**T127-40675-00001**
Operation Permit Issuance Date:	**May 31, 2019**
Significant Source Modification No.:	**127-43979-00001**
Significant Permit Modification No.:	**127-44000-00001**
Permit Reviewer:	**Wilfredo de la Rosa**

On June 17, 2021, the Office of Air Quality (OAQ) had a notice posted on IDEM's website (https://www.in.gov/idem/public-notices/), stating that Cleveland-Cliffs Burns Harbor, LLC had applied for a Significant Source Modification and Significant Permit Modification relating to the incorporation into the operating permit of the requirements of the Consent Decree approved and entered on April 1, 2020 by the United States District Court for the Northern District of Indiana, Hammond Division in the matter of United States of America, et al v. ArcelorMittal USA, LLC et al, Civil action 2:19-cv-00179.. The notice also stated that the OAQ proposed to issue a Significant Permit Modification for this operation and provided information on how the public could review the proposed permit and other documentation. Finally, the notice informed interested parties that there was a period of thirty (30) days to provide comments on whether or not this permit should be issued as proposed.

Comments and Responses

On July 15, 2021, the United States Environmental Protection Agency submitted comments to IDEM, OAQ on the draft Significant Source Modification and Significant Permit Modification.

The Technical Support Document (TSD) is used by IDEM, OAQ for historical purposes. IDEM, OAQ does not make any changes to the original TSD, but the Permit will have the updated changes. The comments and revised permit language are provided below with deleted language as ~~strikeouts~~ and new language **bolded**.

Comment 1:

Section D.12.2(b) incorporates consent decree requirements for the iron beaching partial enclosure. To ensure that the enclosure and carbon dioxide gas suppression system requirements continue to apply after the termination of the consent decree, please revise the draft permit condition so that it also identifies the associated permit content requirements and underlying permit authority, instead of only the time-limited consent decree authority. Example language (in bold) could include:

> Pursuant to **[cite relevant state statutory or regulatory authority], SSM 127-43979-00001, and as originated in** the Consent Decree 2:19-cv-00179 issued on April 1, 2020, all iron beaching events conducted with the use of the existing partial enclosures shall include the use of a carbon dioxide gas suppression system to ensure compliance with applicable visible emission limits.

Response to Comment 1:

IDEM, OAQ considers that the permit format clearly establishes the statutory or regulatory authority for permit conditions in the text, condition titles, and subsection headings. No changes were made as a result of this element of the comment.

IDEM, OAQ, however, agrees that the phrase "Pursuant to the Consent Decree …" could be open to misinterpretation following the termination of the Consent Decree. Condition D.12.2(b) has been revised as follows:

(b) Pursuant to **SSM 127-43979-00001 and as originated in** the Consent Decree 2:19-cv-00179 issued on April 1, 2020, all iron beaching events conducted with the use of the existing partial enclosures shall include the use of a carbon dioxide gas suppression system to ensure compliance with applicable visible emission limits.

Comment 2:

Paragraph 15.f.(4) of the consent decree requires the source to submit a permit application to address the operational requirements in paragraph 15.f.(1). Because paragraph 15.f.(1) is predicated on the operational requirements in paragraph 15.f., please revise Section D.12.2(b) of the permit as necessary to clearly include 1) the requirement that the source shall beach iron only with the use of the enclosure, and 2) that this requirement (as well as the gas suppression system) is necessary to ensure compliance with the applicable visible emission limits and fugitive particulate control plan requirements that apply outside the enclosure.

In addition, to ensure that the permit clearly identifies these associated compliance requirements with the underlying standards, please consider referencing the specific permit conditions that address these applicable visible emission limits and fugitive particulate control plan requirements.

Response to Comment 2:

IDEM OAQ agrees with the recommendation, since a more explicit description clarifies the requirements of the Consent Decree. The permit has been revised as follows:

(b) Pursuant to **SSM 127-43979-00001 and as originated in** the Consent Decree 2:19-cv-00179 issued on April 1, 2020, all iron beaching events **shall be** conducted **only** with the use of the existing partial enclosures **and** shall include the use of a carbon dioxide gas suppression system to ensure compliance with applicable visible emission limits **and fugitive particulate control plan requirements stipulated in Conditions C.2 and D.12.1(a) respectively**.

Comment 3:

Section E.6.2.(c) identifies the applicable provisions of the Reciprocating Internal Combustion Engines MACT, 40 CFR Part 63, Subpart ZZZZ. To ensure that these conditions are consistent with the vacatur of §63.6640(f)(2)(ii) - (iii) (and as described in the technical support document), please list the rule citations grouped in paragraph (7) separately in order to make it clear that only §63.6640(f)(2)(i) applies. Currently paragraph (7) includes 40 CFR 63.6640(f)(1) through (f)(3).

Response to Comment 3:

IDEM OAQ agrees with the recommendation for clarity. The permit has been revised as follows:

(7) 40 CFR 63.6640(f)(1), ~~through (f)(3)~~**(f)(2)(i) and f(3)**

Comment 4:

Section E.14.2 identifies the applicable provisions of the Compression Ignition Internal Combustion Engines NSPS, 40 CFR Part 60, Subpart IIII. To ensure that these conditions are consistent with the vacatur of §60.4211(f)(2)(ii) - (iii) (and as described in the technical support document), please list the rule citations grouped in paragraph (8) separately in order to make it clear that only §60.4211(f)(2)(i) applies. Currently paragraph (8) includes 40 CFR 60.4211(a),(c),(f), and (g)(3).

Response to Comment 4:

IDEM OAQ agrees with the recommendation for clarity. The permit has been revised as follows:

(8) 40 CFR 60.4211(a),(c),(f)**(2)(i)**, and (g)(3)

IDEM Contact

(a) If you have any questions regarding this permit, please contact Wilfredo de la Rosa, 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) 232-8422 or (800) 451-6027, and ask for Wilfredo de la Rosa or (317) 232-8422.

(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 Air Permits page on the Internet at: https://www.in.gov/idem/airpermit/public-participation/; and the Citizens' Guide to IDEM on the Internet at: https://www.in.gov/idem/resources/citizens-guide-to-idem/.

Indiana Department of Environmental Management
Office of Air Quality

Technical Support Document (TSD) for a Part 70 Significant Source Modification and Significant Permit Modification

Source Description and Location

Source Name:	**Cleveland-Cliffs Burns Harbor, LLC**
Source Location:	**250 West US Highway 12, Burns Harbor, IN 46304**
County:	**Porter (Westchester Township)**
SIC Code:	**3312 (Steel Works, Blast Furnaces including Coke Ovens, and Rolling Mills**
Operation Permit No.:	**T 127-40675-00001**
Operation Permit Issuance Date:	**May 31, 2019**
Significant Source Modification No.:	**127-43979-00001**
Significant Permit Modification No.:	**127-44000-00001**
Permit Reviewer:	**Wilfredo de la Rosa**

Source Definition

This steel works operation consists of a primary source, Cleveland-Cliffs Burns Harbor, LLC (Plant ID 127-00001), located at 250 West U.S. Highway 12, Burns Harbor, Indiana, and its contractors. The contractors listed below were issued separate Part 70 operating permits solely for administrative purposes:

(a) Indiana Flame Service (Plt ID 127-00098)

(b) Metal Services, LLC dba Phoenix Services, LLC (Plt ID 127-00026)

(c) Mid-Continent Coal and Coke (Plt ID 127-00108)

(d) Oil Technology, Inc. (Plt ID 127-00074)

(e) SMS Mill Services, LLC (Plt ID 127-00076)

(f) Beemsterboer Slag Corp (Plt ID 127-00116)

(g) Fritz Enterprises, Inc (Plt ID 127-00123)

(h) PSC Metals, Inc. (Plt ID 127-00118)

Existing Approvals

The source was issued Part 70 Operating Permit Renewal No. 127-40675-00001 on May 31, 2019. The source has since received the following approval:

(a) Administrative Amendment No. 127-43739-00001, issued on February 12, 2021.

County Attainment Status

The source is located in Porter County.

Pollutant	Designation
SO_2	Cannot be classified for the area bounded on the north by Lake Michigan; on the west by the Lake County and Porter County line; on the south by I-80 and I-90; and on the east by the LaPorte County and Porter County line. The remainder of Porter County is better than national standards.
CO	Unclassifiable or attainment effective November 15, 1990.
O_3	Serious nonattainment effective September 23, 2019, for the 2008 8-hour ozone standard.
O_3	Unclassifiable or attainment effective August 3, 2018, for the 2015 8-hour ozone standard.
$PM_{2.5}$	Unclassifiable or attainment effective April 15, 2015, for the 2012 annual $PM_{2.5}$ standard.
$PM_{2.5}$	Unclassifiable or attainment effective December 13, 2009, for the 2006 24-hour $PM_{2.5}$ standard.
PM_{10}	Unclassifiable effective November 15, 1990.
NO_2	Unclassifiable or attainment effective January 29, 2012, for the 2010 NO_2 standard.
Pb	Unclassifiable or attainment effective December 31, 2011, for the 2008 lead standard.

(a) Ozone Standards
U.S. EPA, in the Federal Register Notice 84 FR 44238 dated August 23, 2019, designated Porter County as serious nonattainment for the 2008 8-hour ozone standard effective September 23, 2019. On November 14, 2019, the Environmental Rules Board issued an emergency rule adopting the U.S. EPA's designation. Volatile organic compounds (VOC) and Nitrogen Oxides (NOx) are regulated under the Clean Air Act (CAA) for the purposes of attaining and maintaining the National Ambient Air Quality Standards (NAAQS) for ozone. Therefore, VOC and NOx emissions are considered when evaluating the rule applicability relating to ozone. Therefore, VOC and NOx emissions were evaluated pursuant to the requirements of Emission Offset, 326 IAC 2-3.

(b) $PM_{2.5}$
Porter County has been classified as attainment for $PM_{2.5}$. Therefore, direct $PM_{2.5}$, and SO_2 emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2.

(c) Other Criteria Pollutants
Porter 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, it is considered one (1) of the twenty-eight (28) listed source categories, as specified in 326 IAC 2-2-1(ff)(1), 326 IAC 2-3-2(g), or 326 IAC 2-7-1(22)(B). Therefore, fugitive emissions are counted toward the determination of PSD, Emission Offset, and Part 70 Permit applicability.

The fugitive emissions of hazardous air pollutants (HAP) are counted toward the determination of Part 70 Permit applicability and source status under Section 112 of the Clean Air Act (CAA).

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. If the control equipment has been determined to be integral, the table reflects the potential to emit (PTE) after consideration of the integral control device.

	Source-Wide Emissions Prior to Modification (ton/year)								
	PM[1]	**PM_{10}[1]**	**$PM_{2.5}$[1, 2]**	**SO_2**	**NO_X**	**VOC**	**CO**	**Single HAP[3]**	**Total HAPs**
Total PTE of Entire Source Including Fugitives*	>100	>100	>100	>100	>100	>100	>100	>10	>25
Title V Major Source Thresholds	NA	100	100	100	50	50	100	10	25
PSD Major Source Thresholds	100	100	100	100	NA	NA	100	--	--
Emission Offset Major Source Thresholds	---	NA	NA	NA	50	50	NA	--	--

[1]Under the Part 70 Permit program (40 CFR 70), PM_{10} and $PM_{2.5}$, not particulate matter (PM), are each considered as a "regulated air pollutant."

[2]$PM_{2.5}$ listed is direct $PM_{2.5}$.

[3]Single highest source-wide HAP

*Fugitive HAP emissions are always included in the source-wide emissions.

(a) This existing source is a major stationary source, under PSD (326 IAC 2-2), because a PSD regulated pollutant(s), PM, PM10, PM2.5, SO2, 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(s), is emitted at a rate of 50 tons per year or more.

(c) This existing source is a major source of HAP, 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.

(d) These emissions are based on the TSD of Part 70 Renewal No. 127-40675-00001, issued on May 31, 2019.

The Permittee has agreed that the source is major for Part 70 Permits, 326 IAC 2-7, and Hazardous Air Pollutants, 326 IAC 20. No source-wide calculations of unrestricted potential to emit have been done for all regulated pollutants.

Emission Units and Pollution Control Equipment Constructed Under the Provisions of 326 IAC 2-1.1-3 (Exemptions)

As part of this permitting action, the source requested to add the following emission unit constructed under the provisions of 326 IAC 2-1.1-3 (Exemptions):

(a) One (1) diesel-fueled CI Sanitary Secondary Waste Treatment Plant emergency generator, identified as TPGEN, constructed in 2021, with rated capacity of 619 Horsepower (HP).

This emission unit is identified under 326 IAC 2-1.1-3(e)(25)(B)(ii) (Exemptions).

The diesel-fueled emergency generator, identified as TPGEN is identified under 326 IAC 2-1.1-3(e)(25)(B)(ii)(Exemptions – Emergency Diesel generators not exceeding one thousand six hundred (1,600) horsepower) and the addition of the emission unit did not require the source to transition to a higher operation permit level. Therefore, pursuant to 326 IAC 2-1.1-3(e), the modification approval requirements under 326 IAC 2-7-10.5, including the requirement to submit an application, do not apply to the emission unit.

Description of Proposed Modification

The Office of Air Quality (OAQ) has reviewed an application, submitted by Cleveland-Cliffs Burns Harbor, LLC on April 12, 2021, relating to the incorporation of the requirements from the Consent Decree approved and entered on April 1, 2020 by the United States District Court for the Northern District of Indiana, Hammond Division, in the matter of United States of America, et al. v. ArcelorMittal USA LLC et al., Civil action 2:19-cv-00179 as shown below:

(a) No later than 12 months following the effective date of the Consent Decree, ArcelorMittal Burns Harbor shall beach iron, when beaching is necessary, only with the use of an existing or new partial or total enclosures that will ensure that opacity outside of this enclosure complies with the applicable visible emission limits and fugitive particulate control plan requirements in the ArcelorMittal Burns Harbor Title V permit.

(1) ArcelorMittal Burns Harbor shall use a carbon dioxide gas suppression system during all beaching events with the use of the existing or new partial or total enclosures;
(2) ArcelorMittal Burns Harbor shall perform Method 9 readings during the first ten beaching events conducted with the use of the existing or new partial or total enclosures;
(3) ArcelorMittal Burns Harbor shall submit the results of the Method 9 readings to EPA and IDEM with the applicable quarterly report required under Section VIII (Reporting Requirements);
(4) No later than 12 months following completion of the monitoring required in (2), ArcelorMittal Burns Harbor shall submit an application to IDEM to modify its federally-enforceable non-Title V Permit such that ArcelorMittal Burns Harbor is required to operate as specified in (1) to ensure compliance with applicable visible emission limits.

Note: ArcelorMittal Burns Harbor has been acquired by Cleveland-Cliffs Burns Harbor

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 2-1.1-1(12), Potential to Emit is defined as "the maximum capacity of a stationary source or emission unit to emit any air pollutant under its physical and operational design. Any physical or operational limitation on the capacity of a source to emit an air pollutant, including air pollution control equipment and restrictions on hours of operation or type or amount of material combusted, stored, or processed shall be treated as part of its design if the limitation is enforceable by the U. S. EPA, IDEM, or the appropriate local air pollution control agency."

The following table shows the PTE of the exempt emergency generator that is being added to the permit. It does not affect the determination of the appropriate permit level under 326 IAC 2-7-10.5. This table reflects the PTE before controls. If the control equipment has been determined to be integral, the table reflects the potential to emit (PTE) after consideration of the integral control device.

	PTE Before Controls of the New Emission Units (ton/year)								
Process / Emission Unit	**PM**	**PM_{10}**	**$PM_{2.5}$[1]**	**SO_2**	**NO_X**	**VOC**	**CO**	**Single HAP[2]**	**Total HAPs**
Emergency generator, TPGEN	0.11	0.06	0.06	0.06	2.01	0.11	0.85	0.0008 Benzene	0.002
Total PTE Before Controls of the New Emission Units:	**0.11**	**0.06**	**0.06**	**0.06**	**2.01**	**0.11**	**0.85**	**0.0008 Benzene**	**0.002**

[1]$PM_{2.5}$ listed is direct $PM_{2.5}$.
[2]Single highest HAP.

Appendix A of this TSD reflects the detailed potential emissions of the modification.

(a) Approval to Construct

Pursuant to 326 IAC 2-7-10.5(b) and (k), a Significant Source Modification is required because this modification incorporates the control requirements and emission limitations that are set forth in federal consent decree that is entered into for the purpose of resolving alleged violations of 326 IAC 6-4 (Fugitive Dust Emissions) and 326 IAC 5-1-2 (Opacity Limitations) in the Iron Beaching process.

(b) Approval to Operate

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 does not qualify as a Minor Permit Modification or as an Administrative Amendment.

Permit Level Determination – PSD and Emission Offset Emissions Increase

There are no significant emissions increase involved in this modification.

PTE of the Entire Source After Issuance of the Part 70 Modification

The table below summarizes the after issuance source-wide potential to emit, reflecting all limits, of the emission units. Any control equipment is considered federally enforceable only after issuance of the Part 70 source and permit modification, and only to the extent that the effect of the control equipment is made practically enforceable in the permit. If the control equipment has been determined to be integral, the table reflects the potential to emit (PTE) after consideration of the integral control device.

	Source-Wide Emissions After Issuance (ton/year)								
	PM[1]	**PM_{10}[1]**	**$PM_{2.5}$[1, 2]**	**SO_2**	**NO_X**	**VOC**	**CO**	**Single HAP[3]**	**Total HAPs**
Total PTE of Entire Source Including Fugitives*	>100	>100	>100	>100	>100	>100	>100	>10	>25
Title V Major Source Thresholds	NA	100	100	100	50	50	100	10	25
PSD Major Source Thresholds	100	100	100	100	100	100	100	--	--
Emission Offset Major Source Thresholds	---	NA	NA	NA	50	50	NA	--	--

[1]Under the Part 70 Permit program (40 CFR 70), PM_{10} and $PM_{2.5}$, not particulate matter (PM), are each considered as a "regulated air pollutant."

[2]$PM_{2.5}$ listed is direct $PM_{2.5}$.

[3]Single highest source-wide HAP

*Fugitive HAP emissions are always included in the source-wide emissions.

(a) This existing major PSD stationary source will continue to be major under 326 IAC 2-2 because at least one pollutant, PM, PM10, PM2.5, SO2, and CO, has emissions equal to or greater than the PSD major source threshold.

(b) This existing major Emission Offset stationary source will continue to be major under 326 IAC 2-3 because the emissions of the nonattainment pollutant(s), NOx, and VOC, will continue to be equal to or greater than the Emission Offset major source thresholds.

(a) This existing major source of HAP will continue to be a major source of HAP, as defined in 40 CFR 63.2, because HAP emissions will continue to be equal to or greater than ten (10) tons per year for any single HAP and/or equal to or greater than twenty-five (25) tons per year of a combination of HAPs. Therefore, this source is a major source under Section 112 of the Clean Air Act (CAA).

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 diesel-fueled emergency generator, identified as TPGEN, is subject to the New Source Performance Standards for Stationary Compression Ignition Internal Combustion Engines, 40 CFR 60, Subpart IIII and 326 IAC 12, because it is a stationary compression ignition internal combustion engine constructed after July 11, 2005, manufactured after April 1, 2006 and is not a fire pump engine. The engine subject to his rule includes the following:

(1) One (1) diesel-fueled CI Sanitary Secondary Waste Treatment Plant emergency generator, identified as TPGEN), constructed in 2021, with rated capacity of 619 Horsepower (HP).

The diesel-fueled emergency generator, identified as TPGEN, is subject to the following portions of Subpart IIII.

(1) 40 CFR 60.4200(a)(2)(i) and (a)(4)
(2) 40 CFR 60.4202(a)(2)
(3) 40 CFR 60.4205(b
(4) 40 CFR 60.4206

(5) 40 CFR 60.4207(b)
(6) 40 CFR 60.4208(a)
(7) 40 CFR 60.4209(a)
(8) 40 CFR 60.4211(a),(c),(f), and (g)(3)
(9) 40 CFR 60.4212(a)
(10) 40 CFR 60.4214(b), and (d)
(11) 40 CFR 60.4218
(12) 40 CFR 60.4219
(13) Table 8 to Subpart IIII of Part 60

The requirements of 40 CFR Part 60, Subpart A – General Provisions, which are incorporated as 326 IAC 12-1, apply to the diesel-fueled emergency generator, identified as TPGEN, except as otherwise specified in 40 CFR 60, Subpart IIII.

On May 4, 2016, the U.S. Court of Appeals for the D.C. Circuit issued a mandate vacating paragraphs 40 CFR 60.4211(f)(2)(ii) - (iii) of NSPS Subpart IIII. Therefore, these paragraphs no longer have any legal effect and any engine that is operated for purposes specified in these paragraphs becomes a non-emergency engine and must comply with all applicable requirements for a non-emergency engine.

For additional information, please refer to the USEPA's Guidance Memo:
https://www.epa.gov/sites/production/files/2016-06/documents/ricevacaturguidance041516.pdf

Since the federal rule has not been updated to remove these vacated requirements, the text below shows the vacated language as ~~strikethroug~~h text. At this time, IDEM is not making any changes to the permit's attachment due to this vacatur. However, the permit will not reference the vacated requirements, as applicable.

40 CFR 60.4211(f)(2) You may operate your emergency stationary ICE for any combination of the purposes specified in paragraph~~s~~ (f)(2)(i) ~~through (iii)~~ of this section for a maximum of 100 hours per calendar year. Any operation for non-emergency situations as allowed by paragraph (f)(3) of this section counts as part of the 100 hours per calendar year allowed by this paragraph (f)(2).

(i) Emergency stationary ICE may be operated for maintenance checks and readiness testing, provided that the tests are recommended by federal, state or local government, the manufacturer, the vendor, the regional transmission organization or equivalent balancing authority and transmission operator, or the insurance company associated with the engine. The owner or operator may petition the Administrator for approval of additional hours to be used for maintenance checks and readiness testing, but a petition is not required if the owner or operator maintains records indicating that federal, state, or local standards require maintenance and testing of emergency ICE beyond 100 hours per calendar year.

~~(ii) Emergency stationary ICE may be operated for emergency demand response for periods in which the Reliability Coordinator under the North American Electric Reliability Corporation (NERC) Reliability Standard EOP-002-3, Capacity and Energy Emergencies (incorporated by reference, see §60.17), or other authorized entity as determined by the Reliability Coordinator, has declared an Energy Emergency Alert Level 2 as defined in the NERC Reliability Standard EOP-002-3.~~

~~(iii) Emergency stationary ICE may be operated for periods where there is a deviation of voltage or frequency of 5 percent or greater below standard voltage or frequency.~~

(b) 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):

(c) The diesel-fueled emergency generator, identified as TPGEN, is subject to the National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines, 40 CFR 63, Subpart ZZZZ which is incorporated by reference as 326 IAC 20-82, because it is considered a new (construction commenced after December 19, 2002) stationary reciprocating internal combustion engine (RICE) at a major source of hazardous air pollutants (HAP). The engine subject to this rule includes the following:

(1) One (1) diesel-fueled CI Sanitary Secondary Waste Treatment Plant emergency generator, identified as TPGEN), constructed in 2021, with rated capacity of 619 Horsepower (HP).

The diesel-fueled emergency generator, identified as TPGEN, is subject to the following portions of Subpart ZZZZ:

(1) 40 CFR 63.6580
(2) 40 CFR 63.6585(a) and (b)
(3) 40 CFR 63.6590(a)(2)(i) and (b)(1)(i)
(4) 40 CFR 63.6600(c)
(5) 40 CFR 63.6604(c)
(6) 40 CFR 63.6605
(7) 40 CFR 63.6640(f)(1) through (f)(3)
(8) 40 CFR 63.6645(f)

The requirements of 40 CFR Part 63, Subpart A – General Provisions, which are incorporated as 326 IAC 20-1, apply to the diesel-fueled emergency generator, identified as TPGEN except as otherwise specified in 40 CFR 63, Subpart ZZZZ.

On May 4, 2016, the U.S. Court of Appeals for the D.C. Circuit issued a mandate vacating paragraphs 40 CFR 63.6640(f)(2)(ii) - (iii) of NESHAP Subpart ZZZZ. Therefore, these paragraphs no longer have any legal effect and any engine that is operated for purposes specified in these paragraphs becomes a non-emergency engine and must comply with all applicable requirements for a non-emergency engine.

For additional information, please refer to the USEPA's Guidance Memo:
https://www.epa.gov/sites/production/files/2016-06/documents/ricevacaturguidance041516.pdf

Since the federal rule has not been updated to remove these vacated requirements, the text below shows the vacated language as ~~strikethrough~~ text. At this time, IDEM is not making any changes to the permit's attachment due to this vacatur. However, the permit will not reference the vacated requirements, as applicable.

40 CFR 63.6640(f)(2) You may operate your emergency stationary RICE for any combination of the purposes specified in paragraph~~s~~ (f)(2)(i) ~~through (iii)~~ of this section for a maximum of 100 hours per calendar year. Any operation for non-emergency situations as allowed by paragraphs (f)(3) and (4) of this section counts as part of the 100 hours per calendar year allowed by this paragraph (f)(2).

(i) Emergency stationary RICE may be operated for maintenance checks and readiness testing, provided that the tests are recommended by federal, state or local government, the manufacturer, the vendor, the regional transmission organization or equivalent balancing authority and transmission operator, or the insurance company associated with the engine. The owner or operator may petition the Administrator for approval of additional hours to be used for maintenance checks and readiness testing, but a petition is not required if the owner or operator maintains records indicating that federal, state, or local standards require maintenance and testing of emergency RICE beyond 100 hours per calendar year.

~~(ii) Emergency stationary RICE may be operated for emergency demand response for periods in which the Reliability Coordinator under the North American Electric Reliability Corporation (NERC) Reliability Standard EOP-002-3, Capacity and Energy Emergencies (incorporated by reference, see §63.14), or other authorized entity as determined by the Reliability Coordinator, has declared an Energy Emergency Alert Level 2 as defined in the NERC Reliability Standard EOP-002-3.~~

~~(iii) Emergency stationary RICE may be operated for periods where there is a deviation of voltage or frequency of 5 percent or greater below standard voltage or frequency.~~

(d) There are no other 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):

(a) Pursuant to 40 CFR 64.2, Compliance Assurance Monitoring (CAM) is applicable to each 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 regulated pollutant involved;

(2) is subject to an emission limitation or standard for that pollutant (or a surrogate thereof); and

(3) uses a control device, as defined in 40 CFR 64.1, to comply with that emission limitation or standard.

(b) Pursuant to 40 CFR 64.2(b)(1)(i), emission limitations or standards proposed after November 15, 1990 pursuant to a NSPS or NESHAP under Section 111 or 112 of the Clean Air Act are exempt from the requirements of CAM. Therefore, an evaluation was not conducted for any emission limitations or standards proposed after November 15, 1990 pursuant to a NSPS or NESHAP under Section 111 or 112 of the Clean Air Act.

Based on this evaluation, the requirements of 40 CFR Part 64, CAM, are not applicable to any of the new units as part of this modification.

State Rule Applicability - Entire Source

Due to this modification, state rule applicability has been reviewed as follows:

326 IAC 2-2 (PSD) and 326 IAC 2-3 (Emission Offset)
PSD and Emission Offset applicability is discussed under the PTE of the Entire Source After Issuance of the Part 70 Modification of this document.

326 IAC 2-4.1 (Major Sources of Hazardous Air Pollutants (HAP))
The provisions of 326 IAC 2-4.1 apply to any owner or operator who constructs or reconstructs a major source of hazardous air pollutants (HAP), as defined in 40 CFR 63.41, after July 27, 1997, unless the major source has been specifically regulated under or exempted from regulation under a NESHAP that was issued pursuant to Section 112(d), 112(h), or 112(j) of the Clean Air Act (CAA) and incorporated under 40 CFR 63. On and after June 29, 1998, 326 IAC 2-4.1 is intended to implement the requirements of Section 112(g)(2)(B) of the Clean Air Act (CAA).

The operation of the new emergency generator, identified as TPGEN, 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)
This source is subject to the requirements of 326 IAC 2-6 (Emission Reporting), since it is required to have an operating permit under 326 IAC 2-7, Part 70 Permit Program, is located in Porter County, and emits NOx, and VOC into the ambient air at levels equal to or greater than twenty-five (25) tons per year. Pursuant to 326 IAC 2-6-3(a)(1), the Permittee shall submit, by July 1, an annual emission statement covering the previous calendar 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 5-1 (Opacity Limitations)
This source is subject to the opacity limitations specified in 326 IAC 5-1-2(1).

326 IAC 6-4 (Fugitive Dust Emissions Limitations)
Pursuant to 326 IAC 6-4 (Fugitive Dust Emissions Limitations), the source 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.

326 IAC 6-5 (Fugitive Particulate Matter Emission Limitations)
This source was constructed after December 13, 1985 and has potential fugitive particulate emissions of twenty-five (25) tons per year or more. Pursuant to 326 IAC 6-5 (Fugitive Particulate Matter Emission Limitations), fugitive particulate matter emissions shall be controlled according to the Fugitive Dust Control Plan that is included as Attachment A to the permit.

326 IAC 6.5 (Particulate Matter Limitations Except Lake County)
Pursuant to 326 IAC 6.5-1-1(a), this source (located in Porter County) is not subject to the requirements of 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 6.8 (Particulate Matter Limitations for Lake County)
Pursuant to 326 IAC 6.8-1-1(a), this source (located in Porter County) is not subject to the requirements of 326 IAC 6.8 because it is not located in Lake County.

State Rule Applicability – Individual Facilities

Due to this modification, state rule applicability has been reviewed as follows:

326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes)
Pursuant to 326 IAC 6-3-1.5(2), the diesel-fueled emergency generator, identified as TPGEN, is not subject to the requirements of 326 IAC 6-3, since it is not a manufacturing process because liquid fuel is not considered a part of the process weight as defined in 326 IAC 1-2-59(a).

326 IAC 7-1.1 Sulfur Dioxide Emission Limitations
The diesel-fueled emergency generator, identified as TPGEN, is not subject to 326 IAC 326 IAC 7-1.1 because it has a potential to emit (or limited potential to emit) sulfur dioxide (SO2) of less than 25 tons per year or 10 pounds per hour.

326 IAC 8-1-6 (VOC Rules: General Reduction Requirements for New Facilities)
Even though the diesel-fueled emergency generator, identified as TPGEN, was constructed after January 1, 1980, it is not subject to the requirements of 326 IAC 8-1-6 because its unlimited VOC potential emissions are less than twenty-five (25) tons per year.

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:

Testing Requirements:

IDEM OAQ has determined that testing of the partial enclosure and carbon dioxide suppressant system in the iron beaching operations is not required at this time to determine compliance with the fugitive emission limits. IDEM has the authority to require testing at a later time if necessary to demonstrate compliance with any applicable requirement.

The source has completed a valid compliance demonstration conducted by a third party on April 2-8, 2020 in the first ten (10) iron beaching events as mandated in the Consent Decree 2:19-cv-00179 issued on April 1, 2020.

Proposed Changes

As part of this permit approval, the permit may contain new or different permit conditions and some conditions from previously issued permits/approvals may have been corrected, changed, or removed. These corrections, changes, and removals may include Title I 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 (these changes may include Title I changes):

Change 1: Sections A.3 and A.4 have been modified to reflect the change in the descriptive information of the iron beaching operation and to incorporate the new exempt emergency generator:

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:

****

(l) Fugitive Dust Emissions Operations

****

(3) Blast Furnace operations:

(A) C Casthouse Slag Pit fugitive emissions.

(B) D Casthouse Slag Pit fugitive emissions.

(C) Beach Iron operation fugitive emissions, **with existing partial enclosure and carbon dioxide suppressant system.**

(D) Ore Dock Loading/Unloading fugitive emissions.

(E) Ore Field fugitive emissions.

(F) Two (2) Stacker/Reclaimers in the material handling portion of the Blast Furnace that stack and reclaim the ores.

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

Cleveland-Cliffs Burns Harbor LLC (Plant ID 127-00001) also includes the following insignificant activities which are specifically regulated, as defined in 326 IAC 2-7-1(21):

****

(m) Generators:

****

(8) One (1) diesel-fueled CI Sanitary Secondary Waste Treatment Plant emergency generator, identified as TPGEN, constructed in 2021, with a rated capacity of 619 horsepower (HP).

[Under 40 CFR 60, Subpart IIII, this emergency diesel-fueled generator is considered an affected facility]
[Under 40 CFR 63, Subpart ZZZZ, this emergency diesel-fueled generator is considered an affected facility]

Change 2: Section D.12 has been modified to incorporate the Consent Decree requirements for iron beaching operation:

SECTION D.12 EMISSIONS UNIT OPERATION CONDITIONS

Emission Unit Description:

(l) Fugitive Dust Emissions Operations

****

(3) Blast Furnace operations:

****

(C) Beach Iron operation fugitive emissions, **with existing partial enclosure and carbon dioxide suppressant system..**

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

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

****

D.12.2 Operation Condition

(a) Pursuant to CP 127-2725-00001, issued January 28, 1994, for Coke Battery 2, the 8,600 feet of the paved slab haul roads shall be maintained in good condition. The PM emissions (EP420-2016) shall not exceed 5.4 lbs/Vehicle Miles Traveled (VMT). The PM10 emissions shall not exceed 1.2 lbs/ VMT.

(b) Pursuant to the Consent Decree 2:19-cv-00179 issued on April 1, 2020, all iron beaching events conducted with the use of the existing partial enclosures shall include the use of a carbon dioxide gas suppression system to ensure compliance with applicable visible emission limits.

Change 3: Section E.6 has been modified to incorporate the new emergency generator, identified as TPGEN and the governing NESHAP provisions:

SECTION E.6 NESHAP

Emission Unit Description:

(m) Generators:

****

(8) One (1) diesel-fueled CI Sanitary Secondary Waste Treatment Plant emergency generator, identified as TPGEN, constructed in 2021, with a rated capacity of 619 horsepower (HP).

[Under 40 CFR 60, Subpart IIII, this emergency diesel-fueled generator is considered an affected facility]
[Under 40 CFR 63, Subpart ZZZZ, this emergency diesel-fueled generator is considered an affected facility]

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

National Emissions Standards for Hazardous Air Pollutants [326 IAC 2 7 5(1)]

****

E.6.2 National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines [40 CFR Part 63, Subpart ZZZZ]

****

(c) The Permittee shall comply with the following provisions of 40 CFR Part 63, Subpart ZZZZ (included as Attachment F to the operating permit), for the emergency generator listed at (m)(8):

(1) 40 CFR 63.6580
(2) 40 CFR 63.6585(a) and (b)
(3) 40 CFR 63.6590(a)(2)(i) and (b)(1)(i)
(4) 40 CFR 63.6600(c)
(5) 40 CFR 63.6604(c)
(6) 40 CFR 63.6605
(7) 40 CFR 63.6640(f)(1) through (f)(3)
(8) 40 CFR 63.6645(f)

Change 4: Section E.14 has been added to incorporate the provisions of NSPS 40 CFR 60, Subpart IIII governing the new exempt emergency generation TPGEN:

SECTION E.14 NSPS

Emission Unit Description:

(m) Generators:

(8) One (1) diesel-fueled CI Sanitary Secondary Waste Treatment Plant emergency generator, identified as TPGEN, constructed in 2021, with a rated capacity of 619 horsepower (HP).

[Under 40 CFR 60, Subpart IIII, this emergency diesel-fueled generator is considered an affected facility]
[Under 40 CFR 63, Subpart ZZZZ, this emergency diesel-fueled generator is considered an affected facility]

(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)]

E.14.1 General Provisions Relating to New Source Performance Standards [40 CFR Part 60, Subpart A] [326 IAC 12-1]

(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, except as otherwise specified in 40 CFR Part 60, Subpart IIII.

(b) Pursuant to 40 CFR 60.19, 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

E.14.2 Standard of Performance for Stationary Compression Ignition Internal Combustion Engines [40 CFR Part 60, Subpart IIII

The Permittee shall comply with the following provisions of 40 CFR Part 60, Subpart IIII (included as Attachment O to the operating permit), which are incorporated by reference as 326 IAC 12, for the emission units listed above:

(1) 40 CFR 60.4200(a)(2)(i) and (a)(4)
(2) 40 CFR 60.4202(a)(2)
(3) 40 CFR 60.4205(b)
(4) 40 CFR 60.4206
(5) 40 CFR 60.4207(b)
(6) 40 CFR 60.4208(a)
(7) 40 CFR 60.4209(a)
(8) 40 CFR 60.4211(a),(c),(f), and (g)(3)
(9) 40 CFR 60.4212(a)
(10) 40 CFR 60.4214(b), and (d)
(11) 40 CFR 60.4218
(12) 40 CFR 60.4219
(13) Table 8 to Subpart IIII of Part 60

Change 5: An additional attachment is included in the table of contents:

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****

Attachment O 40 CFR 60, Subpart IIII – Standards of Performance for Stationary Compression Ignition Internal Combustion Engines.

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 April 12, 2021. Additional information was received on April 16, 2021.

The construction of this proposed modification shall be subject to the conditions of the attached proposed Part 70 Significant Source Modification No. 127-43979-00001. The operation of this proposed modification shall be subject to the conditions of the attached proposed Significant Permit Modification No. 127-44000-00001.

The staff recommends to the Commissioner that the Part 70 significant Source Modification and Significant Permit Modification be approved.

IDEM Contact

(a) If you have any questions regarding this permit, please contact Wilfredo de la Rosa, 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) 232-8422 or (800) 451-6027, and ask for Wilfredo de la Rosa or (317) 232-8422.

(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 Air Permits page on the Internet at: https://www.in.gov/idem/airpermit/public-participation/; and the Citizens' Guide to IDEM on the Internet at: https://www.in.gov/idem/resources/citizens-guide-to-idem/.

Appendix A: Emission Calculations
Emergency Diesel-fueled Generator, TPGEN
Output Rating (>600 HP)
Maximum Input Rate (>4.2 MMBtu/hr)

Company Name: Cleveland-Cliffs Burns Harbor, LLC
Source Address: 250 W US Hwy 12, Burns Harbor, Indiana 46304
Operating Permit Number: T127-40675-00001
Significant Source Modification No.: 127-43979-00001
Significant Permit Modification No.: 127-44000-00001
Reviewer: Wilfredo de la Rosa

Emissions calculated based on output rating (hp)

Output Horsepower Rating (hp)	619.0
Maximum Hours Operated per Year	500
Potential Throughput (hp-hr/yr)	309,500
Sulfur Content (S) of Fuel (% by weight)	0.05

	Pollutant						
	PM*	PM10*	direct PM2.5*	SO2	NOx	VOC	CO
Emission Factor in lb/hp-hr	7.00E-04	4.01E-04	3.89E-04	4.05E-04 *(.00809S)*	1.30E-02 **see below	7.05E-04	5.50E-03
Potential Emission in tons/yr	0.11	0.06	0.06	0.06	2.01	0.11	0.85

*PM emission factor is from AP-42 Table 3.4-1. The PM10 and PM2.5 emission factors for are from AP-42 Table 3.4-2. The PM10 emission factor is the sum of filterable PM10 and condensable particulate. The PM2.5 emission factor is the sum of filterable particulate less than 3 um and condensable particulate. Emission factors in lb/hp-hr were calculated using the emission factor in lb/MMBtu and a brake specific fuel consumption of 7,000 Btu / hp-hr (AP-42 Tables 3.3-1 and 3.4-1).
**NOx emission factor: uncontrolled = 0.024 lb/hp-hr, controlled by ignition timing retard = 0.013 lb/hp-hr

Hazardous Air Pollutants (HAPs)

	Pollutant						
	Benzene	Toluene	Xylene	Formaldehyde	Acetaldehyde	Acrolein	Total PAH HAPs***
Emission Factor in lb/hp-hr****	5.43E-06	1.97E-06	1.35E-06	5.52E-07	1.76E-07	5.52E-08	1.48E-06
Potential Emission in tons/yr	8.41E-04	3.04E-04	2.09E-04	8.55E-05	2.73E-05	8.54E-06	2.30E-04

***PAH = Polyaromatic Hydrocarbon (PAHs are considered HAPs, since they are considered Polycyclic Organic Matter)
****Emission factors in lb/hp-hr were calculated using emission factors in lb/MMBtu and a brake specific fuel consumption of 7,000 Btu / hp-hr (AP-42 Tables 3.3-1 and 3.4-1).

Potential Emission of Total HAPs (tons/yr)	**1.71E-03**

Methodology
Emission Factors are from AP 42 (Supplement B 10/96) Tables 3.4-1 , 3.4-2, 3.4-3, and 3.4-4.
Potential Throughput (hp-hr/yr) = [Output Horsepower Rating (hp)] * [Maximum Hours Operated per Year]
Potential Emission (tons/yr) = [Potential Throughput (hp-hr/yr)] * [Emission Factor (lb/hp-hr)] / [2,000 lb/ton]

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

Eric J. Holcomb
Governor

Bruno L. Pigott
Commissioner

SENT VIA U.S. MAIL: CONFIRMED DELIVERY AND SIGNATURE REQUESTED

TO: Thomas Maicher
Cleveland-Cliffs Burns Harbor, LLC
250 West US Highway 12
Burns Harbor, IN 46304

DATE: August 17, 2021

FROM: Jenny Acker, Branch Chief
Permits Branch
Office of Air Quality

SUBJECT: Final Decision
Title V – Significant Permit Modification
127-44000-00001

This notice is to inform you that a final decision has been issued for the air permit application referenced above.

Our records indicate that you are the contact person for this application. However, if you are not the appropriate person within your company to receive this document, please forward it to the correct person. In addition, the Notice of Decision has been sent to the OAQ Permits Branch Interested Parties List and, if applicable, the Consultant/Agent and/or Responsible Official/Authorized Individual.

The final decision and supporting materials are available electronically; the original signature page is enclosed for your convenience. The final decision and supporting materials available electronically at:

IDEM's online searchable database: http://www.in.gov/apps/idem/caats/ . Choose Search Option **by Permit Number**, then enter permit 44000

and

IDEM's Virtual File Cabinet (VFC): https://www.in.gov/idem. Enter VFC in the search box, then search for permit documents using a variety of criteria, such as Program area, date range, permit #, Agency Interest Number, or Source ID.

If you have technical questions regarding the enclosed documents, please contact the Office of Air Quality, Permits Branch at (317) 233-0178, or toll-free at 1-800-451-6027 (ext. 3-0178), and ask to speak to the permit reviewer who prepared the permit. If you think you have received this document in error, or have difficulty accessing the documents online, please contact Joanne Smiddie-Brush of my staff at 1-800-451-6027 (ext 3-0185), or via e-mail at jbrush@idem.IN.gov.

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Eric J. Holcomb
Governor

Bruno L. Pigott
Commissioner

August 17, 2021

TO: Westchester Public Library – Hageman Branch

From: Jenny Acker, Branch Chief
Permits Branch
Office of Air Quality

Subject: **Important Information for Display Regarding a Final Determination**

Applicant Name: Cleveland-Cliffs Burns Harbor, LLC
Permit Number: 127-44000-00001

You previously received information to make available to the public during the public comment period of a draft permit. Enclosed is a copy of the final decision and supporting materials for the same project. Please place the enclosed information along with the information you previously received. To ensure that your patrons have ample opportunity to review the enclosed permit, **we ask that you retain this document for at least 60 days.**

The applicant is responsible for placing a copy of the application in your library. If the permit application is not on file, or 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.

Enclosures
Final Library 1/9/2017

Mail Code 61-53

IDEM Staff	KBOURQUE 8/17/2021 Cleveland-Cliffs Burns Harbor LLC 127-44000-00001 (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**

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2		Jean Louis Muller Vice President of Operations Cleveland-Cliffs Burns Harbor LLC 250 W US Hwy 12 Burns Harbor IN 46304 *(RO CAATS)*									
3		Westchester Public Library - Hageman Memorial 100 Francis St Porter IN 46304 *(Library)*									
4		Porter County Board of Commissioners 155 Indiana Ave, Ste 205 Valparaiso IN 46383 *(Local Official)*									
5		Porter County Health Department 155 Indiana Ave, Suite 104 Valparaiso IN 46383-5502 *(Health Department)*									
6		Mr. Ed Dybel 900 Parker Place, Suite A Schererville IN 46325-1482 *(Affected Party)*									
7		Mr. Joseph Virgil 128 Kinsale Avenue Valparaiso IN 46385 *(Affected Party)*									
8		Ms. Kathy Luther Northern Regional Planning Commission 6100 Southport Rd Portage IN 46368 *(Affected Party)*									
9		Burns Harbor Town Council 1240 N. Boo Rd Burns Harbor IN 46304 *(Local Official)*									
10		Eric & Sharon Haussman 57 Shore Drive Ogden Dunes IN 46368 *(Affected Party)*									
11		Joseph Hero 11723 S Oakridge Drive St. John IN 46373 *(Affected Party)*									
12		Tom Anderson Save the Dunes 444 Barker Rd Michigan City IN 46360 *(Affected Party)*									
13		Jeff Mayes News-Dispatch 422 Franklin St Michigan City IN 46360 (Affected Party)									
14		Justin Milavec Civil & Environmental Consultants 1230 E Diehl Rd, Ste 200 Naperville IL 60563 *(Consultant)*									
15											

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