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

NOTICE OF 30-DAY PERIOD FOR PUBLIC COMMENT

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

for Indiana Michigan Power Company, dba American Electric Power - Rockport Plant in Spencer County

Significant Permit Modification No.: 147-38415-00020

The Indiana Department of Environmental Management (IDEM) has received an application from Indiana Michigan Power Company, dba American Electric Power - Rockport Plant, located at 2791 N. U.S. Highway 321, Rockport, IN 47635, for a significant modification of its Part 70 Operating Permit issued on August 15, 2014. If approved by IDEM's Office of Air Quality (OAQ), this proposed modification would allow Indiana Michigan Power Company, dba American Electric Power - Rockport Plant to make certain changes at its existing source. Indiana Michigan Power Company, dba American Electric Power - Rockport Plant has applied to install a Selective Catalytic Reduction (SCR) on Unit 2 and a space heater, identified as WHU-11.

The applicant intends to construct and operate new equipment that will emit air pollutants; therefore, the permit contains new or different permit conditions. In addition, some conditions from previously issued permits/approvals have been corrected, changed, or removed. These corrections, changes, and removals may include Title I changes (e.g., changes that add or modify synthetic minor emission limits). The potential to emit regulated air pollutants will continue to be limited to less than the Title V and PSD major threshold levels. IDEM has reviewed this application and has developed preliminary findings, consisting of a draft permit and several supporting documents, which would allow the applicant to make this change.

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

Spencer County Public Librarary
210 Walnut Street
Rockport, IN 47635

and

IDEM Southwest Regional Office
114 South 7th Street
P.O. Box 128
Petersburg, IN 47567-0128

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

A copy of the preliminary findings is also available via IDEM's Virtual File Cabinet (VFC.) Please go to: http://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.

How can you participate in this process?

The date that this notice is published in a newspaper marks the beginning of a 30-day public comment period. If the 30th day of the comment period falls on a day when IDEM offices are closed for business, all comments must be postmarked or delivered in person on the next business day that IDEM is open.

You may request that IDEM hold a public hearing about this draft permit. If adverse comments concerning the **air pollution impact** of this draft permit are received, with a request for a public hearing, IDEM will decide whether or not to hold a public hearing. IDEM could also decide to hold a public meeting instead of, or in addition to, a public hearing. If a public hearing or meeting is held, IDEM will make a separate announcement of the date, time, and location of that hearing or meeting. At a hearing, you would have an opportunity to submit written comments and make verbal comments. At a meeting, you would have an opportunity to submit written comments, ask questions, and discuss any air pollution concerns with IDEM staff.

Comments and supporting documentation, or a request for a public hearing should be sent in writing to IDEM at the address below. If you comment via e-mail, please include your full U.S. mailing address so that you can be added to IDEM's mailing list to receive notice of future action related to this permit. If you do not want to comment at this time, but would like to receive notice of future action related to this permit application, please contact IDEM at the address below. Please refer to permit number SPM 147-38415-00020 in all correspondence.

Comments should be sent to:

Mehul Sura
IDEM, Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251
(800) 451-6027, ask for extension (2 or 3-3838)
Or dial directly: (317) 233-6868
Fax: (317)-232-6749 attn: Mehul Sura
E-mail: msura@IDEM.IN.gov

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

For additional information about air permits and how the public and interested parties can participate, refer to the IDEM Air Permits page on the Internet at: http://www.in.gov/idem/airquality/2356.htm; and the Citizens' Guide to IDEM on the Internet at: http://www.in.gov/idem/6900.htm.

What will happen after IDEM makes a decision?

Following the end of the public comment period, IDEM will issue a Notice of Decision stating whether the permit has been issued or denied. If the permit is issued, it may be different than the draft permit because of comments that were received during the public comment period. If comments are received during the public notice period, the final decision will include a document that summarizes the comments and IDEM's response to those comments. If you have submitted comments or have asked to be added to the mailing list, you will receive a Notice of the Decision. The notice will provide details on how you may appeal IDEM's decision, if you disagree with that decision. The final decision will also be available on the Internet at the address indicated above, at the local library indicated above, at the IDEM Regional Office indicated above, and the IDEM public file room on the 12th floor of the Indiana Government Center North, 100 N. Senate Avenue, Indianapolis, Indiana 46204-2251.

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

for TS

Tripurari P. Sinha, Ph.D., Section Chief
Permits Branch
Office of Air Quality

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*

DRAFT

John LaGrange
Indiana Michigan Power dba AEP- Rockport
2791 North US Highway 231
Rockport, IN 47635

Re: 147-38415-00020
Significant Permit Modification

Dear Mr. LaGrange:

Indiana Michigan Power Company, dba American Electric Power - Rockport Plant was issued Part 70 Operating Permit Renewal No. T147-29841-00020 on August 15, 2014 for a stationary electric utility generating station located at 2791 N. U.S. Highway 321, Rockport, IN 47635. An application requesting changes to this permit was received on April 3, 2017. Pursuant to the provisions of 326 IAC 2-7-12(d), 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 F: 326 IAC 24-3 (Clean Air Interstate Rule (CAIR) NOx Ozone Season Trading requirements)

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: 40 CFR 60, Subpart D, New Source Performance Standards for Standard of Performance for Fossil-Fuel-Fired Steam Generators

Attachment B: 40 CFR 60, Subpart Y, New Source Performance Standard (NSPS): Coal Preparation Plants

Attachment C: 40 CFR 63, Subpart ZZZZ, National Emissions Standard for Hazardous Air Pollutants for stationary Reciprocating Internal Combustion Engines

Attachment D: 40 CFR 63, Subpart DDDDD, National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers and Process Heaters

Attachment E: 40 CFR 63, Subpart UUUUU, National Emission Standards for Hazardous Air Pollutants: Coal- and Oil-Fired Electric Utility Steam Generating Units

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

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

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

DRAFT

the IDEM Permit Guide on the Internet at: http://www.in.gov/idem/5881.htm; and the Citizens' Guide to IDEM on the Internet at: http://www.in.gov/idem/6900.htm.

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

If you have any questions on this matter, please contact Mehul Sura, of my staff, OAQ, 100 North Senate Avenue, MC 61-53 IGCN 1003, Indianapolis, Indiana, 46204-2251 at 317-233-6868 or 1-800-451-6027, and ask for extension 3-6868.

Sincerely,

Tripurari P. Sinha, Ph.D., Section Chief
Permits Branch
Office of Air Quality

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

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

DRAFT

Part 70 Operating Permit Renewal

OFFICE OF AIR QUALITY

Indiana Michigan Power Company, dba American Electric Power - Rockport Plant
2791 N US Highway 231
Rockport, Indiana 47635

(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.: T147-29841-00020 Master Agency Interest ID.: 12,105	
Issued by: Original Signed Tripurari P. Sinha, Ph. D., Section Chief Permits Branch, Office of Air Quality	Issuance Date: August 15, 2014 Expiration Date: August 15, 2019

First Significant Permit Modification No. 147-34888-00020, issued on February 20, 2015
Second Significant Permit Modification No. 147-35785-00020, issued on July 30, 2015
Third Significant Permit Modification No.: 147-36090-00020, issued on November 9, 2015
Third Significant Permit Modification No.: 147-37926-00020, issued on May 1, 2017

Significant Permit Modification No.: 147-38415-00020	
Issued by: Tripurari Sinha, Ph. D., Section Chief, Permits Branch Office of Air Quality	 Issuance Date: Expiration Date: August 15, 2019

TABLE OF CONTENTS

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 electric utility generating station.

Source Address:	2791 N US Highway 231, Rockport, Indiana 47635
General Source Phone Number:	812-649-9171
SIC Code:	4911
County Location:	Spencer
Source Location Status:	Attainment for all criteria pollutants
Source Status:	Part 70 Operating Permit Program Major Source, under PSD Rules Major Source, Section 112 of the Clean Air Act 1 of 28 Source Categories

A.2 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) One (1) pulverized coal opposed wall fired dry bottom boiler, identified as MB1 (Main Boiler 1), with construction commenced in 1977 and completed in 1984, with a design heat input capacity of 12,374 million Btu per hour, with an electrostatic precipitator (ESP) system for control of particulate matter. Low NO_X burners and an overfire air (OFA) system have been installed and Selective Catalytic Reduction permitted in 2015 for NO_X control. No. 2 fuel oil is fired during startup, shutdown, and load stabilization periods. No. 2 fuel oil may also be burned to maintain boiler temperature to ensure boiler availability on short notice, and to maintain boiler temperature required during chemical cleaning. One (1) powdered activated carbon (PAC) injection system, identified as ACI, permitted in 2008, 2010 and 2013, with a unit maximum capacity of injecting 4,000 pounds of halogenated or non-halogenated activated carbon per hour into the exhaust ductwork for Boiler 1 (MB1) from a dedicated silo(s). One (1) dry sorbent injection (DSI) system, identified as DSI-U1, permitted in 2013, with a design injection capacity of 20,000 pounds of Sodium Bicarbonate per hour into the exhaust ductwork for Boiler 1 (MB1). Emissions from Units MB1 and MB2 are exhausted through the common stack, Stack CS012. Continuous emissions monitoring systems (CEMS) for nitrogen oxides (NO_X) and for sulfur dioxide (SO_2) and a continuous opacity monitoring (COM) system are located on the common stack.

(b) One (1) pulverized coal opposed wall fired dry bottom boiler, identified as MB2 (Main Boiler 2), with construction commenced in 1977 and completed in 1989, with a design heat input capacity of 12,374 million Btu per hour, with an electrostatic precipitator (ESP) system for control of particulate matter. Low NO_X burners and an overfire air (OFA) system have been installed and Selective Catalytic Reduction (SCR) permitted in 2018 for NO_X control. No. 2 fuel oil is fired during startup, shutdown, and load stabilization periods. No. 2 fuel oil may also be burned to maintain boiler temperature to ensure boiler availability on short notice, and to maintain boiler temperature required during chemical cleaning. One (1) powdered activated carbon (PAC) injection system, identified as ACI, permitted in 2008, 2010 and 2013, with a unit maximum capacity of injecting 4,000 pounds of halogenated or non-halogenated activated carbon per hour into the exhaust

ductwork for Boiler 2 (MB2) from a dedicated silo(s). One (1) dry sorbent injection (DSI) system, identified as DSI-U2, permitted in 2013, with a combined maximum capacity of injecting 20,000 pounds of Sodium Bicarbonate per hour into the exhaust ductwork for Boiler 2 (MB2). Emissions from Units MB1 and MB2 are exhausted through the common stack, Stack CS012. Continuous emissions monitoring systems (CEMS) for nitrogen oxides (NO_X) and for sulfur dioxide (SO_2) and a continuous opacity monitoring (COM) system are located on the common stack.

(c) Two (2) No. 2 fuel oil-fired boilers, identified as Auxiliary Boiler 1 and Auxiliary Boiler 2, with construction commenced in 1977 and completed in 1983, each with a design heat input capacity of 603 million Btu per hour, both exhausting through Stack AB12.

(d) A coal storage and handling system for MB1 and MB2, with installation started in 1981 and completed in 1984, consisting of the following equipment:

(1) Two (2) barge unloading stations, identified as Stations 1 and 2, each with a baghouse, or a dust extraction system using water injection, and foam or water spray for particulate control, each with a bucket elevator with foam or water spray and partial enclosure for particulate control, and Conveyors 1 and 2 with water spray for particulate control.

(2) Enclosed conveyor systems, including fully and partially enclosed conveyors, with foam, water, or other equivalent dust suppression measures for particulate control, with the transfer points enclosed by buildings with baghouses, or a dust extraction system using water injection, for particulate control at Stations 5, 6 and 7. A stacker reclaim system is used to drop coal to the storage pile(s). The coal handling system has a design throughput capacity of 4000 tons per hour up to the stacker-reclaimers, and 1600 tons per hour from Station 7E and 7W to the coal bunkers in the units.

(3) Coal storage pile(s), with fugitive dust emissions controlled by watering.

(4) Coal crushing Station 8, with a maximum throughput of 2618 tons per hour for the east system and 2542 tons per hour for the west system, with a baghouse for particulate control, or a dust extraction system using water injection.

(5) Blending and transfer Station 9, with foam, water, or other equivalent dust suppression measures for particulate control.

(6) Blending and transfer Station 10.

(7) Two (2) storage silos for Station 9, with foam, water, or other equivalent dust suppression measures for particulate control.

(8) Coal sampling and transfer Stations A and D, each with a baghouse for particulate control, or a dust extraction system using water injection.

(9) Bunkering conveyors AB, BC, CB, DC, and FD, each fully enclosed, each with a baghouse for particulate control, or a dust extraction system using water injection.

(10) Fourteen (14) storage silos for Unit 1, with particulate control as follows:

(A) four (4) bag type filters, two for each set of seven bunkers on each side of Main Boiler 1, or

(B) one or more dust extraction systems using water injection.

(11) Fourteen (14) storage silos for Unit 2, with particulate control as follows:

(A) four (4) bag type filters, two for each set of seven bunkers on each side of Main Boiler 2, or

(B) one or more dust extraction systems using water injection.

(e) Dry fly ash handling:

(1) Fly ash handling for MB1, installed in approximately 1982, including the following:

(A) Vacuum system to convey fly ash to four (4) storage silos with particulate emissions controlled by a bin vent filter on each silo, with a maximum throughput rate of 58 tons per hour.

(B) Each of the four fly ash silos is equipped with two telescoping chutes for loading dry ash into tanker trucks. Each chute has a vacuum system to control dust and transport it back into the storage silo. Process rate for loading the tanker trucks is estimated at 300 tons per hour.

(C) Each of the four fly ash silos is equipped with two wet ash conditioners, for loading ash into open trucks for disposal. Dust is controlled by mixing water with the ash prior to depositing the ash in the truck. Process rate is estimated at 150 tons per hour.

(D) Water spray curtains on each silo can be used to prevent dust generated in the loading operation from leaving the loading gallery in the silo base, if the outdoor temperature is above freezing.

(2) Fly ash handling for MB2, with installation completed in 1986, including the following:

(A) Vacuum system to convey fly ash to four (4) storage silos with particulate emissions controlled by two (2) bin vent filters on each silo, with a maximum throughput rate of 58 tons per hour.

(B) Each of the four fly ash silos is equipped with two telescoping chutes for loading dry ash into tanker trucks. Each chute has a vacuum system to control dust and transport it back into the storage silo. Process rate for loading the tanker trucks is estimated at 300 tons per hour.

(C) Each of the four fly ash silos is equipped with two wet ash conditioners, for loading ash into open trucks for disposal. Dust is controlled by mixing water with the ash prior to depositing the ash in the truck. Process rate is estimated at 150 tons per hour.

(D) Water spray curtains on each silo can be used to prevent dust generated in the loading operation from leaving the loading gallery in the silo base, if the outdoor temperature is above freezing.

(3) One (1) fly ash barge loading facility, with pneumatic unloading system from covered truck to covered barge with a maximum throughput rate of 52.5 tons ash per hour, with a baghouse on a river cell for particulate control.

(4) Rail loading equipment associated with the former fly ash temporary storage facility, with a maximum throughput rate of 52.5 tons ash per hour. The loader has a baghouse for dust control.

PAC Handling and Storage Operations

(f) Four (4) pneumatic truck unloading stations, two (2) at each set of silos, for transferring halogenated and non-halogenated activated carbon from transports to storage silos, permitted in 2008, 2010, and 2013 with particulate emissions controlled by a bin vent filter.

(g) Two (2) silos for storing halogenated or non-halogenated activated carbon, each with a maximum storage capacity of 360 tons, permitted in 2008, 2010, and 2013 with particulate emissions from each silo controlled by a bin vent filter.

(h) Two (2) silos for storing halogenated or non-halogenated activated carbon, each with a maximum storage capacity of 360 tons, permitted in 2013, with particulate emissions from each silo controlled by a bin vent filter.

(i) Four (4) metering pressure tanks per silo, with a maximum system capacity of injecting 4000 pounds per hour of halogenated or non-halogenated activated carbon into the exhaust ductwork, permitted in 2008, 2010, and 2013 with particulate emissions from the pressure tanks controlled via the silo bin vent filter.

DSI Handling and Storage operation

(j) Two (2) pneumatic truck unloading systems (one system per unit) for transferring sodium bicarbonate from up to two transport trucks simultaneously to the attached storage silos, permitted in 2013, with particulate emissions controlled by a bin vent filter on the silo receiving the sorbent being unloaded.

(k) Four (4) silos, two (2) per unit, for storing sodium bicarbonate, each with a maximum storage capacity of 1440 tons, permitted in 2013, with particulate emissions from each silo controlled by a bin vent filter.

(l) Injection metering system that includes three (3) metering feeders directly fed from each storage silo, blowers, and piping necessary to inject up to 10 tons per hour of sodium bicarbonate into the ductwork feeding the four electrostatic precipitators on each unit, permitted in 2013, with particulate emissions controlled by a bin vent filter.

A.3 Specifically Regulated Insignificant Activities [326 IAC 2-7-1(21)] [326 IAC 2-7-4(c)] [326 IAC 2-7-5(14)]

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

(a) Space heaters using the following fuels: Fuel oil-fired combustion sources with heat input equal to or less than two million (2,000,000) Btu per hour and firing fuel containing less than three-tenths (0.3) percent sulfur by weight, including space heaters WHU-1 and WHU-2, each with 1.1 MMBtu/hr heat input capacity. [326 IAC 7]

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

(c) Cleaners and solvents characterized as follows: [326 IAC 8-3]

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

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

(d) Coal bunker and coal scale exhausts and associated dust collector vents. [326 IAC 6-3][326 IAC 12][40 CFR 60, Subpart Y]

(e) Other activities or categories not previously identified with potential, uncontrolled emissions equal to or less than thresholds require listing only: Pb 0.6 ton per year or 3.29 pounds per day, SO_2 5 pounds per hour or 25 pounds per day, NO_X 5 pounds per hour or 25 pounds per day, CO 25 pounds per day, PM 5 pounds per hour or 25 pounds per day, VOC 3 pounds per hour or 15 pounds per day:

Ponded bottom ash handling and management, including dredging bottom ash ponds and loading material into trucks. [326 IAC 6-4]

(f) Wet process bottom ash handling, with hydroveyors conveying ash to storage ponds, with water level sufficient to prevent ash re-entrainment.

(g) Emergency generators as follows: Three (3) No. 2 fuel oil-fired emergency diesel generators designated as DG1, DG2, and DG3, each with 25.16 MMBtu/hr heat input capacity. [326 IAC 7][326 IAC 2]

(h) Six (6) No. 2 fuel oil-fired space heaters designated as WHU-5, WHU-6, WHU-7, WHU-8, WHU-9, and WHU-10 with heat input capacities of 4.5 MMBtu/hr, 3.0 MMBtu/hr, 2.75 MMBtu/hr, 3.5 MMBtu/hr, 4.5 MMBtu/hr, and 2.4 MMBtu/hr, respectively.

A.4 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).

(c) It is an affected source under Title IV (Acid Deposition Control) of the Clean Air Act, as defined in 326 IAC 2-7-1(3);

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, 147-29841-00020, 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 or of permits issued pursuant to Title IV of the Clean Air Act and 326 IAC 21 (Acid Deposition Control).

(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) Where specifically designated by this permit or required by an applicable requirement, any application form, report, or compliance certification submitted shall contain certification by the "responsible official" of truth, accuracy, and completeness. This certification shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.

(b) One (1) certification shall be included, using the attached Certification Form, with each submittal requiring certification. One (1) certification may cover multiple forms in one (1) submittal.

(c) A "responsible official" is defined at 326 IAC 2-7-1(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 July 1 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 the certification by the "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) The Permittee shall prepare and maintain Preventive Maintenance Plans (PMPs) within ninety (90) days after issuance of this permit, for the source as described in 326 IAC 1-6-3. At a minimum, the PMP shall include:
(1) Identification of the individual(s) responsible for inspecting, maintaining, and repairing emission control devices;
(2) A description of the items or conditions that will be inspected and the inspection schedule for said items or conditions; and
(3) Identification and quantification of the replacement parts that will be maintained in inventory for quick replacement.

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

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

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

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

(b) An emergency, as defined in 326 IAC 2-7-1(12), constitutes an affirmative defense to an action brought for noncompliance with a technology-based emission limitation if the affirmative defense of an emergency is demonstrated through properly signed, contemporaneous operating logs or other relevant evidence that describe the following:
(1) An emergency occurred and the Permittee can, to the extent possible, identify the causes of the emergency;
(2) The permitted facility was at the time being properly operated;
(3) During the period of an emergency, the Permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards or other requirements in this permit;
(4) For each emergency lasting one (1) hour or more, the Permittee notified IDEM, OAQ, or Southwest 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
Southwest Regional Office phone: (812) 380-2305; fax: (812) 380-2304**.**
(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 the certification by the "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.

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

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

(a) Pursuant to 326 IAC 2-7-15, the Permittee has been granted a permit shield. The permit shield provides that compliance with the conditions of this permit shall be deemed 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 147-29841-00020 and issued pursuant to permitting programs approved into the state implementation plan have been either:
(1) incorporated as originally stated,
(2) revised under 326 IAC 2-7-10.5, or
(3) deleted under 326 IAC 2-7-10.5.

(b) Provided that all terms and conditions are accurately reflected in this permit, all previous registrations and permits are superseded by this Part 70 operating permit, except for permits issued pursuant to Title IV of the Clean Air Act and 326 IAC 21 (Acid Deposition Control)

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

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

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

using the attached Quarterly Deviation and Compliance Monitoring Report, or its equivalent. A deviation required to be reported pursuant to an applicable requirement

that exists independent of this permit, shall be reported according to the schedule stated in the applicable requirement and does not need to be included in this report.

The Quarterly Deviation and Compliance Monitoring Report does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(35).

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

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

(a) This permit may be modified, reopened, revoked and reissued, or terminated for cause. The filing of a request by the Permittee for a Part 70 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 the certification by the "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(a)]

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(40). The renewal application does require the certification by the "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] [40 CFR 72]

(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) Pursuant to 326 IAC 2-7-11(b) and 326 IAC 2-7-12(a), administrative Part 70 operating permit amendments and permit modifications for purposes of the acid rain portion of a Part 70 permit shall be governed by regulations promulgated under Title IV of the Clean Air Act. [40 CFR 72]

(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 shall be certified by the "responsible official" as defined by 326 IAC 2-7-1(35).

(d) 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) or (c). 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(36)) without a permit revision, subject to the constraint of 326 IAC 2-7-20(a). For each such Section 502(b)(10) of the Clean Air Act change, the required written notification shall include the following:
(1) A brief description of the change within the source;
(2) The date on which the change will occur;
(3) Any change in emissions; and
(4) Any permit term or condition that is no longer applicable as a result of the change.

The notification which shall be submitted is not considered an application form, report or compliance certification. Therefore, the notification by the Permittee does not require the certification by the “responsible official” as defined by 326 IAC 2-7-1(35).

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

(b) Any application requesting a change in the ownership or operational control of the source shall contain a written agreement containing a specific date for transfer of permit responsibility, coverage and liability between the current and new Permittee. The application shall be submitted to:
Indiana Department of Environmental Management
Permit Administration and Support Section, Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251

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

B.25 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).

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 or incinerate any waste or refuse except as provided in 326 IAC 4-2 and 326 IAC 9-1-2.

C.5 Fugitive Dust Emissions [326 IAC 6-4]

(a) The Permittee shall not allow fugitive dust to escape beyond the property line or boundaries of the property, right-of-way, or easement on which the source is located, in a manner that would violate 326 IAC 6-4 (Fugitive Dust Emissions).
  (1) Pursuant to 326 IAC 6-4-2, a source or sources generating fugitive dust shall be in violation 326 IAC 6-4 if any of the following criteria are violated:
    (A) A source or combination of sources which cause to exist fugitive dust concentrations greater than sixty-seven percent (67%) in excess of ambient upwind concentrations as determined by the following formula:

$$P = [100 (R-U)] / U$$

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

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

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

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

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

(D) If fugitive dust is visible crossing the boundary or property line of a source. This subdivision may be refuted by factual data expressed in subparagraph (a)(1)(A), (B), or (C).

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

Adverse weather conditions do not relieve a source from taking all reasonable measures to mitigate fugitive dust formation and transport. Failure to take reasonable measures during this period may be considered to be violation from this permit.

(b) 326 IAC 6-4-2(4), which is repeated as subparagraph (a)(1)(D) above, is not federally enforceable.

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

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

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

The Permittee shall comply with the applicable requirements of 326 IAC 14-10, 326 IAC 18, and 40 CFR 61 Subpart M.

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

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

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

Indiana Department of Environmental Management
Compliance 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 certification by the "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 certification by the "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.

Compliance Requirements [326 IAC 2-1.1-11]

C.9 Compliance Requirements [326 IAC 2-1.1-11]

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

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

C.10 Compliance Monitoring [326 IAC 2-7-5(3)][326 IAC 2-7-6(1)][40 CFR 64][326 IAC 3-8]

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

Indiana Department of Environmental Management
Compliance 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 the certification by the "responsible official" as defined by 326 IAC 2-7-1(35).

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

C.11 Monitoring Methods [326 IAC 3] [40 CFR 60] [40 CFR 63]

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

C.12 Instrument Specifications [326 IAC 2-1.1-11] [326 IAC 2-7-5(3)] [326 IAC 2-7-6(1)]

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

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

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

C.13 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.14 Risk Management Plan [326 IAC 2-7-5(11)] [40 CFR 68]

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

C.15 Response to Excursions or Exceedances [40 CFR 64][326 IAC 3-8][326 IAC 2-7-5] [326 IAC 2-7-6]

(a) This subsection applies only to pollutant-specific emission units that are not subject to CAM (40 C.F.R Part 64; 326 IAC 3-8). Upon detecting an excursion when a response step is required by Section D. of this Permit:

(1) 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.

(2) The response shall include minimizing the period of any startup, shutdown or malfunction. The response may include, but is not limited to, the following:
(A) initial inspection and evaluation;
(B) recording that operations returned or are returning to normal without operator action (such as through response by a computerized distribution control system); or
(C) any necessary follow-up actions to return operation to normal or usual manner of operation.

(3) 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:
(A) monitoring results;
(B) review of operation and maintenance procedures and records; and/or

(C) inspection of the control device, associated capture system, and the process.

(4) Failure to take response steps pursuant to C.15(a)(1) through (a)(3) shall be considered a deviation from the permit.

(b) This subsection applies only to pollutant-specific emission units subject to CAM (40 CFR Part 64, 326 IAC 3-8).

(1) Upon detecting an excursion or exceedance 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.

(3) If the Permittee identifies a failure to achieve compliance with an emission limitation or standard 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 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.

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

(5) Elements of a QIP:
The Permittee shall maintain a written QIP, if required, and have it available for inspection. The plan initially shall include procedures for evaluating the control performance problems and, based on the results of the evaluation procedures, the owner or operator shall modify the plan to include procedures for conducting one or more of the following actions, as appropriate:
(i) Improved preventive maintenance practices.
(ii) Process operation changes.
(iii) Appropriate improvements to control methods.
(iv) Other steps appropriate to correct control performance.

(v) More frequent or improved monitoring (only in conjunction with one or more steps under paragraphs (5)(i) through (iv) of this section).

(6) 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.

(7) Following implementation of a QIP, upon any subsequent determination pursuant to paragraph (b)(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:
(A) Failed to address the cause of the control device performance problems; or
(B) 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.

(8) 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.

C.16 Actions Related to Noncompliance Demonstrated by a Stack Test [326 IAC 2-7-5][326 IAC 2-7-6]

(a) When the results of a stack test performed in conformance with Section C - Performance Testing, of this permit exceed the level specified in any condition of this permit, the Permittee shall take appropriate response actions. The Permittee shall submit a description of these response actions to IDEM, OAQ, within thirty (30) days of receipt of the test results. The Permittee shall take appropriate action to minimize excess emissions from the affected facility while the response actions are being implemented.

(b) A retest to demonstrate compliance shall be performed within one hundred twenty (120) days of receipt of the original test results. Should the Permittee demonstrate to IDEM, OAQ that retesting in one hundred twenty (120) days is not practicable, IDEM, OAQ may extend the retesting deadline.

(c) IDEM, OAQ reserves the authority to take any actions allowed under law in response to noncompliant stack tests.

The response action documents submitted pursuant to this condition do require the certification by the "responsible official" as defined by 326 IAC 2-7-1(35).

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

C.17 Emission Statement [326 IAC 2-7-5(3)(C)(iii)][326 IAC 2-7-5(7)][326 IAC 2-7-19(c)][326 IAC 2-6]

(a) Pursuant to 326 IAC 2-6-3(a)(1), the Permittee shall submit by July 1 of each year an emission statement covering the previous calendar year. The emission statement shall contain, at a minimum, the information specified in 326 IAC 2-6-4(c) and shall meet the following requirements:

(1) Indicate estimated actual emissions of all pollutants listed in 326 IAC 2-6-4(a);
(2) Indicate estimated actual emissions of regulated pollutants as defined by 326 IAC 2-7-1(32) (“Regulated pollutant, which is used only for purposes of Section 19 of this rule”) from the source, for purpose of fee assessment.

The statement must be submitted to:

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

The emission statement does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(35).

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

C.18 General Record Keeping Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-6] [326 IAC 2-2][326 IAC 2-3]

(a) Records of all required monitoring data, reports and support information required by this permit shall be retained for a period of at least five (5) years from the date of monitoring sample, measurement, report, or application. These records shall be physically present or electronically accessible at the source location for a minimum of three (3) years. The records may be stored elsewhere for the remaining two (2) years as long as they are available upon request. If the Commissioner makes a request for records to the Permittee, the Permittee shall furnish the records to the Commissioner within a reasonable time.

(b) Unless otherwise specified in this permit, all record keeping requirements not already legally required shall be implemented within ninety (90) days of permit issuance or ninety (90) days of initial start-up, whichever is later.

(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)) performed following the issuance of this permit 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))

performed following the issuance of this permit 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.

(e) CAM record keeping requirements under 40 CFR Part 64. The Permittee shall maintain records of monitoring data, monitor performance data, corrective actions taken, any written QIP required pursuant to paragraph (b)(4) of condition C.14 and any activities undertaken to implement a QIP, and other supporting information required to be maintained under CAM (such as data used to document the adequacy of monitoring, or records of monitoring maintenance or corrective actions).

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

(a) The Permittee shall submit the attached Quarterly Deviation and Compliance Monitoring Report or its equivalent. Any deviation from permit requirements, the date(s) of each deviation, the cause of the deviation, and the response steps taken must be reported. This report shall be submitted within thirty (30) days of the end of the reporting period. The Quarterly Deviation and Compliance Monitoring Report shall include the certification by the "responsible official" as defined by 326 IAC 2-7-1(35).
If at any time the Permittee becomes subject to monitoring under 40 CFR Part 64 and 326 IAC 3-8, the Permittee shall submit CAM reports to the IDEM, OAQ for applicable pollutant-specific emission units. 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 Condition C.14(b). 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.

(c) The report required in (a) of this condition and reports required by conditions in Section D of this permit shall be submitted to:

(d)

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) Unless otherwise specified in this permit, all reports required in Section D of this permit shall be submitted within thirty (30) days of the end of the reporting period. All reports do require the certification by the "responsible official" as defined by 326 IAC 2-7-1(35).

(e) The first report shall cover the period commencing on the date of issuance of this permit or the date of initial start-up, whichever is later, and ending on the last day of the reporting period. Reporting periods are based on calendar years, unless otherwise specified in this permit. For the purpose of this permit, “calendar year” means the twelve (12) month period from January 1 to December 31 inclusive.

(f) If the Permittee is required to comply with the recordkeeping provisions of (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)) performed following the issuance of this permit *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).

(g) The report required by Subsection (f) *for a project at an existing emissions unit* shall be submitted within sixty (60) days after the end of the year and contain the following:

(1) The name, address, and telephone number of the major stationary source.
(2) The annual emissions calculated in accordance with (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 deems fit to include in this report.

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

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

Stratospheric Ozone Protection

C.20 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

Emissions Unit Description [326 IAC 2-7-5(14)]

(a) One (1) pulverized coal opposed wall fired dry bottom boiler, identified as MB1 (Main Boiler 1), with construction commenced in 1977 and completed in 1984, with a design heat input capacity of 12,374 million Btu per hour, with an electrostatic precipitator (ESP) system for control of particulate matter. Low NO_X burners and an overfire air (OFA) system have been installed and Selective Catalytic Reduction permitted in 2015 for NO_X control. No. 2 fuel oil is fired during startup, shutdown, and load stabilization periods. No. 2 fuel oil may also be burned to maintain boiler temperature to ensure boiler availability on short notice, and to maintain boiler temperature required during chemical cleaning. One (1) powdered activated carbon (PAC) injection system, identified as ACI, permitted in 2008, 2010 and 2013, with a unit maximum capacity of injecting 4,000 pounds of halogenated or non-halogenated activated carbon per hour into the exhaust ductwork for Boiler 1 (MB1) from a dedicated silo(s). One (1) dry sorbent injection (DSI) system, identified as DSI-U1, permitted in 2013, with a design injection capacity of 20,000 pounds of Sodium Bicarbonate per hour into the exhaust ductwork for Boiler 1 (MB1). Emissions from Units MB1 and MB2 are exhausted through the common stack, Stack CS012. Continuous emissions monitoring systems (CEMS) for nitrogen oxides (NO_X) and for sulfur dioxide (SO_2) and a continuous opacity monitoring (COM) system are located on the common stack.

(b) One (1) pulverized coal opposed wall fired dry bottom boiler, identified as MB2 (Main Boiler 2), with construction commenced in 1977 and completed in 1989, with a design heat input capacity of 12,374 million Btu per hour, with an electrostatic precipitator (ESP) system for control of particulate matter. Low NO_X burners and an overfire air (OFA) system have been installed and Selective Catalytic Reduction (SCR) permitted in 2018 for NO_X control. No. 2 fuel oil is fired during startup, shutdown, and load stabilization periods. No. 2 fuel oil may also be burned to maintain boiler temperature to ensure boiler availability on short notice, and to maintain boiler temperature required during chemical cleaning. One (1) powdered activated carbon (PAC) injection system, identified as ACI, permitted in 2008, 2010 and 2013, with a unit maximum capacity of injecting 4,000 pounds of halogenated or non-halogenated activated carbon per hour into the exhaust ductwork for Boiler 2 (MB2) from a dedicated silo(s). One (1) dry sorbent injection (DSI) system, identified as DSI-U2, permitted in 2013, with a combined maximum capacity of injecting 20,000 pounds of Sodium Bicarbonate per hour into the exhaust ductwork for Boiler 2 (MB2). Emissions from Units MB1 and MB2 are exhausted through the common stack, Stack CS012. Continuous emissions monitoring systems (CEMS) for nitrogen oxides (NO_X) and for sulfur dioxide (SO_2) and a continuous opacity monitoring (COM) system are located on the common stack.

PAC Handling and Storage Operations

(f) Four (4) pneumatic truck unloading stations, two (2) at each set of silos, for transferring halogenated and non-halogenated activated carbon from transports to storage silos, permitted in 2008, 2010, and 2013 with particulate emissions controlled by a bin vent filter.

(g) Two (2) silos for storing halogenated or non-halogenated activated carbon, each with a maximum storage capacity of 360 tons, permitted in 2008, 2010, and 2013 with particulate emissions from each silo controlled by a bin vent filter.

(h) Two (2) silos for storing halogenated or non-halogenated activated carbon, each with a maximum storage capacity of 360 tons, permitted in 2013, with particulate emissions from each silo controlled by a bin vent filter.

(i) Four (4) metering pressure tanks per silo, with a maximum system capacity of injecting 4000

pounds per hour of halogenated or non-halogenated activated carbon into the exhaust ductwork, permitted in 2008, 2010, and 2013 with particulate emissions from the pressure tanks controlled via the silo bin vent filter.

DSI Handling and Storage operation

(j) Two (2) pneumatic truck unloading systems (one system per unit) for transferring sodium bicarbonate from up to two transport trucks simultaneously to the attached storage silos, permitted in 2013, with particulate emissions controlled by a bin vent filter on the silo receiving the sorbent being unloaded.

(k) Four (4) silos, two (2) per unit, for storing sodium bicarbonate, each with a maximum storage capacity of 1440 tons, permitted in 2013, with particulate emissions from each silo controlled by a bin vent filter.

(l) Injection metering system that includes three (3) metering feeders directly fed from each storage silo, blowers, and piping necessary to inject up to 10 tons per hour of sodium bicarbonate into the ductwork feeding the four electrostatic precipitators on each unit, permitted in 2013, with particulate emissions controlled by a bin vent filter.

(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 Pollution Control Project (PCP) [326 IAC 2-2-1(x)(2)(H)]

Pursuant to Source Modification 147-17468-00020, issued November 13, 2003, and 326 IAC 2-2-1(x)(2)(H) as it existed on November 13, 2003:

The replacement of the LNB and the installation of an OFA system for each of the boilers MB1 and MB2 to reduce NO_X emissions are considered to be a pollution control project; therefore, the project's CO collateral emissions are excluded from the 326 IAC 2-2 PSD requirements.

D.1.2 PSD Limits [326 IAC 2-2][326 IAC 6-2-1(g)][326 IAC 7-1.1-2]

Pursuant to Approval to Construct EPA-5-78-A-1, issued October 27, 1977, 40 CFR 52.21 (Federal Regulations for the Prevention of Significant Deterioration of Air Quality), 326 IAC 6-2-1(g), and 326 IAC 7-1.1-2(a)]:

(a) MB1 and MB2 (a.k.a. Units 1 and 2) must meet emission limitations of 0.1 pound of particulate matter per million BTU heat input and 1.2 pounds of sulfur dioxide per million BTU heat input. These limitations are equivalent to the New Source Performance Standards (40 CFR Part 60) for fossil-fuel fired steam generating units and are defined as best available control technology.

(b) The Permittee may not alter the height of the boilerhouse as presented in the construction application. The dispersion modeling in the application relies upon a stack height expressed as 2.5 times the height of the boilerhouse. Any change in the boilerhouse height would alter the dispersion of sulfur dioxide and particulates.

(c) The Permittee may not alter the design stack parameters identified in the construction application including, but not limited to, exit gas temperature, exit gas velocity and stack diameter (inside top). The air quality analysis relies heavily on the combination of stack parameters, control devices, the emission limitations and any change in those factors could change the results of the air quality analysis. Therefore, design changes in Units 1 and 2 must receive the prior written authorization of IDEM, OAQ.

D.1.3 PSD Minor Limits [326 IAC 2-2]

(a) In order to render the requirements of 326 IAC 2-2 (PSD) not applicable to the 2013 project to install DSI and ACI, the Permittee shall comply with the following:

Boiler MB1 and Boiler MB2

(1) The total PM emissions from Boiler MB1 and Boiler MB2 shall be limited to 2575 tons per twelve (12) consecutive month period with compliance determined at the end of each month. The monthly PM emissions shall be calculated using the following formula:

$E = (HI_{CS012} \times EF_{PMCS012}) \times 1/2000(lb/ton)$

Where:

HI_{CS012} = Monthly Heat Input (MMBtu/month)
$EF_{PMCS012}$ = a value of 0.0365 lb/MMBtu of PM for the common stack until a value is determined from the latest IDEM approved stack test, and that value thereafter.

(2) The total PM10 emissions from Boiler MB1 and Boiler MB2 shall be limited to 1725 tons per twelve (12) consecutive month period with compliance determined at the end of each month. The monthly PM emissions shall be calculated using the following formula:

$E = (HI_{CS012} \times EF_{PM10CS012}) \times 1/2000(lb/ton)$

Where:

HI_{CS012} = Monthly Heat Input (MMBtu/month)
$EF_{PM10CS012}$ = a value of 0.0245 lb/MMBtu of PM10 for the common stack until a value is determined from the latest IDEM approved stack test, and that value thereafter.

(3) The total PM2.5 emissions from Boiler MB1 and Boiler MB2 shall be limited to 746 tons per twelve (12) consecutive month period with compliance determined at the end of each month. The monthly PM emissions shall be calculated using the following formula:

$E = (HI_{CS012} \times EF_{PM25CS012}) \times 1/2000(lb/ton)$

Where:

HI_{CS012} = Monthly Heat Input (MMBtu/month)
$EF_{PM10CS012}$ = a value of 0.011 lb/MMBtu of PM2.5 for the common stack until a value is determined from the latest IDEM approved stack test, and that value thereafter.

Dry Sorbent Injection System Serving Units MB1 and MB21

(1) The Dry Sorbent delivered to the site shall be limited to 142,500 tons per twelve (12) consecutive month period for both units with compliance determined at the end of each month.

(2) The PM emissions from the Sorbent Silos shall be limited to 0.73 lbs per thousand tons of dry sorbent.

(3) The PM10 emissions from the Sorbent Silos shall be limited to 0.48 lbs per thousand tons of dry sorbent.

(4) The PM2.5 emissions from the Sorbent Silos shall be limited to 0.0028 lbs per thousand tons of dry sorbent.

(5) The PM emissions from the paved roads used for the Dry Sorbent delivery shall be limited to 33.54 lbs per thousand tons of dry sorbent.

(6) The PM10 emissions from the paved roads used for the Dry Sorbent delivery shall be limited to 6.46 lbs per thousand tons of dry sorbent.

(7) The PM2.5 emissions from the paved roads used for the Dry Sorbent delivery shall be limited to 1.54 lbs per thousand tons of dry sorbent.

Activated Carbon Injection System Serving Units MB1 and MB21

(1) The Activated Carbon delivered to the site shall be limited to 35,040 tons per twelve (12) consecutive month period for both units with compliance determined at the end of each month.

(2) The PM emissions from the Activated Carbon Silo bin vent filter shall be limited to 56.68 lbs per thousand tons of Activated Carbon.

(3) The PM10 emissions from the Activated Carbon Silo bin vent filter shall be limited to 36.99 lbs per thousand tons of Activated Carbon.

(4) The PM2.5 emissions from the Activated Carbon Silo bin vent filter shall be limited to 5.99 lbs per thousand tons of Activated Carbon.

(5) The PM emissions from the paved roads used for the Activated Carbon delivery shall be limited to 20.55 lbs per thousand tons of Activated carbon delivered.

(6) The PM10 emissions from the paved roads used for the Activated Carbon delivery shall be limited to 4.00 lbs per thousand tons of Activated carbon delivered.

(7) The PM2.5 emissions from the paved roads used for the Activated Carbon delivery shall be limited to 1.14 lbs per thousand tons of Activated carbon delivered.

Ash Handling to Silos

(1) The PM emissions from the Ash Silos shall be limited to 0.2 lbs per thousand tons of dry ash.

(2) The PM10 emissions from the Ash Silos shall be limited to 0.2 lbs per thousand tons of dry ash.

(3) The PM2.5 emissions from the Ash Silos shall be limited to 0.1 lbs per thousand tons of dry ash.

(4) The total amount of dry ash loaded shall be limited to 583,743 tons per twelve (12) consecutive month period with compliance determined at the end of each month.

Ash Hauling on Paved Roads

(1) The PM emissions from the paved roads used for the Ash Hauling shall be limited to 81.59 lbs per thousand tons of conditioned ash.

(2) The PM10 emissions from the paved roads used for the Ash Hauling shall be limited to 15.57 lbs per thousand tons of conditioned ash.

(3) The PM2.5 emissions from the paved roads used for the Ash Hauling shall be limited to 3.90 lbs per thousand tons of conditioned ash.

(4) The total amount of conditioned ash loaded and dumped shall be limited to 686,846 tons per twelve (12) consecutive month period with compliance determined at the end of each month.

Ash Hauling on Unpaved Roads

(1) The PM emissions from the unpaved roads used for the Ash Hauling shall be limited to 72.83 lbs per thousand tons of conditioned ash.

(2) The PM10 emissions from the unpaved roads used for the Ash Hauling shall be limited to 19.33 lbs per thousand tons of conditioned ash.

(3) The PM2.5 emissions from the unpaved roads used for the Ash Hauling shall be limited to 1.92 lbs per thousand tons of conditioned ash.

(4) The total amount of conditioned ash loaded and dumped shall be limited to 686,846 tons per twelve (12) consecutive month period with compliance determined at the end of each month.

Loading and Dumping of conditioned Ash

(1) The PM emissions from the loading and dumping of the conditioned ash shall be limited to 0.22 lbs per thousand tons of conditioned ash.

(2) The PM10 emissions from the loading and dumping of the conditioned ash shall be limited to 0.1 lbs per thousand tons of conditioned ash.

(3) The PM2.5 emissions from the loading and dumping of the conditioned ash shall be limited to 0.01 lbs per thousand tons of conditioned ash.

(4) The total amount of conditioned ash loaded and dumped shall be limited to 686,846 tons per twelve (12) consecutive month period with compliance determined at the end of each month.

Landfill Emissions:

(1) The PM emissions from the landfill operation for the conditioned ash shall be limited to 183.59 lbs per thousand tons of conditioned ash.

(2) The PM10 emissions from the landfill operation for the conditioned ash shall be limited to 55.45 lbs per thousand tons of conditioned ash.

(3) The PM2.5 emissions from the landfill operation for the conditioned ash shall be limited to 6.92 lbs per thousand tons of conditioned ash.

(4) The total amount of conditioned ash loaded and dumped shall be limited to 686,846 tons per twelve (12) consecutive month period with compliance determined at the end of each month.

(b) In order to render the requirements of 326 IAC 2-2 (PSD) not applicable to the 2013 project to install DSI and ACI for CO_2, the Permittee shall comply with the following:

(1) The total amount of sorbent used on MB1 and MB2 at Rockport Plant shall not exceed 142,500 tons in a 12 month period.

(2) Compliance with the sorbent tonnage limit in (1) shall be determined by the use of inventory and delivery records.

Compliance with these emission limits will ensure that the net emissions increase from this modification is less than twenty-five (25) tons of PM per year, less than fifteen (15) tons of PM_{10} per year and less than ten (10) tons of PM2.5 per year and therefore will render the requirements of 326 IAC 2-2 (PSD) not applicable to the 2013 project to install DSI and ACI.

Compliance with these requirements will ensure that the potential to emit from this modification is less than seventy five thousand (75,000) tons of CO_2 and therefore will render the requirements of 326 IAC 2-2 not applicable to the 2013 project to install DSI and ACI.

D.1.4 Opacity Limitations [326 IAC 5-1]

(a) Pursuant to 326 IAC 5-1-2 (Opacity Limitations), the following applies:

Except as provided in Condition D.1.4(b), opacity from boilers MB1 and MB2 shall meet the following during time periods exempted from the opacity limit of 40 CFR 60 Subpart D, unless otherwise stated in this permit:

(1) 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.

(2) 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.

(b) Temporary Alternative Opacity Limit (TAOL) [326 IAC 5-1-8]
In the event that Permittee is unable to meet the limitations in D.1.4(a), the Permittee shall comply with the following site specific TAOL:

(1) When building a new fire in a boiler, opacity may exceed the applicable limitation established in 326 IAC 5-1-2 for a period not to exceed a total of two (2) hours (twenty (20) six (6)-minute averaging periods) during the startup period, or until the flue gas temperature reaches two hundred fifty (250) degrees Fahrenheit at the inlet of the electrostatic precipitator, whichever occurs first.

(2) When shutting down a boiler, opacity may exceed the applicable limitation established in 326 IAC 5-1-2 once the flue gas temperature has dropped below two hundred fifty (250) degrees Fahrenheit at the inlet of the electrostatic precipitators for a period not to exceed a total of one and half (1.5) hour (fifteen (15) six (6)-minute averaging periods) during the shutdown period.

D.1.5 Consent Decree (Federal District Court for the Southern District of Ohio on February 22, 2013) Boiler MB1 and MB2 SO2 emission limits:

(a) "Continuously Operate" or "Continuous Operation" means that when an SCR, FGD, DSI, ESP, or Other NOx Pollution Controls are used at a Unit, except during a Malfunction, they shall be operated at all times such Unit is in operation, consistent with the technological limitations, manufacturer's specifications, and good engineering and maintenance practices for such equipment and the Unit so as to minimize emissions to the greatest extent practicable.

(b) "Dry Sorbent Injection" or "DSI" means a pollution control system in which sorbent is injected into the flue gas path prior to the particulate pollution control devices for the purpose of reducing SO2 emissions. For the purposes of DSI systems required to be installed at the Rockport Units only, the DSI systems shall utilize a sodium based sorbent and be designed to inject at least 10 tons per hour of a sodium based sorbent. Defendants may utilize a different sorbent at the Rockport Units provided they obtain prior approval from Plaintiffs pursuant to Paragraph 148 of the Consent Decree.

(c) "Plant-Wide Annual Tonnage Limitation for SO2 at Rockport" means the sum of tons of SO2 emitted during all periods of operation from the Rockport Plant, including, without limitations, all SO2 emitted during periods of startup, shutdown, and Malfunction, during relevant calendar year (i.e., January 1-December 31).

(d) The source shall install the DSI systems on Unit 1 and Unit 2 no later than April 16, 2015.

(e) Beginning January 1, 2016 and ending on December 31, 2017 Rockport Plant will be limited to emitting 28,000 tons per year of SO_2 from Boilers MB1 and MB2;

(f) Beginning January 1, 2018 and ending on December 31, 2019 Rockport Plant will be limited to emitting 26,000 tons per year of SO_2 from Boilers MB1 and MB2;

(g) Beginning January 1, 2020 and ending on December 31, 2025 Rockport Plant will be limited to emitting 22,000 tons per year of SO_2 from Boilers MB1 and MB2;

(h) Beginning January 1, 2026, one Rockport Plant main boiler must be equipped with SO_2 controls as defined in the consent decree, repowered, refueled with natural gas, or retired and MB1 and MB2 will be limited to emitting no more than 18,000 tons of SO_2 per year.

(i) Beginning January 1, 2029, the second Rockport Plant main boiler must be equipped with SO_2 controls as defined in the consent decree, repowered, refueled with natural gas, or retired and MB1 and MB2 will be limited to emitting no more than 10,000 tons of SO_2 per year.

(i) Beginning on March 31, 2017, and continuing annually thereafter, the source shall report:

(1) The actual tons of SO2 emitted from Units 1 and 2 at the Rockport plant for the prior calendar year.

(2) The Plant-Wide Annual Tonnage Limitation for SO2 at the Rockport plant for the prior year as set forth in Paragraph 89A of the consent Decree;

(3) For the annual reports for calendar years 2015-2028, the source shall report the daily average SO2 emissions from the Rockport Plant expressed in lb/MMBtu, and the daily sorbent deliveries to the Rockport Plant by weight.

(j) By March 31, 2024, Defendants shall notify Plaintiffs of their decision to Retrofit, Retire, Re-power or refuel the first Rockport Unit. If Defendants elect to Retrofit the Unit, Defendants shall provide with such notification, information regarding the removal efficiency guarantee requested from and obtained from the control technology vendor and the sulfur content of the fuel used to design the FGD, including any non-confidential information regarding the SO2 control technology filed by Defendants with public utility regulator.

(k) By March 31, 2027, Defendants shall notify Plaintiffs of their decision to Retrofit, Retire, Re-power or refuel the second Rockport Unit. If Defendants elect to Retrofit the Unit, Defendants shall provide with such notification, information regarding the removal efficiency guarantee requested from and obtained from the control technology vendor and the sulfur content of the fuel used to design the FGD, including any non-confidential information regarding the SO2 control technology filed by Defendants with public utility regulator.

(l) If Defendants elect to Retrofit one or both of the Rockport Units, beginning in the annual reports submitted for calendar years 2026 and/or 2029, as applicable, Defendants shall report a 30-Day Rolling Average SO2 Emissions Rate for the Unit(s) that is (are) Retrofit in accordance with Paragraph 5 of the Consent Decree. In addition, Defendants shall report a 30-Day Rolling Average Uncontrolled Emission Rate for SO2 for the Unit(s) that is (are) Retrofit based on daily as burned coal sampling and analysis or an inlet SO2 CEMs upstream of the FGD.

(m) No later than December 31, 2017 for Unit 1 and December 31, 2019 for Unit 2 SCR shall be continuously operated, as defined in paragraph (a) of this Section. (Section B, Paragraph 68 of the Consent Decree as modified).

D.1.6 Hourly SO2 Emission Limitations [326 IAC 2-2]

In accordance with the modeling analysis required for Approval to Construct EPA-5-78-A-1, issued October 27, 1977, and 40 CFR 52.21, the combined SO_2 emission rate for Boilers MB1 and MB2 shall not exceed 28,663 pounds of SO_2 per hour.

D.1.7 Particulate Emission Limitations for Manufacturing Processes [326 IAC 6-3-2]

(a) Pursuant to 326 IAC 6-3 (Particulate Emission Limitations for Manufacturing Processes), the allowable particulate emission rate from the PAC handling and storage operations shall not exceed the emission limits specified in the table below:

Unit Description	Max. Process Weight Rate (tons/hr)	Allowable Particulate Emission Rate (lbs/hr)
PAC Handling and Storage Operations	30	40

The allowable particulate emission rates were calculated using the equation below:

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

(b) Pursuant to 326 IAC 6-3 (Particulate Emission Limitations for Manufacturing Processes), the allowable particulate emission rate from the DSI handling and storage operations shall not exceed the emission limits specified in the table below:

Unit Description	Max. Process Weight Rate (tons/hr)	Allowable Particulate Emission Rate (lbs/hr)
DSI Handling and Storage	50	44.60

The allowable particulate emission rates were calculated using the equation below: Interpolation of the data for the process weight rate in excess of sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

$E = 55.0 P^{0.11} - 40$

Where:

E = rate of emission in pounds per hour and

P = process weight rate in tons per hour

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

D.1.8 Particulate Control [326 IAC 2-7-6(6)]

In order to comply with Condition D.1.7, the bin vent filters for particulate control shall be in operation and control emissions at all times the respective unloading stations, silos and pressure tanks are in operation.

D.1.9 Testing Requirements [326 IAC 2-7-6(1), (6)][326 IAC 2-1.1-11]

In order to demonstrate the compliance status with Condition D.1.2, the Permittee shall perform PM stack testing of the emissions from the common stack using methods as approved by the Commissioner. This testing shall be repeated by December 31 of every second calendar year following the most recent valid compliance demonstration. Section C - Performance Testing contains the Permittee's obligations with regard to the performance testing required by this condition. For the purpose of this permit, "calendar year" means the twelve (12) month period from January 1 to December 31 inclusive.

D.1.10 Operation of Electrostatic Precipitator [326 IAC 2-7-6(6)]

(a) Except as otherwise provided by statute or rule, or in this permit, the electrostatic precipitator (ESP) shall be operated at all times that the boiler vented to the ESP is in operation.

(b) Operation of the electrostatic precipitator is not required during startup and shutdown periods.

D.1.11 Operation of Low NOX Burners and Overfire Air Systems [326 IAC 2-7-6(6)]

Pursuant to SSM 147-17468-00020, issued November 13, 2003, except as otherwise provided by statute or rule, or in this permit, the low NO_X burners and overfire air system for each boiler, MB1 and MB2, shall be operated at all times that the respective boiler is firing coal.

D.1.12 Maintenance of Continuous Opacity Monitoring Equipment [326 IAC 2-7-5(3)(A)(iii)]

(a) The Permittee shall install, calibrate, maintain, and operate all necessary continuous opacity monitoring systems (COMS) and related equipment. For a boiler, the COMS shall be in operation at all times that a draft fan is in operation.

(b) All COMS shall meet the performance specifications of 40 CFR 60, Appendix B, Performance Specification No. 1, and are subject to monitor system certification requirements pursuant to 326 IAC 3-5.

(c) In the event that a breakdown of a COMS occurs, a record shall be made of the times and reasons of the breakdown and efforts made to correct the problem.

(d) Whenever a COMS is malfunctioning or is down for maintenance or repairs for a period of twenty-four (24) hours or more and a backup COMS is not online within twenty-four (24) hours of shutdown or malfunction of the primary COMS, the Permittee shall provide a certified opacity reader, who may be an employee of the Permittee or an independent contractor, to self-monitor the emissions from the emission unit stack.

(1) Visible emission readings shall be performed in accordance with 40 CFR 60, Appendix A, Method 9, for a minimum of five (5) consecutive six (6) minute averaging periods beginning not more than twenty-four (24) hours after the start of the malfunction or down time.

(2) Method 9 opacity readings shall be repeated for a minimum of five (5) consecutive six (6) minute averaging periods at least twice per day during daylight operations, with at least four (4) hours between each set of readings, until a COMS is online.

(3) Method 9 readings may be discontinued once a COMS is online.

(4) Any opacity exceedances determined by Method 9 readings shall be reported with the Quarterly Opacity Exceedances Reports.

(e) Nothing in this permit shall excuse the Permittee from complying with the requirements to operate a continuous opacity monitoring system pursuant to 326 IAC 3-5, (and 40 CFR 60 and/or 40 CFR 63).

D.1.13 Continuous Emissions Monitoring [326 IAC 3-5][326 IAC 12][40 CFR 60, Subpart D] [326 IAC 7-2][40 CFR 52.21]

(a) Pursuant to 326 IAC 3-5 (Continuous Monitoring of Emissions), 326 IAC 12, 40 CFR 60.45, Approval to Construct EPA-5-78-A-1, issued October 27, 1977, and 40 CFR 52.21, continuous emission monitoring systems for Units MB1 and MB2 shall be calibrated, maintained, and operated for measuring opacity, SO_2, NO_X, and either CO_2 or O2, which meet the performance specifications of 326 IAC 3-5-2 and 40 CFR 60.45.

(b) Pursuant to 40 CFR 60.13(e), except for system breakdowns, repairs, calibration checks, and zero and span adjustments required under paragraph (d) of 40 CFR 60.13, all continuous monitoring systems shall be in continuous operation and shall meet minimum frequency of operation requirements as follows:

(1) All continuous monitoring systems referenced by paragraph (c) of 40 CFR 60.13 for measuring opacity of emissions shall complete a minimum of one cycle of sampling and analyzing for each successive 10-second period and one cycle of data recording for each successive 6-minute period.

(2) All continuous monitoring systems referenced by paragraph (c) of 40 CFR 60.13 for measuring emissions, except opacity, shall complete a minimum of one cycle of operation (sampling, analyzing, and data recording) for each successive 15-minute period.

(c) Pursuant to 40 CFR 60.45(g)(2)(i), Approval to Construct EPA-5-78-A-1, and 40 CFR 52.21, excess SO_2 emissions for affected facilities are defined as any three-hour period during which the average emissions (arithmetic average of three contiguous one-hour periods) of sulfur dioxide as measured by a continuous monitoring system exceed the applicable standard under 40 CFR 60.43.

(d) Excess NO_X emissions for affected facilities using a continuous monitoring system for measuring nitrogen oxides are defined as any three-hour period during which the

average emissions (arithmetic average of three contiguous one-hour periods) exceed the applicable standards under 40 CFR 60.44. [40 CFR 60.45(g)(3)]

(e) Pursuant to 326 IAC 3-7-5(a), the Permittee shall develop a standard operating procedure (SOP) to be followed for sampling, handling, analysis, quality control, quality assurance, and data reporting of the information collected pursuant to 326 IAC 3-7-2 through 326 IAC 3-7-4. In addition, any revision to the SOP shall be submitted to IDEM, OAQ.

(f) All continuous emission monitoring systems are subject to monitor system certification requirements pursuant to 326 IAC 3-5-3.

(g) Whenever a NOx CEMS is down for more than twenty-four (24) hours, the Permittee shall monitor the SCR catalyst bed inlet temperature with a continuous temperature monitoring system no less often than once per four (4) hours. Except during periods of Unit non-operation Unit start-up and Unit shutdown activities, and prior to the required operation of an SCR on either unit in accordance with Condition D.1.5(m), should the catalyst bed inlet temperature fall below 500°F, the minimum temperature for SCR operation, the Permittee shall take a reasonable response action. Section C – Response to Excursions or Exceedances contains the Permittee's obligation with regard to the reasonable response steps required by this condition. A temperature reading that is below the minimum temperature is not a deviation from this permit. Failure to take reasonable response steps shall be considered a deviation from this permit.

(h) Nothing in this permit shall excuse the Permittee from complying with the requirements to operate a continuous emission monitoring system pursuant to 326 IAC 3-5, 326 IAC 10-4, 40 CFR 60, or 40 CFR 75.

D.1.14 Sulfur Dioxide Emissions and Sulfur Content [326 IAC 3-5][326 IAC 7-2][326 IAC 7-1.1-2]

Pursuant to 326 IAC 7-2-1(c), the Permittee shall demonstrate that the sulfur dioxide emissions do not exceed the SO_2 limits in Condition D.1.2. Compliance with these limits shall be determined using SO_2 CEMS data, and demonstrated using a thirty (30) day rolling weighted average.

Compliance Assurance Monitoring Requirements [40 CFR 64]

D.1.15 Transformer-Rectifier (T-R) Sets [40 CFR 64]

(a) The ability of the ESP to control particulate emissions shall be continuously monitored when the units are in operation, by measuring and recording the number of T-R sets in service and the primary and secondary voltages and the currents of the transformer-rectifier (T-R) sets.

(b) A response shall be taken in accordance with Section C – Response to Excursions or Exceedances (Condition C.15(b)) whenever the number of T-R sets out of service is above thirty-two (32) per unit. T-R set failure resulting in more than thirty-two (32) per unit out of service is not a deviation from this permit. Failure to take a reasonable response in accordance with Condition C.15(b) when more than thirty-two (32) T-R Sets are out of service shall be considered a deviation from this permit. Failure to use reasonable procedures in a response to an excursion or exceedance of the indicator range set forth above in accordance with Condition C.15(b)(2) may result in the requirement to develop a Quality Improvement Plan as set forth in Condition C.15(b)(4).

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

D.1.16 SO2 Monitoring System Downtime [326 IAC 2-7-6][326 IAC 2-7-5(3)]

Whenever the SO_2 continuous emission monitoring system (CEMS) is malfunctioning or down for repairs or adjustments, the following shall be used to provide information related to SO_2 emissions:

(a) If the CEMS is down for less than twenty-four (24) hours, the Permittee shall substitute an average of the quality-assured data from the hour immediately before and the hour immediately after the missing data period for each hour of missing data.

(b) If the CEMS is down for twenty-four (24) hours or more, fuel sampling shall be conducted as follows:

(1) Solid fuel sampling shall be conducted as specified in 326 IAC 3-7-2(b). Fuel sample preparation and analysis shall be conducted as specified in 326 IAC 3-7-2(c), 326 IAC 3-7-2(d), and 326 IAC 3-7-2(e). Pursuant to 326 IAC 3-7-3, manual or other non-ASTM automatic sampling and analysis procedures may be used upon a demonstration, submitted to the department for approval, that such procedures provide sulfur dioxide emission estimates representative either of estimates based on coal sampling and analysis procedures specified in 326 IAC 3-7-2 or of continuous emissions monitoring.

(2) If fuel oil is fired in the unit during the CEMS downtime, pursuant to 326 IAC 7-2-1(e) and 326 IAC 3-7-4, oil sampling and analysis data shall be collected as follows:

(A) The Permittee may rely upon vendor analysis of fuel delivered, if accompanied by a vendor certification [326 IAC 3-7-4(b)]; or,

(B) The Permittee shall perform sampling and analysis of fuel oil samples in accordance with 326 IAC 3-7-4(a).

D.1.17 Visible Emissions Notations

(a) Daily visible emission notations of the exhaust from the bin vent filters on the storage silos shall be performed during normal daylight operations when loading or unloading material. A trained employee shall record whether emissions are normal or abnormal.

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

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

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

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

D.1.18 Broken or Failed Bin Vent Filter Detection

In the event that filter failure has been observed, for single compartment filters, failed units and the associated process will be shut down as soon as possible until the failed units have been repaired or replaced.

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

D.1.19 Record Keeping Requirements

(a) To document the compliance status with Section C - Opacity, Section C - Maintenance of Continuous Opacity Monitoring Equipment, and the particulate matter and opacity requirements in Conditions D.1.2, D.1.4, D.1.13, and D.1.15, the Permittee shall maintain records in accordance with (1) through (4) below. Records shall be complete and sufficient to establish compliance with the limits in Section C - Opacity and Conditions D.1.2, and D.1.4.

(1) Data and results from the most recent stack test.

(2) All continuous opacity monitoring data, pursuant to 326 IAC 3-5-6, 40 CFR 60.7, and 40 CFR 60.45.

(3) The results of all Method 9 visible emission readings taken during any periods of COM downtime.

(4) All ESP parametric monitoring readings.

(b) To document the compliance status with the SO_2 requirements in Conditions D.1.2(a), D.1.13, D.1.14, and D.1.16, the Permittee shall maintain records in accordance with (1) through (4) below. Records shall be complete and sufficient to establish compliance with the applicable SO_2 limit(s) as required in Conditions D.1.2(a), D.1.13, and D.1.14. The Permittee shall maintain records in accordance with (3) and (4) below during SO_2 CEMS malfunction or downtime.

(1) All SO_2 continuous emissions monitoring data, pursuant to 326 IAC 3-5-6, 326 IAC 7-2-1(g), 40 CFR 60.7, and 40 CFR 60.45.

(2) Actual fuel usage since last compliance determination period.

(3) All fuel sampling and analysis data collected for SO_2 CEMS downtime, in accordance with Condition D.1.16.

(4) Actual fuel usage during each SO_2 CEMS downtime.

(c) To document the compliance status with the NO_X requirements in Condition D.1.13, the Permittee shall maintain records of all NO_X and CO_2 or O2 continuous emissions monitoring data, pursuant to 326 IAC 3-5-6, 326 IAC 2-2, 40 CFR 60.7, and 40 CFR 60.45. Records shall be complete and sufficient to establish compliance with the NO_X limits as required in 40 CFR 60, Subpart D.

(d) Pursuant to 326 IAC 2-2 and 326 IAC 2-3, the Permittee shall maintain records as specified by Conditions C.19(c) and (d) (General Record Keeping Requirements).

(e) To document the compliance status with Condition D.1.17, the Permittee shall maintain records of the visible emission notations required by that condition. 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).

(f) To document the compliance status with the PSD minor limits in Condition D.1.3, the Permittee shall maintain records of the monthly heat input from Boiler MB1, Boiler MB2, all the Dry Sorbent and PAC delivered to the source and the amount of dry ash and wet

ash loaded to and from the Ash Silos. Records shall be complete and sufficient to establish compliance with the PSD minor limits as required in Condition D.1.3.

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

D.1.20 Reporting Requirements

(a) A quarterly report of opacity exceedances and a quarterly summary of the information to document the compliance status with the PM and SO_2 requirements of Conditions D.1.2, D.1.4, and D.1.14 shall be submitted to the address listed in Section C - General Reporting Requirements, of this permit, within thirty (30) days after the end of the quarter being reported. The report submitted by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(35).

(b) Pursuant to 326 IAC 12, 40 CFR 60.7(c), Approval to Construct EPA-5-78-A-1, and 40 CFR 52.21, to document the compliance status with Condition D.1.2 and pursuant to 40 CFR 60.45(g), excess emissions and monitoring system performance (MSP) reports shall be submitted on a quarterly basis. All reports shall be postmarked by the 30th day following the end of each quarter. Each excess emission and MSP report shall include the information required in 40 CFR 60.7(c). These reports shall be submitted to:

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

The 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 Requirements contains the Permittee's obligations with regard to the reporting required by this condition.

(c) Pursuant to 326 IAC 3-5-7(5), reporting of continuous monitoring system instrument downtime, except for zero (0) and span checks, which shall be reported separately, shall include the following:

(1) Date of downtime.

(2) Time of commencement.

(3) Duration of each downtime.

(4) Reasons for each downtime.

(5) Nature of system repairs and adjustments.

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 Requirements contains the Permittee's obligations with regard to the reporting required by this condition.

(d) A quarterly report of the total amount of Dry Sorbent delivered to the source to document the compliance status with PSD minor limits in Condition D.1.3 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. 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 Requirements contains the Permittee's obligations with regard to the reporting required by this condition.

(e) A quarterly report of the total amount of PAC delivered to the source to document the compliance status with PSD minor limits in Condition D.1.3 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. 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 Requirements contains the Permittee's obligations with regard to the reporting required by this condition.

(f) A quarterly report of the total amount of dry ash loaded to the ash silos to document the compliance status with PSD minor limits in Condition D.1.3 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. 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 Requirements contains the Permittee's obligations with regard to the reporting required by this condition.

(g) A quarterly report of the total amount of wet ash loaded from the ash silos to document the compliance status with PSD minor limits in Condition D.1.3 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. 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 Requirements contains the Permittee's obligations with regard to the reporting required by this condition.

(h) A quarterly report of the total PM emissions from Boiler MB1 and Boiler MB2 to document the compliance status with PSD minor limits in Condition D.1.3 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. 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 Requirements contains the Permittee's obligations with regard to the reporting required by this condition.

(i) A quarterly report of the total PM10 emissions from Boiler MB1 and Boiler MB2 to document the compliance status with PSD minor limits in Condition D.1.3 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. 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 Requirements contains the Permittee's obligations with regard to the reporting required by this condition.

(j) A quarterly report of the total PM2.5 emissions from Boiler MB1 and Boiler MB2 to document the compliance status with PSD minor limits in Condition D.1.3 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. 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 Requirements contains the Permittee's obligations with regard to the reporting required by this condition.

SECTION D.2 EMISSIONS UNIT OPERATION CONDITIONS

Emissions Unit Description [326 IAC 2-7-5(14)]

(c) Two (2) No. 2 fuel oil-fired boilers, identified as Auxiliary Boiler 1 and Auxiliary Boiler 2, with construction commenced in 1977 and completed in 1983, each with a design heat input capacity of 603 million Btu per hour, both exhausting through Stack AB12.

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

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

D.2.0 Prevention of Significant Deterioration (PSD) Minor Limits and Limited Use Boiler [326 IAC 2-2] [40 CFR Part 63.7500(c) and 63.7575, Subpart DDDDD]

Beginning January 31, 2016, each auxiliary boiler shall be limited to less than 3773.06 Kilogallons of No. 2 fuel oil per twelve (12) consecutive month period, with compliance determined at the end of each month.

Compliance with this limit will make the boilers, identified as Auxiliary Boiler 1 and Auxiliary Boiler 2 limited use boilers pursuant to 40 CFR 63.7500(c).

D.2.1 Alternative Opacity Monitoring [326 IAC 12][40 CFR 60.13(i)(2)]

Pursuant to the approval letter issued March 18, 2003, by U.S. EPA, and 40 CFR 60.13(i)(2), Auxiliary Boilers 1 and 2 shall comply with the following Alternative Opacity Monitoring requirements:

(a) Neither boiler shall be operated more than 876 hours in a calendar year. If one of the boilers is operated more than 876 hours in a calendar year, AEP shall immediately submit a schedule for installing and certifying a continuous opacity monitor (COM) to IDEM and U.S. EPA. This schedule shall require installation of the COM within six months or less of the 876 hour limit exceedance. IDEM and U.S. EPA shall also be immediately notified that the 876 hour limit has been exceeded.

(b) At least once every four (4) hours of operation, during daylight hours, an observer certified in accordance with U.S. EPA Method 9 shall perform three (3) six-minute observations of each boiler stack.

(c) If the average of any 6-minute set of readings collected in accordance with Condition D.2.1(b) exceeds 10 percent (10%), the observer must collect two additional 6-minute sets of visible emission readings.

(d) AEP shall maintain the boilers in accordance with good air pollution control practices.

D.2.2 Temporary Alternative Opacity Limitations [326 IAC 5-1-3]

Pursuant to 326 IAC 5-1-3 (Temporary Alternative Opacity Limitations), when building a new fire in a boiler, or shutting down a boiler, opacity may exceed the forty percent (40%) opacity limitation of 326 IAC 5-1-2. However, opacity levels shall not exceed sixty percent (60%) for any six (6)-minute averaging period. Opacity in excess of the applicable limit established in 326 IAC 5-1-2 shall not continue for more than two (2) six (6)-minute averaging periods in any twenty-four (24) hour period. [326 IAC 5-1-3(a)]

D.2.3 Sulfur Dioxide (SO_2) [326 IAC 7-1.1-2]

Pursuant to 326 IAC 7-1.1-2 (Sulfur Dioxide Emission Limitations), the SO_2 emissions from Auxiliary Boilers 1 and 2 shall not exceed 0.5 pounds per million Btu (lbs/MMBtu).

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

D.2.4 Continuous Emissions Monitoring [326 IAC 3-5][326 IAC 12][40 CFR 60, Subpart D]

Pursuant to 326 IAC 3-5 (Continuous Monitoring of Emissions) and 40 CFR 60.45, no continuous emission monitoring systems are required for Auxiliary Boilers 1 and 2 at this time.

(a) Pursuant to paragraph (b) of 40 CFR 60.45:

(1) For a fossil fuel fired steam generator that does not use a flue gas desulfurization device, a continuous monitoring system for measuring sulfur dioxide emissions is not required if the owner or operator monitors sulfur dioxide emissions by fuel sampling and analysis.

(2) Pursuant to 40 CFR 60.45(b)(3) and the results of the nitrogen oxides (NO_X) stack tests performed January 15 and January 16, 2003, Auxiliary Boilers 1 and 2 are exempted from the NO_X continuous monitoring requirement of 60.45(a).

This exemption is contingent upon continued demonstration that the NO_X emissions are less than 70% of the limit (i.e. < 0.21 pounds per million Btu's).

(3) If an owner or operator does not install any continuous monitoring systems for sulfur oxides and nitrogen oxides, as provided under paragraph (b) of 40 CFR 60.45, a continuous monitoring system for measuring either oxygen or carbon dioxide is not required.

(b) Pursuant to 40 CFR 60.13(i)(2), Auxiliary Boilers 1 and 2 shall comply with the Alternative Opacity Monitoring requirements of the approval letter issued March 18, 2003, by U.S. EPA, in lieu of the continuous opacity monitoring requirements of 40 CFR 60.45.

D.2.5 Testing Requirements [326 IAC 2-7-6(1),(6)][326 IAC 2-1.1-11]

Performance tests for Auxiliary Boiler 1 and 2 were performed in 2003 pursuant to 40 CFR 60.11. PM and NO_X stack testing shall be repeated using methods as approved by the Commissioner, as follows:

(a) By December 31 of the second calendar year following the most recent stack test; or

(b) If a unit is not operated at least 1,000 hours in the 2 years since the previous stack test, then testing shall be repeated at least once every 1,000 hours of operation for that unit, or five (5) calendar years from the date of the last valid compliance demonstration, whichever occurs first.

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 obligations with regard to the performance testing required by this condition. For the purpose of this permit, "calendar year" means the twelve (12) month period from January 1 to December 31 inclusive.

D.2.6 Sulfur Dioxide Emissions and Sulfur Content [326 IAC 3-7][326 IAC 7-2][326 IAC 12] [40 CFR 60.45(b)(2)]

(a) Pursuant to 40 CFR 60.45(b)(2), the Permittee shall monitor sulfur dioxide emissions by fuel sampling and analysis.

(b) Pursuant to 326 IAC 7-2-1(c)(3), the Permittee shall demonstrate that the sulfur dioxide emissions do not exceed the equivalent of 0.5 pounds per MMBtu, using a calendar month average.

(c) Pursuant to 326 IAC 7-2-1(e) and 326 IAC 3-7-4, fuel sampling and analysis data shall be collected as follows:

(1) The Permittee may rely upon vendor analysis of fuel shipments, if accompanied by a vendor certification [326 IAC 3-7-4(b)]; the certification may apply to all trucks that are part of a single shipment as ordered by the Permittee; or,

(2) The Permittee shall perform sampling and analysis of fuel oil samples in accordance with one of the following methods:

(A) Oil samples shall be collected from the tanker truck load prior to transferring fuel to the storage tank; or

(B) Oil samples shall be collected from the storage tank immediately after each addition of fuel to the tank; or

(C) Oil samples shall be collected on a monthly basis at the triplex pump station on the feed lines from the main oil storage tank to determine the fuel oil characteristics for the fuel oil used in Auxiliary Boiler #1 and Auxiliary Boiler #2.

(d) Upon written notification to IDEM by a facility owner or operator, continuous emission monitoring data collected and reported pursuant to 326 IAC 3-5 may be used as the means for determining compliance with the emission limitations in 326 IAC 7. Upon such notification, the other requirements of 326 IAC 7-2 shall not apply. [326 IAC 7-2-1(g)]

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

D.2.7 Record Keeping Requirements

(a) Pursuant to the approval letter issued March 18, 2003, by U.S. EPA, and 40 CFR 60.13(i)(2), and to document the compliance status with Section C - Opacity, Condition D.2.1(b) and (c), and Condition D.2.2 the Permittee shall maintain the following records:

(1) Records of the date and time of visible emission observations, along with the results of each observation, must be maintained. Such records must be maintained on-site for a period of five years from the date of the observation.

(2) Records of hours of operation for each boiler must be maintained onsite for a period of five years.

(b) To document the compliance status with the PM and NOx requirements in Condition D.2.5, the Permittee shall maintain records of the data and results from the most recent stack test. Records shall be complete and sufficient to establish compliance with the PM and NO_X limits established in Condition D.2.5.

(1) Data and results from the most recent stack test;

(2) All sampling and analysis data used to show compliance with [40 CFR 60.42(a)(1)], [326 IAC 6-2-1(f)], and [40 CFR 60.44(a)(2)].

(c) In order to document the compliance status with the SO_2 requirements in Conditions D.2.3 and D.2.6, the Permittee shall maintain records in accordance with (1) and (2) below.

Records shall be complete and sufficient to establish compliance with the SO_2 limits in Condition D.2.3.

(1) All fuel sampling and analysis data used to show compliance with 326 IAC 7-1.1 and 40 CFR 60.43(a)(1).

(2) Actual fuel usage since last compliance determination period.

(d) Beginning January 31, 2016, in order to document the compliance status with Condition D.2.0, the Permittee shall maintain monthly records of no. 2 fuel oil usage.

D.2.8 Reporting Requirements

(a) To document the compliance status with the applicable opacity limitations and monitoring requirements:

(1) Pursuant to the approval letter issued March 18, 2003, by U.S. EPA, and 40 CFR 60.13(i)(2), within thirty days of the end of each calendar quarter, excess opacity emission reports for Auxiliary Boilers 1 and 2 must be submitted to IDEM and U.S. EPA. The excess emission reports shall identify the number of hours of operation in that quarter, the number of hours of operation in previous quarters within the same calendar year, the total number of observations performed under condition D.2.1(b) and any excess opacity readings observed. The excess emission report shall denote that the boilers must comply with a 20 percent opacity limit over a six-minute average.

(2) Within thirty days of the end of each calendar quarter, a quarterly summary of the information to document compliance with Condition D.2.4 and 326 IAC 5-1-3 shall be submitted to IDEM at the address listed in Section C - General Reporting Requirements, of this permit, no later than thirty (30) days after the end of the quarter being reported.

The Permittee may elect to combine the excess opacity emission report for 326 IAC 5-1-3 with the quarterly reports required under part (a)(1) of this condition. If the Permittee elects to submit combined opacity reports, the reports submitted pursuant to (a) must also identify any excess opacity readings observed during startup and shutdown, and each report must state precisely which state and federal requirements are satisfied by the report.

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 Requirements contains the Permittee's obligations with regard to the reporting required by this condition.

(3) The reports required by subparagraph (a)(1) of this Condition shall be submitted to:

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

The 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 Requirements contains the Permittee's obligations with regard to the reporting required by this condition.

(b) To document compliance with the NSPS SO_2 requirements:

(1) To document compliance with NSPS SO_2 requirements, pursuant to 40 CFR 60.45(b)(2), excess SO_2 emissions reports shall be submitted to the administrator semi-annually for each six month period in the calendar year. All semiannual reports shall be postmarked by the 30th day following the end of each six-month period. Each excess emission and MSP report shall include the information required in 40 CFR 60.7(c).

(2) The reports required by subparagraph (b)(1) of this Condition shall be submitted to:
Indiana Department of Environmental Management
Compliance and Enforcement Branch, Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251

The report submitted by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(35).

(c) Upon request of the IDEM, OAQ, reports of the calendar month average sulfur content, heat content, fuel consumption, and sulfur dioxide emission rate in pounds per million Btus shall be submitted to the address listed in Section C - General Reporting Requirements, of this permit. [326 IAC 7-2-1(c)(3]

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 Requirements contains the Permittee's obligations with regard to the reporting required by this condition.

(d) Beginning January 31, 2016, a quarterly report of the information to document the compliance status with Condition D.2.0 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. 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 Requirements contains the Permittee's obligations with regard to the reporting required by this condition.

SECTION D.3 EMISSIONS UNIT OPERATION CONDITIONS

Emissions Unit Description [326 IAC 2-7-5(14)]

(d) A coal storage and handling system for MB1 and MB2, with installation started in 1981 and completed in 1984, consisting of the following equipment:

(1) Two (2) barge unloading stations, identified as Stations 1 and 2, each with a baghouse, or a dust extraction system using water injection, and foam or water spray for particulate control, each with a bucket elevator with foam or water spray and partial enclosure for particulate control, and Conveyors 1 and 2 with water spray for particulate control.

(2) Enclosed conveyor systems, including fully and partially enclosed conveyors, with foam, water, or other equivalent dust suppression measures for particulate control, with the transfer points enclosed by buildings with baghouses, or a dust extraction system using water injection, for particulate control at Stations 5, 6 and 7. A stacker reclaim system is used to drop coal to the storage pile(s). The coal handling system has a design throughput capacity of 4000 tons per hour up to the stacker-reclaimers, and 1600 tons per hour from Station 7E and 7W to the coal bunkers in the units.

(3) Coal storage pile(s), with fugitive dust emissions controlled by watering.

(4) Coal crushing Station 8, with a maximum throughput of 2618 tons per hour for the east system and 2542 tons per hour for the west system, with a baghouse for particulate control, or a dust extraction system using water injection.

(5) Blending and transfer Station 9, with foam, water, or other equivalent dust suppression measures for particulate control.

(6) Blending and transfer Station 10.

(7) Two (2) storage silos for Station 9, with foam, water, or other equivalent dust suppression measures for particulate control.

(8) Coal sampling and transfer Stations A and D, each with a baghouse for particulate control, or a dust extraction system using water injection.

(9) Bunkering conveyors AB, BC, CB, DC, and FD, each fully enclosed, each with a baghouse for particulate control, or a dust extraction system using water injection.

(10) Fourteen (14) storage silos for Unit 1, with particulate control as follows:

(A) four (4) bag type filters, two for each set of seven bunkers on each side of Main Boiler 1, or

(B) one or more dust extraction systems using water injection.

(11) Fourteen (14) storage silos for Unit 2, with particulate control as follows:

(A) four (4) bag type filters, two for each set of seven bunkers on each side of Main Boiler 2, or

(B) one or more dust extraction systems using water injection.

Insignificant Activities [326 IAC 2-7-1(21)]:

Coal bunker and coal scale exhausts and associated dust collector vents.

(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 Particulate Emission Limitations for Manufacturing Processes [326 IAC 6-3-2]

(a) Pursuant to 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes), the particulate emission rates shall not exceed the following:

(1) 96.95 pounds per hour from the barge loading, and enclosed conveyors 5, 6, and 7 when operating at a process weight rate of 4000 tons per hour.

(2) 83.82 pounds per hour from Transfer Station 7E and 7W, Station 9, Station 10, Transfer Station A&D, enclosed conveyors AB, BC, CB, DC, and FD, and silos at Unit 1 and 2 when operating at a process weight rate of 1600 tons per hour.

(3) 90.71 pounds per hour for the east system of Station 8 when operating at a maximum process weight rate of 2618 tons per hour.

(4) 90.30 pounds per hour for the west system of Station 8 when operating at a maximum process weight rate of 2542 tons per hour.

These pounds per hour limitations were calculated using the following equation for Interpolation and extrapolation for the process weight rate in excess of 60,000 pounds per hour:

$E = 55.0 P^{0.11} - 40$ 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 for Manufacturing Processes), for the coal storage and handling system other than the coal storage piles, at a throughput rate greater than 200 tons per hour, the concentration of particulate may exceed the numerical limits in subparagraph (a), provided that particulate concentration in the discharge gases to the atmosphere is less than 0.10 pounds per one thousand (1,000) pounds of gases.

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

D.3.2 Particulate Control [326 IAC 2-7-6(6)]

Except as otherwise provided by statute or rule or in this permit, in order to comply with Condition D.3.1, the coal handling operations shall be conducted in enclosed operations, except for the coal barge unloading areas, coal storage piles and the coal yard handling areas between coal handling stations 6 and 7, which shall be controlled by a foam, water, or equivalent dust suppression system on as-needed basis to minimize fugitive dust.

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

D.3.3 Visible Emissions Notations [326 IAC 2-7-6(1)][326 IAC 2-7-5(1)]

(a) Visible emission notations of the partially enclosed coal unloading stations shall be performed once per week during normal daylight operations when unloading coal. A trained employee shall record whether emissions are normal or abnormal.

(b) Visible emission notations of the exhaust from the particulate control devices on the coal handling operations shall be performed once per week during normal daylight operations when the associated processes are in operation. A trained employee shall record whether emissions are normal or abnormal.

(c) If abnormal emissions are observed from the coal handling operations, the Permittee shall take reasonable response steps. Observation of abnormal emissions that do not violate 326 IAC 6-4 (Fugitive Dust Emissions) or an applicable opacity limit is not a deviation from this permit. Failure to take response steps shall be considered a deviation from this permit. Section C – Response to Excursions or Exceedances contains the Permittee's obligations with regard to responding to the reasonable response steps required by this condition.

(d) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation.

(e) 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.

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

D.3.4 Record Keeping Requirements

(a) To document the compliance status with Condition D.3.3 the Permittee shall maintain records of the weekly visible emission notations of the coal unloading station openings and the exhausts from the particulate control devices on the coal handling operations. The Permittee shall include in its daily record when a visible emission notation is not taken and the reason for the lack of a visible emission notation (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

Emissions Unit Description [326 IAC 2-7-5(14)]

(e) Dry fly ash handling:

(1) Fly ash handling for MB1, installed in approximately 1982, including the following:

(A) Vacuum system to convey fly ash to four (4) storage silos with particulate emissions controlled by a bin vent filter on each silo, with a maximum throughput rate of 58 tons per hour.

(B) Each of the four fly ash silos is equipped with two telescoping chutes for loading dry ash into tanker trucks. Each chute has a vacuum system to control dust and transport it back into the storage silo. Process rate for loading the tanker trucks is estimated at 300 tons per hour.

(C) Each of the four fly ash silos is equipped with two wet ash conditioners, for loading ash into open trucks for disposal. Dust is controlled by mixing water with the ash prior to depositing the ash in the truck. Process rate is estimated at 150 tons per hour.

(D) Water spray curtains on each silo can be used to prevent dust generated in the loading operation from leaving the loading gallery in the silo base, if the outdoor temperature is above freezing.

(2) Fly ash handling for MB2, with installation completed in 1986, including the following:

(A) Vacuum system to convey fly ash to four (4) storage silos with particulate emissions controlled by two (2) bin vent filters on each silo, with a maximum throughput rate of 58 tons per hour.

(B) Each of the four fly ash silos is equipped with two telescoping chutes for loading dry ash into tanker trucks. Each chute has a vacuum system to control dust and transport it back into the storage silo. Process rate for loading the tanker trucks is estimated at 300 tons per hour.

(C) Each of the four fly ash silos is equipped with two wet ash conditioners, for loading ash into open trucks for disposal. Dust is controlled by mixing water with the ash prior to depositing the ash in the truck. Process rate is estimated at 150 tons per hour.

(D) Water spray curtains on each silo can be used to prevent dust generated in the loading operation from leaving the loading gallery in the silo base, if the outdoor temperature is above freezing.

(3) One (1) fly ash barge loading facility, with pneumatic unloading system from covered truck to covered barge with a maximum throughput rate of 52.5 tons ash per hour, with a baghouse (ABL-001) on a river cell for particulate control.

(4) Rail loading equipment associated with the former fly ash temporary storage facility, with a maximum throughput rate of 52.5 tons ash per hour. The loader has a baghouse for dust control (ADL-001).

(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]

(a) Pursuant to 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes), the particulate emission rates shall not exceed the following:

(1) 46 pounds per hour from the fly ash vacuum conveying system to storage silos when operating at a process weight rate of 58 tons per hour.

(2) 55 pounds per hour from the ash loading to open trucks from the storage silos when operating at a process weight rate of 150 tons per hour.

(3) 45 pounds per hour from fly ash barge loading when operating at a maximum process weight rate of 52.5 tons per hour.

(4) 45 pounds per hour from fly ash rail loading when operating at a maximum process weight rate of 50 tons per hour.

These pounds per hour limitations were calculated using the following equation:

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

$E = 55.0 P^{0.11} - 40$ 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) (Particulate Emission Limitations for Manufacturing Processes), for dry fly ash loading to tanker trucks from the storage silos at a maximum throughput rate greater than 200 tons per hour, the concentration of particulate in the discharge gases to the atmosphere shall be less than 0.10 pounds per one thousand (1,000) pounds of gases.

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

D.4.2 Visible Emissions Notations [326 IAC 2-7-6(1)][326 IAC 2-7-5(1)] [40 CFR 64]

(a) Visible emission notations of the ash silo unloading station openings shall be performed at least once per day during normal daylight operations when ash is being unloaded. A trained employee shall record whether emissions are normal or abnormal.

(b) Visible emission notations of each ash silo bin vent filter exhaust, barge and rail loading baghouse exhaust, and the nozzle of each telescoping chute at the barge and rail loading stations shall be performed at least once per week during normal daylight operations when the respective ash silo bin vent filter or barge and rail loading are in operation. A trained employee shall record whether emissions are normal or abnormal.

(c) If abnormal emissions of ash are observed from the ash silo unloading station openings, the Permittee shall take reasonable response steps. Observation of visible emissions that do not violate 326 IAC 6-4 (Fugitive Dust Emissions) or an applicable opacity limit is not a deviation from this permit. Failure to take response steps shall be considered a deviation from this permit. Section C – Response to Excursions or Exceedances contains the Permittee's obligations with regard to responding to the reasonable response steps required by this condition.

(d) If abnormal emissions are observed at a bin vent filter or baghouse exhaust or from the nozzle of the telescoping chute, the Permittee shall take reasonable response steps. Observation of abnormal emissions that do not violate 326 IAC 6-4 (Fugitive Dust Emissions) or an applicable opacity limit is not a deviation from this permit. Failure to take response steps shall be considered a deviation from this permit. Section C – Response to Excursions or Exceedances contains the Permittee's obligations with regard to responding to the reasonable response steps required by this condition.

(e) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation.

(f) 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.

D.4.3 Broken or Failed Bag Detection [326 IAC 2-7-6(1)][326 IAC 2-7-5(1)] [40 CFR 64]

For a single compartment baghouse controlling emissions from the fly ash barge loading facility (ABL-001) and the rail loader associated with the former fly ash temporary storage facility (ADL-001), 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).

Bag failure may be indicated by a significant drop in the baghouses' pressure reading, by abnormal visible emissions, by an opacity violation, or by visual inspection.

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

D.4.4 Record Keeping Requirements

(a) To document the compliance status with Condition D.4.2, the Permittee shall maintain records of the visible emission notations of the ash silo unloading station openings and the baghouse and bin vent exhausts. The Permittee shall include in its daily record when a visible emission notation is not taken and the reason for the lack of a visible emission notation (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.5 EMISSIONS UNIT OPERATION CONDITIONS

Emissions Unit Description [326 IAC 2-7-5(14)]

(f) Wet process bottom ash handling, with hydroveyors conveying ash to storage ponds, with water level sufficient to prevent ash re-entrainment.

(g) Paved Roads

Insignificant Activities [326 IAC 2-7-1(21)]:

Ponded bottom ash handling and management, including dredging bottom ash ponds and loading material into trucks.

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

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

D.5.1 Visible Emissions Notations [326 IAC 2-7-6(1)][326 IAC 2-7-5(1)]

(a) Visible emission notations of the bottom ash storage pond area(s) and any bottom ash storage piles shall be performed at least once per week during normal daylight operations. A trained employee shall record whether emissions are normal or abnormal.

(b) If visible emissions are observed crossing the property line or boundaries of the property, right-of-way, or easement on which the source is located, the Permittee shall take reasonable response steps. Failure to take response steps shall be considered a deviation from this permit. Section C – Response to Excursions or Exceedances contains the Permittee's obligations with regard to responding to the reasonable response steps required by this condition.

(c) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation.

(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.

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

D.5.2 Record Keeping Requirements

(a) To document the compliance status with Conditions C.5 and D.5.1, the Permittee shall maintain records of visible emission notations of the ash storage pond area(s) and any bottom ash storage piles. The Permittee shall include in its daily record when a visible emission notation is not taken and the reason for the lack of a visible emission notation (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.6 EMISSIONS UNIT OPERATION CONDITIONS

Emissions Unit Description [326 IAC 2-7-5(14)]

(g) Emergency generators as follows: Three (3) No. 2 fuel oil-fired emergency diesel generators designated as DG1, DG2, and DG3, each with 25.16 MMBtu/hr heat input capacity. [326 IAC 7][326 IAC 2]

(h) Six (6) No. 2 fuel oil-fired space heaters designated as WHU-5, WHU-6, WHU-7, WHU-8, WHU-9, and WHU-10 with heat input capacities of 4.5 MMBtu/hr, 3.0 MMBtu/hr, 2.75 MMBtu/hr, 3.5 MMBtu/hr, 4.5 MMBtu/hr, and 2.2 MMBtu/hr, respectively.

Insignificant Activities [326 IAC 2-7-1(21)]:

Space heaters using the following fuels: Fuel oil-fired combustion sources with heat input equal to or less than two million (2,000,000) Btu per hour and firing fuel containing less than three-tenths (0.3) percent sulfur by weight, including space heaters WHU-1 and WHU-2, each with 1.1 MMBtu/hr heat input capacity.

Emergency generators as follows: Diesel generators not exceeding 1600 horsepower.

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

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

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

In order to make the requirements of 326 IAC 2-2-1(x) and 326 IAC 2-2-1(jj) (PSD Requirements) not applicable to the diesel generators DG1, DG2, and DG3, during periods when both of the Unit 1 and Unit 2 main boilers are in service the total operating hours for all three diesel generators (DG1, DG2, and DG3) taken together shall not exceed 780 hours per twelve (12) consecutive month period with compliance determined at the end of each month.

D.6.2 Sulfur Dioxide (SO_2) [326 IAC 7]

Pursuant to 326 IAC 7-1.1-2 (Sulfur Dioxide Emission Limitations), the SO_2 emissions from the distillate oil-fired emergency generators and space heaters shall not exceed 0.5 pounds per million Btu (lbs/MMBtu).

D.6.3 PSD Minor Limit for SO_2 [326 IAC 2-2]

In order to make the requirements of 326 IAC 2-2-1(x) and 326 IAC 2-2-1(jj) (PSD Requirements) not applicable to the fuel oil-fired space heaters WHU-1, WHU-2, WHU-5, WHU-6, WHU-7, WHU-8, WHU-9, and WHU-10, the emissions from the heaters shall be limited to less than forty (40) tons of sulfur dioxide (SO_2) per twelve (12) consecutive month period with compliance determined at the end of each month. Compliance with this limit shall be determined at the end of each month, using the following equation:

$$SO_2 \text{ Emissions (per month)} = \frac{142 \times S\% \times 22.65 \text{ MMBtu/hr} \times Hr \text{ (hrs/month)}}{H \text{ (MMBtu/kgal)} \times 2000 \text{ (lb/ton)}}$$

Where: SO_2 Emission Limit (S) = (142 X S%) lbs per kilogallons
Monthly Average Sulfur Content = S (%)
Heat Input Capacity = 22.65 MMBtu/hr
Operating Hours = Hr (hrs/month)
Monthly Average Fuel Heating Value = H (MMBtu/kgal)

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

D.6.4 Sulfur Dioxide Emissions and Sulfur Content [326 IAC 3][326 IAC 7-2][326 IAC 7-1.1-2] [326 IAC 2-2]

(a) Pursuant to 326 IAC 7-2-1(c), the Permittee shall demonstrate that the sulfur dioxide emissions from the emergency generators do not exceed the equivalent of five-tenths (0.5) pound per million Btu heat input, using a calendar month average.

(b) The Permittee shall demonstrate that the fuel oil sulfur content does not exceed the percentage required for compliance with D.6.3.

(c) Pursuant to 326 IAC 7-2-1(e) and 326 IAC 3-7-4, fuel sampling and analysis data shall be collected as follows:

(1) The Permittee may rely upon vendor analysis of fuel shipments, if accompanied by a vendor certification [326 IAC 3-7-4(b)]; the certification may apply to all trucks that are part of a single shipment as ordered by the Permittee; or,

(2) The Permittee shall perform sampling and analysis of fuel oil samples in accordance with one of the following methods.

(A) Oil samples shall be collected from the tanker truck load prior to transferring fuel to the storage tank; or

(B) Oil samples shall be collected from the storage tank immediately after each addition of fuel to the tank; or

(C) For the emergency diesel generators, oil samples shall be collected on a monthly basis at the triplex pump station on the feed lines from the main oil storage tank to determine the fuel oil characteristics for the fuel oil used in the emergency generators; or

(D) For the space heaters, oil samples shall be collected in monthly basis from the feed lines from the individual space heater fuel oil storage tanks between the storage tanks and the space heater.

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

D.6.5 Record Keeping Requirements

(a) To document the compliance status with the requirements in Condition D.6.1, the Permittee shall maintain records of the following for each month of any one of the diesel generators:

(1) Identification of generator(s) in service.

(2) Total generator hours of operation (example: two generators operating for 3 hours equals 6 generator hours)

(3) The status of the Main Boilers MB1 and MB2 during periods of diesel generator operation.

(b) To document the compliance status with the requirements in Conditions D.6.2 and D.6.3, the Permittee shall maintain records of all fuel sampling and analysis data, pursuant to 326 IAC 7-2. Records shall be complete and sufficient to establish compliance with the limits in Conditions D.6.2 and D.6.3.

(c) To document the compliance status with the requirements in Condition D.6.3, the Permittee shall maintain records of all periods of operation of space heaters WHU-1, WHU-2, WHU-5, WHU-6, WHU-7, WHU-8, WHU-9, and WHU-10. These records shall include the total cumulative operating time (in hours) for that calendar month.

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

D.6.6 Reporting Requirements

A quarterly report of the information to document the compliance status with Conditions D.6.1 and D.6.3 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. 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 Requirements contains the Permittee's obligations with regard to the reporting required by this condition.

SECTION D.7 EMISSIONS UNIT OPERATION CONDITIONS

Emissions Unit Description [326 IAC 2-7-5(14)]

Insignificant Activities [326 IAC 2-7-1(21)]:

Degreasing operations that do not exceed 145 gallons per 12 months, except if subject to 326 IAC 20-6.

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 C (100°F) or;

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

(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 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), for cold cleaning degreasers without remote solvent reservoirs constructed after July 1, 1990:

(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 (a)(3), (a)(4), (a)(6), and (a)(7) of this condition.

(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 Permittee 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 (b)(1)(A) through (D) of this condition 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.7.2 Volatile Organic Compounds (VOC) [326 IAC 8-3-8]

Pursuant to 326 IAC 8-3-8 (Material Requirements for Cold Cleaner Degreasers), on and after January 1, 2015, the Permittee shall not operate a cold cleaner degreaser with a solvent that has a VOC composite partial vapor pressure than exceeds one (1) millimeter of mercury (nineteen-thousandths (0.019) pound per square inch) measured at twenty (20) degrees Celsius (sixty-eight (68) degrees Fahrenheit).

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

D.7.3 Record Keeping Requirements

(a) Pursuant to 326 IAC 8-3-8(c)(2), on and after January 1, 2015, the following records shall be maintained for each purchase of cold cleaner degreaser solvent:

(1) The name and address of the solvent supplier.
(2) The date of purchase (or invoice/bill dates of contract servicer indicating service date).
(3) The type of solvent purchased.
(4) The total volume of the solvent purchased.
(5) The true vapor pressure of the solvent measured in millimeters of mercury at twenty (20) degrees Celsius (sixty-eight (68) degrees Fahrenheit).

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

SECTION E.1 TITLE IV CONDITIONS

Emissions Unit Description [326 IAC 2-7-5(14)]

(a) One (1) pulverized coal opposed wall fired dry bottom boiler, identified as MB1 (Main Boiler 1), with construction commenced in 1977 and completed in 1984, with a design heat input capacity of 12,374 million Btu per hour, with an electrostatic precipitator (ESP) system for control of particulate matter. Low NO_X burners, an overfire air (OFA) system have been installed and Selective Catalytic Reduction permitted in 2015 for NO_X control. No. 2 fuel oil is fired during startup, shutdown, and load stabilization periods. No. 2 fuel oil may also be burned to maintain boiler temperature to ensure boiler availability on short notice, and to maintain boiler temperature required during chemical cleaning. One (1) powdered activated carbon (PAC) injection system, identified as ACI, permitted in 2008, 2010 and 2013, with a unit maximum capacity of injecting 4,000 pounds of halogenated or non-halogenated activated carbon per hour into the exhaust ductwork for Boiler 1 (MB1) from a dedicated silo)s). One (1) dry sorbent injection (DSI) system, identified as DSI-U1, permitted in 2013, with a design injection capacity of 20,000 pounds of Sodium Bicarbonate per hour into the exhaust ductwork for Boilers 1 (MB1). Emissions from Units MB1 and MB2 are exhausted through the common stack, Stack CS012. Continuous emissions monitoring systems (CEMS) for nitrogen oxides (NO_X) and for sulfur dioxide (SO_2) and a continuous opacity monitoring (COM) system are located on the common stack.

(b) One (1) pulverized coal opposed wall fired dry bottom boiler, identified as MB2 (Main Boiler 2), with construction commenced in 1977 and completed in 1989, with a design heat input capacity of 12,374 million Btu per hour, with an electrostatic precipitator (ESP) system for control of particulate matter. Low NO_X burners and an overfire air (OFA) system have been installed and Selective Catalytic Reduction (SCR) permitted in 2018 for NO_X control. No. 2 fuel oil is fired during startup, shutdown, and load stabilization periods. No. 2 fuel oil may also be burned to maintain boiler temperature to ensure boiler availability on short notice, and to maintain boiler temperature required during chemical cleaning. One (1) powdered activated carbon (PAC) injection system, identified as ACI, permitted in 2008, 2010 and 2013, with a unit maximum capacity of injecting 4,000 pounds of halogenated or non-halogenated activated carbon per hour into the exhaust ductwork for Boiler 2 (MB2) from a dedicated silo(s). One (1) dry sorbent injection (DSI) system, identified as DSI-U2, permitted in 2013, with a combined maximum capacity of injecting 20,000 pounds of Sodium Bicarbonate per hour into the exhaust ductwork for Boilers 1 (MB2). Emissions from Units MB1 and MB2 are exhausted through the common stack, Stack CS012. Continuous emissions monitoring systems (CEMS) for nitrogen oxides (NO_X) and for sulfur dioxide (SO_2) and a continuous opacity monitoring (COM) system are located on the common stack.

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

Acid Rain Program

E.1.1 Acid Rain Permit [326 IAC 2-7-5(1)(C)][326 IAC 21][40 CFR 72 through 40 CFR 78]

Pursuant to 326 IAC 21 (Acid Deposition Control), the Permittee shall comply with all provisions of the Acid Rain permit issued for this source, and any other applicable requirements contained in 40 CFR 72 through 40 CFR 78. The Acid Rain permit for this source is attached to this permit as Attachment B, and is incorporated by reference.

E.1.2 Title IV Emissions Allowances [326 IAC 2-7-5(4)][326 IAC 21]

Emissions exceeding any allowances that the Permittee lawfully holds under the Title IV Acid Rain Program of the Clean Air Act are prohibited, subject to the following limitations:

(a) No revision of this permit shall be required for increases in emissions that are authorized by allowances acquired under the Title IV Acid Rain Program, provided that such increases do not require a permit revision under any other applicable requirement.

(b) No limit shall be placed on the number of allowances held by the Permittee. The Permittee may not use allowances as a defense to noncompliance with any other applicable requirement.

(c) Any such allowance shall be accounted for according to the procedures established in regulations promulgated under Title IV of the Clean Air Act.

SECTION E.2 EMISSIONS UNIT OPERATION CONDITIONS

Emissions Unit Description: [326 IAC 2-7-5(14)]

(a) One (1) pulverized coal opposed wall fired dry bottom boiler, identified as MB1 (Main Boiler 1), with construction commenced in 1977 and completed in 1984, with a design heat input capacity of 12,374 million Btu per hour, with an electrostatic precipitator (ESP) system for control of particulate matter. Low NO_X burners, an overfire air (OFA) system have been installed and Selective Catalytic Reduction permitted in 2015 for NO_X control. No. 2 fuel oil is fired during startup, shutdown, and load stabilization periods. No. 2 fuel oil may also be burned to maintain boiler temperature to ensure boiler availability on short notice, and to maintain boiler temperature required during chemical cleaning. One (1) powdered activated carbon (PAC) injection system, identified as ACI, permitted in 2008, 2010 and 2013, with a unit maximum capacity of injecting 4,000 pounds of halogenated or non-halogenated activated carbon per hour into the exhaust ductwork for Boiler 1 (MB1) from a dedicated silo)s). One (1) dry sorbent injection (DSI) system, identified as DSI-U1, permitted in 2013, with a design injection capacity of 20,000 pounds of Sodium Bicarbonate per hour into the exhaust ductwork for Boilers 1 (MB1). Emissions from Units MB1 and MB2 are exhausted through the common stack, Stack CS012. Continuous emissions monitoring systems (CEMS) for nitrogen oxides (NO_X) and for sulfur dioxide (SO_2) and a continuous opacity monitoring (COM) system are located on the common stack.

(b) One (1) pulverized coal opposed wall fired dry bottom boiler, identified as MB2 (Main Boiler 2), with construction commenced in 1977 and completed in 1989, with a design heat input capacity of 12,374 million Btu per hour, with an electrostatic precipitator (ESP) system for control of particulate matter. Low NO_X burners and an overfire air (OFA) system have been installed and Selective Catalytic Reduction (SCR) permitted in 2018 for NO_X control. No. 2 fuel oil is fired during startup, shutdown, and load stabilization periods. No. 2 fuel oil may also be burned to maintain boiler temperature to ensure boiler availability on short notice, and to maintain boiler temperature required during chemical cleaning. One (1) powdered activated carbon (PAC) injection system, identified as ACI, permitted in 2008, 2010 and 2013, with a unit maximum capacity of injecting 4,000 pounds of halogenated or non-halogenated activated carbon per hour into the exhaust ductwork for Boiler 2 (MB2) from a dedicated silo(s). One (1) dry sorbent injection (DSI) system, identified as DSI-U2, permitted in 2013, with a combined maximum capacity of injecting 20,000 pounds of Sodium Bicarbonate per hour into the exhaust ductwork for Boilers 1 (MB2). Emissions from Units MB1 and MB2 are exhausted through the common stack, Stack CS012. Continuous emissions monitoring systems (CEMS) for nitrogen oxides (NO_X) and for sulfur dioxide (SO_2) and a continuous opacity monitoring (COM) system are located on the common stack.

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

National Emission Standards for Hazardous Air Pollutants (NESHAP) Requirements [326 IAC 2-7-5(1)]

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 63.10040, the Permittee shall comply with the provisions of 40 CFR Part 63, Subpart A – General Provisions, which are incorporated by reference as 326 IAC 20-1-1, for the above listed emissions units, as specified in 40 CFR Part 63, Subpart UUUUU, in accordance with the schedule in 40 CFR Part 63, Subpart UUUUU.

(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.2.2 Coal- and Oil-Fired Electric Utility Steam Generating Units NESHAP [40 CFR Part 63, Subpart UUUUU]

Pursuant to 40 CFR Part 63, Subpart UUUUU, the Permittee shall comply with the provisions of 40 CFR Part 63, Subpart UUUUU, (included as Attachment E to this permit), for the above listed emissions units, as specified as follows.

(a) 40 CFR 63.9980
(b) 40 CFR 63.9981
(c) 40 CFR 63.9982(a)(1) and (d)
(d) 40 CFR 63.9984(b), (c), and (f)
(e) 40 CFR 63.9991(a)
(f) 40 CFR 63.10000(a), (b), (c), (d), (e), and (l)
(g) 40 CFR 63.10005(a), (b), (d), (e), (f), (h), (j), and (k)
(h) 40 CFR 63.10006(b), (d), (f), (h), (i)(1), and (j)
(i) 40 CFR 63.10007(a), (b), (d), (e), and (g)
(j) 40 CFR 63.10009(k) and (m)
(k) 40 CFR 63.10010(a)(2)(ii), (b), (c), (d), (g), and (l)
(l) 40 CFR 63.10011(a), (c)(1), (d), (e), and (g)
(m) 40 CFR 63.10020
(n) 40 CFR 63.10021
(o) 40 CFR 63.10030
(p) 40 CFR 63.10031
(q) 40 CFR 63.10032
(r) 40 CFR 63.10033
(s) 40 CFR 63.10040
(t) 40 CFR 63.10041
(u) 40 CFR 63.10042
(v) Table 2 to 40 CFR 63, Subpart UUUUU
(w) Table 3 to 40 CFR 63, Subpart UUUUU
(x) Table 5 to 40 CFR 63, Subpart UUUUU
(y) Table 7 to 40 CFR 63, Subpart UUUUU
(z) Table 8 to 40 CFR 63, Subpart UUUUU
(aa) Table 9 to 40 CFR 63, Subpart UUUUU

E.2.3 ORDER of the Commissioner of the Indiana Department of Environmental Management

Pursuant to Indiana Code § 13-14-2-6 and in order to secure compliance with 40 CFR Part 63, Subpart UUUUU, Indiana Michigan Power, dba American Electric Power, Rockport Plant is subject to the following ORDER:

(a) Indiana Michigan Power, dba American Electric Power shall submit a status report within fifteen (15) days of completion of the following Rockport Plant milestones indicating the actual dates of completion:

(1) The dates on-site construction for the installation of the emission control equipment identified for all affected units are initiated, and

(2) The dates on-site construction for the installation of the emission control equipment identified for all affected units are completed.

(3) The dates by which final compliance with 40 CFR Part 63, Subpart UUUUU for all affected units are achieved.

(b) Indiana Michigan Power, dba American Electric Power, Rockport Plant Unit Nos. 1 and 2 shall comply with the standards set forth in 40 CFR Part 63, Subpart UUUUU no later than December 16, 2015.

SECTION E.3 EMISSIONS UNIT OPERATION CONDITIONS

Emissions Unit Description:

(a) One (1) pulverized coal opposed wall fired dry bottom boiler, identified as MB1 (Main Boiler 1), with construction commenced in 1977 and completed in 1984, with a design heat input capacity of 12,374 million Btu per hour, with an electrostatic precipitator (ESP) system for control of particulate matter. Low NO_X burners, an overfire air (OFA) system have been installed and Selective Catalytic Reduction to be permitted in 2014 for NO_X control. No. 2 fuel oil is fired during startup, shutdown, and load stabilization periods. No. 2 fuel oil may also be burned to maintain boiler temperature to ensure boiler availability on short notice, and to maintain boiler temperature required during chemical cleaning. One (1) powdered activated carbon (PAC) injection system, identified as ACI, permitted in 2008, 2010 and 2013, with a unit maximum capacity of injecting 4,000 pounds of halogenated or non-halogenated activated carbon per hour into the exhaust ductwork for Boiler 1 (MB1) from a dedicated silo(s). One (1) dry sorbent injection (DSI) system, identified as DSI-U1, permitted in 2013, with a design injection capacity of 20,000 pounds of Sodium Bicarbonate per hour into the exhaust ductwork for Boiler 1 (MB1). Emissions from Units MB1 and MB2 are exhausted through the common stack, Stack CS012. Continuous emissions monitoring systems (CEMS) for nitrogen oxides (NO_X) and for sulfur dioxide (SO_2) and a continuous opacity monitoring (COM) system are located on the common stack.

(b) One (1) pulverized coal opposed wall fired dry bottom boiler, identified as MB2 (Main Boiler 2), with construction commenced in 1977 and completed in 1989, with a design heat input capacity of 12,374 million Btu per hour, with an electrostatic precipitator (ESP) system for control of particulate matter. Low NO_X burners and an overfire air (OFA) system have been installed and Selective Catalytic Reduction (SCR) permitted in 2018 for NO_X control. No. 2 fuel oil is fired during startup, shutdown, and load stabilization periods. No. 2 fuel oil may also be burned to maintain boiler temperature to ensure boiler availability on short notice, and to maintain boiler temperature required during chemical cleaning. One (1) powdered activated carbon (PAC) injection system, identified as ACI, permitted in 2008, 2010 and 2013, with a unit maximum capacity of injecting 4,000 pounds of halogenated or non-halogenated activated carbon per hour into the exhaust ductwork for Boiler 2 (MB2) from a dedicated silo(s). One (1) dry sorbent injection (DSI) system, identified as DSI-U2, permitted in 2013, with a combined maximum capacity of injecting 20,000 pounds of Sodium Bicarbonate per hour into the exhaust ductwork for Boiler 2 (MB2). Emissions from Units MB1 and MB2 are exhausted through the common stack, Stack CS012. Continuous emissions monitoring systems (CEMS) for nitrogen oxides (NO_X) and for sulfur dioxide (SO_2) and a continuous opacity monitoring (COM) system are located on the common stack.

(c) Two (2) No. 2 fuel oil-fired boilers, identified as Auxiliary Boiler 1 and Auxiliary Boiler 2, with construction commenced in 1977 and completed in 1983, each with a design heat input capacity of 603 million Btu per hour, both exhausting through Stack AB12.

(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 12][40 CFR 60, Subpart D] [326 IAC 2-7-5(1)]

E.3.1 General Provisions Relating to New Source Performance Standards [326 IAC 12-1] [40 CFR Part 60, Subpart A]

Pursuant to 40 CFR 60.1, the Permittee shall comply with the provisions of 40 CFR Part 60 Subpart A – General Provisions, which are incorporated by reference as 326 IAC 12-1 for the pulverized coal opposed wall fired dry bottom boilers, identified as MB1 and MB2 and the two (2)

No. 2 fuel oil-fired boilers, identified as Auxiliary Boiler 1 and Auxiliary Boiler 2, except as otherwise specified in 40 CFR Part 60, Subpart D.

E.3.2 New Source Performance Standards for Standard of Performance for Fossil-Fuel-Fired Steam Generators [40 CFR Part 60, Subpart D] [326 IAC 12]

Pursuant to 40 CFR Part 60, Subpart D, the Permittee shall comply with the provisions of New Source Performance Standards for Standard of Performance for Fossil-Fuel-Fired Steam Generators, which are incorporated by reference as 326 IAC 12, for the pulverized coal opposed wall fired dry bottom boilers, identified as MB1 and MB2 and the two (2) No. 2 fuel oil-fired boilers, identified as Auxiliary Boiler 1 and Auxiliary Boiler 2, as specified as follows:

(1) 40 CFR 60.40
(2) 40 CFR 60.41
(3) 40 CFR 60.42
(4) 40 CFR 60.43(a) and (b)
(5) 40 CFR 60.44(a) and (b)
(6) 40 CFR 60.45
(7) 40 CFR 60.46

SECTION E.4 EMISSIONS UNIT OPERATION CONDITIONS

Emissions Unit Description [326 IAC 2-7-5(14)]

(d) A coal storage and handling system for MB1 and MB2, with installation started in 1981 and completed in 1984, consisting of the following equipment:

(1) Two (2) barge unloading stations, identified as Stations 1 and 2, each with a baghouse, or a dust extraction system using water injection, and foam or water spray for particulate control, each with a bucket elevator with foam or water spray and partial enclosure for particulate control, and Conveyors 1 and 2 with water spray for particulate control.

(2) Enclosed conveyor systems, including fully and partially enclosed conveyors, with foam, water, or other equivalent dust suppression measures for particulate control, with the transfer points enclosed by buildings with baghouses, or a dust extraction system using water injection, for particulate control at Stations 5, 6 and 7. A stacker reclaim system is used to drop coal to the storage pile(s). The coal handling system has a design throughput capacity of 4000 tons per hour up to the stacker-reclaimers, and 1600 tons per hour from Station 7E and 7W to the coal bunkers in the units.

(3) Coal storage pile(s), with fugitive dust emissions controlled by watering.

(4) Coal crushing Station 8, with a maximum throughput of 2618 tons per hour for the east system and 2542 tons per hour for the west system, with a baghouse for particulate control, or a dust extraction system using water injection.

(5) Blending and transfer Station 9, with foam, water, or other equivalent dust suppression measures for particulate control.

(6) Blending and transfer Station 10.

(7) Two (2) storage silos for Station 9, with foam, water, or other equivalent dust suppression measures for particulate control.

(8) Coal sampling and transfer Stations A and D, each with a baghouse for particulate control, or a dust extraction system using water injection.

(9) Bunkering conveyors AB, BC, CB, DC, and FD, each fully enclosed, each with a baghouse for particulate control, or a dust extraction system using water injection.

(10) Fourteen (14) storage silos for Unit 1, with particulate control as follows:

(A) four (4) bag type filters, two for each set of seven bunkers on each side of Main Boiler 1, or

(B) one or more dust extraction systems using water injection.

(11) Fourteen (14) storage silos for Unit 2, with particulate control as follows:

(A) four (4) bag type filters, two for each set of seven bunkers on each side of Main Boiler 2, or

(B) one or more dust extraction systems using water injection.

Insignificant Activities [326 IAC 2-7-1(21)]:

Coal bunker and coal scale exhausts and associated dust collector vents.

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

New Source Performance Standards (NSPS) [40 CFR 60, Subpart Y] [326 IAC 2-7-5(1)]

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

The provisions of 40 CFR Part 60, Subpart A - General Provisions, which are incorporated by reference in 326 IAC 12-1, apply to the coal storage and handling system for MB1 and MB2, except when otherwise specified in 40 CFR Part 60, Subpart Y.

E.4.2 New Source Performance Standard (NSPS): Coal Preparation Plants [326 IAC 12] [40 CFR 60, Subpart Y]

The following provisions of 40 CFR Part 60, Subpart Y - Standards of Performance for Coal Preparation Plants, which are incorporated by reference in 326 IAC 12, apply to the coal storage and handling system for MB1 and MB2 (Applicable portions are included in Attachment B):

(a) 40 CFR 60.250;
(b) 40 CFR 60.251;
(c) 40 CFR 60.252(a)(1), and (2), (b)(1) and (2), and (c);
(d) 40 CFR 60.253(a)(1), and (2)(i)(ii) and (b), and
(e) 40 CFR 60.254.

SECTION E.5 EMISSIONS UNIT OPERATION CONDITIONS

Emissions Unit Description:

(1) Three (3) No. 2 fuel oil-fired emergency diesel generators designated as DG1, DG2, and DG3, each with 25.16 MMBtu/hr heat input capacity.

(2) Two (2) Diesel Fire Pumps, identified as DFP-1 and DFP-2.

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

National Emissions Standard for Hazardous Air Pollutants [326 IAC 20] [40 CFR 63, Subpart ZZZZ] [326 IAC 2-7-5(1)]

E.5.1 General Provisions Relating to National Emissions Standard for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines [326 IAC 20-1][40 CFR Part 63, Subpart A]

Pursuant to 40 CFR 63.6590, the Permittee shall comply with the provisions of 40 CFR Part 63, Subpart A – General Provisions, which are incorporated by reference as 326 IAC 20-1-1 for the affected source, as specified in Appendix A of 40 CFR Part 63, Subpart ZZZZ, in accordance with the schedule in 40 CFR 63 Subpart ZZZZ.

E.5.2 National Emissions Standard for Hazardous Air Pollutants for stationary Reciprocating Internal Combustion Engines [40 CFR Part 63, Subpart ZZZZ][326 IAC 20-82-1]

Pursuant to CFR Part 63, Subpart ZZZZ, the Permittee shall comply with the provisions of 40 CFR Part 63.6590, for the affected source, as specified as follows:

1. 40 CFR 63.6585
2. 40 CFR 63.6590(b)(3)(iii)
3. 40 CFR 63.6640(f)(2)
4. 40 CFR 63.6675

SECTION E.6 EMISSIONS UNIT OPERATION CONDITIONS

Emissions Unit Description [326 IAC 2-7-5(14)]

(c) Two (2) No. 2 fuel oil-fired boilers, identified as Auxiliary Boiler 1 and Auxiliary Boiler 2, with construction commenced in 1977 and completed in 1983, each with a design heat input capacity of 603 million Btu per hour, both exhausting through Stack AB12.

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

National Emission Standards for Hazardous Air Pollutants [40 CFR 63] [326 IAC 2-7-5(1)]

E.6.1 General Provisions Relating to National Emissions Standards for Hazardous Air Pollutants under 40 CFR Part 63 [326 IAC 20-1] [40 CFR Part 63, Subpart A]

Pursuant to 40 CFR 63.7565, the Permittee shall comply with the provisions of 40 CFR Part 63, Subpart A – General Provisions, which are incorporated by reference as 326 IAC 20-1-1 unless otherwise specified in 40 CFR 63, Subpart DDDDD (National Emission Standards for Industrial, Commercial, and Institutional Boilers and Process Heaters).

E.6.2 National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers and Process Heaters [326 IAC 20-95] [40 CFR Part 63, Subpart DDDDD]

Beginning January 31, 2016, the Permittee which has industrial, commercial, and institutional boilers and process heaters shall comply with the applicable provisions of 40 CFR Part 63, Subpart DDDDD, which are incorporated by reference as 326 IAC 20-95, as follows: The full text of Subpart DDDDD will be found in Attachment D to this permit.

(1) 40 CFR 63.7485
(2) 40 CFR 63.7490(a)(1)
(3) 40 CFR 63.7490(d)
(4) 40 CFR 63.7495(b)
(5) 40 CFR 63.7499(o)
(6) 40 CFR 63.7500(c)
(7) 40 CFR 63.7500(f)
(8) 40 CFR 63.7501
(9) 40 CFR 63.7505(a)
(10) 40 CFR 63.7515(d)
(11) 40 CFR 63.7525(k)
(12) 40 CFR 63.7540(a)
(13) 40 CFR 63.7540(a)(12)
(14) 40 CFR 63.7550(b)
(15) 40 CFR 63.7550(c)(1)
(16) 40 CFR 63.7550(c)(5)(i) through (iv)
(17) 40 CFR 63.7550(c)(5)(xiv)
(18) 40 CFR 63.7550(h)(3)
(19) 40 CFR 63.7555(a)(1)
(20) 40 CFR 63.7555(i)
(21) 40 CFR 63.7555(j)
(22) 40 CFR 63.7560
(23) 40 CFR 63.7575

Section F - Reserved

SECTION G Clean Air Interstate Rule (CAIR) Nitrogen Oxides Annual, Sulfur Dioxide, and Nitrogen Oxides Ozone Season Trading Programs – CAIR Permit for CAIR Units Under 326 IAC 24-3-1(a)

ORIS Code: {6166}

CAIR Permit for CAIR Units Under 326 IAC 24-3-1(a)

(a) One (1) pulverized coal opposed wall fired dry bottom boiler, identified as MB1 (Main Boiler 1), with construction commenced in 1977 and completed in 1984, with a design heat input capacity of 12,374 million Btu per hour, with an electrostatic precipitator (ESP) system for control of particulate matter. Low NO_X burners, an overfire air (OFA) system have been installed and Selective Catalytic Reduction permitted in 2015 for NO_X control. No. 2 fuel oil is fired during startup, shutdown, and load stabilization periods. No. 2 fuel oil may also be burned to maintain boiler temperature to ensure boiler availability on short notice, and to maintain boiler temperature required during chemical cleaning. One (1) powdered activated carbon (PAC) injection system, identified as ACI, permitted in 2008, 2010 and 2013, with a unit maximum capacity of injecting 4,000 pounds of halogenated or non-halogenated activated carbon per hour into the exhaust ductwork for Boiler 1 (MB1) from a dedicated silo)s). One (1) dry sorbent injection (DSI) system, identified as DSI-U1, permitted in 2013, with a design injection capacity of 20,000 pounds of Sodium Bicarbonate per hour into the exhaust ductwork for Boilers 1 (MB1). Emissions from Units MB1 and MB2 are exhausted through the common stack, Stack CS012. Continuous emissions monitoring systems (CEMS) for nitrogen oxides (NO_X) and for sulfur dioxide (SO_2) and a continuous opacity monitoring (COM) system are located on the common stack.

(b) One (1) pulverized coal opposed wall fired dry bottom boiler, identified as MB2 (Main Boiler 2), with construction commenced in 1977 and completed in 1989, with a design heat input capacity of 12,374 million Btu per hour, with an electrostatic precipitator (ESP) system for control of particulate matter. Low NO_X burners and an overfire air (OFA) system have been installed and Selective Catalytic Reduction (SCR) permitted in 2018 for NO_X control. No. 2 fuel oil is fired during startup, shutdown, and load stabilization periods. No. 2 fuel oil may also be burned to maintain boiler temperature to ensure boiler availability on short notice, and to maintain boiler temperature required during chemical cleaning. One (1) powdered activated carbon (PAC) injection system, identified as ACI, permitted in 2008, 2010 and 2013, with a unit maximum capacity of injecting 4,000 pounds of halogenated or non-halogenated activated carbon per hour into the exhaust ductwork for Boiler 2 (MB2) from a dedicated silo(s). One (1) dry sorbent injection (DSI) system, identified as DSI-U2, permitted in 2013, with a combined maximum capacity of injecting 20,000 pounds of Sodium Bicarbonate per hour into the exhaust ductwork for Boilers 1 (MB2). Emissions from Units MB1 and MB2 are exhausted through the common stack, Stack CS012. Continuous emissions monitoring systems (CEMS) for nitrogen oxides (NO_X) and for sulfur dioxide (SO_2) and a continuous opacity monitoring (COM) system are located on the common stack.

(c) Two (2) No.2 fuel oil-fired boilers, identified as Auxiliary Boiler 1 and Auxiliary Boiler 2, with construction commenced in 1977 and completed in 1983, each with design capacity of 603 million Btu per hour, both exhausted through stack AB12.

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

G.1 Clean Air Interstate Rule (CAIR) NOx Ozone Season Trading requirements [326 IAC 24-3] [40 CFR 52.770]

Pursuant to 326 IAC 326 IAC 24-3 (CAIR NOx Ozone Season Trading Program), the Permittee shall comply with the following requirements (included as Attachment F of this permit) for the boilers MB1, MB2, Auxiliary Boiler 1 and Auxiliary Boiler 2:

(a) 326 IAC 24-3-1 (Applicability)
(b) 326 IAC 24-3-2 (Definitions)

(c) 326 IAC 24-3-4 (Standard requirements)
(d) 326 IAC 24-3-11 (Monitoring and reporting requirements)

SECTION H TR NO_X Annual Trading Program, TR NO_X Ozone Season Trading Program, and TR SO_2 Group 1 Trading Program Requirements (40 CFR 97.406), (40 CFR 97.506), (40 CFR 97.606)

ORIS Code: *6166*

Transport Rule (TR):

(a) One (1) pulverized coal opposed wall fired dry bottom boiler, identified as MB1 (Main Boiler 1), with construction commenced in 1977 and completed in 1984, with a design heat input capacity of 12,374 million Btu per hour, with an electrostatic precipitator (ESP) system for control of particulate matter. Low NO_X burners and an overfire air (OFA) system have been installed and Selective Catalytic Reduction permitted in 2015 for NO_X control. No. 2 fuel oil is fired during startup, shutdown, and load stabilization periods. No. 2 fuel oil may also be burned to maintain boiler temperature to ensure boiler availability on short notice, and to maintain boiler temperature required during chemical cleaning. One (1) powdered activated carbon (PAC) injection system, identified as ACI, permitted in 2008, 2010 and 2013, with a unit maximum capacity of injecting 4,000 pounds of halogenated or non-halogenated activated carbon per hour into the exhaust ductwork for Boiler 1 (MB1) from a dedicated silo(s). One (1) dry sorbent injection (DSI) system, identified as DSI-U1, permitted in 2013, with a design injection capacity of 20,000 pounds of Sodium Bicarbonate per hour into the exhaust ductwork for Boiler 1 (MB1). Emissions from Units MB1 and MB2 are exhausted through the common stack, Stack CS012. Continuous emissions monitoring systems (CEMS) for nitrogen oxides (NO_X) and for sulfur dioxide (SO_2) and a continuous opacity monitoring (COM) system are located on the common stack.

(b) One (1) pulverized coal opposed wall fired dry bottom boiler, identified as MB2 (Main Boiler 2), with construction commenced in 1977 and completed in 1989, with a design heat input capacity of 12,374 million Btu per hour, with an electrostatic precipitator (ESP) system for control of particulate matter. Low NO_X burners and an overfire air (OFA) system have been installed and Selective Catalytic Reduction (SCR) permitted in 2018 for NO_X control. No. 2 fuel oil is fired during startup, shutdown, and load stabilization periods. No. 2 fuel oil may also be burned to maintain boiler temperature to ensure boiler availability on short notice, and to maintain boiler temperature required during chemical cleaning. One (1) powdered activated carbon (PAC) injection system, identified as ACI, permitted in 2008, 2010 and 2013, with a unit maximum capacity of injecting 4,000 pounds of halogenated or non-halogenated activated carbon per hour into the exhaust ductwork for Boiler 2 (MB2) from a dedicated silo(s). One (1) dry sorbent injection (DSI) system, identified as DSI-U2, permitted in 2013, with a combined maximum capacity of injecting 20,000 pounds of Sodium Bicarbonate per hour into the exhaust ductwork for Boiler 2 (MB2). Emissions from Units MB1 and MB2 are exhausted through the common stack, Stack CS012. Continuous emissions monitoring systems (CEMS) for nitrogen oxides (NO_X) and for sulfur dioxide (SO_2) and a continuous opacity monitoring (COM) system are located on the common stack.

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

H.1 Designated representative requirements

The owners and operators shall comply with the requirement to have a designated representative, and may have an alternate designated representative, in accordance with the following:

(a) 40 CFR 97.413 through 97.418;
(b) 40 CFR 97.513 through 97.518; and
(c) 40 CFR 97.613 through 97.618.

H.2 Emissions monitoring, reporting, and recordkeeping requirements

(1) The owners and operators, and the designated representative, of each TR NO_X Annual source, TR NOx Ozone Season source, and TR SO2 Group 1 source, and each TR NO_X Annual unit at the source, TR NOx Ozone Season unit at the source, and TR SO2 Group 1 unit at the source shall comply with the monitoring, reporting, and recordkeeping requirements of 40 CFR 97.430, 40 CFR 97.530, and 40 CFR 97.630 (general requirements, including installation, certification, and data accounting, compliance deadlines, reporting data, prohibitions, and long-term cold storage), 97.431, 97.531, and 97.631 (initial monitoring system certification and recertification procedures), 97.432, 97.532, and 97.632 (monitoring system out-of-control periods), 97.433, 97.533, and 97.633 (notifications concerning monitoring), 97.434, 97.534, and 97.634 (recordkeeping and reporting, including monitoring plans, certification applications, quarterly reports, and compliance certification), and 97.435, 97.535, and 97.635 (petitions for alternatives to monitoring, recordkeeping, or reporting requirements).

(2) The emissions data determined in accordance with 40 CFR 97.430 through 97.435 shall be used to calculate allocations of TR NO_X Annual allowances under 40 CFR 97.411(a)(2) and (b) and 97.412 and to determine compliance with the TR NO_X Annual emissions limitation and assurance provisions under Condition H.3 below, provided that, for each monitoring location from which mass emissions are reported, the mass emissions amount used in calculating such allocations and determining such compliance shall be the mass emissions amount for the monitoring location determined in accordance with 40 CFR 97.430 through 97.435 and rounded to the nearest ton, with any fraction of a ton less than 0.50 being deemed to be zero.

(3) The emissions data determined in accordance with 40 CFR 97.530 through 97.535 shall be used to calculate allocations of TR NO_X Ozone Season allowances under 40 CFR 97.511(a)(2) and (b) and 97.512 and to determine compliance with the TR NO_X Ozone Season emissions limitation and assurance provisions under Condition H.4 below, provided that, for each monitoring location from which mass emissions are reported, the mass emissions amount used in calculating such allocations and determining such compliance shall be the mass emissions amount for the monitoring location determined in accordance with 40 CFR 97.530 through 97.535 and rounded to the nearest ton, with any fraction of a ton less than 0.50 being deemed to be zero.

(4) The emissions data determined in accordance with 40 CFR 97.630 through 97.635 shall be used to calculate allocations of TR SO_2 Group 1 allowances under 40 CFR 97.611(a)(2) and (b) and 97.612 and to determine compliance with the TR SO_2 Group 1 emissions limitation and assurance provisions under Condition H.5 below, provided that, for each monitoring location from which mass emissions are reported, the mass emissions amount used in calculating such allocations and determining such compliance shall be the mass emissions amount for the monitoring location determined in accordance with 40 CFR 97.630 through 97.635 and rounded to the nearest ton, with any fraction of a ton less than 0.50 being deemed to be zero.

H.3 NOX annual emissions requirements

(1) TR NO_X Annual emissions limitation.

(i). As of the allowance transfer deadline for a control period in a given year, the owners and operators of each TR NO_X Annual source and each TR NO_X Annual unit at the source shall hold, in the source's compliance account, TR NO_X Annual allowances available for deduction for such control period under 40 CFR 97.424(a) in an amount not less than the tons of total NO_X emissions for such control period from all TR NO_X Annual units at the source.

(ii). If total NO_X emissions during a control period in a given year from the TR NO_X Annual units at a TR NO_X Annual source are in excess of the TR NO_X Annual emissions limitation set forth in Condition H.3(1)(i) above, then:

(A). The owners and operators of the source and each TR NO_X Annual unit at the source shall hold the TR NO_X Annual allowances required for deduction under 40 CFR 97.424(d); and

(B). The owners and operators of the source and each TR NO_X Annual unit at the source shall pay any fine, penalty, or assessment or comply with any other remedy imposed, for the same violations, under the Clean Air Act, and each ton of such excess emissions and each day of such control period shall constitute a separate violation of 40 CFR part 97, subpart AAAAA and the Clean Air Act.

(2) TR NO_X Annual assurance provisions.

(i). If total NO_X emissions during a control period in a given year from all TR NO_X Annual units at TR NO_X Annual sources in the state exceed the state assurance level, then the owners and operators of such sources and units in each group of one or more sources and units having a common designated representative for such control period, where the common designated representative's share of such NO_X emissions during such control period exceeds the common designated representative's assurance level for the state and such control period, shall hold (in the assurance account established for the owners and operators of such group) TR NO_X Annual allowances available for deduction for such control period under 40 CFR 97.425(a) in an amount equal to two times the product (rounded to the nearest whole number), as determined by the Administrator in accordance with 40 CFR 97.425(b), of multiplying— (A) The quotient of the amount by which the common designated representative's share of such NO_X emissions exceeds the common designated representative's assurance level divided by the sum of the amounts, determined for all common designated representatives for such sources and units in the state for such control period, by which each common designated representative's share of such NO_X emissions exceeds the respective common designated representative's assurance level; and (B) The amount by which total NO_X emissions from all TR NO_X Annual units at TR NO_X Annual sources in the state for such control period exceed the state assurance level.

(ii). The owners and operators shall hold the TR NO_X Annual allowances required under Condition H.3(2)(i) above, as of midnight of November 1 (if it is a business day), or midnight of the first business day thereafter (if November 1 is not a business day), immediately after such control period.

(iii). Total NO_X emissions from all TR NO_X Annual units at TR NO_X Annual sources in the State during a control period in a given year exceed the state assurance level if such total NO_X emissions exceed the sum, for such control period, of the state NO_X Annual trading budget under 40 CFR 97.410(a) and the state's variability limit under 40 CFR 97.410(b).

(iv). It shall not be a violation of 40 CFR part 97, subpart AAAAA or of the Clean Air Act if total NO_X emissions from all TR NO_X Annual units at TR NO_X Annual sources in the State during a control period exceed the state assurance level or if a common designated representative's share of total NO_X emissions from the TR NO_X Annual units at TR NO_X Annual sources in the state during a control period exceeds the common designated representative's assurance level.

(v). To the extent the owners and operators fail to hold TR NO_X Annual allowances for a control period in a given year in accordance with Condition H.3(2)(i) through (iii) above,

(A). The owners and operators shall pay any fine, penalty, or assessment or comply with any other remedy imposed under the Clean Air Act; and

(B). Each TR NO_X Annual allowance that the owners and operators fail to hold for such control period in accordance with Condition H.3(2)(i) through (iii) above and each day of such control period shall constitute a separate violation of 40 CFR part 97, subpart AAAAA and the Clean Air Act.

(3) Compliance periods.

(i). A TR NO_X Annual unit shall be subject to the requirements under Condition H.3(1) above for the control period starting on the later of January 1, 2015, or the deadline for meeting the unit's monitor certification requirements under 40 CFR 97.430(b) and for each control period thereafter.

(ii). A TR NO_X Annual unit shall be subject to the requirements under Condition H.3(2) above for the control period starting on the later of January 1, 2017 or the deadline for meeting the unit's monitor certification requirements under 40 CFR 97.430(b) and for each control period thereafter.

(4) Vintage of allowances held for compliance.

(i). A TR NO_X Annual allowance held for compliance with the requirements under Condition H.3(1)(i) above for a control period in a given year must be a TR NO_X Annual allowance that was allocated for such control period or a control period in a prior year.

(ii). A TR NO_X Annual allowance held for compliance with the requirements under Condition H.3(1)(ii)(A) and (2)(i) through (iii) above for a control period in a given year must be a TR NO_X Annual allowance that was allocated for a control period in a prior year or the control period in the given year or in the immediately following year.

(5) Allowance Management System requirements. Each TR NO_X Annual allowance shall be held in, deducted from, or transferred into, out of, or between Allowance Management System accounts in accordance with 40 CFR part 97, subpart AAAAA.

(6) Limited authorization. A TR NO_X Annual allowance is a limited authorization to emit one ton of NO_X during the control period in one year. Such authorization is limited in its use and duration as follows:

(i). Such authorization shall only be used in accordance with the TR NO_X Annual Trading Program; and

(ii). Notwithstanding any other provision of 40 CFR part 97, the Administrator has the authority to terminate or limit the use and duration of such authorization to the extent the Administrator determines is necessary or appropriate to implement any provision of the Clean Air Act.

(7) Property right. A TR NO_X Annual allowance does not constitute a property right.

H.4 NOx ozone season requirements

(1) TR NO_X Ozone Season emissions limitation.

(i). As of the allowance transfer deadline for a control period in a given year, the owners and operators of each TR NO_X Ozone Season source and each TR NO_X Ozone Season unit at the source shall hold, in the source's compliance account, TR NO_X Ozone Season allowances available for deduction for such control period under 40 CFR 97.524(a) in an amount not less than the tons of total NO_X emissions for such control period from all TR NO_X Ozone Season units at the source.

(ii). If total NO_X emissions during a control period in a given year from the TR NO_X Ozone Season units at a TR NO_X Ozone Season source are in excess of the TR NO_X Ozone Season emissions limitation set forth in Condition H.4(1)(i) above, then:

(A). The owners and operators of the source and each TR NO_X Ozone Season unit at the source shall hold the TR NO_X Ozone Season allowances required for deduction under 40 CFR 97.524(d); and

(B). The owners and operators of the source and each TR NO_X Ozone Season unit at the source shall pay any fine, penalty, or assessment or comply with any other remedy imposed, for the same violations, under the Clean Air Act, and each ton of such excess emissions and each day of such control period shall constitute a separate violation of 40 CFR part 97, subpart BBBBB and the Clean Air Act.

(2) TR NO_X Ozone Season assurance provisions.

(i). If total NO_X emissions during a control period in a given year from all TR NO_X Ozone Season units at TR NO_X Ozone Season sources in the state exceed the state assurance level, then the owners and operators of such sources and units in each group of one or more sources and units having a common designated representative for such control period, where the common designated representative's share of such NO_X emissions during such control period exceeds the common designated representative's assurance level for the state and such control period, shall hold (in the assurance account established for the owners and operators of such group) TR NO_X Ozone Season allowances available for deduction for such control period under 40 CFR 97.525(a) in an amount equal to two times the product (rounded to the nearest whole number), as determined by the Administrator in accordance with 40 CFR 97.525(b), of multiplying—

(A). The quotient of the amount by which the common designated representative's share of such NO_X emissions exceeds the common designated representative's assurance level divided by the sum of the amounts, determined for all common designated representatives for such sources and units in the state for such control period, by which each common designated representative's share of such NO_X emissions exceeds the respective common designated representative's assurance level; and

(B). The amount by which total NO_X emissions from all TR NO_X Ozone Season units at TR NO_X Ozone Season sources in the state for such control period exceed the state assurance level.

(ii). The owners and operators shall hold the TR NO_X Ozone Season allowances required under Condition H.4(2)(i) above, as of midnight of November 1 (if it is a business day), or midnight of the first business day thereafter (if November 1 is not a business day), immediately after such control period.

(iii). Total NO_X emissions from all TR NO_X Ozone Season units at TR NO_X Ozone Season sources in the state during a control period in a given year exceed the state assurance level if such total NO_X emissions exceed the sum, for such control period, of the State NO_X Ozone Season trading budget under 40 CFR 97.510(a) and the state's variability limit under 40 CFR 97.510(b).

(iv). It shall not be a violation of 40 CFR part 97, subpart BBBBB or of the Clean Air Act if total NO_X emissions from all TR NO_X Ozone Season units at TR NO_X Ozone Season sources in the state during a control period exceed the state assurance level or if a common designated representative's share of total NO_X emissions from the TR NO_X Ozone Season units at TR NO_X Ozone Season sources in the state during a control period exceeds the common designated representative's assurance level.

(v). To the extent the owners and operators fail to hold TR NO_X Ozone Season allowances for a control period in a given year in accordance with Condition H.4(2)(i) through (iii) above,

(A). The owners and operators shall pay any fine, penalty, or assessment or comply with any other remedy imposed under the Clean Air Act; and

(B). Each TR NOX Ozone Season allowance that the owners and operators fail to hold for such control period in accordance with paragraphs (d)(2)(i) through (iii) above and each day of such control period shall constitute a separate violation of 40 CFR part 97, subpart BBBBB and the Clean Air Act.

(3) Compliance Periods.

(i). A TR NOx Ozone Season unit shall be subject to the requirements under Condition H.4(1) above for the control period starting on the later of May 1, 2015 or the deadline for meeting the unit's monitor certificate requirements under 40 CFR 97.530(b) and for each control period thereafter.

(ii). A TR NOx Ozone Season unit shall be subject to the requirements under Condition H.4(2) above for the control period starting on the later of May 1, 2017 or the deadline for meeting the unit's monitor certification requirements under 40 CFR 97.530(b) and for each control period thereafter.

(4) Vintage of allowances held for compliance.

(i). A TR NOx Ozone Season allowance held for compliance with the requirements under Condition H.4(1)(i) above for a control period in a given year must be a TR NOx Ozone Season Allowance that was allocated for such control period or a control period in a prior year.

(ii). A TR NOx Ozone Season allowance held for compliance with the requirements under Condition H.4(1)(ii)(A) and (2)(i) through (iii) above for a control period in a given year must be a TR NOx Ozone Season allowance that was allocated for a

control period in a prior year or the control period in the given year or in the immediately following year.

(5) Allowances Management System Requirements.

(i). Each TR NOx Ozone Season allowance shall be held in, deducted from, or transferred into, out of, or between Allowance Management System accounts in accordance with 40 CFR Part 97, Subpart BBBBB.

(6) Limited Authorization.

(i). A TR NOx Ozone Season allowance is a limited authorization to emit one ton of NOx during the control period in one year. Such authorization is limited in its use and duration as follows:

(A). Such authorization shall only be used in accordance with the TR NOx Ozone Season Trading Program; and

(B). Notwithstanding any other provision of 40 CFR Part 97, Subpart BBBBB, the Administrator has the authority to terminate or limit the use and duration of such authorization to the extent the Administrator determines is necessary or appropriate to implement any provision of the Clean Air Act.

(7) Property Right.

(i). A TR NOx Ozone Season allowance does not constitute a property right.

H.5 SO_2 emissions requirements

(1) TR SO_2 Group 1 emissions limitation.

(i). As of the allowance transfer deadline for a control period in a given year, the owners and operators of each TR SO_2 Group 1 source and each TR SO2 Group 1 unit at the source shall hold, in the source's compliance account, TR SO_2 Group 1 allowances available for deduction for such control period under 40 CFR 97.624(a) in an amount not less than the tons of total SO_2 emissions for such control period from all TR SO_2 Group 1 units at the source.

(ii). If total SO_2 emissions during a control period in a given year from the TR SO_2 Group 1 units at a TR SO_2 Group 1 source are in excess of the TR SO_2 Group 1 emissions limitation set forth in Condition H.5(1)(i) above, then:

(A). The owners and operators of the source and each TR SO_2 Group 1 unit at the source shall hold the TR SO_2 Group 1 allowances required for deduction under 40 CFR 97.624(d); and

(B). The owners and operators of the source and each TR SO_2 Group 1 unit at the source shall pay any fine, penalty, or assessment or comply with any other remedy imposed, for the same violations, under the Clean Air Act, and each ton of such excess emissions and each day of such control period shall constitute a separate violation 40 CFR part 97, subpart CCCCC and the Clean Air Act.

(2) TR SO_2 Group 1 assurance provisions

(i). If total SO_2 emissions during a control period in a given year from all TR SO_2 Group 1 units at TR SO_2 Group 1 sources in the state exceed the state assurance level, then the owners and operators of such sources and units in each group of one or more sources and units having a common designated representative for such control period, where the common designated representative's share of such SO_2 emissions during such control period exceeds the common designated representative's assurance level for the state and such control period, shall hold (in the assurance account established for the owners and operators of such group) TR SO_2 Group 1 allowances available for deduction for such control period under 40 CFR 97.625(a) in an amount equal to two times the product (rounded to the nearest whole number), as determined by the Administrator in accordance with 40 CFR 97.625(b), of multiplying—

(A). The quotient of the amount by which the common designated representative's share of such SO_2 emissions exceeds the common designated representative's assurance level divided by the sum of the amounts, determined for all common designated representatives for such sources and units in the state for such control period, by which each common designated representative's share of such SO_2 emissions exceeds the respective common designated representative's assurance level; and

(B). The amount by which total SO_2 emissions from all TR SO_2 Group 1 units at TR SO_2 Group 1 sources in the state for such control period exceed the state assurance level.

(ii). The owners and operators shall hold the TR SO_2 Group 1 allowances required under Condition H.5(2)(i) above, as of midnight of November 1 (if it is a business day), or midnight of the first business day thereafter (if November 1 is not a business day), immediately after such control period.

(iii). Total SO_2 emissions from all TR SO_2 Group 1 units at TR SO_2 Group 1 sources in the state during a control period in a given year exceed the state assurance level if such total SO_2 emissions exceed the sum, for such control period, of the state SO_2 Group 1 trading budget under 40 CFR 97.610(a) and the state's variability limit under 40 CFR 97.610(b).

(iv). It shall not be a violation of 40 CFR part 97, subpart CCCCC or of the Clean Air Act if total SO_2 emissions from all TR SO_2 Group 1 units at TR SO_2 Group 1 sources in the state during a control period exceed the state assurance level or if a common designated representative's share of total SO_2 emissions from the TR SO_2 Group 1 units at TR SO_2 Group 1 sources in the state during a control period exceeds the common designated representative's assurance level.

(v). To the extent the owners and operators fail to hold TR SO_2 Group 1 allowances for a control period in a given year in accordance with Condition H.5(2)(i) through (iii) above,

(A). The owners and operators shall pay any fine, penalty, or assessment or comply with any other remedy imposed under the Clean Air Act; and

(B). Each TR SO_2 Group 1 allowance that the owners and operators fail to hold for such control period in accordance with Condition H.5(2)(i) through (iii) above and each day of such control period shall constitute a separate violation of 40 CFR part 97, subpart CCCCC and the Clean Air Act.

(3) Compliance periods.

(i). A TR SO_2 Group 1 unit shall be subject to the requirements under Condition H.5(1) above for the control period starting on the later of January 1, 2015 or the deadline for meeting the unit's monitor certification requirements under 40 CFR 97.630(b) and for each control period thereafter.

(ii). A TR SO_2 Group 1 unit shall be subject to the requirements under Condition H.5(2) above for the control period starting on the later of January 1, 2017 or the deadline for meeting the unit's monitor certification requirements under 40 CFR 97.630(b) and for each control period thereafter.

(4) Vintage of allowances held for compliance.

(i). A TR SO_2 Group 1 allowance held for compliance with the requirements under Condition H.5(1)(i) above for a control period in a given year must be a TR SO_2 Group 1 allowance that was allocated for such control period or a control period in a prior year.

(ii). A TR SO_2 Group 1 allowance held for compliance with the requirements under Condition H.5(1)(ii)(A) and (2)(i) through (iii) above for a control period in a given year must be a TR SO_2 Group 1 allowance that was allocated for a control period in a prior year or the control period in the given year or in the immediately following year.

(5) Allowance Management System requirements. Each TR SO_2 Group 1 allowance shall be held in, deducted from, or transferred into, out of, or between Allowance Management System accounts in accordance with 40 CFR part 97, subpart CCCCC.

(6) Limited authorization. A TR SO_2 Group 1 allowance is a limited authorization to emit one ton of SO_2 during the control period in one year. Such authorization is limited in its use and duration as follows:

(i). Such authorization shall only be used in accordance with the TR SO_2 Group 1 Trading Program; and

(ii). Notwithstanding any other provision of 40 CFR part 97, subpart CCCCC, the Administrator has the authority to terminate or limit the use and duration of such authorization to the extent the Administrator determines is necessary or appropriate to implement any provision of the Clean Air Act.

(7) Property right. A TR SO_2 Group 1 allowance does not constitute a property right.

H.6 Title V Permit Revision Requirements

(1) No title V permit revision shall be required for any allocation, holding, deduction, or transfer of TR NO_X Annual allowances in accordance with 40 CFR part 97, subpart AAAAA, TR NO_X Ozone Season allowances in accordance with 40 CFR part 97, subpart BBBBB, and TR SO_2 Group 1 allowances in accordance with 40 CFR part 97, subpart CCCCC.

(2) This permit incorporates the TR emissions monitoring, recordkeeping and reporting requirements pursuant to 40 CFR 97.430 through 97.435, 40 CFR 97.530 through 97.535, and 40 CFR 97.630 through 97.635, and the requirements for a continuous emission monitoring system (pursuant to 40 CFR part 75, subparts B and H), an excepted monitoring system (pursuant to 40 CFR part 75, appendices D and E), a low

mass emissions excepted monitoring methodology (pursuant to 40 CFR 75.19), and an alternative monitoring system (pursuant to 40 CFR part 75, subpart E). Therefore, the Description of TR Monitoring Provisions table for units identified in this permit may be added to, or changed, in this title V permit using minor permit modification procedures in accordance with 40 CFR 97.406(d)(2), 40 CFR 97.506(d)(2), and 40 CFR 97.606(d)(2) and 70.7(e)(2)(i)(B) or 71.7(e)(1)(i)(B).

H.7 Additional recordkeeping and reporting requirements

(1) Unless otherwise provided, the owners and operators of each TR NO_X Annual source and each TR NO_X Annual unit, TR NO_X Ozone Season source and each TR NO_X Ozone Season unit, and TR SO_2 Group 1 source and each TR SO_2 Group 1 unit at the source shall keep on site at the source each of the following documents (in hardcopy or electronic format) for a period of 5 years from the date the document is created. This period may be extended for cause, at any time before the end of 5 years, in writing by the Administrator.

(i). The certificate of representation under 40 CFR 97.416, 40 CFR 97.516, and 40 CFR 97.616 for the designated representative for the source and each TR NO_X Annual unit, TR NOx Ozone Season unit, and TR SO_2 Group 1 unit at the source and all documents that demonstrate the truth of the statements in the certificate of representation; provided that the certificate and documents shall be retained on site at the source beyond such 5-year period until such certificate of representation and documents are superseded because of the submission of a new certificate of representation under 40 CFR 97.416, 40 CFR 97.516, and 40 CFR 97.616 changing the designated representative.

(ii). All emissions monitoring information, in accordance with 40 CFR part 97, subpart AAAAA, 40 CFR part 97, subpart BBBBB, and 40 CFR part 97, subpart CCCCC.

(iii). Copies of all reports, compliance certifications, and other submissions and all records made or required under, or to demonstrate compliance with the requirements of, the TR NO_X Annual Trading Program, TR NO_X Ozone Season Trading Program, and TR SO_2 Group 1 Trading Program.

(2) The designated representative of a TR NO_X Annual source and each TR NO_X Annual unit, a TR NO_X Ozone Season source and each TR NO_X Ozone Season unit, and a TR SO_2 Group 1 source and each TR SO_2 Group 1 unit at the source shall make all submissions required under the TR NO_X Annual Trading Program, TR NO_X Ozone Season Trading Program, and TR SO_2 Group 1 Trading Program, except as provided in 40 CFR 97.418, 40 CFR 97.518, and 40 CFR 97.618. This requirement does not change, create an exemption from, or otherwise affect the responsible official submission requirements under a title V operating permit program in 40 CFR parts 70 and 71.

H.8 Liability

(1) Any provision of the TR NO_X Annual Trading Program that applies to a TR NO_X Annual source or the designated representative of a TR NO_X Annual source shall also apply to the owners and operators of such source and of the TR NO_X Annual units at the source.

(2) Any provision of the TR NO_X Annual Trading Program that applies to a TR NO_X Annual unit or the designated representative of a TR NO_X Annual unit shall also apply to the owners and operators of such unit.

(3) Any provision of the TR NO_X Ozone Season Trading Program that applies to a TR NO_X Ozone Season source or the designated representative of a TR NO_X Ozone Season source shall also apply to the owners and operators of such source and of the TR NO_X Ozone Season units at the source.

(4) Any provision of the TR NO_X Ozone Season Trading Program that applies to a TR NO_X Ozone Season unit or the designated representative of a TR NO_X Ozone Season unit shall also apply to the owners and operators of such unit.

(5) Any provision of the TR SO_2 Group 1 Trading Program that applies to a TR SO_2 Group 1 source or the designated representative of a TR SO_2 Group 1 source shall also apply to the owners and operators of such source and of the TR SO_2 Group 1 units at the source.

(6) Any provision of the TR SO_2 Group 1 Trading Program that applies to a TR SO_2 Group 1 unit or the designated representative of a TR SO_2 Group 1 unit shall also apply to the owners and operators of such unit.

H.9 Effect on other authorities

No provision of the TR NO_X Annual Trading Program or exemption under 40 CFR 97.405, TR NO_X Ozone Season Trading Program or exemption under 40 CFR 97.505, and TR SO_2 Group 1 Trading Program or exemption under 40 CFR 97.605 shall be construed as exempting or excluding the owners and operators, and the designated representative, of a TR NO_X Annual source or TR NO_X Annual unit, TR NO_X Ozone Season source or TR NO_X Ozone Season unit, and TR SO_2 Group 1 source or TR SO_2 Group 1 unit from compliance with any other provision of the applicable, approved state implementation plan, a federally enforceable permit, or the Clean Air Act.

H.10 Description of TR Monitoring Provisions

The TR subject unit(s) and the unit-specific monitoring provisions at this source are identified in the following table(s). These units are subject to the requirements for the TR NOx Annual Trading Program and TR NOx Ozone Season Trading Program and TR SO2 Group 1 Trading Program.

Unit ID: pulverized coal opposed wall fired dry bottom boiler, identified as MB1					
Parameter	Continuous emission monitoring system or systems (CEMS) requirements pursuant to 40 CFR part 75, subpart B (for SO_2 monitoring) and 40 CFR part 75, subpart H (for NO_X monitoring)	Excepted monitoring system requirements for gas- and oil-fired units pursuant to 40 CFR part 75, appendix D	Excepted monitoring system requirements for gas- and oil-fired peaking units pursuant to 40 CFR part 75, appendix E	Low Mass Emissions excepted monitoring (LME) requirements for gas- and oil-fired units pursuant to 40 CFR 75.19	EPA-approved alternative monitoring system requirements pursuant to 40 CFR part 75, subpart E
SO_2	x		----------		
NO_X	x	----------			
Heat input	x		----------		

Unit ID: pulverized coal opposed wall fired dry bottom boiler, identified as MB2					
Parameter	Continuous emission monitoring system or systems (CEMS) requirements pursuant to 40 CFR part 75, subpart B (for SO_2 monitoring) and 40 CFR part 75, subpart H (for NO_X monitoring)	Excepted monitoring system requirements for gas- and oil-fired units pursuant to 40 CFR part 75, appendix D	Excepted monitoring system requirements for gas- and oil-fired peaking units pursuant to 40 CFR part 75, appendix E	Low Mass Emissions excepted monitoring (LME) requirements for gas- and oil-fired units pursuant to 40 CFR 75.19	EPA-approved alternative monitoring system requirements pursuant to 40 CFR part 75, subpart E
SO_2	x		----------		
NO_X	x	----------			
Heat input	x		----------		

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE AND ENFORCEMENT BRANCH
PART 70 OPERATING PERMIT
CERTIFICATION

Source Name: Indiana Michigan Power Co. - Rockport Plant
Source Address: 2791 N US Highway 231, Rockport, Indiana 47635
Part 70 Permit No.: 147-29841-00020

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: Indiana Michigan Power Co. - Rockport Plant
Source Address: 2791 N US Highway 231, Rockport, Indiana 47635
Part 70 Permit No.: 147-29841-00020
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), no later than four (**4**) daytime business hours (1-800-451-6027 or 317-233-0178, ask for Compliance Section); and
- The Permittee must submit notice in writing or by facsimile no later than 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: _____

A certification is not required for this report.

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE AND ENFORCEMENT BRANCH

Part 70 Quarterly Report
Auxiliary Boiler Hours of Operation

Source Name: Indiana Michigan Power Co. - Rockport Plant
Source Address: 2791 N US Highway 231, Rockport, Indiana 47635
Part 70 Permit No.: 147-29841-00020
Facility: Auxiliary Boilers 1 and 2
Parameter: NSPS Alternate Opacity Monitoring Approval
Limit: Neither boiler shall be operated more than 876 hours in a calendar year.

QUARTER : YEAR:

Month	Hours of operation for each Auxiliary Boiler	Hours of Operation in this Calendar Year, for each Auxiliary Boiler	Hours of operation for each Auxiliary Boiler
	This Month	Previous 11 Months	12 Month Total
Month 1			
Month 2			
Month 3			

☐ No deviation occurred in this quarter.
☐ Deviation/s occurred in this quarter.
Deviation has been reported on:
Submitted by: _____
Title / Position: _____
Signature: _____
Date: _____
Phone: _____

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
Compliance and Enforcement Branch

Part 70 Quarterly Report: Emergency Generators Hours of Operation

Source Name: Indiana Michigan Power Company (d.b.a. American Electric Power) Rockport Plant
Source Address: 2791 North US Highway 231, Rockport, Indiana 47635
Part 70 Permit No.: T147-29841-00020
Facilities: Diesel Generators DG1, DG2, DG3
Parameter: NO_X
Limits: 780 hours total per twelve (12) consecutive month period for all three generators during periods when both main boilers, Unit 1 and Unit 2, are in service.

YEAR: _____

Month	THIS MONTH Hours of operation for each generator	THIS MONTH Hours of generator operation when both main boilers were in operation	PREVIOUS 11 MONTHS TOTAL hours of generator operation when both main boilers were in operation	12 MONTH TOTAL hours of generator operation when both main boilers were in operation
	DG1:	DG1:		
	DG2:	DG2:		
	DG3	DG3:		
	DG1:	DG1:		
	DG2:	DG2:		
	DG3:	DG3:		
	DG1:	DG1:		
	DG2:	DG2:		
	DG3:	DG3:		

☐ 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: Space Heaters Hours of Operation

Source Name: Indiana Michigan Power Company (d.b.a. American Electric Power) Rockport Plant
Source Address: 2791 North US Highway 231, Rockport, Indiana 47635
Part 70 Permit No.: T147-29841-00020
Facility: Space Heaters WHU-1, WHU-2, WHU-5, WHU-6, WHU-7, WHU-8, WHU-9, and WHU-10
Parameter: Sulfur Dioxide (SO_2)
Limit: 40 tons per year of SO_2 emissions per consecutive 12-month period, with compliance determined at the end of each month. SO_2 emissions are calculated using the following equation:

SO_2 Emissions (per month) = $\frac{142 \times S\% \times 22.55 MMBtu/hr \times Hr (hrs/month)}{H (MMBtu/kgal) \times 2000 (lb/ton)}$

Where: SO_2 Emission Limit (S) = (142 X S%) lbs per kilogallons
Monthly Average Sulfur Content = S (%)
Heat Input Capacity = 22.55 MMBtu/hr
Operating Hours = Hr (hrs/month)
Monthly Average Fuel Heating Value = H (MMBtu/kgal)

QUARTER: _____ YEAR**:** _____

Month	Total SO_2 This Month	Total SO_2 Previous 11 Months	12 Month Total SO_2
Month 1			
Month 2			
Month 3			

1. facility consists of seven (7) No. 2 fuel oil fired space heaters
2. Hours of operation Last 12 Months = Sum of Hours of Operation Over the Last 12 Months

☐ Supporting documents attached.
☐ No deviation occurred in this quarter.
☐ Deviation/s occurred in this quarter.
Deviation has been reported on:_____
Submitted by: _____
Title / Position: _____
Signature: _____
Date: _____
Telephone: _____

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
Compliance and Enforcement Branch

Part 70 Quarterly Report: Total Dry Sorbent delivered

Source Name: Indiana Michigan Power Company (d.b.a. American Electric Power) Rockport Plant
Source Address: 2791 North US Highway 231, Rockport, Indiana 47635
Part 70 Permit No.: T147-29841-00020
Facilities: Dry Sorbent Silos
Parameter: PSD minor limits
Limits: The Dry Sorbent delivered to the site shall be limited to 142,500 tons per twelve (12) consecutive month period for both units.

YEAR: _____

Month	THIS MONTH Tons of Dry Sorbent Delivered	PREVIOUS 11 MONTHS TOTAL Tons of Dry Sorbent Delivered	12 MONTH TOTAL Tons of Dry Sorbent Delivered

☐ No deviation occurred in this quarter.
☐ Deviation/s occurred in this quarter.
Deviation has been reported on: _____

Submitted by: _____

Title / Position: _____

Signature: _____

Date: _____

Telephone: _____

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
Compliance and Enforcement Branch

Part 70 Quarterly Report: Total PAC delivered

Source Name: Indiana Michigan Power Company (d.b.a. American Electric Power) Rockport Plant
Source Address: 2791 North US Highway 231, Rockport, Indiana 47635
Part 70 Permit No.: T147-29841-00020
Facilities: PAC Silos
Parameter: PSD minor limits
Limits: The PAC delivered to the site shall be limited to 35,040 tons per twelve (12) consecutive month period for both units.

YEAR: _____

Month	THIS MONTH Tons of PAC Delivered	PREVIOUS 11 MONTHS TOTAL Tons of PAC Delivered	12 MONTH TOTAL Tons of PAC Delivered

☐ No deviation occurred in this quarter.
☐ Deviation/s occurred in this quarter.
Deviation has been reported on: _____

Submitted by: _____

Title / Position: _____

Signature: _____

Date: _____

Telephone: _____

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
Compliance and Enforcement Branch

Part 70 Quarterly Report: Dry Ash loaded to the Ash Silos

Source Name: Indiana Michigan Power Company (d.b.a. American Electric Power) Rockport Plant
Source Address: 2791 North US Highway 231, Rockport, Indiana 47635
Part 70 Permit No.: T147-29841-00020
Facilities: Ash Silos
Parameter: PSD minor limits
Limits: The total amount of the dry ash loaded to the ash silos shall be limited to 583,742 twelve (12) consecutive month period for both units.

YEAR: _____

Month	THIS MONTH Tons of Dry Ash Loaded	PREVIOUS 11 MONTHS TOTAL Tons of Dry Ash Loaded	12 MONTH TOTAL Tons of Dry Ash Loaded

☐ No deviation occurred in this quarter.
☐ Deviation/s occurred in this quarter.
Deviation has been reported on: _____

Submitted by: _____

Title / Position: _____

Signature: _____

Date: _____

Telephone: _____

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
Compliance and Enforcement Branch

Part 70 Quarterly Report: Wet Ash Loaded

Source Name: Indiana Michigan Power Company (d.b.a. American Electric Power) Rockport Plant
Source Address: 2791 North US Highway 231, Rockport, Indiana 47635
Part 70 Permit No.: T147-29841-00020
Facilities: Ash Silos
Parameter: PSD minor limits
Limits: The total amount of wet ash loaded from the ash silos shall be limited to 686,846 twelve (12) consecutive month period for both units.

YEAR: _____

Month	THIS MONTH Tons of Wet Ash Loaded	PREVIOUS 11 MONTHS TOTAL Tons of Wet Ash Loaded	12 MONTH TOTAL Tons of Wet Ash Loaded

☐ No deviation occurred in this quarter.
☐ Deviation/s occurred in this quarter.
Deviation has been reported on: _____

Submitted by: _____

Title / Position: _____

Signature: _____

Date: _____

Telephone: _____

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
Compliance and Enforcement Branch

Part 70 Quarterly Report: PM emissions from MB1 and MB2 common stack

Source Name: Indiana Michigan Power Company (d.b.a. American Electric Power) Rockport Plant
Source Address: 2791 North US Highway 231, Rockport, Indiana 47635
Part 70 Permit No.: T147-29841-00020
Facilities: MB1 and MB2
Parameter: PSD minor limits
Limits: PM emissions from MB1 and MB2 common stack shall be limited to 2575 tons per twelve (12) consecutive month period.

YEAR: _____

Month	THIS MONTH PM emissions (tons)	PREVIOUS 11 MONTHS TOTAL PM emissions (tons)	12 MONTH TOTAL PM emissions (tons)

☐ No deviation occurred in this quarter.
☐ Deviation/s occurred in this quarter.
Deviation has been reported on: _____

Submitted by: _____

Title / Position: _____

Signature: _____

Date: _____

Telephone: _____

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
Compliance and Enforcement Branch

Part 70 Quarterly Report: PM emissions from MB1 and MB2 common stack

Source Name: Indiana Michigan Power Company (d.b.a. American Electric Power) Rockport Plant
Source Address: 2791 North US Highway 231, Rockport, Indiana 47635
Part 70 Permit No.: T147-29841-00020
Facilities: MB1 and MB2
Parameter: PSD minor limits
Limits: PM10 emissions from MB1 and MB2 common stack shall be limited to 1725 tons per twelve (12) consecutive month period.

YEAR: _____

Month	THIS MONTH PM10 emissions (tons)	PREVIOUS 11 MONTHS TOTAL PM10 emissions (tons)	12 MONTH TOTAL PM10 emissions (tons)

☐ No deviation occurred in this quarter.
☐ Deviation/s occurred in this quarter.
Deviation has been reported on: _____

Submitted by: _____

Title / Position: _____

Signature: _____

Date: _____

Telephone: _____

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
Compliance and Enforcement Branch

Part 70 Quarterly Report: PM emissions from MB1 and MB2 common stack

Source Name: Indiana Michigan Power Company (d.b.a. American Electric Power) Rockport Plant
Source Address: 2791 North US Highway 231, Rockport, Indiana 47635
Part 70 Permit No.: T147-29841-00020
Facilities: MB1 and MB2
Parameter: PSD minor limits
Limits: PM2.5 emissions from MB1 and MB2 common stack shall be limited to 746 tons per twelve (12) consecutive month period.

YEAR: _____

Month	THIS MONTH PM2.5 emissions (tons)	PREVIOUS 11 MONTHS TOTAL PM2.5 emissions (tons)	12 MONTH TOTAL PM2.5 emissions (tons)

☐ No deviation occurred in this quarter.
☐ Deviation/s occurred in this quarter.
Deviation has been reported on: _____

Submitted by: _____

Title / Position: _____

Signature: _____

Date: _____

Telephone: _____

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE AND ENFORCEMENT BRANCH

Part 70 Quarterly Report

Source Name: Indiana Michigan Power Co. - Rockport Plant
Source Address: 2791 N US Highway 231, Rockport, Indiana 47635
Part 70 Permit No.: 147-29841-00020
Facility: Auxiliary Boiler 1
Parameter: Fuel Usage
Limit: less than 3773.06 kilogallons of no. 2 fuel oil per twelve (12) consecutive month period.

QUARTER : YEAR:

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

☐ No deviation occurred in this quarter.

☐ Deviation/s occurred in this quarter.
Deviation has been reported on:

Submitted by: _____
Title / Position: _____
Signature: _____
Date: _____
Phone: _____

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE AND ENFORCEMENT BRANCH

Part 70 Quarterly Report

Source Name: Indiana Michigan Power Co. - Rockport Plant
Source Address: 2791 N US Highway 231, Rockport, Indiana 47635
Part 70 Permit No.: 147-29841-00020
Facility: Auxiliary Boiler 2
Parameter: Fuel Usage
Limit: less than 3773.06 kilogallons of no. 2 fuel oil per twelve (12) consecutive month period.

QUARTER : YEAR:

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

☐ No deviation occurred in this quarter.

☐ Deviation/s occurred in this quarter.
Deviation has been reported on:

Submitted by: _____
Title / Position: _____
Signature: _____
Date: _____
Phone: _____

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE AND ENFORCEMENT BRANCH
PART 70 OPERATING PERMIT
QUARTERLY DEVIATION AND COMPLIANCE MONITORING REPORT

Source Name: Indiana Michigan Power Co. - Rockport Plant
Source Address: 2791 N US Highway 231, Rockport, Indiana 47635
Part 70 Permit No.: 147-29841-00020

Months: to Year:

Page 1 of 2

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. 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:

Page 2 of 2

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 F

Part 70 Operating Permit No. 147-29841-00020

326 IAC 24-3 (Clean Air Interstate Rule (CAIR) NOx Ozone Season Trading requirements)

ARTICLE 24. CROSS-STATE AIR POLLUTION RULE (CSAPR) PROGRAMS

Rule 1. Clean Air Interstate Rule Nitrogen Oxides Annual Trading Program (Repealed)

(Repealed by Air Pollution Control Division; filed Oct 25, 2017, 1:02 p.m.: 20171122-IR-326160209FRA)

Rule 2. Clean Air Interstate Rule (CAIR) Sulfur Dioxide Trading Program (Repealed)

(Repealed by Air Pollution Control Division; filed Oct 25, 2017, 1:02 p.m.: 20171122-IR-326160209FRA)

Rule 3. Clean Air Interstate Rule (CAIR) NO_x Ozone Season Trading Program

326 IAC 24-3-1 Applicability

Authority: IC 13-14-8; IC 13-17-3-4; IC 13-17-3-11
Affected: IC 13-15; IC 13-17

Sec. 1. Any large affected unit as defined in section 2 of this rule, shall be a CAIR NO_x ozone season unit, and any source that includes one (1) or more such units shall be a CAIR NO_x ozone season source, and shall be subject to the requirements of this rule. *(Air Pollution Control Division; 326 IAC 24-3-1; filed Jan 26, 2007, 10:25 a.m.: 20070221-IR-326050117FRA; filed May 12, 2009, 11:16 a.m.: 20090610-IR-326080005FRA; filed Oct 25, 2017, 1:02 p.m.: 20171122-IR-326160209FRA)*

326 IAC 24-3-2 Definitions

Authority: IC 13-14-8; IC 13-17-3-4; IC 13-17-3-11
Affected: IC 13-11-2; IC 13-15; IC 13-17

Sec. 2. For purposes of this rule, the definition given for a term in this rule shall control in any conflict between 326 IAC 1-2 and this rule. In addition to the definitions provided in IC 13-11-2 and 326 IAC 1-2, the following definitions apply throughout this rule, unless expressly stated otherwise or unless the context clearly implies otherwise:

(1) "Account number" means the identification number given by the U.S. EPA to each CAIR NO_x ozone season allowance tracking system account.

(2) "Acid rain emissions limitation" means a limitation on emissions of sulfur dioxide or nitrogen oxides under the acid rain program.

(3) "Acid rain program" means a multistate sulfur dioxide and nitrogen oxides air pollution control and emission reduction program established by the U.S. EPA under Title IV of the Clean Air Act and 40 CFR Parts 72 through 40 CFR 78*.

(4) "Allocate" or "allocation" means, with regard to CAIR NO_x ozone season allowances, the determination by a permitting authority or the U.S. EPA of the amount of such CAIR NO_x ozone season allowances to be initially credited to a CAIR NO_x ozone season unit, a new unit set-aside, an energy efficiency or renewable energy set-aside, or other entity.

(5) "Allowance transfer deadline" means, for a control period, midnight of November 30 (if it is a business day), or midnight of the first business day thereafter (if November 30 is not a business day), immediately following the control period and is the deadline by which a CAIR NO_x ozone season allowance transfer must be submitted for recordation in a CAIR NO_x source's compliance account in order to be used to meet the source's CAIR NO_x ozone season emissions limitation for such control period in accordance with sections 9(i) and 9(j) of this rule.

(6) "Alternate CAIR designated representative" means, for a CAIR NO_x ozone season source and each CAIR NO_x ozone season unit at the source, the natural person who is authorized by the owners and operators of the source and all such units at the source in accordance with sections 6 and 12 of this rule, to act on behalf of the CAIR designated representative in matters pertaining to the CAIR NO_x ozone season trading program. If the CAIR NO_x ozone season source is also a CAIR NO_x source, then this natural person shall be the same person as the alternate CAIR designated representative under the CAIR NO_x annual trading program. If the CAIR NO_x ozone season source is also a CAIR SO_2 source, then this natural person shall be the same person as the alternate CAIR designated representative under the CAIR SO_2 trading program. If the CAIR NO_x ozone season source is also subject to the acid rain program, then this natural person shall be the same person as the alternate designated representative under the acid rain program. If the CAIR NO_x ozone season source is also subject to the mercury budget trading program, then this natural person shall be the same person as the alternate mercury designated representative under the mercury budget trading program.

(7) "Automated data acquisition and handling system" or "DAHS" means that component of the continuous emission monitoring system, or other emissions monitoring system approved for use under section 11 of this rule, designed to interpret and convert individual output signals from pollutant concentration monitors, flow monitors, diluent gas monitors, and other component parts of the monitoring system to produce a continuous record of the measured parameters in the measurement units required by section 11 of this rule.

(8) "Biomass" means any of the following:

(A) Organic material grown for the purpose of being converted to energy.

(B) Organic byproduct of agriculture that can be converted into energy.

(C) Material that:

(i) can be converted into energy and is nonmerchantable for other purposes;

(ii) is segregated from other nonmerchantable material; and

(iii) is:

(AA) a forest-related organic residue, including mill residues, precommercial thinnings, slash, brush, or byproduct from conversion of trees to merchantable material; or

(BB) a wood material, including pallets, crates, dunnage, manufacturing and construction materials (other than pressure-treated, chemically-treated, or painted wood products), and landscape or right-of-way trimmings.

(9) "Boiler" means an enclosed fossil- or other-fuel-fired combustion device used to produce heat and to transfer heat to recirculating water, steam, or other medium.

(10) "Bottoming-cycle cogeneration unit" means a cogeneration unit in which the energy input to the unit is first used to produce useful thermal energy and at least some of the reject heat from the useful thermal energy application or process is then used for electricity production.

(11) "CAIR authorized account representative" means, with regard to a general account, a responsible natural person who is authorized, in accordance with sections 6, 9, and 12 of this rule, to transfer and otherwise dispose of CAIR NO_x ozone season allowances held in the general account and, with regard to a compliance account, the CAIR designated representative of the source.

(12) "CAIR designated representative" means, for a CAIR NO_x ozone season source and each CAIR NO_x ozone season unit at the source, the natural person who is authorized by the owners and operators of the source and all such units at the source, in accordance with sections 6 and 12 of this rule, to represent and legally bind each owner and operator in matters pertaining to the CAIR NO_x ozone season trading program. If the CAIR NO_x ozone season source is also a CAIR NO_x source, then this natural person shall be the same person as the CAIR designated representative under the CAIR NO_x annual trading program. If the CAIR NO_x ozone season source is also a CAIR SO_2 source, then this natural person shall be the same person as the CAIR designated representative under the CAIR SO_2 trading program. If the CAIR NO_x ozone season source is also subject to the acid rain program, then this natural person shall be the same person as the designated representative under the acid rain program. If the CAIR NO_x ozone season source is also subject to the mercury budget trading program, then this natural person shall be the same person as the mercury designated representative under the mercury budget trading program.

(13) "CAIR NO_x annual trading program" means a multistate nitrogen oxides air pollution control and emission reduction program approved and administered by the U.S. EPA in accordance with 326 IAC 24-1; 40 CFR 96, Subparts AA through II* and 40 CFR 51.123(o)(1) or 40 CFR 51.123(o)(2)*; or established by the U.S. EPA in accordance with 40 CFR 97, Subparts AA through II* and 40 CFR 51.123(p)* and 40 CFR 52.35*, as a means of mitigating interstate transport of fine particulates and nitrogen oxides.

(14) "CAIR NO_x ozone season allowance" means a limited authorization issued by a permitting authority or the U.S. EPA under provisions of a state implementation plan that are approved under 40 CFR 51.123(aa)(1) or 40 CFR 51.123(aa)(2), and 40 CFR 51.123(bb)(1), 40 CFR 51.123(bb)(2), 40 CFR 51.123(dd), or 40 CFR 51.123(ee)*, or under 40 CFR 97*, to emit one (1) ton of nitrogen oxides during a control period of the specified calendar year for which the authorization is allocated or of any calendar year thereafter under the CAIR NO_x ozone season trading program or a limited authorization issued by a permitting authority for a control period during 2003 through 2009 under the NO_x budget trading program in accordance with 40 CFR 51.121(p)* or 326 IAC 10-4 to emit one (1) ton of nitrogen oxides during a control period, provided that the provision in 40 CFR 51.121(b)(2)(ii)(E)* shall not be used in applying this definition and the limited authorization

shall not have been used to meet the allowance-holding requirement under the NO_x budget trading program. An authorization to emit nitrogen oxides that is not issued under provisions of a state implementation plan approved under 40 CFR 51.121(p)* or 40 CFR 51.123(aa)(1) or 40 CFR 51.123(aa)(2), and 40 CFR 51.123(bb)(1), 40 CFR 51.123(bb)(2), 40 CFR 51.123(dd), or 40 CFR 51.123(ee)*, or under 40 CFR 97* shall not be a CAIR NO_x ozone season allowance.

(15) "CAIR NO_x ozone season allowance deduction" or "deduct CAIR NO_x ozone season allowances" means the permanent withdrawal of CAIR NO_x ozone season allowances by the U.S. EPA from a compliance account, for example, in order to account for a specified number of tons of total nitrogen oxides emissions from all CAIR NO_x ozone season units at a CAIR NO_x ozone season source for a control period, determined in accordance with section 11 of this rule, or to account for excess emissions.

(16) "CAIR NO_x ozone season allowances held" or "hold CAIR NO_x ozone season allowances" means the CAIR NO_x ozone season allowances recorded by the U.S. EPA, or submitted to the U.S. EPA for recordation, in accordance with sections 9, 10, and 12 of this rule, in a CAIR NO_x ozone season allowance tracking system account.

(17) "CAIR NO_x ozone season allowance tracking system" means the system by which the U.S. EPA records allocations, deductions, and transfers of CAIR NO_x ozone season allowances under the CAIR NO_x ozone season trading program. Such allowances will be allocated, held, deducted, or transferred only as whole allowances.

(18) "CAIR NO_x ozone season allowance tracking system account" means an account in the CAIR NO_x ozone season allowance tracking system established by the U.S. EPA for purposes of recording the allocation, holding, transferring, or deducting of CAIR NO_x ozone season allowances.

(19) "CAIR NO_x ozone season emissions limitation" means, for a CAIR NO_x ozone season source, the tonnage equivalent, in NO_x emissions in a control period, of the CAIR NO_x ozone season allowances available for deduction for the source under section 9(i) and 9(j)(1) of this rule for the control period.

(20) "CAIR NO_x ozone season source" means a source that includes one (1) or more CAIR NO_x ozone season units.

(21) "CAIR NO_x ozone season trading program" means a multistate nitrogen oxides air pollution control and emission reduction program approved and administered by the U.S. EPA in accordance with this rule; 40 CFR 96, Subparts AAAA through IIII* and 40 CFR 51.123(aa)(1) or 40 CFR 51.123(aa)(2), and 40 CFR 51.123(bb)(1), 40 CFR 51.123(bb)(2), or 40 CFR 51.123(dd)*; or established by the U.S. EPA in accordance with 40 CFR 97, Subparts AAAA through IIII* and 40 CFR 51.123(ee)* and 40 CFR 52.35*, as a means of mitigating interstate transport of ozone and nitrogen oxides.

(22) "CAIR NO_x ozone season unit" means a unit that is subject to the CAIR NO_x ozone season trading program under section 1 of this rule and, and except for the purposes of sections 3 and 8 of this rule, a CAIR NO_x ozone season opt-in unit under section 12 of this rule.

(23) "CAIR NO_x source" means a source that is subject to the CAIR NO_x annual trading program.

(24) "CAIR permit" means the legally binding and federally enforceable written document, or portion of such document, issued by the department under section 7 of this rule, including any permit revisions, specifying the CAIR NO_x ozone season trading program requirements applicable to a CAIR NO_x ozone season source, to each CAIR NO_x ozone season unit at the source, and to the owners and operators and the CAIR designated representative of the source and each such unit.

(25) "CAIR SO_2 source" means a source that is subject to the CAIR SO_2 trading program.

(26) "CAIR SO_2 trading program" means a multistate sulfur dioxide air pollution control and emission reduction program approved and administered by the U.S. EPA in accordance with 326 IAC 24-2; 40 CFR 96, Subparts AAA through III* and 40 CFR 51.124(o)(1) or 40 CFR 51.124(o)(2)*; or established in accordance with 40 CFR 97, Subparts AAA through III and 40 CFR 51.124(r)* and 40 CFR 52.36*, as a means of mitigating interstate transport of fine particulates and sulfur dioxide.

(27) "Coal" means any solid fuel classified as anthracite, bituminous, subbituminous, or lignite.

(28) "Coal-derived fuel" means any fuel, whether in a solid, liquid, or gaseous state, produced by the mechanical, thermal, or chemical processing of coal.

(29) "Coal-fired" means:

(A) except for purposes of section 8 of this rule, combusting any amount of coal or coal-derived fuel, alone or in combination with any amount of any other fuel, during any year; or

(B) for purposes of section 8 of this rule, combusting any amount of coal or coal-derived fuel, alone or in combination with any amount of any other fuel, during a specified year.

(30) "Cogeneration unit" means a stationary, fossil-fuel-fired boiler or stationary, fossil-fuel-fired combustion turbine:

(A) having equipment used to produce electricity and useful thermal energy for industrial, commercial, heating, or cooling purposes through the sequential use of energy;

(B) producing electricity during the twelve (12) month period starting on the date the unit first produces electricity and during any calendar year after the calendar year in which the unit first produces electricity:

(i) for a topping-cycle cogeneration unit:

(AA) useful thermal energy not less than five percent (5%) of total energy output; and

(BB) useful power that, when added to one-half (½) of useful thermal energy produced, is not less than forty-two and one-half percent (42.5%) of total energy input, if useful thermal energy produced is fifteen percent (15%) or more of total energy output, or not less than forty-five percent (45%) of total energy input, if useful thermal energy produced is less than fifteen percent (15%) of total energy output; and

(ii) for a bottoming-cycle cogeneration unit, useful power not less than forty-five percent (45%) of total energy input; and

(C) provided that the total energy input under clause (B)(i)(BB) and (B)(ii) shall equal the unit's total energy input from all fuel except biomass if the unit is a boiler.

(31) "Combustion turbine" means:

(A) an enclosed device comprising a compressor, a combustor, and a turbine and in which the flue gas resulting from the combustion of fuel in the combustor passes through the turbine, rotating the turbine; and

(B) if the enclosed device under clause (A) is combined cycle, any associated duct burner, heat recovery steam generator and steam turbine.

(32) "Commence commercial operation" means, with regard to a unit serving a generator, the following:

(A) To have begun to produce steam, gas, or other heated medium used to generate electricity for sale or use, including test generation, except as provided in sections 3 and 12(f)(10) of this rule, subject to the following:

(i) For a unit that is a CAIR NO_x ozone season unit under section 1 of this rule on the later of November 15, 1990, or the date the unit commences commercial operation as defined in this clause and that subsequently undergoes a physical change (other than replacement of the unit by a unit at the same source) such date shall remain the date of commencement of commercial operation of the unit, which shall continue to be treated as the same unit.

(ii) For a unit that is a CAIR NO_x ozone season unit under section 1 of this rule on the later of November 15, 1990, or the date the unit commences commercial operation as defined in this clause and that is subsequently replaced by a unit at the same source (for example, repowered), such date shall remain the replaced unit's date of commencement of commercial operation, and the replacement unit shall be treated as a separate unit with a separate date for commencement of commercial operation as defined in this clause or clause (B) as appropriate.

(B) Notwithstanding clause (A) and except as provided in section 3 of this rule, for a unit that is not a CAIR NO_x ozone season unit under section 1 of this rule on the later of November 15, 1990, or the date the unit commences commercial operation as defined in clause (A), the unit's date for commencement of commercial operation shall be the date on which the unit becomes a CAIR NO_x ozone season unit under section 1 of this rule, subject to the following:

(i) For a unit with a date for commencement of commercial operation as defined in this clause and that subsequently undergoes a physical change, other than replacement of the unit by a unit at the same source, such date shall remain the date of commencement of commercial operation of the unit, which shall continue to be treated as the same unit.

(ii) For a unit with a date for commencement of commercial operation as defined in this clause and that is subsequently replaced by a unit at the same source (for example, repowered), such date shall remain the replaced unit's date of commencement of commercial operation, and the replacement unit shall be treated as a separate unit with a separate date for commencement of commercial operation as defined in this clause or clause (A), as appropriate.

(C) Notwithstanding clauses (A) and (B), for a unit not serving a generator producing electricity for sale, the unit's

date of commencement of operation shall also be the unit's date of commencement of commercial operation.

(33) "Commence operation" means the following:

(A) To have begun any mechanical, chemical, or electronic process, including, with regard to a unit, start-up of a unit's combustion chamber, except as provided in section 12(f)(10) of this rule.

(B) For a unit that undergoes a physical change (other than replacement of the unit by a unit at the same source) after the date the unit commences operation as defined in clause (A), such date shall remain the unit's date of commencement of operation of the unit, which shall continue to be treated as the same unit.

(C) For a unit that is replaced by a unit at the same source (for example, repowered) after the date the unit commences operation as defined in clause (A), such date shall remain the replaced unit's date of commencement, and the replacement unit shall be treated as a separate unit with a separate date for commencement of operation as defined in this clause or clause (A) or (B), as appropriate, except as provided in section 12(f)(10) of this rule.

(D) Notwithstanding clauses (A) through (C), and solely for purposes of section 11 of this rule, for a unit that is not a large affected unit under subdivision (51)(A) or (51)(B) on the later of November 15, 1990, or the date the unit commences operation as defined in clause (A) and that subsequently becomes a large affected unit under subdivision (51)(A) or (51)(B), the unit's date for commencement of operation shall be the date on which the unit becomes a large affected unit under subdivision (51)(A) or (51)(B).

(E) For a unit with a date of commencement of operation as defined in clause (D) and that subsequently undergoes a physical change, other than replacement of the unit by a unit at the same source, such date shall remain the date of commencement of operation of the unit, which shall continue to be treated as the same unit.

(F) For a unit with a date for commencement of operation as defined in clause (D) and that is subsequently replaced by a unit at the same source, for example, repowered, such date shall remain the replaced unit's date of commencement of operation, and the replacement unit shall be treated as a separate unit with a separate date for commencement of operation as defined in this clause and clauses (A) through (E), as appropriate.

(34) "Common stack" means a single flue through which emissions from two (2) or more units are exhausted.

(35) "Compliance account" means a CAIR NO_x ozone season allowance tracking system account, established by the U.S. EPA for a CAIR NO_x ozone season source under section 9 or 12 of this rule, in which any CAIR NO_x ozone season allowance allocations for the CAIR NO_x ozone season units at the source are initially recorded and in which are held any CAIR NO_x ozone season allowances available for use for a control period in order to meet the source's CAIR NO_x ozone season emissions limitation in accordance with section 9(i) and 9(j) of this rule.

(36) "Continuous emission monitoring system" or "CEMS" means the equipment required under section 11 of this rule to sample, analyze, measure, and provide, by means of readings recorded at least once every fifteen (15) minutes, using an automated data acquisition and handling system (DAHS), a permanent record of nitrogen oxides emissions, stack gas volumetric flow rate, stack gas moisture content, and oxygen or carbon dioxide concentration, as applicable, in a manner consistent with 40 CFR 75*. The following systems are the principal types of continuous emission monitoring systems required under section 11 of this rule:

(A) A flow monitoring system, consisting of a stack flow rate monitor and an automated data acquisition and handling system and providing a permanent, continuous record of stack gas volumetric flow rate, in standard cubic feet per hour (scfh).

(B) A nitrogen oxides concentration monitoring system, consisting of a NO_x ozone season pollutant concentration monitor and an automated data acquisition and handling system and providing a permanent, continuous record of NO_x ozone season emissions, in parts per million (ppm).

(C) A nitrogen oxides emission rate (or NO_x -diluent) monitoring system, consisting of a NO_x ozone season pollutant concentration monitor, a diluent gas (CO_2 or O_2) monitor, and an automated data acquisition and handling system and providing a permanent, continuous record of NO_x ozone season concentration, in parts per million (ppm), diluent gas concentration, in percent CO_2 or O_2; and NO_x ozone season emission rate, in pounds per million British thermal units (lb/MMBtu).

(D) A moisture monitoring system, as defined in 40 CFR 75.11(b)(2)* and providing a permanent, continuous record of the stack gas moisture content, in percent H_2O.

(E) A carbon dioxide monitoring system, consisting of a CO_2 pollutant concentration monitor, or an oxygen monitor

plus suitable mathematical equations from which the CO_2 concentration is derived, and an automated data acquisition and handling system and providing a permanent, continuous record of CO_2 emissions, in percent CO_2.

(F) An oxygen monitoring system, consisting of an O_2 concentration monitor and an automated data acquisition and handling system and providing a permanent, continuous record of O_2, in percent O_2.

(37) "Control period" means the period beginning May 1 of a calendar year, except as provided in section 4(c)(2) of this rule, and ending on September 30 of the same year, inclusive.

(38) "Electricity for sale under a firm contract to the electric grid" means electricity for sale where the capacity involved is intended to be available at all times during the period covered by the guaranteed commitment to deliver, even under adverse conditions.

(39) "Emissions" means air pollutants exhausted from a unit or source into the atmosphere, as measured, recorded, and reported to the U.S. EPA by the CAIR designated representative and as determined by the U.S. EPA in accordance with section 11 of this rule.

(40) "Energy efficiency or renewable energy projects" means any of the following implemented in Indiana:

(A) End-use energy efficiency projects, including demand-side management programs.

(B) Highly efficient electricity or steam generation for the predominant use of a single end user, such as combined cycle, combined heat and power, microturbines, and fuel cell systems. In order to be considered as highly efficient electricity generation under this clause, combined cycle, combined heat and power, microturbines, and fuel cell generating systems must meet or exceed the following thresholds:

(i) For combined heat and power projects generating both electricity and thermal energy for space, water, or industrial process heat, rated energy efficiency of sixty percent (60%).

(ii) For microturbine projects rated at or below five hundred (500) kilowatts generating capacity, rated energy efficiency of forty percent (40%).

(iii) For combined cycle projects rated at greater than five hundred (500) kilowatts, rated energy efficiency of fifty percent (50%).

(iv) For fuel cell systems, rated energy efficiency of forty percent (40%), whether or not the fuel cell system is part of a combined heat and power energy system.

(C) Zero-emission renewable energy projects, including wind, photovoltaic, solar, and hydropower projects. Eligible hydropower projects are restricted to systems employing a head of ten (10) feet or less or systems employing a head greater than ten (10) feet that make use of a dam that existed before September 16, 2001.

(D) Energy efficiency projects generating electricity through the capture of methane gas from municipal solid waste landfills, water treatment plants, sewage treatment plants, or anaerobic digestion systems operating on animal or plant wastes.

(E) The installation of highly efficient electricity generation equipment for the sale of power where such equipment replaces or displaces retired electrical generating units. In order to be considered as highly efficient under this clause, generation equipment must meet or exceed the following energy efficiency thresholds:

(i) For coal-fired electrical generation units, rated energy efficiency of forty-two percent (42%).

(ii) For natural gas-fired electrical generating units, rated energy efficiency of fifty percent (50%).

(F) Improvements to existing fossil fuel-fired electrical generation units that increase the efficiency of the unit and decrease the heat rate used to generate electricity, including gas reburning projects that reduce NO_x emissions.

(G) The installation of integrated gasification combined cycle equipment producing electricity for sale.

(H) Renewable energy projects that displace some portion of the combustion of coal, natural gas, or oil through the use of solar energy or methane from landfills, water treatment plants, sewage treatment plants, or anaerobic digestion systems on animal or plant wastes and reduce NO_x emissions.

Energy efficiency or renewable energy projects do not include nuclear power projects. This definition is solely for the purposes of implementing this rule and does not apply in other contexts.

(41) "Excess emissions" means any ton of nitrogen oxides emitted by the CAIR NO_x ozone season units at a CAIR NO_x ozone season source during a control period that exceeds the CAIR NO_x ozone season emissions limitation for the source.

(42) "FESOP" means a federally enforceable state operating permit issued under 326 IAC 2-8.

(43) "Fossil fuel" means natural gas, petroleum, coal, or any form of solid, liquid, or gaseous fuel derived from such material.

(44) "Fossil-fuel-fired" means, with regard to a unit, the following:

(A) Except as provided in clause (B), combusting any amount of fossil fuel in any calendar year.

(B) Solely for the purposes of applying the term "large affected unit", the combustion of fossil fuel, alone or in combination with any other fuel, under any of the following scenarios:

(i) Fossil fuel actually combusted comprises more than fifty percent (50%) of the annual heat input on a British thermal unit (Btu) basis during any year starting in 1995. If a unit had no heat input starting in 1995, during the last year of operation of the unit prior to 1995.

(ii) Fossil fuel is projected to comprise more than fifty percent (50%) of the annual heat input on a Btu basis during any year, provided that the unit shall be fossil-fuel-fired as of the date, during the year, that the unit begins combusting fossil fuel.

(45) "Fuel oil" means any petroleum-based fuel, including diesel fuel or petroleum derivatives such as oil tar, and any recycled or blended petroleum products or petroleum byproducts used as a fuel whether in a liquid, solid, or gaseous state.

(46) "General account" means a CAIR NO_x ozone season allowance tracking system account, established under section 9 of this rule, that is not a compliance account.

(47) "Generator" means a device that produces electricity.

(48) "Gross electrical output" means, with regard to a cogeneration unit, electricity made available for use, including any such electricity used in the power production process. This process may include, but is not limited to, any on-site processing or treatment of fuel combusted at the unit and any on-site emission controls.

(49) "Heat input" means, with regard to a specified period of time, the product, in million British thermal units per unit of time (MMBtu/time) of the gross calorific value of the fuel, in British thermal units per pound (Btu/lb), divided by one million (1,000,000) British thermal units per million British thermal units (Btu/MMBtu) and multiplied by the fuel feed rate into a combustion device, in pounds of fuel per unit of time (lb of fuel/time), as measured, recorded, and reported to the U.S. EPA by the CAIR designated representative and determined by the U.S. EPA in accordance with section 11 of this rule and excluding the heat derived from preheated combustion air, recirculated flue gases, or exhaust from other sources.

(50) "Heat input rate" means the amount of heat input, in million British thermal units (MMBtu), divided by unit operating time, in hours, or, with regard to a specific fuel, the amount of heat input attributed to the fuel, in million British thermal units (MMBtu), divided by the unit operating time, in hours, during which the unit combusts the fuel.

(51) "Large affected unit" means the following:

(A) For units other than cogeneration units commencing operation, the following:

(i) Before January 1, 1997, a unit that has a maximum design heat input greater than two hundred fifty million (250,000,000) Btus per hour and that did not serve during 1995 or 1996 a generator producing electricity for sale under a firm contract to the electric grid.

(ii) On or after January 1, 1997, and before January 1, 1999, a unit that has a maximum design heat input greater than two hundred fifty million (250,000,000) Btus per hour and that did not serve during 1997 or 1998 a generator producing electricity for sale under a firm contract to the electric grid.

(iii) On or after January 1, 1999, a unit with a maximum design heat input greater than two hundred fifty million (250,000,000) Btus per hour that:

(AA) at no time serves a generator producing electricity for sale; or

(BB) at any time serves a generator producing electricity for sale, if any such generator has a nameplate capacity of twenty-five (25) megawatt electrical or less and has the potential to use no more than fifty percent (50%) of the potential electrical output capacity of the unit.

(B) For cogeneration units commencing operation, the following:

(i) Before January 1, 1997, a unit with a maximum design heat input greater than two hundred fifty million (250,000,000) Btus per hour and qualifying as an unaffected unit under the acid rain program for 1995 and 1996.

(ii) In 1997 or 1998, a unit with a maximum design heat input greater than two hundred fifty million (250,000,000) Btus per hour and qualifying as an unaffected unit under the acid rain program for 1997 and 1998.

(iii) On or after January 1, 1999, a unit with a maximum design heat input greater than two hundred fifty

million (250,000,000) Btus per hour and qualifying as an unaffected unit under the acid rain program for each year.

(C) For units other than cogeneration units that are not already subject to this rule under section 1(a)(1) or 1(a)(3) of this rule commencing operation:

(i) before January 1, 1997, a unit serving a generator during 1995 or 1996 that had a nameplate capacity greater than twenty-five (25) megawatts and produced electricity for sale under a firm contract to the electric grid;

(ii) on or after January 1, 1997, and before January 1, 1999, a unit serving a generator during 1997 or 1998 that had a nameplate capacity greater than twenty-five (25) megawatts and produced electricity for sale under a firm contract to the electric grid; or

(iii) on or after January 1, 1999, a unit serving a generator at any time that has a nameplate capacity greater than twenty-five (25) megawatts and produced electricity for sale under a firm contract to the electric grid.

(D) For cogeneration units that are not already subject to this rule under section 1(a)(1) or 1(a)(3) of this rule commencing operation:

(i) before January 1, 1997, a unit serving a generator during 1995 or 1996 that had a nameplate capacity greater than twenty-five (25) megawatts and failing to qualify as an unaffected unit for 1995 or 1996 under the acid rain program;

(ii) in 1997 or 1998, a unit serving a generator during 1997 or 1998 with a nameplate capacity greater than twenty-five (25) megawatts and failing to qualify as an unaffected unit for 1997 or 1998 under the acid rain program; or

(iii) on or after January 1, 1999, a unit serving at any time a generator with a nameplate capacity greater than twenty-five (25) megawatts and failing to qualify as an unaffected unit under the acid rain program for any year.

The term does not include a unit subject to 326 IAC 10-3.

(52) "Life-of-the-unit, firm power contractual arrangement" means a unit participation power sales agreement under which a utility or industrial customer reserves, or is entitled to receive, a specified amount or percentage of nameplate capacity and associated energy generated by any specified unit and pays its proportional amount of such unit's total costs, pursuant to a contract:

(A) for the life of the unit;

(B) for a cumulative term of no less than thirty (30) years, including contracts that permit an election for early termination; or

(C) for a period no less than twenty-five (25) years or seventy percent (70%) of the economic useful life of the unit determined as of the time the unit is built, with option rights to purchase or release some portion of the nameplate capacity and associated energy generated by the unit at the end of the period.

(53) "Maximum design heat input" means the maximum amount of fuel per hour, in British thermal units per hour (Btu/hr), that a unit is capable of combusting on a steady state basis as of the initial installation of the unit as specified by the manufacturer of the unit.

(54) "Mercury budget trading program" means a multistate mercury air pollution control and emission reduction program approved and administered by the U.S. EPA in accordance with 40 CFR 60, Subpart HHHH* and 40 CFR 60.24(h)(6)*, or established by the U.S. EPA under the Clean Air Act, Section 111, as a means of reducing national mercury emissions.

(55) "Monitoring system" means any monitoring system that meets the requirements of section 11 of this rule, including a continuous emissions monitoring system, an alternative monitoring system, or an excepted monitoring system under 40 CFR 75*.

(56) "Most stringent state or federal NO_x emissions limitation" means, with regard to a unit, the lowest NO_x emissions limitation, in terms of pounds per million British thermal units (lb/MMBtu), that is applicable to the unit under state or federal law, regardless of the averaging period to which the emissions limitation applies.

(57) "Nameplate capacity" means, starting from the initial installation of a generator, the maximum electrical generating output, in megawatt electrical (MWe), that the generator is capable of producing on a steady state basis and during continuous operation (when not restricted by seasonal or other deratings) as of such installation as specified by the manufacturer of the generator or, starting from the completion of any subsequent physical change in the generator resulting in an increase in the maximum electrical generating output, in megawatt electrical (MWe), that the generator is capable of

producing on a steady state basis and during continuous operation (when not restricted by seasonal or other deratings) such increased maximum amount as of such completion as specified by the person conducting the physical change.

(58) "Oil-fired" means, for the purposes of section 8 of this rule, combusting fuel oil for more than fifteen percent (15%) of the annual heat input in a specified year and not qualifying as coal-fired.

(59) "Operator" means any person who operates, controls, or supervises a CAIR NO_x ozone season unit or a CAIR NO_x ozone season source and shall include, but not be limited to, any holding company, utility system, or plant manager of such a unit or source.

(60) "Owner" means any of the following persons:

(A) With regard to a CAIR NO_x ozone season source or a CAIR NO_x ozone season unit at a source, respectively, any of the following:

(i) Holder of any portion of the legal or equitable title in a CAIR NO_x ozone season unit at the source or the CAIR NO_x ozone season unit.

(ii) Holder of a leasehold interest in a CAIR NO_x ozone season unit at the source or the CAIR NO_x ozone season unit.

(iii) Purchaser of power from a CAIR NO_x ozone season unit at the source or the CAIR NO_x ozone season unit under a life-of-the-unit, firm power contractual arrangement; provided that, unless expressly provided for in a leasehold agreement, owner shall not include a passive lessor, or a person who has an equitable interest through such lessor, whose rental payments are not based, either directly or indirectly, on the revenues or income from such CAIR NO_x ozone season unit.

(B) With regard to any general account, any person who has an ownership interest with respect to the CAIR NO_x ozone season allowances held in the general account and who is subject to the binding agreement for the CAIR authorized account representative to represent the person's ownership interest with respect to CAIR NO_x ozone season allowances.

(61) "Permitting authority" means the state air pollution control agency, local agency, other state agency, or other agency authorized by the U.S. EPA to issue or revise permits to meet the requirements of the CAIR NO_x annual trading program or, if no such agency has been so authorized, the U.S. EPA.

(62) "Potential electrical output capacity" means thirty-three percent (33%) of a unit's maximum design heat input, divided by three thousand four hundred thirteen (3,413) Btu/kilowatt hour, divided by one thousand (1,000) kilowatt hour/megawatt hour, and multiplied by eight thousand seven hundred sixty (8,760) hours/year.

(63) "Rated energy efficiency" means the percentage of gross energy input that is recovered as useable net energy output in the form of electricity or thermal energy, or both, that is used for heating, cooling, industrial processes, or other beneficial uses as follows:

(A) For electric generators, rated energy efficiency is calculated as one (1) net kilowatt hour (three thousand four hundred twelve (3,412) British thermal units) of electricity divided by the unit's design heat rate using the higher heating value of the fuel.

(B) For combined heat and power projects, rated energy efficiency is calculated using the following formula:

$$Eff\% = (NEO + UTO)/GEI$$

Where:

Eff% = Rated energy efficiency.

NEO = Net electrical output of the system converted to British thermal units per unit of time.

UTO = Utilized thermal output or the energy value in British thermal units of thermal energy from the system that is used for heating, cooling, industrial processes, or other beneficial uses, per unit of time.

GEI = Gross energy input, based upon the higher heating value of fuel, per unit of time.

(64) "Receive" or "receipt of" means, when referring to the department or U.S. EPA, to come into possession of a document, information, or correspondence, whether sent in hard copy or by authorized electronic transmission, as indicated in an official log, or by a notation made on the document, information, or correspondence, by the department or U.S. EPA in the regular course of business.

(65) "Recordation", "record", or "recorded" means, with regard to CAIR NO_x ozone season allowances, the movement of CAIR NO_x ozone season allowances by the U.S. EPA into or between CAIR NO_x ozone season allowance tracking system accounts, for purposes of allocation, transfer, or deduction.

(66) "Reference method" means any direct test method of sampling and analyzing for an air pollutant as specified in 40 CFR 75.22*.

(67) "Replacement", "replace", or "replaced" means, with regard to a unit, the demolishing of a unit, or the permanent shutdown and permanent disabling of a unit, and the construction of another unit (the replacement unit) to be used instead of the demolished or shutdown unit (the replaced unit).

(68) "Repowered" means, with regard to a unit, replacement of a coal-fired boiler with one (1) of the following coal-fired technologies at the same source as the coal-fired boiler:

(A) Atmospheric or pressurized fluidized bed combustion.

(B) Integrated gasification combined cycle.

(C) Magnetohydrodynamics.

(D) Direct and indirect coal-fired turbines.

(E) Integrated gasification fuel cells.

(F) As determined by the U.S. EPA in consultation with the Secretary of Energy, a derivative of one (1) or more of the technologies under clauses (A) through (E) and any other coal-fired technology capable of controlling multiple combustion emissions simultaneously with improved boiler or generation efficiency and with significantly greater waste reduction relative to the performance of technology in widespread commercial use as of January 1, 2005.

(69) "Sequential use of energy" means:

(A) for a topping-cycle cogeneration unit, the use of reject heat from electricity production in a useful thermal energy application or process; or

(B) for a bottoming-cycle cogeneration unit, the use of reject heat from useful thermal energy application or process in electricity production.

(70) "Serial number" means, for a CAIR NO_x ozone season allowance, the unique identification number assigned to each CAIR NO_x ozone season allowance by the U.S. EPA.

(71) "Solid waste incineration unit" means a stationary, fossil-fuel-fired boiler or stationary, fossil-fuel-fired combustion turbine that is a solid waste incineration units as defined in the Clean Air Act, Section 129(g)(1).

(72) "Source" means all buildings, structures, or installations located in one (1) or more contiguous or adjacent properties under common control of the same person or persons. For purposes of Section 502(c) of the Clean Air Act, a source, including a source with multiple units, shall be considered a single facility.

(73) "Submit" or "serve" means to send or transmit a document, information, or correspondence to the person specified in accordance with the applicable rule:

(A) in person;

(B) by United States Postal Service; or

(C) by other means of dispatch or transmission and delivery.

Compliance with any submission or service deadline shall be determined by the date of dispatch, transmission, or mailing and not the date of receipt by the department or U.S. EPA.

(74) "Title V operating permit" or "Part 70 operating permit" means a permit issued under 326 IAC 2-7.

(75) "Title V operating permit regulations" or "Part 70 operating permit regulations" means the rules under 326 IAC 2-7.

(76) "Ton" means two thousand (2,000) pounds. For the purpose of determining compliance with the CAIR NO_x ozone season emissions limitation, total tons of nitrogen oxides emissions for a control period shall be calculated as the sum of all recorded hourly emissions, or the mass equivalent of the recorded hourly emission rates, in accordance with section 11 of this rule, but with any remaining fraction of a ton equal to or greater than fifty-hundredths (0.50) tons deemed to equal one (1) ton and any remaining fraction of a ton less than fifty-hundredths (0.50) tons deemed to equal zero (0) tons.

(77) "Topping-cycle cogeneration unit" means a cogeneration unit in which the energy input to the unit is first used to produce useful power, including electricity, and at least some of the reject heat from the electricity production is then used to provide useful thermal energy.

(78) "Total energy input" means, with regard to a cogeneration unit, total energy of all forms supplied to the cogeneration unit, excluding energy produced by the cogeneration unit itself. Each form of energy supplied shall be measured by the lower heating value of that form of energy calculated as follows:

$$LHV = HHV - 10.55(W + 9H)$$

Where: LHV = Lower heating value of fuel in Btu/hr.
HHV = Higher heating value of fuel in Btu/hr.
W = Weight % of moisture in fuel.
H = Weight % of hydrogen in fuel.

(79) "Total energy output" means, with regard to a cogeneration unit, the sum of useful power and useful thermal energy produced by the cogeneration unit.

(80) "Unit" means:

(A) except as provided in clause (B), a stationary, fossil-fuel-fired boiler or combustion turbine or other stationary, fossil-fuel-fired combustion device; and

(B) solely for the purposes of applying the term "large affected unit", a fossil-fuel-fired:

(i) stationary boiler;

(ii) combustion turbine; or

(iii) combined cycle system.

(81) "Unit operating day" means a calendar day in which a unit combusts any fuel.

(82) "Unit operating hour" or "hour of unit operation" means an hour in which a unit combusts any fuel.

(83) "Useful power" means, with regard to a cogeneration unit, electricity or mechanical energy made available for use, excluding any such energy used in the power production process, which process includes, but is not limited to, any on-site processing or treatment of fuel combusted at the unit and any on-site emission controls.

(84) "Useful thermal energy" means, with regard to a cogeneration unit, thermal energy that is:

(A) made available to an industrial or commercial process, not a power production process, excluding any heat contained in condensate return or makeup water;

(B) used in a heating application (for example, space heating or domestic hot water heating); or

(C) used in a space cooling application (that is, thermal energy used by an absorption chiller).

(85) "Utility power distribution system" means the portion of an electricity grid owned or operated by a utility and dedicated to delivering electricity to customers.

*These documents are incorporated by reference. Copies may be obtained from the Government Printing Office, 732 North Capitol Street NW, Washington, D.C. 20401 or are available for review and copying at the Indiana Department of Environmental Management, Office of Air Quality, Indiana Government Center-North, Tenth Floor, 100 North Senate Avenue, Indianapolis, Indiana 46204. *(Air Pollution Control Division; 326 IAC 24-3-2; filed Jan 26, 2007, 10:25 a.m.: 20070221-IR-326050117FRA; errata filed Jan 29, 2007, 2:43 p.m.: 20070221-IR-326050117ACA; filed May 12, 2009, 11:16 a.m.: 20090610-IR-326080005FRA)*

326 IAC 24-3-3 Retired unit exemption (Repealed)

Sec. 3. *(Repealed by Air Pollution Control Division; filed Oct 25, 2017, 1:02 p.m.: 20171122-IR-326160209FRA)*

326 IAC 24-3-4 Standard requirements

Authority: IC 13-14-8; IC 13-17-3-4; IC 13-17-3-11
Affected: IC 13-15; IC 13-17

Sec. 4. The owners and operators, and the CAIR designated representative, of each CAIR NO_x ozone season source and CAIR NO_x ozone season unit at the source shall comply with the monitoring, reporting, and record keeping requirements of section 11 of this rule. *(Air Pollution Control Division; 326 IAC 24-3-4; filed Jan 26, 2007, 10:25 a.m.: 20070221-IR-326050117FRA; filed Oct 25, 2017, 1:02 p.m.: 20171122-IR-326160209FRA)*

326 IAC 24-3-5 Computation of time and appeal procedures (Repealed)

Sec. 5. *(Repealed by Air Pollution Control Division; filed Oct 25, 2017, 1:02 p.m.: 20171122-IR-326160209FRA)*

326 IAC 24-3-6 CAIR designated representative for CAIR NO_x ozone season sources (Repealed)

Sec. 6. *(Repealed by Air Pollution Control Division; filed Oct 25, 2017, 1:02 p.m.: 20171122-IR-326160209FRA)*

326 IAC 24-3-7 Permit requirements (Repealed)

Sec. 7. *(Repealed by Air Pollution Control Division; filed Oct 25, 2017, 1:02 p.m.: 20171122-IR-326160209FRA)*

326 IAC 24-3-8 CAIR NO_x ozone season allowance allocations (Repealed)

Sec. 8. *(Repealed by Air Pollution Control Division; filed Oct 25, 2017, 1:02 p.m.: 20171122-IR-326160209FRA)*

326 IAC 24-3-9 CAIR NO_x ozone season allowance tracking system (Repealed)

Sec. 9. *(Repealed by Air Pollution Control Division; filed Oct 25, 2017, 1:02 p.m.: 20171122-IR-326160209FRA)*

326 IAC 24-3-10 CAIR NO_x ozone season allowance transfers (Repealed)

Sec. 10. *(Repealed by Air Pollution Control Division; filed Oct 25, 2017, 1:02 p.m.: 20171122-IR-326160209FRA)*

326 IAC 24-3-11 Monitoring and reporting requirements

Authority: IC 13-14-8; IC 13-17-3-4; IC 13-17-3-11
Affected: IC 13-15; IC 13-17

Sec. 11. (a) The owners and operators, and to the extent applicable, the CAIR designated representative, of a CAIR NO_x ozone season unit, shall comply with the monitoring, record keeping, and reporting requirements as provided in this rule and in 40 CFR 75, Subpart H*. For purposes of complying with such requirements, the definitions in section 2 of this rule and 40 CFR 72.2* shall apply, and the terms affected unit, designated representative, and continuous emission monitoring system (CEMS) in 40 CFR 75* shall be replaced by the terms CAIR NO_x ozone season unit, CAIR designated representative, and continuous emission monitoring system (CEMS) respectively, as defined in section 2 of this rule. The owner or operator of a unit that is not a CAIR NO_x ozone season unit but that is monitored under 40 CFR 75.72(b)(2)(ii)* shall comply with the same monitoring, record keeping, and reporting requirements as a CAIR NO_x ozone season unit.

(b) The owner or operator of each CAIR NO_x ozone season unit shall do the following:

(1) Install all monitoring systems required under this section for monitoring NO_x ozone season mass emissions and individual unit heat input. This includes all systems required to monitor NO_x ozone season emission rate, NO_x ozone season concentration, stack gas moisture content, stack gas flow rate, CO_2 or O_2 concentration, and fuel flow rate, as applicable, in accordance with 40 CFR 75.71* and 40 CFR 75.72*.

(2) Successfully complete all certification tests required under subsections (f) through (j) and meet all other requirements of this section and 40 CFR 75* applicable to the monitoring systems under subdivision (1).

(3) Record, report, and quality-assure the data from the monitoring systems under subdivision (1).

(c) Except as provided in subsection (p), the owner or operator shall meet the monitoring system certification and other requirements of subsection (b)(1) and (b)(2) on or before the following dates. The owner or operator shall record, report, and quality-assure the data from the monitoring systems under subsection (b)(1) on and after the following dates:

(1) For the owner or operator of a CAIR NO_x ozone season unit that commences commercial operation before July 1, 2007, by May 1, 2008.

(2) For the owner or operator of a CAIR NO_x ozone season unit that commences commercial operation on or after July 1, 2007, and that reports on an annual basis under subsection (n)(3), by the later of the following dates:

(A) May 1, 2008.

(B) The earlier of:

(i) one hundred eighty (180) calendar days after the date on which the unit commences commercial operation; or

(ii) ninety (90) unit operating days after the date on which the unit commences commercial operation.

(3) For the owner or operator of a CAIR NO_x ozone season unit that commences commercial operation on or after July 1, 2007, and that reports on a control period basis under subsection (n)(3)(B)(ii), by the later of the following dates:

(A) If the compliance date under clause (B) is not during a control period, May 1 immediately following the compliance date under clause (B).

(B) The earlier of:

(i) one hundred eighty (180) calendar days after the date on which the unit commences commercial operation; or

(ii) ninety (90) unit operating days after the date on which the unit commences commercial operation.

(4) For the owner or operator of a CAIR NO_x ozone season unit for which construction of a new stack or flue or installation of add-on NO_x emission controls is completed after the applicable deadline under subdivisions (1), (2), (6), or (7) and that reports on an annual basis under subsection (n)(3), compliance by the earlier of:

(A) one hundred eighty (180) calendar days after the date on which emissions first exit to the atmosphere through the new stack or flue or add-on NO_x emissions controls; or

(B) ninety (90) unit operating days after the date on which emissions first exit to the atmosphere through the new stack or flue or add-on NO_x emissions controls.

(5) For the owner or operator of a CAIR NO_x ozone season unit for which construction of a new stack or flue or installation of add-on NO_x emission controls is completed after the applicable deadline under subdivision (1), (3), (6), or (7) and that reports on control period basis under subsection (n)(3)(B)(ii), by the later of the following dates:

(A) If the compliance date under clause (B) is not during a control period, May 1 immediately following the compliance date under clause (B).

(B) The earlier of:

(i) one hundred eighty (180) calendar days after the date on which emissions first exit to the atmosphere through the new stack or flue or add-on NO_x emissions controls; or

(ii) ninety (90) unit operating days after the date on which emissions first exit to the atmosphere through the new stack or flue or add-on NO_x emissions controls.

(6) Notwithstanding the dates in subdivisions (1) through (3), for the owner or operator of a unit for which a CAIR NO_x ozone season opt-in permit application is submitted and not withdrawn and a CAIR opt-in permit is not yet issued or denied under section 12 of this rule, by the date specified in section 12(f)(2) through 12(f)(4) of this rule.

(7) Notwithstanding the dates in subdivisions (1), (2), and (3), for the owner or operator of a CAIR NO_x ozone season opt-in unit, by the date on which the CAIR NO_x ozone season opt-in unit under section 12 of this rule enters the CAIR NO_x ozone season trading program as provided in section 12(f)(9) of this rule.

(d) The owner or operator of a CAIR NO_x ozone season unit that does not meet the applicable compliance date set forth in subsection (c) for any monitoring system under subsection (b)(1) shall, for each such monitoring system, determine, record, and report maximum potential or, as appropriate, minimum potential, values for NO_x concentration, NO_x emission rate, stack gas flow rate, stack gas moisture content, fuel flow rate, and any other parameters required to determine NO_x mass emissions and heat input in accordance with 40 CFR 75.31(b)(2) or 40 CFR 75.31(c)(3)*, 40 CFR 75, Appendix D, Section 2.4*, or 40 CFR 75, Appendix E, Section 2.5*, as applicable.

(e) The following shall apply to any monitoring system, alternative monitoring system, alternative reference method, or any other alternative for a CEMS required under this rule:

(1) No owner or operator of a CAIR NO_x ozone season unit shall use any alternative monitoring system, alternative reference method, or any other alternative to any requirement of this section without having obtained prior written approval in accordance with subsection (o).

(2) No owner or operator of a CAIR NO_x ozone season unit shall operate the unit so as to discharge, or allow to be discharged, NO_x ozone season emissions to the atmosphere without accounting for all such emissions in accordance with the applicable provisions of this section and 40 CFR 75*.

(3) No owner or operator of a CAIR NO_x ozone season unit shall disrupt the continuous emission monitoring system, any portion thereof, or any other approved emission monitoring method, and thereby avoid monitoring and recording NO_x ozone season mass emissions discharged into the atmosphere or heat input, except for periods of recertification or periods when

calibration, quality assurance testing, or maintenance is performed in accordance with the applicable provisions of this section and 40 CFR 75*.

(4) No owner or operator of a CAIR NO_x ozone season unit shall retire or permanently discontinue use of the continuous emission monitoring system, any component thereof, or any other approved monitoring system under this section, except under any one (1) of the following circumstances:

(A) During the period that the unit is covered by an exemption under section 3 of this rule.

(B) The owner or operator is monitoring emissions from the unit with another certified monitoring system approved, in accordance with the applicable provisions of this section and 40 CFR 75*, by the department for use at that unit that provides emission data for the same pollutant or parameter as the retired or discontinued monitoring system.

(C) The CAIR designated representative submits notification of the date of certification testing of a replacement monitoring system for the retired or discontinued monitoring system in accordance with subsection (h)(3)(A).

(f) The owner or operator of a CAIR NO_x ozone season unit shall be exempt from the initial certification requirements of this subsection and subsections (g) through (j) for a monitoring system under subsection (b)(1) if the following conditions are met:

(1) The monitoring system has been previously certified in accordance with 40 CFR 75*.

(2) The applicable quality-assurance and quality-control requirements of 40 CFR 75.21*, 40 CFR 75, Appendix B*, 40 CFR 75, Appendix D*, and 40 CFR 75, Appendix E* are fully met for the certified monitoring system described in subdivision (1).

The recertification provisions of this subsection and subsections (g) through (j) shall apply to a monitoring system under subsection (b)(1) exempt from initial certification requirements under this subsection.

(g) If the U.S. EPA has previously approved a petition under 40 CFR 75.17(a)* or 40 CFR 75.17(b)* for apportioning the NO_x emission rate measured in a common stack or a petition under 40 CFR 75.66* for an alternative to a requirement in 40 CFR 75.12* or 40 CFR 75.17*, the CAIR designated representative shall resubmit the petition to the U.S. EPA under subsection (o)(1) to determine whether the approval applies under the CAIR NO_x ozone season trading program.

(h) Except as provided in subsection (f), the owner or operator of a CAIR NO_x ozone season unit shall comply with the following initial certification and recertification procedures for a continuous monitoring system (that is, a continuous emission monitoring system and an excepted monitoring system under 40 CFR 75, Appendix D* and 40 CFR 75, Appendix E*) under subsection (b)(1). The owner or operator of a unit that qualifies to use the low mass emissions accepted monitoring methodology under 40 CFR 75.19* or that qualifies to use an alternative monitoring system under 40 CFR 75, Subpart E* shall comply with the procedures in subsection (i) or (j) respectively:

(1) The owner or operator shall ensure that each continuous monitoring system under subsection (b)(1), including the automated data acquisition and handling system, successfully completes all of the initial certification testing required under 40 CFR 75.20* by the applicable deadline in subsection (c). In addition, whenever the owner or operator installs a monitoring system to meet the requirements of this section in a location where no such monitoring system was previously installed, initial certification in accordance with 40 CFR 75.20* is required.

(2) Whenever the owner or operator makes a replacement, modification, or change in any certified continuous emission monitoring system under subsection (b)(1) that may significantly affect the ability of the system to accurately measure or record NO_x mass emissions or heat input rate or to meet the quality-assurance and quality-control requirements of 40 CFR 75.21* or 40 CFR 75, Appendix B*, the owner or operator shall recertify the monitoring system in accordance with 40 CFR 75.20(b)*. Furthermore, whenever the owner or operator makes a replacement, modification, or change to the flue gas handling system or the unit's operation that may significantly change the stack flow or concentration profile, the owner or operator shall recertify each continuous emission monitoring system whose accuracy is potentially affected by the change, in accordance with 40 CFR 75.20(b)*. Examples of changes to a continuous emission monitoring system that require recertification include replacement of the analyzer, complete replacement of an existing continuous emission monitoring system, or change in location or orientation of the sampling probe or site. Any fuel flowmeter system, and any excepted NO_x monitoring system under 40 CFR 75, Appendix E*, under subsection (b)(1) are subject to the recertification requirements in 40 CFR 75.20(g)(6)*.

(3) Clauses (A) through (D) apply to both initial certification and recertification of a continuous monitoring system under subsection (b)(1). For recertifications, replace the words certification and initial certification with the word recertification, replace the word certified with the word recertified, and follow the procedures in 40 CFR 75.20(b)(5)* and 40 CFR

75.20(g)(7)* in lieu of the procedures in clause (E). Requirements for the certification approval process for initial certification and recertification, and loss of certification are as follows:

(A) The CAIR designated representative shall submit to the department, the appropriate EPA Regional Office, and the U.S. EPA written notice of the dates of certification testing, in accordance with subsection (m).

(B) The CAIR designated representative shall submit to the department a certification application for each monitoring system. A complete certification application shall include the information specified in 40 CFR 75.63*.

(C) The provisional certification date for a monitoring system shall be determined in accordance with 40 CFR 75.20(a)(3)*. A provisionally certified monitoring system may be used under the CAIR NO_x ozone season trading program for a period not to exceed one hundred twenty (120) days after receipt by the department of the complete certification application for the monitoring system under clause (B). Data measured and recorded by the provisionally certified monitoring system, in accordance with the requirements of 40 CFR 75*, shall be considered valid quality-assured data, retroactive to the date and time of provisional certification, provided that the department does not invalidate the provisional certification by issuing a notice of disapproval within one hundred twenty (120) days of the date of receipt of the complete certification application by the department.

(D) The department shall issue a written notice of approval or disapproval of the certification application to the owner or operator within one hundred twenty (120) days of receipt of the complete certification application under clause (B). In the event the department does not issue such a notice within such one hundred twenty (120) day period, each monitoring system that meets the applicable performance requirements of 40 CFR 75* and is included in the certification application shall be deemed certified for use under the CAIR NO_x ozone season trading program. The issuance of notices shall be as follows:

(i) If the certification application is complete and shows that each monitoring system meets the applicable performance requirements of 40 CFR 75*, then the department shall issue a written notice of approval of the certification application within one hundred twenty (120) days of receipt.

(ii) If the certification application is not complete, then the department shall issue a written notice of incompleteness that sets a reasonable date by which the CAIR designated representative must submit the additional information required to complete the certification application. If the CAIR designated representative does not comply with the notice of incompleteness by the specified date, then the department may issue a notice of disapproval under item (iii). The one hundred twenty (120) day review period shall not begin before receipt of a complete certification application.

(iii) If the certification application shows that any monitoring system does not meet the performance requirements of 40 CFR 75* or if the certification application is incomplete and the requirement for disapproval under item (ii) is met, then the department shall issue a written notice of disapproval of the certification application. Upon issuance of such notice of disapproval, the provisional certification is invalidated by the department and the data measured and recorded by each uncertified monitoring system shall not be considered valid quality-assured data beginning with the date and hour of provisional certification, as defined under 40 CFR 75.20(a)(3)*. The owner or operator shall follow the procedures for loss of certification in clause (E) for each monitoring system that is disapproved for initial certification.

(iv) The department or, for a CAIR NO_x ozone season opt-in unit or a unit for which a CAIR opt-in permit application is submitted and not withdrawn and a CAIR opt-in permit is not yet issued or denied under section 12 of this rule, the U.S. EPA may issue a notice of disapproval of the certification status of a monitor in accordance with subsection (l).

(E) If the department or the U.S. EPA issues a notice of disapproval of a certification application under clause (D)(iii) or a notice of disapproval of certification status under clause (D)(iv), then the following shall apply:

(i) The owner or operator shall substitute the following values, for each disapproved monitoring system, for each hour of unit operation during the period of invalid data specified under 40 CFR 75.20(a)(4)(iii)*, 40 CFR 75.20(g)(7)*, or 40 CFR 75.21(e)* and continuing until the applicable date and hour specified under 40 CFR 75.20(a)(5)(i)* or 40 CFR 75.20(g)(7)*:

(AA) For a disapproved NO_x emission rate, NO_x-diluent, system, the maximum potential NO_x emission rate, as defined in 40 CFR 72.2*.

(BB) For a disapproved NO_x pollutant concentration monitor and disapproved flow monitor, respectively, the maximum potential concentration of NO_x and the maximum potential flow rate, as defined in 40 CFR 75, Appendix A, Sections 2.1.2.1 and 2.1.4.1*.

(CC) For a disapproved moisture monitoring system and disapproved diluent gas monitoring system, respectively, the minimum potential moisture percentage and either the maximum potential CO_2 concentration or the minimum potential O_2 concentration, as applicable, as defined in 40 CFR 75, Appendix A, Sections 2.1.5, 2.1.3.1, and 2.1.3.2*.

(DD) For a disapproved fuel flowmeter system, the maximum potential fuel flow rate, as defined in 40 CFR 75, Appendix D, Section 2.4.2.1*.

(EE) For a disapproved excepted NO_x ozone season monitoring system under 40 CFR 75, Appendix E, the fuel-specific maximum potential NO_x ozone season emission rate, as defined in 40 CFR 72.2*.

(ii) The CAIR designated representative shall submit a notification of certification retest dates and a new certification application in accordance with clauses (A) and (B).

(iii) The owner or operator shall repeat all certification tests or other requirements that were failed by the monitoring system, as indicated in the department's or the U.S. EPA's notice of disapproval, not later than thirty (30) unit operating days after the date of issuance of the notice of disapproval.

(i) The owner or operator of a unit qualified to use the low mass emissions (LME) excepted methodology under 40 CFR 75.19* shall meet the applicable certification and recertification requirements in 40 CFR 75.19(a)(2)* and 40 CFR 75.20(h)*. If the owner or operator of such a unit elects to certify a fuel flowmeter system for heat input determination, the owner or operator shall also meet the certification and recertification requirements in 40 CFR 75.20(g)*.

(j) The CAIR designated representative of each unit for which the owner or operator intends to use an alternative monitoring system approved by the U.S. EPA and, if applicable, the department under 40 CFR 75, Subpart E* shall comply with the applicable notification and application procedures of 40 CFR 75.20(f)*.

(k) Whenever any monitoring system fails to meet the quality-assurance and quality-control requirements or data validation requirements of 40 CFR 75*, data shall be substituted using the applicable missing data procedures in 40 CFR, Subpart D*, 40 CFR 75, Subpart H*, 40 CFR 75, Appendix D*, or 40 CFR 75, Appendix E*.

(l) Whenever both an audit of a monitoring system and a review of the initial certification or recertification application reveal that any monitoring system should not have been certified or recertified because it did not meet a particular performance specification or other requirement under subsections (f) through (j) or the applicable provisions of 40 CFR 75*, both at the time of the initial certification or recertification application submission and at the time of the audit, the department or, for a CAIR NO_x ozone season opt-in unit or a unit for which a CAIR opt-in permit application is submitted and not withdrawn and a CAIR opt-in permit is not yet issued or denied under section 12 of this rule, the U.S. EPA will issue a notice of disapproval of the certification status of such monitoring system. For the purposes of this subsection and subsection (k), an audit shall be either a field audit or an audit of any information submitted to the department or the U.S. EPA. By issuing the notice of disapproval, the department or the U.S. EPA revokes prospectively the certification status of the monitoring system. The data measured and recorded by the monitoring system shall not be considered valid quality-assured data from the date of issuance of the notification of the revoked certification status until the date and time that the owner or operator completes subsequently approved initial certification or recertification tests for the monitoring system. The owner or operator shall follow the applicable initial certification or recertification procedures in subsections (f) through (j) for each disapproved monitoring system.

(m) The CAIR designated representative for a CAIR NO_x ozone season unit shall submit written notice to the department and the U.S. EPA in accordance with 40 CFR 75.61*.

(n) The CAIR designated representative shall comply with all record keeping and reporting requirements in this subsection, the applicable record keeping and reporting requirements under 40 CFR 75.73*, and the requirements of section 6(e)(1) of this rule as follows:

(1) The owner or operator of a CAIR NO_x ozone season unit shall comply with requirements of 40 CFR 75.73(c)* and 40 CFR 75.73(e)* and, for a unit for which a CAIR opt-in permit application is submitted and not withdrawn and a CAIR opt-in permit is not yet issued or denied under section 12 of this rule.

(2) The CAIR designated representative shall submit an application to the department within forty (45) days after completing all initial certification or recertification tests required under subsections (f) through (j), including the information required

under 40 CFR 75.63*.

(3) The CAIR designated representative shall submit quarterly reports as follows:

(A) If the CAIR NO_x ozone season unit is subject to an acid rain emissions limitation or a CAIR NO_x emissions limitation or if the owner or operator of such unit chooses to report on an annual basis under this section, the CAIR designated representative shall meet the requirements of 40 CFR 75, Subpart H*, concerning monitoring of NO_x mass emissions, for such unit for the entire year and shall report the NO_x mass emissions data and heat input data for such unit, in a format prescribed by the U.S. EPA, for each calendar quarter beginning with:

(i) for a unit that commences commercial operation before July 1, 2007, the calendar quarter covering May 1, 2008, through June 30, 2008;

(ii) for a unit that commences commercial operation on or after July 1, 2007, the calendar quarter corresponding to the earlier of the date of provisional certification or the applicable deadline for initial certification under subsection (c), unless that quarter is the third or fourth quarter of 2007, in which case reporting shall commence in the quarter covering May 1, 2008, through June 30, 2008;

(iii) notwithstanding items (i) and (ii), for a unit for which a CAIR opt-in permit application is submitted and not withdrawn and a CAIR opt-in permit is not yet issued or denied under section 12 of this rule, the calendar quarter corresponding to the date specified in section 12(f)(2), 12(f)(3), and 12(f)(4) of this rule; and

(iv) notwithstanding items (i) and (ii), for a CAIR NO_x opt-in unit under section 12 of this rule, the calendar quarter corresponding to the date on which the CAIR NO_x opt-in unit enters the CAIR NO_x annual trading program as provided in section 12(f)(9) of this rule.

(B) If the CAIR NO_x ozone season unit is not subject to an acid rain emissions limitation or a CAIR NO_x emissions limitation, then the CAIR designated representative shall meet either of the following:

(i) Meet the requirements of 40 CFR 75, Subpart H*, concerning monitoring of NO_x mass emissions, for such unit for the entire year and report the NO_x mass emissions data and heat input data for such unit in accordance with clause (A).

(ii) Meet the requirements of 40 CFR 75, Subpart H* for the control period, including the requirements in 40 CFR 75.74(c)*, and report NO_x mass emissions data and heat input data, including the data described in 40 CFR 75.74(c)(6)*, for such unit only for the control period of each year and report, in an electronic quarterly report in a format prescribed by the U.S. EPA, for each calendar quarter beginning with:

(AA) for a unit that commences commercial operation before July 1, 2007, the calendar quarter covering May 1, 2008 through June 30, 2008;

(BB) for a unit that commences commercial operation on or after July 1, 2007, the calendar quarter corresponding to the earlier of the date of provisional certification or the applicable deadline for initial certification under subsection (c), unless that date is not during a control period, in which case reporting shall commence in the quarter that includes May 1 through June 30 of the first control period after such date;

(CC) notwithstanding subitems (AA) and (BB), for a unit for which a CAIR opt-in permit application submitted and not withdrawn and a CAIR opt-in permit is not yet issued or denied under section 12 of this rule, the calendar quarter corresponding to the date specified in section 12(f)(2), 12 (f)(3), and 12(f)(4) of this rule; and

(DD) notwithstanding items (i) and (ii), for a CAIR NO_x opt-in unit under section 12 of this rule, the calendar quarter corresponding to the date on which the CAIR NO_x opt-in unit enters the CAIR NO_x annual trading program as provided in section 12(f)(9) of this rule.

(C) The CAIR designated representative shall submit each quarterly report to the U.S. EPA within thirty (30) days following the end of the calendar quarter covered by the report. Quarterly reports shall be submitted in the manner specified in 40 CFR 75.73(f)*.

(D) For CAIR NO_x ozone season units that are also subject to an acid rain emissions limitation or the CAIR NO_x ozone season trading program, CAIR SO_2 trading program, or mercury budget trading program, quarterly reports shall include the applicable data and information required by 40 CFR 75, Subparts F through I* as applicable, in addition to the NO_x mass emission data, heat input data, and other information required by this subpart.

(4) The CAIR designated representative shall submit to the U.S. EPA a compliance certification, in a format prescribed by the U.S. EPA in support of each quarterly report based on reasonable inquiry of those persons with primary responsibility for ensuring that all of the unit's emissions are correctly and fully monitored. The certification shall state that:

(A) the monitoring data submitted were recorded in accordance with the applicable requirements of this section and 40 CFR 75*, including the quality assurance procedures and specifications;

(B) for a unit with add-on NO_x ozone season emission controls and for all hours where NO_x data are substituted in accordance with 40 CFR 75.34(a)(1)*, the add-on emission controls were operating within the range of parameters listed in the quality assurance/quality control program under 40 CFR 75, Appendix B* and the substitute data values do not systematically underestimate NO_x emissions; and

(C) for a unit that is reporting on a control period basis under subdivision 3(B)(ii), the NO_x mass emission rate and NO_x concentration values substituted for missing data under 40 CFR 75, Subpart D* are calculated using only values from a control period and do not systemically underestimate NO_x emissions.

(o) A petition requesting approval of alternatives to any requirement of this section may be made as follows:

(1) Except as provided in subdivision (3), the CAIR designated representative of a CAIR NO_x ozone season unit that is subject to an acid rain emissions limitation may submit a petition under 40 CFR 75.66* to the U.S. EPA requesting approval to apply an alternative to any requirement of this section. Application of an alternative to any requirement of this section is in accordance with this section only to the extent that the petition is approved in writing by the U.S. EPA, in consultation with the department.

(2) The CAIR designated representative of a CAIR NO_x ozone season unit that is not subject to an acid rain emissions limitation may submit a petition under 40 CFR 75.66* to the department and the U.S. EPA requesting approval to apply an alternative to any requirement of this section. Application of an alternative to any requirement of this section is in accordance with this section only to the extent that the petition is approved in writing by both the department and the U.S. EPA.

(3) The CAIR designated representative of a CAIR NO_x ozone season unit that is subject to an acid rain emissions limitation may submit a petition under 40 CFR 75.66 * to the department and the U.S. EPA requesting approval to apply an alternative to a requirement concerning any additional continuous emission monitoring system required under 40 CFR 75.72*. Application of an alternative to any such requirement is in accordance with this subpart only to the extent that the petition is approved in writing by both the department and the U.S. EPA.

(p) The owner or operator of a CAIR NO_x unit is subject to the applicable provisions of 40 CFR 75* concerning units in long-term cold storage.

*These documents are incorporated by reference. Copies may be obtained from the Government Printing Office, 732 North Capitol Street NW, Washington, D.C. 20401 or are available for review and copying at the Indiana Department of Environmental Management, Office of Air Quality, Indiana Government Center-North, Tenth Floor, 100 North Senate Avenue, Indianapolis, Indiana 46204. *(Air Pollution Control Division; 326 IAC 24-3-11; filed Jan 26, 2007, 10:25 a.m.: 20070221-IR-326050117FRA)*

326 IAC 24-3-12 CAIR NO_x ozone season opt-in units (Repealed)

Sec. 12. *(Repealed by Air Pollution Control Division; filed Oct 25, 2017, 1:02 p.m.: 20171122-IR-326160209FRA)*

Rule 4. Clean Air Mercury Rule (CAMR) Trading Program (Repealed)

(Repealed by Air Pollution Control Division; filed Sep 19, 2014, 3:11 p.m.: 20141015-IR-326130488FRA)

Rule 5. Nitrogen Oxides (NO_x) Annual Trading Program

326 IAC 24-5-1 Applicability and incorporation by reference

Authority: IC 4-22-2-21; IC 13-14-8; IC 13-17-3-4; IC 13-17-3-11
Affected: IC 4-22-9-5; IC 13-11-2; IC 13-15; IC 13-17

Sec. 1. (a) This rule applies to CSAPR NO_x annual units and CSAPR NO_x annual sources as specified in 40 CFR 97.404*, as amended by 81 FR 74605, that are located in Indiana.

Indiana Department of Environmental Management
Office of Air Quality

Technical Support Document (TSD) for a Part 70 Significant Permit Modification

Source Description and Location

Source Name:	Indiana Michigan Power Company, dba American Electric Power - Rockport Plant
Source Location:	2791 N. U.S. Highway 321, Rockport, IN 47635
County:	Spencer
SIC Code:	4911
Operation Permit No.:	T147-29841-00020
Operation Permit Issuance Date:	August 15, 2014
Significant Permit Modification No.:	147-38415-00020
Permit Reviewer:	Mehul Sura

Existing Approvals

The source was issued Part 70 Operating Permit No. 147-29841-00020 on August 15, 2014. The source has since received the following approvals:

(a) Significant Permit Modification No. 147-34888-00020, issued on February 20, 2015

(b) Significant Permit Modification No. 147-35785-00020, issued on July 30, 2015

(c) Significant Permit Modification No. 147-36090-00020, issued on November 9, 2015

(d) Significant Permit Modification No. 147-37926-00020, issued on May 1, 2017

County Attainment Status

The source is located in Spencer County.

Pollutant	Designation
SO_2	Better than national standards.
CO	Unclassifiable or attainment effective November 15, 1990.
O_3	Unclassifiable or attainment effective July 20, 2012, for the 2008 8-hour ozone standard.[1]
$PM_{2.5}$	Attainment effective October 27, 2011, for the annual $PM_{2.5}$ standard for Ohio Township. Unclassifiable or attainment effective April 5, 2005, for the annual $PM_{2.5}$ standard for the remainder of the county.
$PM_{2.5}$	Unclassifiable or attainment effective December 13, 2009, for the 24-hour $PM_{2.5}$ standard.
PM_{10}	Unclassifiable effective November 15, 1990.
NO_2	Cannot be classified or better than national standards.
Pb	Unclassifiable or attainment effective December 31, 2011.
[1]Unclassifiable or attainment effective October 18, 2000, for the 1-hour ozone standard which was revoked effective June 15, 2005.	

(a) Ozone Standards

Volatile organic compounds (VOC) and Nitrogen Oxides (NO_x) are regulated under the Clean Air Act (CAA) for the purposes of attaining and maintaining the National Ambient Air Quality Standards (NAAQS) for ozone. Therefore, VOC and NO_x emissions are considered when evaluating the rule applicability relating to ozone. Spencer County has been designated as attainment or unclassifiable for ozone. Therefore, VOC and NO_x emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2.

(b) $PM_{2.5}$
Spencer County has been classified as attainment for $PM_{2.5}$. Therefore, direct $PM_{2.5}$, SO_2, and NOx emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2.

(c) Other Criteria Pollutants
Spencer 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 a stationary electric utility generating station, 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.

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:

Pollutant	**Emissions** (ton/yr)
PM	2,892
PM_{10}	1,944
$PM_{2.5}$	847
SO_2	73,334
NO_X	49,142
VOC	400
CO	3,462
Total HAPs	8,858
Worst Single HAP	7,806 (Hydrogen Chloride)

(a) This existing source is a major stationary source, under PSD (326 IAC 2-2), because a PSD regulated pollutant, PM, PM10, PM2.5, SO2 NOx VOC and CO, each, 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 source of HAPs, as defined in 40 CFR 63.2, because HAP emissions are greater than ten (10) tons per year for a single HAP and greater than twenty-five (25) tons per year for a combination of HAPs. Therefore, this source is a major source under Section 112 of the Clean Air Act (CAA).

(c) These emissions are based upon TSD for Significant Permit Modification No. 147-36090-00020, issued July 30, 2015.

Description of Proposed Modification Amendment

The Office of Air Quality (OAQ) has reviewed an application, submitted by Indiana Michigan Power Company, dba American Electric Power - Rockport Plant on April 3, 2017, relating to following:

(a) Installation of a Selective Catalytic Reduction (SCR) NOx control system on Unit 2.

This SCR installation is required by the Consent Decree (Federal District Court for the Southern District of Ohio on February 22, 2013). Please refer Condition D.1.5(m) of the existing permit for this Consent Decree.

The Selective Catalytic Reduction System (SCR) to be installed on Rockport Plant Unit 2 will consist of the following items:

(i) Three (3) SCR Reactors capable of handling up to four layers of catalyst, located above the Air Heater Bay on the west side of the steam generator building with only two layers installed initially.

(ii) Associated duct work to attach the reactors to the steam generator between the economizer outlet and air heater inlets.

(iii) Modifications to the bulk anhydrous ammonia system installed as part of the Unit 1 SCR installation project to support the operation of both SCR Systems and the incremental additional truck traffic to supply the anhydrous ammonia necessary to support the operation of both SCRs.

The SCR being installed at Rockport Plant Unit 2 is designed to use anhydrous ammonia as the reagent for NOx reduction. The anhydrous ammonia will be sourced from the bulk storage system installed as part of the Unit 1 SCR project that will enter service in late 2017, located to the north of Unit 1 near the storm water pond.

The original ammonia system design basis was to unload ammonia to be received in either bulk rail cars or over the road trucks. However, since the offsite rail system would need significant upgrades to allow the delivery of anhydrous ammonia to the plant by rail car, the rail unloading equipment has never been installed.

The only emissions anticipated with the delivery of the anhydrous ammonia for use with the Unit 2 SCR are particulate emissions generated by the incremental increase in truck traffic over that required for the receipt of anhydrous ammonia for use in the Unit 1 SCR.

(b) Remove the existing No. 2 fuel oil-fired space heater (WHU-10) and install a new No. 2 fuel oil-fired space heater described as follows:

One (1) No. 2 fuel oil-fired space heater, identified as WHU-11, approved in 2018 for construction, with heat input capacity of 2.4 MMBtu/hr and exhausting inside.

(c) Modification of the stack testing provisions in Condition D.1.9 to allow the use of MATS PM Testing in place of the requirement to perform a particulate stack test every two years.

Mr. Dave Cline of the of IDEM compliance staff was consulted by the permit writer to evaluate this change. It was determined that this change will not be made.

(d) Correct a typographic error in the Title V Permit that was recently discovered.

There is a typographic error in Condition D.1.2(b) relating to the height of the stack with respect to the boilerhouse used in the original permit modeling of Rockport Plant when the plant was originally permitted in 1977. When USEPA issued PSD Permit EPA-5-77-A-1, the stack height was specified as 2.5 times the height of the boilerhouse in Condition 1.d of the PSD Permit EPA-5-77-A-1. However, TV operating permit Operation Permit No.: T147-6786-00020, issued on August 7, 2006, erroneously specified this stack height as 22 times the height of the boilerhouse. This error will be corrected through this modification.

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 is used to determine the appropriate permit level under 326 IAC 2-7-10.5 and 326 IAC 2-7-11. This table reflects the PTE before controls. Control equipment is not considered federally enforceable until it has been required in a federally enforceable permit. If the control equipment has been determined to be integral, the table reflects the PTE after consideration of the integral control device.

Appendix A of this TSD reflects the unrestricted potential emissions of the modification.

	PTE Before Controls of the New Emission Unit (ton/year)							
Process / Emission Unit	**PM**	**PM_{10}**	**$PM_{2.5}$**	**SO_2**	**NO_X**	**VOC**	**CO**	**Combined HAPs**
Space heater (WHU-11)	0.15	0.18	0.16	5.33	1.50	0.03	0.38	0.0005
Fugitive Dust Emissions - Truck Traffic - Unit 2		0.23	0.06	-	-	-	-	-
Total PTE	**0.15**	**0.41**	**0.22**	**5.33**	**1.50**	**0.03**	**0.38**	**0.0005**

This modification is not subject to the requirements of source modification under 326 IAC 2-7-10.5 because this modification has the potential to emit less than thresholds specified in 326 IAC 2-7-10.5(e)(1). Pursuant to 326 IAC 2-7-12(d), this modification is considered a Significant Permit Modification because the permit modification involves significant changes to the existing monitoring requirements of the part 70 Operating Permit.

Permit Level Determination – PSD for Units 1 and 2

The table below summarizes the potential to emit of the modification, reflecting all limits, of the emission units. Any control equipment is considered federally enforceable only after issuance of the Part 70 permit

modification, and only to the extent that the effect of the control equipment is made practically enforceable in the permit.

	Potential to Emit (ton/yr)							
	PM	**PM10**	**PM2.5**	**SO2**	**VOC**	**CO**	**NOx**	**H2SO4**
Project Emissions - Dry Sorbent Injection (DSI) and Combustion Waste Disposal Activities								
Dry Sorbent Injection (DSI) System								
Truck Traffic	2.39	0.46	0.11					
Unloading and Handling	0.05	0.03	0.12					
Increase in emissions	2.44	0.49	0.23					
Waste Disposal - Ash Handling to Silo								
Baseline	37.13	37.13	18.57					
Future Allowable	58.39	58.39	29.19					
Increase in emissions	21.26	21.26	10.62					
Waste Disposal - Truck Traffic								
Baseline	33.49	7.58	1.26					
Future Allowable	55.19	12.54	2.03					
Increase in emissions	21.50	4.92	0.77					
Waste Disposal - Truck Loading								
Baseline	0.0061	0.003	0.0004					
Future Allowable	0.01	0.01	0.01					
Increase in emissions	0.004	0.007	0.0096					
Waste Disposal - Landfill Operations								
Baseline	49.92	15.03	1.88					
Future Allowable	63.05	19.04	2.38					
Increase in emissions	13.13	4.01	0.50					
SCR1 and SCR2 - H2SO4 changes								
Baseline								75.88
Future Allowable								8.02
Increase in emissions								0.00
Project Increase (Total)	***58.33***	***30.68***	***12.13***	***0.00***	***0.00***	***0.00***	***0.00***	***0.00***
Contemporaneous increases - Activated Carbon Injection (ACI) and Space heater (WHU-11)								
Activated Carbon Injection (ACI) System								
Truck Traffic	*0.36*	*0.07*	*0.02*					
Unloading	*0.08*	*0.05*	*0.01*					
Handling and Fluidizing	*0.99*	*0.64*	*0.10*					
Space heater (WHU-11)	*0.15*	*0.18*	*0.16*					
Contemporaneous increases - (Total)	***1.59***	***0.94***	***0.29***					
Contemporaneous decreases								
Boilers MB1 and MB2								
Baseline	2620	1755.4	759.8					
Future Allowable	2575	1725	746					
Contemporaneous decreases - (Total)	**(45.00)**	**(30.40)**	**(13.80)**					
Net Change (Project Emissions + Contemporaneous Increases - Contemporaneous Decreases)	**14.92**	**1.22**	**-1.38**	**5.33**				
Significant Levels	**25**	**15**	**10**	**40**				

Please refer Appendix A of this TSD for the details of the netting analysis.

Please refer Appendix B of this TSD for the details of the H_2SO_4 emission analysis.

Please refer Appendix C of this TSD for the details of Combustion Waste Disposal Activities baseline PM, PM10 and PM2.5 emission calculations.

Project Aggregation

On February 22, 2013, Indiana Michigan Power Company accepted federally enforceable limitations to reduce NOx emissions from the boilers, identified as MB1 and MB2 and install SCR on these boilers under the NSR Consent Decree, lodged with the Federal District Court for the Southern District of Ohio on February 22, 2013.

Pursuant to this Consent Decree the source is required to operate SCR on MB1 by December 31, 2017 and MB2 by December 31, 2019 and reduce NOx emissions form the boilers MB1 and MB2. As a result of this agreement, Indiana Michigan Power Company submitted an application to IDEM OAQ relating to install SCR on MB1 and reduce NOx emissions from the boilers MB1 and MB2 on February 27, 2013. The NOx emission reduction project was identified as DSI Project.

The MB1 SCR project, MB2 SCR project and DSI project were parts of the single project because these three projects were the requirements of the same Consent Decree. The MB1 SCR project and Dry Sorbent Injection (DSI) project were aggregated and approved under SSM No. 147-32890-00020. This SSM No. 147-32890-00020 was a minor PSD modification because the emissions were less than the corresponding significant levels for PM, PM10, PM2.5, SO2, CO, VOC, NOx and GHGs emissions. Since the MB1 SCR project, MB2 SCR project and Dry Sorbent Injection (DSI) projects are part of the single project the emissions of MB2 SCR project have been aggregated with the MB1 SCR project and DSI project approved under SSM No. 147-32890-00020.

(a) This modification to an existing major PSD stationary source is not major because the emissions increase of each PSD regulated pollutant is less than the PSD significant level. Therefore, pursuant to 326 IAC 2-2, the PSD requirements do not apply.

Federal Rule Applicability Determination

New Source Performance Standards (NSPS):

(a) There are no New Source Performance Standards (NSPS) (326 IAC 12 and 40 CFR Part 60) included in the permit for this proposed modification.

National Emission Standards for Hazardous Air Pollutants (NESHAP):

(b) There are no National Emission Standards for Hazardous Air Pollutants (NESHAPs) (40 CFR Part 63, 326 IAC 14, and 326 IAC 20) included in the permit for this proposed modification.

Compliance Assurance Monitoring (CAM):

(a) Pursuant to 40 CFR 64.2, Compliance Assurance Monitoring (CAM) is applicable to each existing pollutant-specific emission unit that meets the following criteria:

(1) has a potential to emit before controls equal to or greater than the major source threshold for the 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.

The following table is used to identify the applicability of CAM to each existing emission unit and each emission limitation or standard for a specified pollutant based on the criteria specified under 40 CFR 64.2:

Emission Unit/Pollutant	Control Device	Applicable Emission Limitation	Uncontrolled PTE (tons/year)	Controlled PTE (tons/year)	CAM Applicable (Y/N)	Large Unit (Y/N)
boiler (MB2)	(SCR)	Y	>100	>100	Y	Y

Based on this evaluation, the requirements of 40 CFR Part 64, CAM, are applicable to boiler (MB2), which is considered a "large unit," for NOx upon start-up. A CAM plan was submitted as part of this application and the Compliance Determination and Monitoring Requirements section of this TSD includes a detailed description of the CAM requirements. The boiler (MB2) is equipped with NOx CEMS. NOx CAM requirement apply to the boiler when the NOx CEMS is down for more than twenty-four (24) hours.

CAIR

Pursuant to 326 IAC 24-3-1(a), the source is subject to the provisions of CAIR. Section G of the permit contains the provisions the Permittee must follow.

The EPA guidance for the inclusion of CSAPR into the Title V permits does not address the removal of the Clean Air Interstate Rule (CAIR) requirements from the Title V permits. The Indiana Department of Environmental Management (IDEM) adopted the CAIR rule as a State rule, under 326 IAC 24-3. The requirements of 326 IAC 24-3 will be in place until it is repealed by the Indiana Environmental Rules Board and the Indiana rule will stay in place until an alternative is developed and approved by the U.S. EPA. IDEM is currently working to see if a demonstration can be made that would be approvable by the U.S. EPA. There is no estimated time for the repeal of 326 IAC 24-3.

CSAPR

Cross State Air Pollutant Rule (CSAPR)

The preamble of the CSAPR regulations promulgated on August 8, 2011, states that the requirements established in the CSAPR trading program are applicable requirements that must be included in a source Title V permit pursuant to 40 CFR Part 70 and 71. The requirements of the Cross-State Air Pollution Rule (CSAPR) apply to the two (2) simple cycle natural gas fired combustion turbines, identified as Units 1 and 2.

Transport Rule (TR) Trading Program Title V Requirements

Description of TR Monitoring Provisions

The TR subject unit(s), and the unit-specific monitoring provisions at this source, are identified in the following table(s). These unit(s) are subject to the requirements for the TR NOx Annual Trading Program and TR NOx Ozone Season Trading Program and TR SO2 Group 1 Trading Program

Unit ID: pulverized coal opposed wall fired dry bottom boiler, identified as MB1					
Parameter	Continuous emission monitoring system or systems (CEMS) requirements pursuant to 40 CFR part 75, subpart B (for SO_2 monitoring) and 40 CFR part 75, subpart H (for NO_X	Excepted monitoring system requirements for gas- and oil-fired units pursuant to 40 CFR part 75, appendix D	Excepted monitoring system requirements for gas- and oil-fired peaking units pursuant to 40 CFR part 75, appendix E	Low Mass Emissions excepted monitoring (LME) requirements for gas- and oil-fired units pursuant to 40 CFR 75.19	EPA-approved alternative monitoring system requirements pursuant to 40 CFR part 75, subpart E

	monitoring)				
SO_2	x		----------		
NO_X	x	----------			
Heat input	x		----------		

Unit ID: pulverized coal opposed wall fired dry bottom boiler, identified as MB2					
Parameter	Continuous emission monitoring system or systems (CEMS) requirements pursuant to 40 CFR part 75, subpart B (for SO_2 monitoring) and 40 CFR part 75, subpart H (for NO_X monitoring)	Excepted monitoring system requirements for gas- and oil-fired units pursuant to 40 CFR part 75, appendix D	Excepted monitoring system requirements for gas- and oil-fired peaking units pursuant to 40 CFR part 75, appendix E	Low Mass Emissions excepted monitoring (LME) requirements for gas- and oil-fired units pursuant to 40 CFR 75.19	EPA-approved alternative monitoring system requirements pursuant to 40 CFR part 75, subpart E
SO_2	x		----------		
NO_X	x	----------			
Heat input	x		----------		

1. The above description of the monitoring used by a unit does not change, create an exemption from, or otherwise affect the monitoring, recordkeeping, and reporting requirements applicable to the unit under 40 CFR 97.430 through 97.435 (TR NOx Annual Trading Program) and 97.530 through 97.535 (TR NOx Ozone Season Trading Program) and 97.630 through 97.635 (TR SO2 Group 1 Trading Program). The monitoring, recordkeeping and reporting requirements applicable to each unit are included below in the standard conditions for the applicable TR trading programs.

2. Owners and operators must submit to the Administrator a monitoring plan for each unit in accordance with 40 CFR 75.53, 75.62 and 75.73, as applicable. The monitoring plan for each unit is available at the EPA's website at http://www.epa.gov/airmarkets/emissions/monitoringplans.html.

3. Owners and operators that want to use an alternative monitoring system must submit to the Administrator a petition requesting approval of the alternative monitoring system in accordance with 40

CFR part 75, subpart E and 40 CFR 75.66 and 97.435 (TR NOx Annual Trading Program) and 97.535 (TR NOx Ozone Season Trading Program) and 97.635 (TR SO2 Group 1 Trading Program). The Administrator's response approving or disapproving any petition for an alternative monitoring system is available on the EPA's website at http://www.epa.gov/airmarkets/emissions/petitions.html.

4. Owners and operators that want to use an alternative to any monitoring, recordkeeping, or reporting requirement under 40 CFR 97.430 through 97.434 (TR NOx Annual Trading Program) and 97.530 through 97.534 (TR NOx Ozone Season Trading Program) and/or 97.630 through 97.634 (TR SO2 Group 1 Trading Program) must submit to the Administrator a petition requesting approval of the alternative in accordance with 40 CFR 75.66 and 97.435 (TR NOx Annual Trading Program) and 97.535 (TR NOx Ozone Season Trading Program) and 97.635 (TR SO2 Group 1 Trading Program). The Administrator's response approving or disapproving any petition for an alternative to a monitoring, recordkeeping, or reporting requirement is available on EPA's website at http://www.epa.gov/airmarkets/emissions/petitions.html.

5. The descriptions of monitoring applicable to the unit included above meet the requirement of 40 CFR 97.430 through 97.434 (TR NOx Annual Trading Program) and 97.530 through 97.534 (TR NOx Ozone Season Trading Program) and 97.630 through 97.634 (TR SO2 Group 1 Trading Program), and therefore minor permit modification procedures, in accordance with 40 CFR 70.7(e)(2)(i)(B) or 71.7(e)(1)(i)(B), may be used to add to or change this unit's monitoring system description.

State Rule Applicability Determination

326 IAC 2-2 (PSD) and 2-3 (Emission Offset)
PSD applicability is discussed under the Permit Level Determination – PSD section.

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 7-1.1 Sulfur Dioxide Emission Limitations
The space heater (WHU-11) has SO2 PTE less than 25 tons/year and 10 pounds/hour. Therefore, the space heater (WHU-11) is not subject to the requirements of this rule.

326 IAC 6-2 (Indirect Heating Facilities)
The space heater (WHU-11) is not indirect heating source, therefore, the requirements of 326 IAC 6-2 are not applicable to the space heater (WHU-11).

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.

The Compliance Monitoring Requirements applicable to this proposed modification are as follows:

Emission Unit/Control	Operating Parameters	Frequency
SCR	catalyst bed inlet temperature	Once every four (4) hours

These monitoring conditions are necessary to assure that the SCR for the boiler (MB2) operate properly to control NOx emissions from the boiler (MB2).

IDEM has determined to remove the parametric monitoring for baghouses at the source because the visible emission notations requirements specified in the existing permit can ensure the compliance with the PM, PM10 and PM2.5 Limits specified in the permit.

Proposed Changes

The following changes listed below are due to the proposed modification. Deleted language appears as ~~strikethrough~~ text and new language appears as **bold** text:

(a) The rules 326 IAC 24-1 and 326 IAC 24-2 rules have been repealed. The rules under 326 IAC 24-3-3, 326 IAC 24-3-5, 326 IAC 24-3-6, 326 IAC 24-3-7, 326 IAC 24-3-8, 326 IAC 24-3-9, 326 IAC 24-3-10, and 326 IAC 24-3-12 have also been repealed. The permit has been revised to reflect these changes.

(b) IDEM added the rule citation 326 IAC 2-7-5(1) to the following subsection titles to clarify the authority of these conditions:

(i) Compliance Determination and Record Keeping and Reporting Requirements subsection titles in Sections D.1, D.2 and D.3, and

(ii) NSPS and NESHAP Requirements subsection titles in Sections E.2 through E.6.

A.2 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:

. . .

(b) One (1) pulverized coal opposed wall fired dry bottom boiler, identified as MB2 (Main Boiler 2), with construction commenced in 1977 and completed in 1989, with a design heat input capacity of 12,374 million Btu per hour, with an electrostatic precipitator (ESP) system for control of particulate matter. Low NO_X burners and an overfire air (OFA) system have been installed **and Selective Catalytic Reduction (SCR) permitted in 2018** for NO_X control. No. 2 fuel oil is fired during startup, shutdown, and load stabilization periods. No. 2 fuel oil may also be burned to maintain boiler temperature to ensure boiler availability on short notice, and to maintain boiler temperature required during chemical cleaning. One (1) powdered activated carbon (PAC) injection system, identified as ACI, permitted in 2008, 2010 and 2013, with a unit maximum capacity of injecting 4,000 pounds of halogenated or non-halogenated activated carbon per hour into the exhaust ductwork for Boiler 2 (MB2) from a dedicated silo(s). One (1) dry sorbent injection (DSI) system, identified as DSI-U2, permitted in 2013, with a combined maximum capacity of injecting 20,000 pounds of Sodium Bicarbonate per hour into the exhaust ductwork for Boiler 2 (MB2). Emissions from Units MB1 and MB2 are exhausted through the common stack, Stack CS012. Continuous emissions monitoring systems (CEMS) for nitrogen oxides (NO_X) and for sulfur dioxide (SO_2) and a continuous opacity monitoring (COM) system are located on the common stack.

. . .

A.3 Specifically Regulated Insignificant Activities [326 IAC 2-7-1(21)] [326 IAC 2-7-4(c)] [326 IAC 2-7-5(14)]

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

. . .

(h) Six (6) No. 2 fuel oil-fired space heaters designated as WHU-5, WHU-6, WHU-7, WHU-8, WHU-9, and WHU-1~~0~~**1** with heat input capacities of 4.5 MMBtu/hr, 3.0 MMBtu/hr, 2.75 MMBtu/hr, 3.5 MMBtu/hr, 4.5 MMBtu/hr, and 2.~~2~~**4** MMBtu/hr, respectively.

. . .

SECTION D.1 EMISSIONS UNIT OPERATION CONDITIONS

Emissions Unit Description [326 IAC 2-7-5(14)]

. . .

(b) One (1) pulverized coal opposed wall fired dry bottom boiler, identified as MB2 (Main Boiler 2), with construction commenced in 1977 and completed in 1989, with a design heat input capacity of 12,374 million Btu per hour, with an electrostatic precipitator (ESP) system for control of particulate matter. Low NO_X burners and an overfire air (OFA) system have been installed **and Selective Catalytic Reduction (SCR) permitted in 2018** for NO_X control. No. 2 fuel oil is fired during startup, shutdown, and load stabilization periods. No. 2 fuel oil may also be burned to maintain boiler temperature to ensure boiler availability on short notice, and to maintain boiler temperature required during chemical cleaning. One (1) powdered activated carbon (PAC) injection system, identified as ACI, permitted in 2008, 2010 and 2013, with a unit maximum capacity of injecting 4,000 pounds of halogenated or non-halogenated activated carbon per hour into the exhaust ductwork for Boiler 2 (MB2) from a dedicated silo(s). One (1) dry sorbent injection (DSI) system, identified as DSI-U2, permitted in 2013, with a combined maximum capacity of injecting 20,000 pounds of Sodium Bicarbonate per hour into the exhaust ductwork for Boiler 2 (MB2). Emissions from Units MB1 and MB2 are exhausted through the common stack, Stack CS012. Continuous emissions monitoring systems (CEMS) for nitrogen oxides (NO_X) and for sulfur dioxide (SO_2) and a continuous opacity monitoring (COM) system are located on the common stack.

. . .

(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.1.2 PSD Limits [326 IAC 2-2][326 IAC 6-2-1(g)][326 IAC 7-1.1-2]

Pursuant to Approval to Construct EPA-5-78-A-1, issued October 27, 1977, 40 CFR 52.21 (Federal Regulations for the Prevention of Significant Deterioration of Air Quality), 326 IAC 6-2-1(g), and 326 IAC 7-1.1-2(a)]:

. . .

(b) The Permittee may not alter the height of the boilerhouse as presented in the construction application. The dispersion modeling in the application relies upon a stack

height expressed as ~~22~~**2.5** times the height of the boilerhouse. Any change in the boilerhouse height would alter the dispersion of sulfur dioxide and particulates.

. . .

. . .

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

. . .

D.1.13 Continuous Emissions Monitoring [326 IAC 3-5][326 IAC 12][40 CFR 60, Subpart D] [326 IAC 7-2][40 CFR 52.21]

. . .

(g) Whenever a NOx CEMS is down for more than twenty-four (24) hours, the Permittee shall monitor the **SCR** catalyst bed inlet temperature ~~used in conjunction with Boiler 1 SCR~~ with a continuous temperature monitoring system no less often than once per four (4) hours. Except during periods of Unit non-operation ~~and~~ Unit start-up and Unit shutdown activities, **and prior to the required operation of an SCR on either unit in accordance with Condition D.1.5(m),** should the catalyst bed inlet temperature fall below 500°F, the minimum temperature for SCR operation, the Permittee shall take a reasonable response action. Section C – Response to Excursions or Exceedances contains the Permittee's obligation with regard to the reasonable response steps required by this condition. A temperature reading that is below the minimum temperature is not a deviation from this permit. Failure to take reasonable response steps shall be considered a deviation from this permit.

(h) . . .

. . .

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

D.1.19 Record Keeping Requirements

(a) To document the compliance status with Section C - Opacity, Section C - Maintenance of Continuous Opacity Monitoring Equipment, and the particulate matter and opacity requirements in Conditions D.1.2, D.1.4, D.1.13, and D.1.15, the Permittee shall maintain records in accordance with (1) through (4) below. Records shall be complete and sufficient to establish compliance with the limits in Section C - Opacity and Conditions D.1.2, and D.1.4.

. . .

(b) To document the compliance status with the SO_2 requirements in Conditions D.1.2(a), D.1.13, D.1.14, and D.1.16, the Permittee shall maintain records in accordance with (1) through (4) below. Records shall be complete and sufficient to establish compliance with the applicable SO_2 limit(s) as required in Conditions D.1.2(a), D.1.13, and D.1.14. The Permittee shall maintain records in accordance with (3) and (4) below during SO_2 CEMS malfunction or downtime.

(1) All SO_2 continuous emissions monitoring data, pursuant to 326 IAC 3-5-6, 326 IAC 7-2-1(g), 40 CFR 60.7, and 40 CFR 60.45.

(2) Actual fuel usage since last compliance determination period.

(3) All fuel sampling and analysis data collected for SO_2 CEMS downtime, in accordance with Condition D.1.16.

(4) Actual fuel usage during each SO_2 CEMS downtime.

(c) To document the compliance status with the NO_X requirements in Condition D.1.13, the Permittee shall maintain records of all NO_X and CO_2 or O2 continuous emissions monitoring data, pursuant to 326 IAC 3-5-6, 326 IAC 2-2, 40 CFR 60.7, and 40 CFR 60.45. Records shall be complete and sufficient to establish compliance with the NO_X limits as required in 40 CFR 60, Subpart D.

(d) Pursuant to 326 IAC 2-2 and 326 IAC 2-3, the Permittee shall maintain records as specified by Conditions C.19(c) and (d) (General Record Keeping Requirements).

(e) To document the compliance status with Condition D.1.17, the Permittee shall maintain records of the visible emission notations required by that condition. 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).

(f) . . .

(g) . . .

D.1.20 Reporting Requirements

(a) A quarterly report of opacity exceedances and a quarterly summary of the information to document the compliance status with the PM and SO_2 requirements of Conditions D.1.2, D.1.4, and D.1.14 shall be submitted to the address listed in Section C - General Reporting Requirements, of this permit, within thirty (30) days after the end of the quarter being reported. The report submitted by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(35).

. . .

SECTION D.2 EMISSIONS UNIT OPERATION CONDITIONS

. . .

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

. . .

SECTION D.3 EMISSIONS UNIT OPERATION CONDITIONS

. . .

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

. . .

~~D.3.4 Baghouse Parametric Monitoring [326 IAC 2-7-6(1)][326 IAC 2-7-5(1)]~~

~~(a) The Permittee shall record the pressure drop across each baghouse used in conjunction with the coal crusher at least once per week when the crusher is in operation. When for any one reading, the pressure drop across the baghouse is outside the normal range of 0.1 and 11 inches of water or a range established during the latest stack test, 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. 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 instrument used for determining the pressure shall comply with Section C -~~

~~Instrument Specifications, 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~~4~~ Record Keeping Requirements

(a) To document the compliance status with Condition D.3.3 the Permittee shall maintain records of the weekly visible emission notations of the coal unloading station openings and the exhausts from the particulate control devices on the coal handling operations. **The Permittee shall include in its daily record when a visible emission notation is not taken and the reason for the lack of a visible emission notation (e.g., the process did not operate that day).**

~~(b) To document the compliance status with Condition D.3.4, the Permittee shall maintain records of the pressure drop across each baghouse.~~

(~~c~~**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

. . .

~~D.4.3 Baghouse Parametric Monitoring [326 IAC 2-7-6(1)][326 IAC 2-7-5(1)] [40 CFR 64]~~

~~(a) The Permittee shall record the pressure drop across baghouse used in conjunction with the fly ash barge loading facility (ABL-001) and the rail loader associated with the former fly ash temporary storage facility (ADL-001) at least once per week when the ash handling is in operation. When for any one reading, the pressure drop across the baghouse is outside the normal range of 0.1 and 8.0 inches of water or a range established during the latest stack test, 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. 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 instrument used for determining the pressure shall comply with Section C - Instrument Specifications, and shall be calibrated in accordance with the manufacturer's specifications. The specifications shall be available on site with the Preventive Maintenance Plan.~~

. . .

~~D.4.4~~**D.4.3** Broken or Failed Bag Detection [326 IAC 2-7-6(1)][326 IAC 2-7-5(1)] [40 CFR 64]

. . .

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

D.4.**4**~~5~~ Record Keeping Requirements

(a) To document the compliance status with Condition D.4.2, the Permittee shall maintain records of the visible emission notations of the ash silo unloading station openings and the baghouse and bin vent exhausts. **The Permittee shall include in its daily record when a visible emission notation is not taken and the reason for the lack of a visible emission notation (e.g., the process did not operate that day).**

~~(b) To document the compliance status with Condition D.4.3, the Permittee shall maintain records of the pressure drop across each baghouse and bin vent filter.~~

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

SECTION D.5 EMISSIONS UNIT OPERATION CONDITIONS

. . .

D.5.2 Record Keeping Requirements

(a) To document the compliance status with Conditions C.5 and D.5.1, the Permittee shall maintain records of visible emission notations of the ash storage pond area(s) and any bottom ash storage piles. **The Permittee shall include in its daily record when a visible emission notation is not taken and the reason for the lack of a visible emission notation (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.6 EMISSIONS UNIT OPERATION CONDITIONS

. . .

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

. . .

SECTION E.1 TITLE IV CONDITIONS

Emissions Unit Description [326 IAC 2-7-5(14)]

. . .

(b) One (1) pulverized coal opposed wall fired dry bottom boiler, identified as MB2 (Main Boiler 2), with construction commenced in 1977 and completed in 1989, with a design heat input capacity of 12,374 million Btu per hour, with an electrostatic precipitator (ESP) system for control of particulate matter. Low NO_X burners and an overfire air (OFA) system have been installed **and Selective Catalytic Reduction (SCR) permitted in 2018** for NO_X control. No. 2 fuel oil is fired during startup, shutdown, and load stabilization periods. No. 2 fuel oil may also be burned to maintain boiler temperature to ensure boiler availability on short notice, and to maintain boiler temperature required during chemical cleaning. One (1) powdered activated carbon (PAC) injection system, identified as ACI, permitted in 2008, 2010 and 2013, with a unit maximum capacity of injecting 4,000 pounds of halogenated or non-halogenated activated carbon per hour into the exhaust ductwork for Boiler 2 (MB2) from a dedicated silo(s). One (1) dry sorbent injection (DSI) system, identified as DSI-U2, permitted in 2013, with a combined maximum capacity of injecting 20,000 pounds of Sodium Bicarbonate per hour into the exhaust ductwork for Boilers 1 (MB2). Emissions from Units MB1 and MB2 are exhausted through the common stack, Stack CS012. Continuous emissions monitoring systems (CEMS) for nitrogen oxides (NO_X) and for sulfur dioxide (SO_2) and a continuous opacity monitoring (COM) system are located on the common stack.

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

National Emission Standards for Hazardous Air Pollutants (NESHAP) Requirements **[326 IAC 2-7-5(1)]**

. . .

SECTION E.2 EMISSIONS UNIT OPERATION CONDITIONS

Emissions Unit Description: [326 IAC 2-7-5(14)]

. . .

(b) One (1) pulverized coal opposed wall fired dry bottom boiler, identified as MB2 (Main Boiler 2), with construction commenced in 1977 and completed in 1989, with a design heat input capacity of 12,374 million Btu per hour, with an electrostatic precipitator (ESP) system for control of particulate matter. Low NO_X burners and an overfire air (OFA) system have been installed **and Selective Catalytic Reduction (SCR) permitted in 2018** for NO_X control. No. 2 fuel oil is fired during startup, shutdown, and load stabilization periods. No. 2 fuel oil may also be burned to maintain boiler temperature to ensure boiler availability on short notice, and to maintain boiler temperature required during chemical cleaning. One (1) powdered activated carbon (PAC) injection system, identified as ACI, permitted in 2008, 2010 and 2013, with a unit maximum capacity of injecting 4,000 pounds of halogenated or non-halogenated activated carbon per hour into the exhaust ductwork for Boiler 2 (MB2) from a dedicated silo(s). One (1) dry sorbent injection (DSI) system, identified as DSI-U2, permitted in 2013, with a combined maximum capacity of injecting 20,000 pounds of Sodium Bicarbonate per hour into the exhaust ductwork for Boilers 1 (MB2). Emissions from Units MB1 and MB2 are exhausted through the common stack, Stack CS012. Continuous emissions monitoring systems (CEMS) for nitrogen oxides (NO_X) and for sulfur dioxide (SO_2) and a continuous opacity monitoring (COM) system are located on the common stack.

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

National Emission Standards for Hazardous Air Pollutants (NESHAP) Requirements **[326 IAC 2-7-5(1)]**

SECTION E.3 EMISSIONS UNIT OPERATION CONDITIONS

Emissions Unit Description:

. . .

(b) One (1) pulverized coal opposed wall fired dry bottom boiler, identified as MB2 (Main Boiler 2), with construction commenced in 1977 and completed in 1989, with a design heat input capacity of 12,374 million Btu per hour, with an electrostatic precipitator (ESP) system for control of particulate matter. Low NO_X burners and an overfire air (OFA) system have been installed **and Selective Catalytic Reduction (SCR) permitted in 2018 for** NO_X control. No. 2 fuel oil is fired during startup, shutdown, and load stabilization periods. No. 2 fuel oil may also be burned to maintain boiler temperature to ensure boiler availability on short notice, and to maintain boiler temperature required during chemical cleaning. One (1) powdered activated carbon (PAC) injection system, identified as ACI, permitted in 2008, 2010 and 2013, with a unit maximum capacity of injecting 4,000 pounds of halogenated or non-halogenated activated carbon per hour into the exhaust ductwork for Boiler 2 (MB2) from a dedicated silo(s). One (1) dry sorbent injection (DSI) system, identified as DSI-U2, permitted in 2013, with a combined maximum capacity of injecting 20,000 pounds of Sodium Bicarbonate per hour into the exhaust ductwork for Boiler 2 (MB2). Emissions from Units MB1 and MB2 are exhausted through the common stack, Stack CS012. Continuous emissions monitoring systems (CEMS) for nitrogen oxides (NO_X) and for sulfur dioxide (SO_2) and a continuous opacity monitoring (COM) system are located on the common stack.

. . .

(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 12][40 CFR 60, Subpart D] **[326 IAC 2-7-5(1)]**

. . .

SECTION E.4 EMISSIONS UNIT OPERATION CONDITIONS

. . .

New Source Performance Standards (NSPS) [40 CFR 60, Subpart Y] **[326 IAC 2-7-5(1)]**

. . .

SECTION E.5 EMISSIONS UNIT OPERATION CONDITIONS

. . .

National Emissions Standard for Hazardous Air Pollutants [326 IAC 20] [40 CFR 63, Subpart ZZZZ**][326 IAC 2-7-5(1)]**

. . .

SECTION E.6 EMISSIONS UNIT OPERATION CONDITIONS

. . .

National Emission Standards for Hazardous Air Pollutants [40 CFR 63] **[326 IAC 2-7-5(1)]**

. . .

SECTION G Clean Air Interstate Rule (CAIR) Nitrogen Oxides Annual, Sulfur Dioxide, and Nitrogen Oxides Ozone Season Trading Programs – CAIR Permit for CAIR Units Under ~~326 IAC 24-1-1(a), 326 IAC 24-2-1(a), and~~ 326 IAC 24-3-1(a)

ORIS Code: {6166}

CAIR Permit for CAIR Units Under ~~326 IAC 24-1-1(a), 326 IAC 24-2-1(a), and~~ 326 IAC 24-3-1(a)
. . .

(b) One (1) pulverized coal opposed wall fired dry bottom boiler, identified as MB2 (Main Boiler 2), with construction commenced in 1977 and completed in 1989, with a design heat input capacity of 12,374 million Btu per hour, with an electrostatic precipitator (ESP) system for control of particulate matter. Low NO_X burners and an overfire air (OFA) system have been installed **and Selective Catalytic Reduction (SCR) permitted in 2018** for NO_X control. No. 2 fuel oil is fired during startup, shutdown, and load stabilization periods. No. 2 fuel oil may also be burned to maintain boiler temperature to ensure boiler availability on short notice, and to maintain boiler temperature required during chemical cleaning. One (1) powdered activated carbon (PAC) injection system, identified as ACI, permitted in 2008, 2010 and 2013, with a unit maximum capacity of injecting 4,000 pounds of halogenated or non-halogenated activated carbon per hour into the exhaust ductwork for Boiler 2 (MB2) from a dedicated silo(s). One (1) dry sorbent injection (DSI) system, identified as DSI-U2, permitted in 2013, with a combined maximum capacity of injecting 20,000 pounds of Sodium Bicarbonate per hour into the exhaust ductwork for Boilers 1 (MB2). Emissions from Units MB1 and MB2 are exhausted through the common stack, Stack CS012. Continuous emissions monitoring systems (CEMS) for nitrogen oxides (NO_X) and for sulfur dioxide (SO_2) and a continuous opacity monitoring (COM) system are located on the common stack.

. . .

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

G.1 Clean Air Interstate Rule (CAIR) NOx Ozone Season Trading requirements [326 IAC 24-3] [40 CFR 52.770]

Pursuant to 326 IAC 326 IAC 24-3 (CAIR NOx Ozone Season Trading Program), the Permittee shall comply with the following requirements (included as Attachment F of this permit) for the boilers MB1, MB2, Auxiliary Boiler 1 and Auxiliary Boiler 2**:**

(a) 326 IAC 24-3-1 (Applicability)
(b) 326 IAC 24-3-2 (Definitions)
(c) 326 IAC 24-3-4 (Standard requirements)
(d) 326 IAC 24-3-11 (Monitoring and reporting requirements)

~~G.1 Automatic Incorporation of Definitions [326 IAC 24-1-7(e)] [326 IAC 24-2-7(e)] [326 IAC 24-3-7(e)] [40 CFR 97.123(b)] [40 CFR 97.223(b)] [40 CFR 97.323(b)]~~

~~This CAIR permit is deemed to incorporate automatically the definitions of terms under 326 IAC 24-1-2, 326 IAC 24-2-2, and 326 IAC 24-3-2.~~

~~G.2 Standard Permit Requirements [326 IAC 24-1-4(a)] [326 IAC 24-2-4(a)] [326 IAC 24-3-4(a)] [40 CFR 97.106(a)] [40 CFR 97.206(a)] [40 CFR 97.306(a)]~~

~~(a) The owners and operators of each CAIR NO_X source, CAIR SO_2 source, and CAIR NO_X ozone season source and CAIR NO_X unit, CAIR SO_2 unit, and CAIR NO_X ozone season unit shall operate each source and unit in compliance with this CAIR permit.~~

~~(b) The CAIR NO_X unit(s), CAIR SO_2 unit(s), and CAIR NO_X ozone season unit(s) subject to this CAIR permit are Units MB1 and MB2.~~

~~(c) The CAIR NOx ozone season provisions in this permit also apply to the Large Affected Units designated as Auxiliary Boiler 1 and Auxiliary Boiler 2.~~

~~G.3 Monitoring, Reporting, and Record Keeping Requirements [326 IAC 24-1-4(b)] [326 IAC 24-2-4(b)] [326 IAC 24-3-4(b)] [40 CFR 97.106(b)] [40 CFR 97.206(b)] [40 CFR 97.306(b)]~~

~~(a) The owners and operators, and the CAIR designated representative, of each CAIR NO_X source, CAIR SO_2 source, and CAIR NO_X ozone season source and CAIR NO_X unit, CAIR SO_2 unit, and CAIR NO_X ozone season unit at the source shall comply with the applicable monitoring, reporting, and record keeping requirements of 326 IAC 24-1-11, 326 IAC 24-2-10, and 326 IAC 24-3-11.~~

~~(b) The emissions measurements recorded and reported in accordance with 326 IAC 24-1-11, 326 IAC 24-2-10, and 326 IAC 24-3-11 shall be used to determine compliance by each CAIR NO_X source, CAIR SO_2 source, and CAIR NO_X ozone season source with the CAIR NO_X emissions limitation under 326 IAC 24-1-4(c), CAIR SO_2 emissions limitation under 326 IAC 24-2-4(c), and CAIR NO_X ozone season emissions limitation under 326 IAC 24-3-4(c) and Condition G.4.1, Nitrogen Oxides Emission Requirements, Condition G.4.2, Sulfur Dioxide Emission Requirements, and Condition G.4.3, Nitrogen Oxides Ozone Season Emission Requirements.~~

~~G.4.1 Nitrogen Oxides Emission Requirements [326 IAC 24-1-4(c)] [40 CFR 97.106(c)]~~

~~(a) As of the allowance transfer deadline for a control period, the owners and operators of each CAIR NO_X source and each CAIR NO_X unit at the source shall hold, in the source's compliance account, CAIR NO_X allowances available for compliance deductions for the control period under 326 IAC 24-1-9(i) in an amount not less than the tons of total nitrogen oxides emissions for the control period from all CAIR NO_X units at the source, as determined in accordance with 326 IAC 24-1-11.~~

~~(b) A CAIR NO_X unit shall be subject to the requirements under 326 IAC 24-1-4(c)(1) for the control period starting on the applicable date, as determined under 326 IAC 24-1-4(c)(2), and for each control period thereafter.~~

~~(c) A CAIR NO_X allowance shall not be deducted for compliance with the requirements under 326 IAC 24-1-4(c)(1), for a control period in a calendar year before the year for which the CAIR NO_X allowance was allocated.~~

~~(d) CAIR NO_X allowances shall be held in, deducted from, or transferred into or among CAIR NO_X allowance tracking system accounts in accordance with 326 IAC 24-1-9, 326 IAC 24-1-10, and 326 IAC 24-1-12.~~

~~(e) A CAIR NO_X allowance is a limited authorization to emit one (1) ton of nitrogen oxides in accordance with the CAIR NO_X annual trading program. No provision of the CAIR NO_X annual trading program, the CAIR permit application, the CAIR permit, or an exemption under 326 IAC 24-1-3 and no provision of law shall be construed to limit the authority of the State of Indiana or the United States to terminate or limit the authorization.~~

~~(f) A CAIR NO_X allowance does not constitute a property right.~~

~~(g) Upon recordation by the U.S. EPA under 326 IAC 24-1-8, 326 IAC 24-1-9, 326 IAC 24-1-10, or 326 IAC 24-1-12, every allocation, transfer, or deduction of a CAIR NO_X allowance to or from a CAIR NO_X source's compliance account is incorporated automatically in this CAIR permit.~~

~~G.4.2 Sulfur Dioxide Emission Requirements [326 IAC 24-2-4(c)] [40 CFR 97.206(c)]~~

~~(a) As of the allowance transfer deadline for a control period, the owners and operators of each CAIR SO_2 source and each CAIR SO_2 unit at the source shall hold, in the source's compliance account, a tonnage equivalent of CAIR SO_2 allowances available for compliance deductions for the control period under 326 IAC 24-2-8(j) and 326 IAC 24-2-8(k) not less than the tons of total sulfur dioxide emissions for the control period from all CAIR SO_2 units at the source, as determined in accordance with 326 IAC 24-2-10.~~

(b) A CAIR SO_2 unit shall be subject to the requirements under 326 IAC 24-2-4(c)(1) for the control period starting on the applicable date, as determined under 326 IAC 24-2-4(c)(2), and for each control period thereafter.

(c) A CAIR SO_2 allowance shall not be deducted for compliance with the requirements under 326 IAC 24-2-4(c)(1), for a control period in a calendar year before the year for which the CAIR SO_2 allowance was allocated.

(d) CAIR SO_2 allowances shall be held in, deducted from, or transferred into or among CAIR SO_2 allowance tracking system accounts in accordance with 326 IAC 24-2-8, 326 IAC 24-2-9, and 326 IAC 24-2-11.

(e) A CAIR SO_2 allowance is a limited authorization to emit sulfur dioxide in accordance with the CAIR SO_2 trading program. No provision of the CAIR SO_2 trading program, the CAIR permit application, the CAIR permit, or an exemption under 326 IAC 24-2-3 and no provision of law shall be construed to limit the authority of the State of Indiana or the United States to terminate or limit the authorization.

(f) A CAIR SO_2 allowance does not constitute a property right.

(g) Upon recordation by the U.S. EPA under 326 IAC 24-2-8, 326 IAC 24-2-9, or 326 IAC 24-2-11, every allocation, transfer, or deduction of a CAIR SO_2 allowance to or from a CAIR SO_2 source's compliance account is incorporated automatically in this CAIR permit.

G.4.3 Nitrogen Oxides Ozone Season Emission Requirements [326 IAC 24-3-4(c)] [40 CFR 97.306(c)]

(a) As of the allowance transfer deadline for a control period, the owners and operators of each CAIR NO_x ozone season source and each CAIR NO_x ozone season unit at the source shall hold, in the source's compliance account, CAIR NO_x ozone season allowances available for compliance deductions for the control period under 326 IAC 24-3-9(i) in an amount not less than the tons of total nitrogen oxides emissions for the control period from all CAIR NO_x ozone season units at the source, as determined in accordance with 326 IAC 24-3-11.

(b) A CAIR NO_x ozone season unit shall be subject to the requirements under 326 IAC 24-3-4(c)(1) for the control period starting on the applicable date, as determined under 326 IAC 24-3-4(c)(2), and for each control period thereafter.

(c) A CAIR NO_x ozone season allowance shall not be deducted for compliance with the requirements under 326 IAC 24-3-4(c)(1), for a control period in a calendar year before the year for which the CAIR NO_x ozone season allowance was allocated.

(d) CAIR NO_x ozone season allowances shall be held in, deducted from, or transferred into or among CAIR NO_x ozone season allowance tracking system accounts in accordance with 326 IAC 24-3-9, 326 IAC 24-3-10, and 326 IAC 24-3-12.

(e) A CAIR NO_x ozone season allowance is a limited authorization to emit one (1) ton of nitrogen oxides in accordance with the CAIR NO_x ozone season trading program. No provision of the CAIR NO_x ozone season trading program, the CAIR permit application, the CAIR permit, or an exemption under 326 IAC 24-3-3 and no provision of law shall be construed to limit the authority of the State of Indiana or the United States to terminate or limit the authorization.

(f) A CAIR NO_x ozone season allowance does not constitute a property right.

(g) Upon recordation by the U.S. EPA under 326 IAC 24-3-8, 326 IAC 24-3-9, 326 IAC 24-3-10, or 326 IAC 24-3-12, every allocation, transfer, or deduction of a CAIR NO_x ozone season allowance to or from a CAIR NO_x ozone season source's compliance account is incorporated automatically in this CAIR permit.

G.5 Excess Emissions Requirements [326 IAC 24-1-4(d)] [326 IAC 24-2-4(d)] [326 IAC 24-3-4(d)] [40 CFR 97.106(d)] [40 CFR 97.206(d)] [40 CFR 97.306(d)]

(a) The owners and operators of a CAIR NO_x source and each CAIR NO_x unit that emits nitrogen oxides during any control period in excess of the CAIR NO_x emissions limitation shall do the following:

(1) Surrender the CAIR NO_x allowances required for deduction under 326 IAC 24-1-9(j)(4).

(2) Pay any fine, penalty, or assessment or comply with any other remedy imposed, for the same violations, the Clean Air Act (CAA) or applicable state law.

Each ton of such excess emissions and each day of such control period shall constitute a separate violation of 326 IAC 24-1-4, the Clean Air Act (CAA), and applicable state law.

(b) The owners and operators of a CAIR SO_2 source and each CAIR SO_2 unit that emits sulfur dioxide during any control period in excess of the CAIR SO_2 emissions limitation shall do the following:

(1) Surrender the CAIR SO_2 allowances required for deduction under 326 IAC 24-2-8(k)(4).

(2) Pay any fine, penalty, or assessment or comply with any other remedy imposed, for the same violations, the Clean Air Act (CAA) or applicable state law.

Each ton of such excess emissions and each day of such control period shall constitute a separate violation of 326 IAC 24-2-4, the Clean Air Act (CAA), and applicable state law.

(c) The owners and operators of a CAIR NO_x ozone season source and each CAIR NO_x ozone season unit that emits nitrogen oxides during any control period in excess of the CAIR NO_x ozone season emissions limitation shall do the following:

(1) Surrender the CAIR NO_x ozone season allowances required for deduction under 326 IAC 24-3-9(j)(4).

(2) Pay any fine, penalty, or assessment or comply with any other remedy imposed, for the same violations, the Clean Air Act (CAA) or applicable state law.

Each ton of such excess emissions and each day of such control period shall constitute a separate violation of 326 IAC 24-3-4, the Clean Air Act (CAA), and applicable state law.

G.6 Record Keeping Requirements [326 IAC 24-1-4(e)] [326 IAC 24-2-4(e)] [326 IAC 24-3-4(e)] [326 IAC 2-7-5(3)] [40 CFR 97.106(e)] [40 CFR 97.206(e)] [40 CFR 97.306(e)]

Unless otherwise provided, the owners and operators of the CAIR NO_x source, CAIR SO_2 source, and CAIR NO_x ozone season source and each CAIR NO_x unit, CAIR SO_2 unit, and CAIR NO_x ozone season unit at the source shall keep on site at the source or at a central location within Indiana for those owners or operators with unattended sources, each of the following documents for a period of five (5) years from the date the document was created:

(a) The certificate of representation under 326 IAC 24-1-6(h), 326 IAC 24-2-6(h), and 326 IAC 24-3-6(h) for the CAIR designated representative for the source and each CAIR NO_X unit, CAIR SO_2 unit, and CAIR NO_X ozone season unit at the source and all documents that demonstrate the truth of the statements in the certificate of representation. The certificate and documents shall be retained on site at the source or at a central location within Indiana for those owners or operators with unattended sources beyond such five (5) year period until such documents are superseded because of the submission of a new account certificate of representation under 326 IAC 24-1-6(h), 326 IAC 24-2-6(h), and 326 IAC 24-3-6(h) changing the CAIR designated representative.

(b) All emissions monitoring information, in accordance with 326 IAC 24-1-11, 326 IAC 24-2-10, and 326 IAC 24-3-11, provided that to the extent that 326 IAC 24-1-11, 326 IAC 24-2-10, and 326 IAC 24-3-11 provides for a three (3) year period for record keeping, the three (3) year period shall apply.

(c) Copies of all reports, compliance certifications, and other submissions and all records made or required under the CAIR NO_X annual trading program, CAIR SO_2 trading program, and CAIR NO_X ozone season trading program.

(d) Copies of all documents used to complete a CAIR permit application and any other submission under the CAIR NO_X annual trading program, CAIR SO_2 trading program, and CAIR NO_X ozone season trading program or to demonstrate compliance with the requirements of the CAIR NO_X annual trading program, CAIR SO_2 trading program, and CAIR NO_X ozone season trading program.

This period may be extended for cause, at any time before the end of five (5) years, in writing by IDEM, OAQ or the U.S. EPA. Unless otherwise provided, all records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

G.7 Reporting Requirements [326 IAC 24-1-4(e)] [326 IAC 24-2-4(e)] [326 IAC 24-3-4(e)] [40 CFR 97.106(e)] [40 CFR 97.206(e)] [40 CFR 97.306(e)]

(a) The CAIR designated representative of the CAIR NO_X source, CAIR SO_2 source, and CAIR NO_X ozone season source and each CAIR NO_X unit, CAIR SO_2 unit, and CAIR NO_X ozone season unit at the source shall submit the reports required under the CAIR NO_X annual trading program, CAIR SO_2 trading program, and CAIR NO_X ozone season trading program, including those under 326 IAC 24-1-11, 326 IAC 24-2-10, and 326 IAC 24-3-11.

(b) Pursuant to 326 IAC 24-1-4(e), 326 IAC 24-2-4(e), and 326 IAC 24-3-4(e) and 326 IAC 24-1-6(e)(1), 326 IAC 24-2-6(e)(1), and 326 IAC 24-3-6(e)(1), each submission under the CAIR NO_X annual trading program, CAIR SO_2 trading program, and CAIR NO_X ozone season trading program shall include the following certification statement by the CAIR designated representative: “I am authorized to make this submission on behalf of the owners and operators of the source or units for which the submission is made. I certify under penalty of law that I have personally examined, and am familiar with, the statements and information submitted in this document and all its attachments. Based on my inquiry of those individuals with primary responsibility for obtaining the information, I certify that the statements and information are to the best of my knowledge and belief true, accurate, and complete. I am aware that there are significant penalties for submitting false statements and information or omitting required statements and information, including the possibility of fine or imprisonment."

(c) Where 326 IAC 24-1, 326 IAC 24-2, and 326 IAC 24-3 requires a submission to IDEM, OAQ, the information 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

(d) Where 326 IAC 24-1, 326 IAC 24-2, and 326 IAC 24-3 requires a submission to U.S. EPA, the information shall be submitted to:

U.S. Environmental Protection Agency
Clean Air Markets Division
1200 Pennsylvania Avenue, NW
Mail Code 6204N
Washington, DC 20460

G.8 Liability [326 IAC 24-1-4(f)] [326 IAC 24-2-4(f)] [326 IAC 24-3-4(f)] [40 CFR 97.106(f)] [40 CFR 97.206(f)] [40 CFR 97.306(f)]

The owners and operators of each CAIR NO_X source, CAIR SO_2 source, and CAIR NO_X ozone season source and each CAIR NO_X unit, CAIR SO_2 unit, and CAIR NO_X ozone season unit shall be liable as follows:

(a) Each CAIR NO_X source, CAIR SO_2 source, and CAIR NO_X ozone season source and each CAIR NO_X unit, CAIR SO_2 unit, and CAIR NO_X ozone season unit shall meet the requirements of the CAIR NO_X annual trading program, CAIR SO_2 trading program, and CAIR NO_X ozone season trading program.

(b) Any provision of the CAIR NO_X annual trading program, CAIR SO_2 trading program, and CAIR NO_X ozone season trading program that applies to a CAIR NO_X source, CAIR SO_2 source, and CAIR NO_X ozone season source or the CAIR designated representative of a CAIR NO_X source, CAIR SO_2 source, and CAIR NO_X ozone season source shall also apply to the owners and operators of such source and of the CAIR NO_X units, CAIR SO_2 units, and CAIR NO_X ozone season units at the source.

(c) Any provision of the CAIR NO_X annual trading program, CAIR SO_2 trading program, and CAIR NO_X ozone season trading program that applies to a CAIR NO_X unit, CAIR SO_2 unit, and CAIR NO_X ozone season unit or the CAIR designated representative of a CAIR NO_X unit, CAIR SO_2 unit, and CAIR NO_X ozone season unit shall also apply to the owners and operators of such unit.

G.9 Effect on Other Authorities [326 IAC 24-1-4(g)] [326 IAC 24-2-4(g)] [326 IAC 24-3-4(g)] [40 CFR 97.106(g)] [40 CFR 97.206(g)] [40 CFR 97.306(g)]

No provision of the CAIR NO_X annual trading program, CAIR SO_2 trading program, and CAIR NO_X ozone season trading program, a CAIR permit application, a CAIR permit, or an exemption under 326 IAC 24-1-3, 326 IAC 24-2-3, and 326 IAC 24-3-3 shall be construed as exempting or excluding the owners and operators, and the CAIR designated representative, of a CAIR NO_X source, CAIR SO_2 source, and CAIR NO_X ozone season source or CAIR NO_X unit, CAIR SO_2 unit, and CAIR NO_X ozone season unit from compliance with any other provision of the applicable, approved state implementation plan, a federally enforceable permit, or the Clean Air Act (CAA).

G.10 CAIR Designated Representative and Alternate CAIR Designated Representative [326 IAC 24-1-6] [326 IAC 24-2-6] [326 IAC 24-3-6] [40 CFR 97, Subpart BB] [40 CFR 97, Subpart BBB] [40 CFR 97, Subpart BBBB]

Pursuant to 326 IAC 24-1-6, 326 IAC 24-2-6, and 326 IAC 24-3-6:

~~(a) Except as specified in 326 IAC 24-1-6(f)(3), 326 IAC 24-2-6(f)(3), and 326 IAC 24-3-6(f)(3), each CAIR NO_X source, CAIR SO_2 source, and CAIR NO_X ozone season source, including all CAIR NO_X units, CAIR SO_2 units, and CAIR NO_X ozone season units at the source, shall have one (1) and only one (1) CAIR designated representative, with regard to all matters under the CAIR NO_X annual trading program, CAIR SO_2 trading program, and CAIR NO_X ozone season trading program concerning the source or any CAIR NO_X unit, CAIR SO_2 unit, and CAIR NO_X ozone season unit at the source.~~

~~(b) The provisions of 326 IAC 24-1-6(f), 326 IAC 24-2-6(f), and 326 IAC 24-3-6(f) shall apply where the owners or operators of a CAIR NO_X source, CAIR SO_2 source, and CAIR NO_X ozone season source choose to designate an alternate CAIR designated representative.~~

~~Except as specified in 326 IAC 24-1-6(f)(3), 326 IAC 24-2-6(f)(3), and 326 IAC 24-3-6(f)(3), whenever the term "CAIR designated representative" is used, the term shall be construed to include the CAIR designated representative or any alternate CAIR designated representative.~~

SECTION H TR NO_X Annual Trading Program, TR NO_X Ozone Season Trading Program, and TR SO_2 Group 1 Trading Program Requirements (40 CFR 97.406), (40 CFR 97.506), (40 CFR 97.606)

ORIS Code: ***6166***

Transport Rule (TR):

(a) One (1) pulverized coal opposed wall fired dry bottom boiler, identified as MB1 (Main Boiler 1), with construction commenced in 1977 and completed in 1984, with a design heat input capacity of 12,374 million Btu per hour, with an electrostatic precipitator (ESP) system for control of particulate matter. Low NO_X burners and an overfire air (OFA) system have been installed and Selective Catalytic Reduction permitted in 2015 for NO_X control. No. 2 fuel oil is fired during startup, shutdown, and load stabilization periods. No. 2 fuel oil may also be burned to maintain boiler temperature to ensure boiler availability on short notice, and to maintain boiler temperature required during chemical cleaning. One (1) powdered activated carbon (PAC) injection system, identified as ACI, permitted in 2008, 2010 and 2013, with a unit maximum capacity of injecting 4,000 pounds of halogenated or non-halogenated activated carbon per hour into the exhaust ductwork for Boiler 1 (MB1) from a dedicated silo(s). One (1) dry sorbent injection (DSI) system, identified as DSI-U1, permitted in 2013, with a design injection capacity of 20,000 pounds of Sodium Bicarbonate per hour into the exhaust ductwork for Boiler 1 (MB1). Emissions from Units MB1 and MB2 are exhausted through the common stack, Stack CS012. Continuous emissions monitoring systems (CEMS) for nitrogen oxides (NO_X) and for sulfur dioxide (SO_2) and a continuous opacity monitoring (COM) system are located on the common stack.

(b) One (1) pulverized coal opposed wall fired dry bottom boiler, identified as MB2 (Main Boiler 2), with construction commenced in 1977 and completed in 1989, with a design heat input capacity of 12,374 million Btu per hour, with an electrostatic precipitator (ESP) system for control of particulate matter. Low NO_X burners and an overfire air (OFA) system have been installed and Selective Catalytic Reduction (SCR) permitted in 2018 for NO_X control. No. 2 fuel oil is fired during startup, shutdown, and load stabilization periods. No. 2 fuel oil may also be burned to maintain boiler temperature to ensure boiler availability on short notice, and to maintain boiler temperature required during chemical cleaning. One (1) powdered activated carbon (PAC) injection system, identified as ACI, permitted in 2008, 2010 and 2013, with a unit maximum capacity of injecting 4,000 pounds of halogenated or non-halogenated activated carbon per hour into the exhaust ductwork for Boiler 2 (MB2) from a dedicated silo(s). One (1) dry sorbent injection (DSI) system, identified as DSI-U2, permitted in 2013, with a combined maximum capacity of injecting 20,000 pounds of Sodium Bicarbonate per hour into the exhaust ductwork for Boiler 2 (MB2). Emissions from Units MB1 and MB2 are exhausted through the common stack, Stack CS012. Continuous emissions monitoring

systems (CEMS) for nitrogen oxides (NO_X) and for sulfur dioxide (SO_2) and a continuous opacity monitoring (COM) system are located on the common stack.

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

H.1 Designated representative requirements

The owners and operators shall comply with the requirement to have a designated representative, and may have an alternate designated representative, in accordance with the following:

(a) 40 CFR 97.413 through 97.418;
(b) 40 CFR 97.513 through 97.518; and
(c) 40 CFR 97.613 through 97.618.

H.2 Emissions monitoring, reporting, and recordkeeping requirements

(1) The owners and operators, and the designated representative, of each TR NO_X Annual source, TR NOx Ozone Season source, and TR SO2 Group 1 source, and each TR NO_X Annual unit at the source, TR NOx Ozone Season unit at the source, and TR SO2 Group 1 unit at the source shall comply with the monitoring, reporting, and recordkeeping requirements of 40 CFR 97.430, 40 CFR 97.530, and 40 CFR 97.630 (general requirements, including installation, certification, and data accounting, compliance deadlines, reporting data, prohibitions, and long-term cold storage), 97.431, 97.531, and 97.631 (initial monitoring system certification and recertification procedures), 97.432, 97.532, and 97.632 (monitoring system out-of-control periods), 97.433, 97.533, and 97.633 (notifications concerning monitoring), 97.434, 97.534, and 97.634 (recordkeeping and reporting, including monitoring plans, certification applications, quarterly reports, and compliance certification), and 97.435, 97.535, and 97.635 (petitions for alternatives to monitoring, recordkeeping, or reporting requirements).

(2) The emissions data determined in accordance with 40 CFR 97.430 through 97.435 shall be used to calculate allocations of TR NO_X Annual allowances under 40 CFR 97.411(a)(2) and (b) and 97.412 and to determine compliance with the TR NO_X Annual emissions limitation and assurance provisions under Condition H.3 below, provided that, for each monitoring location from which mass emissions are reported, the mass emissions amount used in calculating such allocations and determining such compliance shall be the mass emissions amount for the monitoring location determined in accordance with 40 CFR 97.430 through 97.435 and rounded to the nearest ton, with any fraction of a ton less than 0.50 being deemed to be zero.

(3) The emissions data determined in accordance with 40 CFR 97.530 through 97.535 shall be used to calculate allocations of TR NO_X Ozone Season allowances under 40 CFR 97.511(a)(2) and (b) and 97.512 and to determine compliance with the TR NO_X Ozone Season emissions limitation and assurance provisions under Condition H.4 below, provided that, for each monitoring location from which mass emissions are reported, the mass emissions amount used in calculating such allocations and determining such compliance shall be the mass emissions amount for the monitoring location determined in accordance with 40 CFR 97.530 through 97.535 and rounded to the nearest ton, with any fraction of a ton less than 0.50 being deemed to be zero.

(4) The emissions data determined in accordance with 40 CFR 97.630 through 97.635 shall be used to calculate allocations of TR SO_2 Group 1 allowances under 40 CFR 97.611(a)(2) and (b) and 97.612 and to determine compliance with the TR SO_2 Group 1 emissions limitation and assurance provisions under Condition H.5 below, provided that, for each monitoring location from which mass emissions are reported, the mass emissions amount used in calculating such allocations and

determining such compliance shall be the mass emissions amount for the monitoring location determined in accordance with 40 CFR 97.630 through 97.635 and rounded to the nearest ton, with any fraction of a ton less than 0.50 being deemed to be zero.

H.3 NOX annual emissions requirements

(1) TR NO_X Annual emissions limitation.

(i). As of the allowance transfer deadline for a control period in a given year, the owners and operators of each TR NO_X Annual source and each TR NO_X Annual unit at the source shall hold, in the source's compliance account, TR NO_X Annual allowances available for deduction for such control period under 40 CFR 97.424(a) in an amount not less than the tons of total NO_X emissions for such control period from all TR NO_X Annual units at the source.

(ii). If total NO_X emissions during a control period in a given year from the TR NO_X Annual units at a TR NO_X Annual source are in excess of the TR NO_X Annual emissions limitation set forth in Condition H.3(1)(i) above, then:

(A). The owners and operators of the source and each TR NO_X Annual unit at the source shall hold the TR NO_X Annual allowances required for deduction under 40 CFR 97.424(d); and

(B). The owners and operators of the source and each TR NO_X Annual unit at the source shall pay any fine, penalty, or assessment or comply with any other remedy imposed, for the same violations, under the Clean Air Act, and each ton of such excess emissions and each day of such control period shall constitute a separate violation of 40 CFR part 97, subpart AAAAA and the Clean Air Act.

(2) TR NO_X Annual assurance provisions.

(i). If total NO_X emissions during a control period in a given year from all TR NO_X Annual units at TR NO_X Annual sources in the state exceed the state assurance level, then the owners and operators of such sources and units in each group of one or more sources and units having a common designated representative for such control period, where the common designated representative's share of such NO_X emissions during such control period exceeds the common designated representative's assurance level for the state and such control period, shall hold (in the assurance account established for the owners and operators of such group) TR NO_X Annual allowances available for deduction for such control period under 40 CFR 97.425(a) in an amount equal to two times the product (rounded to the nearest whole number), as determined by the Administrator in accordance with 40 CFR 97.425(b), of multiplying— (A) The quotient of the amount by which the common designated representative's share of such NO_X emissions exceeds the common designated representative's assurance level divided by the sum of the amounts, determined for all common designated representatives for such sources and units in the state for such control period, by which each common designated representative's share of such NO_X emissions exceeds the respective common designated representative's assurance level; and (B) The amount by which total NO_X emissions from all TR NO_X Annual units at TR NO_X Annual sources in the state for such control period exceed the state assurance level.

(ii). The owners and operators shall hold the TR NO_X Annual allowances required under Condition H.3(2)(i) above, as of midnight of November 1 (if it

is a business day), or midnight of the first business day thereafter (if November 1 is not a business day), immediately after such control period.

(iii). Total NO_X emissions from all TR NO_X Annual units at TR NO_X Annual sources in the State during a control period in a given year exceed the state assurance level if such total NO_X emissions exceed the sum, for such control period, of the state NO_X Annual trading budget under 40 CFR 97.410(a) and the state's variability limit under 40 CFR 97.410(b).

(iv). It shall not be a violation of 40 CFR part 97, subpart AAAAA or of the Clean Air Act if total NO_X emissions from all TR NO_X Annual units at TR NO_X Annual sources in the State during a control period exceed the state assurance level or if a common designated representative's share of total NO_X emissions from the TR NO_X Annual units at TR NO_X Annual sources in the state during a control period exceeds the common designated representative's assurance level.

(v). To the extent the owners and operators fail to hold TR NO_X Annual allowances for a control period in a given year in accordance with Condition H.3(2)(i) through (iii) above,

(A). The owners and operators shall pay any fine, penalty, or assessment or comply with any other remedy imposed under the Clean Air Act; and

(B). Each TR NO_X Annual allowance that the owners and operators fail to hold for such control period in accordance with Condition H.3(2)(i) through (iii) above and each day of such control period shall constitute a separate violation of 40 CFR part 97, subpart AAAAA and the Clean Air Act.

(3) Compliance periods.

(i). A TR NO_X Annual unit shall be subject to the requirements under Condition H.3(1) above for the control period starting on the later of January 1, 2015, or the deadline for meeting the unit's monitor certification requirements under 40 CFR 97.430(b) and for each control period thereafter.

(ii). A TR NO_X Annual unit shall be subject to the requirements under Condition H.3(2) above for the control period starting on the later of January 1, 2017 or the deadline for meeting the unit's monitor certification requirements under 40 CFR 97.430(b) and for each control period thereafter.

(4) Vintage of allowances held for compliance.

(i). A TR NO_X Annual allowance held for compliance with the requirements under Condition H.3(1)(i) above for a control period in a given year must be a TR NO_X Annual allowance that was allocated for such control period or a control period in a prior year.

(ii). A TR NO_X Annual allowance held for compliance with the requirements under Condition H.3(1)(ii)(A) and (2)(i) through (iii) above for a control period in a given year must be a TR NO_X Annual allowance that was allocated for a control period in a prior year or the control period in the given year or in the immediately following year.

(5) Allowance Management System requirements. Each TR NO_X Annual allowance shall be held in, deducted from, or transferred into, out of, or between Allowance Management System accounts in accordance with 40 CFR part 97, subpart AAAAA.

(6) Limited authorization. A TR NO_X Annual allowance is a limited authorization to emit one ton of NO_X during the control period in one year. Such authorization is limited in its use and duration as follows:

(i). Such authorization shall only be used in accordance with the TR NO_X Annual Trading Program; and

(ii). Notwithstanding any other provision of 40 CFR part 97, the Administrator has the authority to terminate or limit the use and duration of such authorization to the extent the Administrator determines is necessary or appropriate to implement any provision of the Clean Air Act.

(7) Property right. A TR NO_X Annual allowance does not constitute a property right.

H.4 NOx ozone season requirements

(1) TR NO_X Ozone Season emissions limitation.

(i). As of the allowance transfer deadline for a control period in a given year, the owners and operators of each TR NO_X Ozone Season source and each TR NO_X Ozone Season unit at the source shall hold, in the source's compliance account, TR NO_X Ozone Season allowances available for deduction for such control period under 40 CFR 97.524(a) in an amount not less than the tons of total NO_X emissions for such control period from all TR NO_X Ozone Season units at the source.

(ii). If total NO_X emissions during a control period in a given year from the TR NO_X Ozone Season units at a TR NO_X Ozone Season source are in excess of the TR NO_X Ozone Season emissions limitation set forth in Condition H.4(1)(i) above, then:

(A). The owners and operators of the source and each TR NO_X Ozone Season unit at the source shall hold the TR NO_X Ozone Season allowances required for deduction under 40 CFR 97.524(d); and

(B). The owners and operators of the source and each TR NO_X Ozone Season unit at the source shall pay any fine, penalty, or assessment or comply with any other remedy imposed, for the same violations, under the Clean Air Act, and each ton of such excess emissions and each day of such control period shall constitute a separate violation of 40 CFR part 97, subpart BBBBB and the Clean Air Act.

(2) TR NO_X Ozone Season assurance provisions.

(i). If total NO_X emissions during a control period in a given year from all TR NO_X Ozone Season units at TR NO_X Ozone Season sources in the state exceed the state assurance level, then the owners and operators of such sources and units in each group of one or more sources and units having a common designated representative for such control period, where the common designated representative's share of such NO_X emissions during such control period exceeds the common designated representative's assurance level for the state and such control period, shall hold (in the assurance account established for the owners and operators of such group) TR NO_X Ozone Season allowances available for deduction for such control period under 40 CFR 97.525(a) in an amount equal to two times the product (rounded to the nearest whole number), as determined by the Administrator in accordance with 40 CFR 97.525(b), of multiplying—

(A). The quotient of the amount by which the common designated representative's share of such NO_X emissions exceeds the common designated representative's assurance level divided by the sum of the amounts, determined for all common designated representatives for such sources and units in the state for such control period, by which each common designated representative's share of such NO_X emissions exceeds the respective common designated representative's assurance level; and

(B). The amount by which total NO_X emissions from all TR NO_X Ozone Season units at TR NO_X Ozone Season sources in the state for such control period exceed the state assurance level.

(ii). The owners and operators shall hold the TR NO_X Ozone Season allowances required under Condition H.4(2)(i) above, as of midnight of November 1 (if it is a business day), or midnight of the first business day thereafter (if November 1 is not a business day), immediately after such control period.

(iii). Total NO_X emissions from all TR NO_X Ozone Season units at TR NO_X Ozone Season sources in the state during a control period in a given year exceed the state assurance level if such total NO_X emissions exceed the sum, for such control period, of the State NO_X Ozone Season trading budget under 40 CFR 97.510(a) and the state's variability limit under 40 CFR 97.510(b).

(iv). It shall not be a violation of 40 CFR part 97, subpart BBBBB or of the Clean Air Act if total NO_X emissions from all TR NO_X Ozone Season units at TR NO_X Ozone Season sources in the state during a control period exceed the state assurance level or if a common designated representative's share of total NO_X emissions from the TR NO_X Ozone Season units at TR NO_X Ozone Season sources in the state during a control period exceeds the common designated representative's assurance level.

(v). To the extent the owners and operators fail to hold TR NO_X Ozone Season allowances for a control period in a given year in accordance with Condition H.4(2)(i) through (iii) above,

(A). The owners and operators shall pay any fine, penalty, or assessment or comply with any other remedy imposed under the Clean Air Act; and

(B). Each TR NOX Ozone Season allowance that the owners and operators fail to hold for such control period in accordance with paragraphs (d)(2)(i) through (iii) above and each day of such control period shall constitute a separate violation of 40 CFR part 97, subpart BBBBB and the Clean Air Act.

(3) Compliance Periods.

(i). A TR NOx Ozone Season unit shall be subject to the requirements under Condition H.4(1) above for the control period starting on the later of May 1, 2015 or the deadline for meeting the unit's monitor certificate requirements under 40 CFR 97.530(b) and for each control period thereafter.

(ii). A TR NOx Ozone Season unit shall be subject to the requirements under Condition H.4(2) above for the control period starting on the later of May 1, 2017 or the deadline for meeting the unit's monitor certification requirements under 40 CFR 97.530(b) and for each control period thereafter.

(4) Vintage of allowances held for compliance.

(i). A TR NOx Ozone Season allowance held for compliance with the requirements under Condition H.4(1)(i) above for a control period in a given year must be a TR NOx Ozone Season Allowance that was allocated for such control period or a control period in a prior year.

(ii). A TR NOx Ozone Season allowance held for compliance with the requirements under Condition H.4(1)(ii)(A) and (2)(i) through (iii) above for a control period in a given year must be a TR NOx Ozone Season allowance that was allocated for a control period in a prior year or the control period in the given year or in the immediately following year.

(5) Allowances Management System Requirements.

(i). Each TR NOx Ozone Season allowance shall be held in, deducted from, or transferred into, out of, or between Allowance Management System accounts in accordance with 40 CFR Part 97, Subpart BBBBB.

(6) Limited Authorization.

(i). A TR NOx Ozone Season allowance is a limited authorization to emit one ton of NOx during the control period in one year. Such authorization is limited in its use and duration as follows:

(A). Such authorization shall only be used in accordance with the TR NOx Ozone Season Trading Program; and

(B). Notwithstanding any other provision of 40 CFR Part 97, Subpart BBBBB, the Administrator has the authority to terminate or limit the use and duration of such authorization to the extent the Administrator determines is necessary or appropriate to implement any provision of the Clean Air Act.

(7) Property Right.

(i). A TR NOx Ozone Season allowance does not constitute a property right.

H.5 SO_2 emissions requirements

(1) TR SO_2 Group 1 emissions limitation.

(i). **As of the allowance transfer deadline for a control period in a given year, the owners and operators of each TR SO_2 Group 1 source and each TR SO2 Group 1 unit at the source shall hold, in the source's compliance account, TR SO_2 Group 1 allowances available for deduction for such control period under 40 CFR 97.624(a) in an amount not less than the tons of total SO_2 emissions for such control period from all TR SO_2 Group 1 units at the source.**

(ii). **If total SO_2 emissions during a control period in a given year from the TR SO_2 Group 1 units at a TR SO_2 Group 1 source are in excess of the TR SO_2 Group 1 emissions limitation set forth in Condition H.5(1)(i) above, then:**

(A). The owners and operators of the source and each TR SO_2 Group 1 unit at the source shall hold the TR SO_2 Group 1 allowances required for deduction under 40 CFR 97.624(d); and

(B). The owners and operators of the source and each TR SO_2 Group 1 unit at the source shall pay any fine, penalty, or assessment or

comply with any other remedy imposed, for the same violations, under the Clean Air Act, and each ton of such excess emissions and each day of such control period shall constitute a separate violation 40 CFR part 97, subpart CCCCC and the Clean Air Act.

(2) TR SO_2 Group 1 assurance provisions

(i). **If total SO_2 emissions during a control period in a given year from all TR SO_2 Group 1 units at TR SO_2 Group 1 sources in the state exceed the state assurance level, then the owners and operators of such sources and units in each group of one or more sources and units having a common designated representative for such control period, where the common designated representative's share of such SO_2 emissions during such control period exceeds the common designated representative's assurance level for the state and such control period, shall hold (in the assurance account established for the owners and operators of such group) TR SO_2 Group 1 allowances available for deduction for such control period under 40 CFR 97.625(a) in an amount equal to two times the product (rounded to the nearest whole number), as determined by the Administrator in accordance with 40 CFR 97.625(b), of multiplying—**

(A). The quotient of the amount by which the common designated representative's share of such SO_2 emissions exceeds the common designated representative's assurance level divided by the sum of the amounts, determined for all common designated representatives for such sources and units in the state for such control period, by which each common designated representative's share of such SO_2 emissions exceeds the respective common designated representative's assurance level; and

(B). The amount by which total SO_2 emissions from all TR SO_2 Group 1 units at TR SO_2 Group 1 sources in the state for such control period exceed the state assurance level.

(ii). **The owners and operators shall hold the TR SO_2 Group 1 allowances required under Condition H.5(2)(i) above, as of midnight of November 1 (if it is a business day), or midnight of the first business day thereafter (if November 1 is not a business day), immediately after such control period.**

(iii). **Total SO_2 emissions from all TR SO_2 Group 1 units at TR SO_2 Group 1 sources in the state during a control period in a given year exceed the state assurance level if such total SO_2 emissions exceed the sum, for such control period, of the state SO_2 Group 1 trading budget under 40 CFR 97.610(a) and the state's variability limit under 40 CFR 97.610(b).**

(iv). **It shall not be a violation of 40 CFR part 97, subpart CCCCC or of the Clean Air Act if total SO_2 emissions from all TR SO_2 Group 1 units at TR SO_2 Group 1 sources in the state during a control period exceed the state assurance level or if a common designated representative's share of total SO_2 emissions from the TR SO_2 Group 1 units at TR SO_2 Group 1 sources in the state during a control period exceeds the common designated representative's assurance level.**

(v). **To the extent the owners and operators fail to hold TR SO_2 Group 1 allowances for a control period in a given year in accordance with Condition H.5(2)(i) through (iii) above,**

(A). The owners and operators shall pay any fine, penalty, or assessment or comply with any other remedy imposed under the Clean Air Act; and

(B). Each TR SO_2 Group 1 allowance that the owners and operators fail to hold for such control period in accordance with Condition H.5(2)(i) through (iii) above and each day of such control period shall constitute a separate violation of 40 CFR part 97, subpart CCCCC and the Clean Air Act.

(3) Compliance periods.

(i). **A TR SO_2 Group 1 unit shall be subject to the requirements under Condition H.5(1) above for the control period starting on the later of January 1, 2015 or the deadline for meeting the unit's monitor certification requirements under 40 CFR 97.630(b) and for each control period thereafter.**

(ii). **A TR SO_2 Group 1 unit shall be subject to the requirements under Condition H.5(2) above for the control period starting on the later of January 1, 2017 or the deadline for meeting the unit's monitor certification requirements under 40 CFR 97.630(b) and for each control period thereafter.**

(4) Vintage of allowances held for compliance.

(i). **A TR SO_2 Group 1 allowance held for compliance with the requirements under Condition H.5(1)(i) above for a control period in a given year must be a TR SO_2 Group 1 allowance that was allocated for such control period or a control period in a prior year.**

(ii). **A TR SO_2 Group 1 allowance held for compliance with the requirements under Condition H.5(1)(ii)(A) and (2)(i) through (iii) above for a control period in a given year must be a TR SO_2 Group 1 allowance that was allocated for a control period in a prior year or the control period in the given year or in the immediately following year.**

(5) Allowance Management System requirements. Each TR SO_2 Group 1 allowance shall be held in, deducted from, or transferred into, out of, or between Allowance Management System accounts in accordance with 40 CFR part 97, subpart CCCCC.

(6) Limited authorization. A TR SO_2 Group 1 allowance is a limited authorization to emit one ton of SO_2 during the control period in one year. Such authorization is limited in its use and duration as follows:

(i). **Such authorization shall only be used in accordance with the TR SO_2 Group 1 Trading Program; and**

(ii). **Notwithstanding any other provision of 40 CFR part 97, subpart CCCCC, the Administrator has the authority to terminate or limit the use and duration of such authorization to the extent the Administrator determines is necessary or appropriate to implement any provision of the Clean Air Act.**

(7) Property right. A TR SO_2 Group 1 allowance does not constitute a property right.

H.6 Title V Permit Revision Requirements

(1) No title V permit revision shall be required for any allocation, holding, deduction, or transfer of TR NO_X Annual allowances in accordance with 40 CFR part 97, subpart AAAAA, TR NO_X Ozone Season allowances in accordance with 40 CFR

part 97, subpart BBBBB, and TR SO_2 Group 1 allowances in accordance with 40 CFR part 97, subpart CCCCC.

(2) This permit incorporates the TR emissions monitoring, recordkeeping and reporting requirements pursuant to 40 CFR 97.430 through 97.435, 40 CFR 97.530 through 97.535, and 40 CFR 97.630 through 97.635, and the requirements for a continuous emission monitoring system (pursuant to 40 CFR part 75, subparts B and H), an excepted monitoring system (pursuant to 40 CFR part 75, appendices D and E), a low mass emissions excepted monitoring methodology (pursuant to 40 CFR 75.19), and an alternative monitoring system (pursuant to 40 CFR part 75, subpart E). Therefore, the Description of TR Monitoring Provisions table for units identified in this permit may be added to, or changed, in this title V permit using minor permit modification procedures in accordance with 40 CFR 97.406(d)(2), 40 CFR 97.506(d)(2), and 40 CFR 97.606(d)(2) and 70.7(e)(2)(i)(B) or 71.7(e)(1)(i)(B).

H.7 Additional recordkeeping and reporting requirements

(1) **Unless otherwise provided, the owners and operators of each TR NO_X Annual source and each TR NO_X Annual unit, TR NO_X Ozone Season source and each TR NO_X Ozone Season unit, and TR SO_2 Group 1 source and each TR SO_2 Group 1 unit at the source shall keep on site at the source each of the following documents (in hardcopy or electronic format) for a period of 5 years from the date the document is created. This period may be extended for cause, at any time before the end of 5 years, in writing by the Administrator.**

(i). **The certificate of representation under 40 CFR 97.416, 40 CFR 97.516, and 40 CFR 97.616 for the designated representative for the source and each TR NO_X Annual unit, TR NOx Ozone Season unit, and TR SO_2 Group 1 unit at the source and all documents that demonstrate the truth of the statements in the certificate of representation; provided that the certificate and documents shall be retained on site at the source beyond such 5-year period until such certificate of representation and documents are superseded because of the submission of a new certificate of representation under 40 CFR 97.416, 40 CFR 97.516, and 40 CFR 97.616 changing the designated representative.**

(ii). **All emissions monitoring information, in accordance with 40 CFR part 97, subpart AAAAA, 40 CFR part 97, subpart BBBBB, and 40 CFR part 97, subpart CCCCC.**

(iii). **Copies of all reports, compliance certifications, and other submissions and all records made or required under, or to demonstrate compliance with the requirements of, the TR NO_X Annual Trading Program, TR NO_X Ozone Season Trading Program, and TR SO_2 Group 1 Trading Program.**

(2) **The designated representative of a TR NO_X Annual source and each TR NO_X Annual unit, a TR NO_X Ozone Season source and each TR NO_X Ozone Season unit, and a TR SO_2 Group 1 source and each TR SO_2 Group 1 unit at the source shall make all submissions required under the TR NO_X Annual Trading Program, TR NO_X Ozone Season Trading Program, and TR SO_2 Group 1 Trading Program, except as provided in 40 CFR 97.418, 40 CFR 97.518, and 40 CFR 97.618. This requirement does not change, create an exemption from, or otherwise affect the responsible official submission requirements under a title V operating permit program in 40 CFR parts 70 and 71.**

H.8 Liability

(1) **Any provision of the TR NO_X Annual Trading Program that applies to a TR NO_X Annual source or the designated representative of a TR NO_X Annual source shall also apply to the owners and operators of such source and of the TR NO_X Annual units at the source.**

(2) **Any provision of the TR NO_X Annual Trading Program that applies to a TR NO_X Annual unit or the designated representative of a TR NO_X Annual unit shall also apply to the owners and operators of such unit.**

(3) **Any provision of the TR NO_X Ozone Season Trading Program that applies to a TR NO_X Ozone Season source or the designated representative of a TR NO_X Ozone Season source shall also apply to the owners and operators of such source and of the TR NO_X Ozone Season units at the source.**

(4) **Any provision of the TR NO_X Ozone Season Trading Program that applies to a TR NO_X Ozone Season unit or the designated representative of a TR NO_X Ozone Season unit shall also apply to the owners and operators of such unit.**

(5) **Any provision of the TR SO_2 Group 1 Trading Program that applies to a TR SO_2 Group 1 source or the designated representative of a TR SO_2 Group 1 source shall also apply to the owners and operators of such source and of the TR SO_2 Group 1 units at the source.**

(6) **Any provision of the TR SO_2 Group 1 Trading Program that applies to a TR SO_2 Group 1 unit or the designated representative of a TR SO_2 Group 1 unit shall also apply to the owners and operators of such unit.**

H.9 Effect on other authorities

No provision of the TR NO_X Annual Trading Program or exemption under 40 CFR 97.405, TR NO_X Ozone Season Trading Program or exemption under 40 CFR 97.505, and TR SO_2 Group 1 Trading Program or exemption under 40 CFR 97.605 shall be construed as exempting or excluding the owners and operators, and the designated representative, of a TR NO_X Annual source or TR NO_X Annual unit, TR NO_X Ozone Season source or TR NO_X Ozone Season unit, and TR SO_2 Group 1 source or TR SO_2 Group 1 unit from compliance with any other provision of the applicable, approved state implementation plan, a federally enforceable permit, or the Clean Air Act.

H.10 Description of TR Monitoring Provisions

The TR subject unit(s) and the unit-specific monitoring provisions at this source are identified in the following table(s). These units are subject to the requirements for the TR NOx Annual Trading Program and TR NOx Ozone Season Trading Program and TR SO2 Group 1 Trading Program.

Unit ID: pulverized coal opposed wall fired dry bottom boiler, identified as MB1					
Parameter	**Continuous emission monitoring system or systems (CEMS) requirements pursuant to 40 CFR part 75, subpart B (for SO_2 monitoring) and 40 CFR part 75, subpart H (for**	**Excepted monitoring system requirements for gas- and oil-fired units pursuant to 40 CFR part 75, appendix D**	**Excepted monitoring system requirements for gas- and oil-fired peaking units pursuant to 40 CFR part 75, appendix E**	**Low Mass Emissions excepted monitoring (LME) requirements for gas- and oil-fired units pursuant to 40 CFR 75.19**	**EPA-approved alternative monitoring system requirements pursuant to 40 CFR part 75, subpart E**

	NO_X monitoring)				
SO_2	**x**		**----------**		
NO_X	**x**	**----------**			
Heat input	**x**		**----------**		

Unit ID: pulverized coal opposed wall fired dry bottom boiler, identified as MB2					
Parameter	**Continuous emission monitoring system or systems (CEMS) requirements pursuant to 40 CFR part 75, subpart B (for SO_2 monitoring) and 40 CFR part 75, subpart H (for NO_X monitoring)**	**Excepted monitoring system requirements for gas- and oil-fired units pursuant to 40 CFR part 75, appendix D**	**Excepted monitoring system requirements for gas- and oil-fired peaking units pursuant to 40 CFR part 75, appendix E**	**Low Mass Emissions excepted monitoring (LME) requirements for gas- and oil-fired units pursuant to 40 CFR 75.19**	**EPA-approved alternative monitoring system requirements pursuant to 40 CFR part 75, subpart E**
SO_2	**x**		**----------**		
NO_X	**x**	**----------**			
Heat input	**x**		**----------**		

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 3, 2017.

The operation of this proposed modification shall be subject to the conditions of the attached Significant Permit Modification No. 147-38415-00020.

The staff recommends to the Commissioner that the Part 70 Significant Permit Modification be approved.

IDEM Contact

(a) Questions regarding this proposed significant permit modification can be directed to Mehul Sura at the Indiana Department Environmental Management, Office of Air Quality, Permits Branch, 100 North Senate Avenue, MC 61-53 IGCN 1003, Indianapolis, Indiana 46204-2251 or by telephone at (317) 233-6868 or toll free at 1-800-451-6027 extension 3-6868.

(b) A copy of the permit 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: http://www.in.gov/idem/airquality/2356.htm; and the Citizens' Guide to IDEM on the Internet at: http://www.in.gov/idem/6900.htm.

PSD analysis summary table.

	tons/year							
	PM	**PM10**	**PM2.5**	SO2	VOC	CO	Nox	H2SO4
Project Emissions - Dry Sorbent Injection (DSI) and Combustion Waste Disposal Activities								
Dry Sorbent Injection (DSI) System								
Truck Traffic	2.39	0.46	0.11					
Unloading and Handling	0.05	0.03	0.12					
Increase in emissions	**2.44**	**0.49**	**0.23**					
Waste Disposal - Ash Handling to Silo								
Baseline	37.13 *	37.13 *	18.57 *					
Future Allowable	58.39	58.39	29.19					
Increase in emissions	**21.26**	**21.26**	**10.62**					
Waste Disposal - Truck Trafic								
Baseline	33.49 *	7.58 *	1.26 *					
Future Allowable	55.19	12.54	2.03					
Increase in emissions	**21.50**	**4.92**	**0.77**					
Waste Disposal - Truck Loading								
Baseline	0.00607 *	0.00287 *	0.00043 *					
Future Allowable	0.01	0.01	0.01					
Increase in emissions	**0.004**	**0.007**	**0.0096**					
Waste Disposal - Landfill Operations								
Baseline	49.92 *	15.03 *	1.88 *					
Future Allowable	63.05	19.04	2.38					
Increase in emissions	**13.13**	**4.01**	**0.50**					
H2SO4 changes - SCR1 and SCR2								
Baseline								75.88 **
Future Allowable								8.02 **
Increase in emissions								0
Project Increase (Total)	**58.33**	**30.68**	**12.13**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**
Contemporaneous emission increases - Activated Carbon Injection (ACI) and Space heater (WHU-11)								
Activated Carbon Injection (ACI) System								
Truck Traffic	*0.36*	*0.07*	*0.02*					
Unloading	*0.08*	*0.05*	*0.01*					
Handling and Fluidizing	*0.99*	*0.64*	*0.10*					
Space heater (WHU-11)	*0.15*	*0.18*	*0.16*					
Contemporaneous increases - (Total)	*1.59*	*0.94*	*0.29*					
Contemporaneous emission decreases - Boilers MB1 and MB2								
Boilers MB1 and MB2								
Baseline	2620	1755.4	759.8					
Future Allowable	2575	1725	746					
Contemporaneous decreases - (Total)	**45.00**	**30.40**	**13.80**					

Baseline Period for all pollutants are July 2012 - June 2014.
* Please refer Appendix B of the TSD for the details of Combustion Waste Disposal Activities baseline PM, PM10 and PM2.5 emission calculations.
** Please refer Appendix C of the TSD for the details of H2SO4 emission calculations.
Future Allowable emissions for the Boilers MB1 and MB2 are based on limit specified in Condition D.1.3.

Uncontrolled PTE Summary

Modification PTE

System/Activity	PM	PM10	PM2.5	SO_2	NO_X	VOC	CO	Combined HAPs
Space heater (WHU-11)	0.15	0.18	0.16	5.33	1.50	0.03	0.38	0.0005
Fugitive Dust Emissions - Truck Traffic - Unit 2		0.23	0.06	-	-	-	-	-
Total PTE	**0.15**	**0.41**	**0.22**	**5.33**	**1.50**	**0.03**	**0.38**	**0.0005**

Space heater (WHU-11)
Commercial/Institutional/Residential Combustors (< 100 mmBtu/hr)
#1 and #2 Fuel Oil

Heat Input Capacity MMBtu/hr	Potential Throughput kgals/year	S = Weight % Sulfur
2.4	150.2	0.5

	Pollutant						
	PM*	PM10**	direct PM2.5***	SO2	NOx	VOC	CO
Emission Factor in lb/kgal	2.0	2.38	2.13	71 *(142.0S)*	20.0	0.34	5.0
Potential Emission in tons/yr	0.15	0.18	0.16	5.33	1.50	0.03	0.38

Methodology
1 gallon of No. 2 Fuel Oil has a heating value of 140,000 Btu
Potential Throughput (kgals/year) = Heat Input Capacity (MMBtu/hr) x 8,760 hrs/yr x 1kgal per 1000 gallon x 1 gal per 0.140 MM Btu
Emission Factors are from AP 42, Tables 1.3-1, 1.3-2, and 1.3-3 (SCC 1-03-005-01/02/03) Supplement E 9/98 (see erata file)
*PM emission factor is filterable PM only.
**PM10 emission factor is filterable PM10 of 1.08 lb/kgal + condensable PM emission factor of 1.3 lb/kgal.
***Direct PM2.5 emission factor is filterable PM2.5 of 0.83 lb/kgal + condensable PM emission factor of 1.3 lb/kgal.
Emission (tons/yr) = Throughput (kgals/ yr) x Emission Factor (lb/kgal)/2,000 lb/ton

Hazardous Air Pollutants (HAPs)

	HAPs - Metals				
	Arsenic	Beryllium	Cadmium	Chromium	Lead
Emission Factor in lb/mmBtu	4.0E-06	3.0E-06	3.0E-06	3.0E-06	9.0E-06
Potential Emission in tons/yr	0.00004	0.00003	0.00003	0.00003	0.00009

	HAPs - Metals (continued)				
	Mercury	Manganese	Nickel	Selenium	
Emission Factor in lb/mmBtu	3.0E-06	6.0E-06	3.0E-06	1.5E-05	
Potential Emission in tons/yr	0.000032	0.00006	0.00003	0.00016	5.2E-04

Methodology
No data was available in AP-42 for organic HAPs.
Potential Emissions (tons/year) = Throughput (mmBtu/hr)*Emission Factor (lb/mmBtu)*8,760 hrs/yr / 2,000 lb/ton

Fugitive Dust Emissions - Truck Traffic - Unit 2

Paved Roads at Industrial Site Indiana Michigan Power d.b.a. American Electric Power (AEP) Rockport Plant

The following calculations determine the amount of emissions created by paved roads, based on 8,760 hours of use and AP-42, Ch 13.2.1 (1/2011).

Vehicle Informtation (provided by source)

Type	Maximum number of vehicles per day	Number of one-way trips per day per vehicle	Maximum trips per day (trip/day)	Maximum Weight Loaded (tons/trip)	Total Weight driven per day (ton/day)	Maximum one-way distance (mi/trip)	Maximum one-way miles (miles/day)	Maximum one-way miles (miles/yr)
Vehicle (entering plant) (one-way trip)	2.7	1.0	2.7	40.3	108.2	0.720	1.9	706.3
Vehicle (leaving plant) (one-way trip)	2.7	1.0	2.7	22.5	60.5	0.720	1.9	706.3
		Totals	**5.4**		**168.7**		**3.9**	**1412.6**

Average Vehicle Weight Per Trip = 31.4 tons/trip
Average Miles Per Trip = 0.72 miles/trip

Unmitigated Emission Factor, Ef = [k * (sL)^0.91 * (W)^1.02] (Equation 1 from AP-42 13.2.1)

	PM	PM10	PM2.5	
where k =	0.011567329	0.002207506	0.000551876	lb/VMT = particle size multiplier (AP-42 Table 13.2.1-1)
W =	31.4	31.4	31.4	tons = average vehicle weight (provided by source)
sL =	12	12	12	g/m^2 = silt loading value for paved roads at iron and steel production facilities - Table 13.2.1-3)

Taking natural mitigation due to precipitation into consideration, Mitigated Emission Factor, Eext = E * [1 - (p/4N)] (Equation 2 from AP-42 13.2.1)

Mitigated Emission Factor, Eext = Ef * [1 - (p/4N)]
where p = 125 days of rain greater than or equal to 0.01 inches (see Fig. 13.2.1-2)
N = 365 days per year

	PM	PM10	PM2.5	
Unmitigated Emission Factor, Ef =	3.731	0.712	0.1780	lb/mile
Mitigated Emission Factor, Eext =	3.412	0.651	0.1628	lb/mile
Dust Control Efficiency =	50%	50%	50%	(pursuant to control measures outlined in fugitive dust control plan)

Process	Mitigated PTE of PM (Before Control) (tons/yr)	Mitigated PTE of PM10 (Before Control) (tons/yr)	Mitigated PTE of PM2.5 (Before Control) (tons/yr)	Mitigated PTE of PM (After Control) (tons/yr)	Mitigated PTE of PM10 (After Control) (tons/yr)	Mitigated PTE of PM2.5 (After Control) (tons/yr)
Vehicle (entering plant) (one-way trip)	1.20	0.23	0.06	0.60	0.11	0.03
Vehicle (leaving plant) (one-way trip)	1.20	0.23	0.06	0.60	0.11	0.03
Totals	**2.41**	**0.46**	**0.11**	**1.20**	**0.23**	**0.06**

Methodology

Total Weight driven per day (ton/day) = [Maximum Weight Loaded (tons/trip)] * [Maximum trips per day (trip/day)]
Maximum one-way distance (mi/trip) = [Maximum one-way distance (feet/trip) / [5280 ft/mile]
Maximum one-way miles (miles/day) = [Maximum trips per year (trip/day)] * [Maximum one-way distance (mi/trip)]
Average Vehicle Weight Per Trip (ton/trip) = SUM[Total Weight driven per day (ton/day)] / SUM[Maximum trips per day (trip/day)]
Average Miles Per Trip (miles/trip) = SUM[Maximum one-way miles (miles/day)] / SUM[Maximum trips per year (trip/day)]
Unmitigated PTE (tons/yr) = [Maximum one-way miles (miles/yr)] * [Unmitigated Emission Factor (lb/mile)] * (ton/2000 lbs)
Mitigated PTE (Before Control) (tons/yr) = [Maximum one-way miles (miles/yr)] * [Mitigated Emission Factor (lb/mile)] * (ton/2000 lbs)
Mitigated PTE (After Control) (tons/yr) = [Mitigated PTE (Before Control) (tons/yr)] * [1 - Dust Control Efficiency]

Abbreviations

PM = Particulate Matter
PM10 = Particulate Matter (<10 um)
PM2.5 = Particle Matter (<2.5 um)
PTE = Potential to Emit

PM, PM10 and PM2.5

2016	Jan	F	M	A	M	J	J	A	S	O	N	D
CEMS Stack Heat Input	7952582.7	6297356.8	4110290	9725980.1	8772349.6	10834255	14282887.3	14179767.8	8138314	10241366.4	10223188.5	13140327
Imputed Emission Rate (lb/MMBt	0.003	0.003	0.003	0.003	0.003	0.002	0.002	0.003	0.004	0.004	0.003	0.003
PM Tons/Month	9.94072838	7.871696	5.1378625	14.1026711	11.84267196	10.834255	14.2828873	22.6876285	15.0558809	18.4344595	16.868261	21.6815396
Rolling 12 Mo Emissions (TPY)	485.097621	426.53073	376.48975	317.681574	225.4897156	146.9565368	136.9671402	137.446295	136.894308	144.374029	154.703777	168.740542

2015	Jan	F	M	A	M	J	J	A	S	O	N	D
CEMS Stack Heat Input	13335209.1	8304823.1	6897356.1	9113855.4	13004316.3	14894572.3	16181522.6	14805649.2	10405245	9128949.1	5448760.2	6115820.1
Imputed Emission Rate (lb/MMBt	0.016	0.016	0.016	0.016	0.016	0.012	0.003	0.003	0.003	0.002	0.002	0.003
PM Tons/Month	106.681673	66.438585	55.178849	72.9108432	104.0345304	89.3674338	24.2722839	22.2084738	15.6078678	10.9547389	6.53851224	7.64477513
Rolling 12 Mo Emissions (TPY)	2127.33051	1981.8575	1725.8601	1529.1727	1459.738149	1285.80077	1059.4769	963.44388	855.16015	736.246815	672.651828	581.838566

2014	Jan	F	M	A	M	J	J	A	S	O	N	D
CEMS Stack Heat Input	15954337.8	11611593.0	17050756.9	14772506.2	9505153.2	14427661.0	13731296.1	14780186.8	15486449.6	16233509.3	8766687.4	12307254.7
Imputed Emission Rate (lb/MMBt	0.037	0.037	0.037	0.037	0.037	0.037	0.037	0.016	0.016	0.016	0.016	0.016
PM Tons/Month	291.166665	211.91157	311.17631	269.598238	173.4690459	263.3048133	250.5961538	118.241494	123.891597	129.868074	70.1334992	98.4580376
Rolling 12 Mo Emissions (TPY)	2806.8	2866.0	3002.5	3113.21466	3107.4	3174.0	3125.0	2975.4	2837.5	2715.6	2515.6	2311.8
Peak 12 Month Average of High 24 Months						3089.6						

2013	Jan	F	M	A	M	J	J	A	S	O	N	D
CEMS Stack Heat Input (MMBtu)	16420836.5	8371136.4	9571472.7	8704636.5	9822683.5	10780454.7	16416949.0	14674313.2	14347574.1	13794022.7	14800305.6	16561608.1
Imputed Emission Rate (lb/MMBt	0.037	0.037	0.037	0.037	0.037	0.037	0.037	0.037	0.037	0.037	0.037	0.037
PM Tons/Month	299.680266	152.77324	174.67938	158.859616	179.2639739	196.7432983	299.6093193	267.806216	261.843227	251.740914	270.105577	302.249348
Rolling 12 Mo Emissions (TPY)	2871.2	2837.1	2928.6	2916.8	2980.8	3005.2	2957.3	2892.5	2847.2	2816.8	2821.3	2815.4

2012	Jan	F	M	A	M	J	J	A	S	O	N	D
CEMS Stack Heat Input	18438974.4	16988515	7561046.8	15517318	10476912.9	15667026.1	19043354.3	18221069.2	16829402.6	15464218.7	14552373	16886034.6
Tested Emission Rate (lb/MMBtu	0.022	0.022	0.022	0.022	0.022	0.022	0.037	0.037	0.037	0.037	0.037	0.037
PM Tons Per Month	202.828718	186.87367	83.171515	170.690493	115.2460419	172.3372871	347.541216	332.534513	307.136597	282.221991	265.580807	308.170131
Rolling 12 Mo Emissions (TPY)												2774.33298

Baseline PM	Baseline PM10	Baseline PM2.5
2620.0	1755.4	759.8

Projected Actual	rojected Actual PM1	Projected Actual PM2.5	
2575	1725	746	based on limit D.1.3

lb/MMBtu PM rates are based on the biennial stack tests required under the Title V Permit for Rockport Plant.
PM10=0.67PM and PM2.5=0.29PM based on AP-42, Table 1.1-6.
Projected Actual emissions are based on limit specified in Condition D.1.3.
Tons Per Month = CEMS Stack Heat Input (MMBtu/month) x Inputed Emission Rate (lb/MMBtu) / 2000 (lbs/ton)

NOx Emissions

Baseline Actual

2016	January	February	March	April	May	June	July	August	September	October	November	December
CEMS Stack Heat Input	7952582.7	6297356.8	4110290	9725980.1	8772349.6	10834255	14282887.3	14179767.8	8138314	10241366.4	10223188.5	13140327
Imputed Emission Rate (lb/MMBtu)	0.20	0.19	0.24	0.24	0.21	0.21	0.22	0.21	0.21	0.23	0.20	0.24
CEMS Stack NOx Tons/Month	782.4	589.3	485.8	1189.5	916.6	1158.3	1583.5	1507.2	856	1184.8	1040.4	1594.4
Rolling 12 Mo Emissions (TPY)	13239.7	12853	12574.4	12744.3	12267.3	11784.9	11497.4	11353.9	11113.4	11353.5	11878.1	12888.2

2015	Jan	F	M	A	M	J	J	A	S	O	N	D
CEMS Stack Heat Input	13335209.1	8304823.1	6897356.1	9113855.4	13004316.3	14894572.3	16181522.6	14805649.2	10405245.2	9128949.1	5448760.2	6115820.1
Imputed Emission Rate (lb/MMBtu)	0.22	0.24	0.22	0.22	0.21	0.22	0.23	0.22	0.21	0.21	0.19	0.19
CEMS Stack NOx Tons/Month	1465.6	976	764.4	1019.6	1393.6	1640.7	1871	1650.7	1096.5	944.7	515.8	584.3
Rolling 12 Mo Emissions (TPY)	19234.7	18797.5	17442.7	16681.6	16938.8	17006.4	17336.9	17211	16480.3	15434.1	14810.2	13922.9

2014	Jan	F	M	A	M	J	J	A	S	O	N	D
CEMS Stack Heat Input	15954337.8	11611593.0	17050756.9	14772506.2	9505153.2	14427661.0	13731296.1	14780186.8	15486449.6	16233509.3	8766687.4	12307254.7
Imputed Emission Rate (lb/MMBtu)	0.25	0.24	0.25	0.24	0.24	0.22	0.22	0.24	0.24	0.25	0.26	0.24
CEMS Stack NOx Tons/Month	1959.5	1413.2	2119.2	1780.7	1136.4	1573.1	1540.5	1776.6	1827.2	1990.9	1139.7	1471.6
Rolling 12 Mo Emissions (TPY)	17356.5	17795.1	18775.8	19622.2	19661.6	20065.8	19791.9	19970.3	20260.4	20731.3	20226.7	19728.6
Peak 12 Month Average of High 24 Months												

2013	Jan	F	M	A	M	J	J	A	S	O	N	D
CEMS Stack Heat Input (MMBtu)	16420836.5	8371136.4	9571472.7	8704636.5	9822683.5	10780454.7	16416949.0	14674313.2	14347574.1	13794022.7	14800305.6	16561608.1
Imputed Emission Rate (lb/MMBtu)	0.22	0.23	0.24	0.21	0.22	0.22	0.22	0.22	0.21	0.22	0.22	0.24
CEMS Stack NOx Tons/Month	1805.1	974.6	1138.5	934.3	1097.0	1168.9	1814.4	1598.2	1537.1	1520.0	1644.3	1969.7
Rolling 12 Mo Emissions (TPY)	21201.9	20169.1	20504.5	19743.1	19680.2	19233.5	18699.2	18157.2	17742.7	17390.7	17284.9	17202.1

2012	Jan	F	M	A	M	J	J	A	S	O	N	D
CEMS Stack Heat Input	18438974.4	16988515.3	7561046.8	15517317.5	10476912.9	15667026.1	19043354.3	18221069.2	16829402.6	15464218.7	14552373	16886034.6
Imputed Emission Rate (lb/MMBtu)	0.24	0.24	0.21	0.22	0.22	0.21	0.25	0.23	0.23	0.24	0.24	0.24
CEMS Stack NOx Tons/Month	2247.5	2007.4	803.1	1695.7	1159.9	1615.6	2348.7	2140.2	1951.6	1872	1750.1	2052.5
Rolling 12 Mo Emissions (TPY)												21644.3

Heat Input (MMBtu	(lb/MMBtu)	Baseline Nox (tons/year)	Actual NOx (tons/year)
12374	0.15		8129.718
12374	0.15		8129.718
		19682.7	16259.436

Baseline emission period is from July 2012-June 2014.

DSI System
PTE for paved roads

The following calculations determine the amount of emissions created by paved roads, based on 8760 hours of use and AP-42, Ch 13.2.1 (Updated, 1/11).

E = [k(sL)^(0.91)*(W)^(1.02)]

E= Emission Factor
K= particle size multiplier
sL= Silt Loading

	PM	PM10	PM2.5	
K=	0.011	0.0022	0.00054	lb/VMT
sL=	12	12	12	g/m^2 from table 13.2.1-3 for concrete batching
W=	31.5	31.5	31.5	tons
E=	3.56	0.71	0.17	lb/mile

Process	Throughput (tons/hr)	Trips/hr[1]	Mile/Trip	Miles/Year[2]	Uncontrolled PTE PM (tons/yr)[3]	Uncontrolled PTE PM10 (tons/yr)[3]	Uncontrolled PTE PM2.5 (tons/yr)[3]	Control Efficiency%	Controlled PTE PM (tons/yr)[4]	Controlled PTE PM10 (tons/yr)[4]	Controlled PTE PM2.5 (tons/yr)[4]
SI-All Units	16.26	0.813	0.88	6267.25	11.73	2.23	0.55	79.6	2.39	0.46	0.11
								Controlled Emissions (lb/1000ton)	33.58	6.39	1.57

Methodology:
Throughput is based on the limit of 142,500 tpy of Sodium Bicarbonate
Truck capacity for SI is 20 tons
[1]Trips/Hour = Throughput (tons/hr)/Truck capacity (tons)
[2]Miles/year = trip/hr*mile/trip*8760 hr/year
[3]Uncontrolled PTE (tons/year) = EF(lb/mile)*Miles/year*ton/2000lbs
[4]Controlled PTE (tons/year) = Uncontrolled PTE (tons/year) * (1-control efficiency/100)
Controls are required as specified in Fugitive Dust Plan

DSI System
PTE for Unload and Handling

Truck unloading into the Silo:

Throughput =	50	tph	per silo	
Throughput =	142,500	tpy =		142.5 kton/yr

Uncontrolled

	PM *	PM10 *	PM2.5 **
Emission Factor (lb/ton)	0.73	0.47	0.0024
		lb/kton	
Emissions (tpy)	52.01	33.49	0.17
Emissions (lb/hr)	36.50	23.50	0.12
For both units (lb/hr)	73.00	47.00	0.24

Controlled (99.9 % control efficiency)

	PM	PM10	PM2.5
Controlled Emission Factor (lb/kton)	0.73	0.47	0.0024
Emissions (tpy)	0.052	0.033	0.0002
Emissions (lb/hr)	0.037	0.024	0.0001
For both units (lb/hr)	0.07300	0.04700	0.00024
	0.730	0.470	0.002

* from Table 11.12-2 in AP-42 (Cement Loading into storage silos)
** Based on samples collected during test conducted in fall of 2011. PM2.5 = 0.005PM10
Controlled Emission Factor (lb/kton) = Emission Factor (lb/ton) * 1000 (ton/kton)*(1-.999)

ACI Paved Roads Emissions

The following calculations determine the amount of emissions created by paved roads, based on 8760 hours of use and AP-42, Ch 13.2.1 (Updated, 1/11).

E = [k(sL)^(0.91)*(W)^(1.02)]

E= Emission Factor
K= particle size multiplier
sL= Silt Loading

	PM	PM10	PM2.5	
K=	0.011	0.0022	0.00054	lb/VMT
sL=	12	12	12	g/m^2 from table 13.2.1-3 for concrete batching
W=	25	25	25	tons
E=	2.81	0.56	0.14	lb/mile

Process	Throughput (tons/hr)	Trips/hr[1]	Mile/Trip	Miles/Year[2]	Uncontrolled PTE PM (tons/yr)[3]	Uncontrolled PTE PM10 (tons/yr)[3]	Uncontrolled PTE PM2.5 (tons/yr)[3]	Control Efficiency%	Controlled PTE PM (tons/yr)[4]	Controlled PTE PM10 (tons/yr)[4]	Controlled PTE PM2.5 (tons/yr)[4]
PAC Delivery truck	4	0.2	0.68	1191.36	1.76	0.34	0.08	79.6	0.36	0.07	0.02
								Controlled emission (lb/1000tons)	20.285	3.864	0.948

Methodology:
Throughput is based on the limit of 35,040 tpy of AC
Truck capacity for AC is 20 tons
[1]Trips/Hour = Throughput (tons/hr)/Truck capacity (tons)
[2]Miles/year = trip/hr*mile/trip*8760 hr/year
[3]Uncontrolled PTE (tons/year) = EF(lb/mile)*Miles/year*ton/2000lbs
[4]Controlled PTE (tons/year) = Uncontrolled PTE (tons/year) * (1-control efficiency/100)

ACI Silo Loading and Transfer to Pressure Tank

Particulate Emissions from Powered Activated Carbon (PAC) Handling and Storage

Emissions are generated when:1) the PAC is loaded into the storage silos from trucks, and 2) when it is transferred to the pressure tank from the storage silos.

LOADING tpy emission

Process Description	Maximum Throughput (tons/yr)	PM Emission Factor * (lbs/ton)	PM10 Emission Factor * (lbs/ton)	PM2.5 Emision Factor (lbs/ton)**	PTE of PM Before Controls (tons/yr)	PTE of PM10 Before Controls (tons/yr)	PTE of PM2.5 Before Controls (tons/yr)	Control Efficiency (%)	PTE of PM After Controls (tons/yr)	PTE of PM10 After Controls (tons/yr)	PTE of PM2.5 After Controls (tons/yr)
Silo Loading and Storage	35,040	0.73	0.47	0.076	12.79	8.23	1.33	99.9%	1.3E-02	8.2E-03	1.3E-03
Pressure Tank Loading	35,040	4.8E-03	2.8E-03	5.0E-04	0.084	0.049	0.009	99.9%	8.41E-05	4.9056E-05	8.76E-06

LOADING lb/hr emissions

Process Description	Maximum Throughput (ton/hr)	PM Emission Factor * (lbs/ton)	PM10 Emission Factor * (lbs/ton)	PM2.5 Emision Factor (lbs/ton)**	PTE of PM Before Controls (lb/hr)	PTE of PM10 Before Controls (lb/hr)	PTE of PM2.5 Before Controls (lb/hr)	Control Efficiency (%)	PTE of PM After Controls (lb/hr)	PTE of PM10 After Controls (lb/hr)	PTE of PM2.5 After Controls (lb/hr)
Silo Loading and Storage	30	0.73	0.47	0.076	21.90	14.10	2.28	99.9%	2.2E-02	1.4E-02	2.3E-03
Pressure Tank Loading	4	4.8E-03	2.8E-03	5.0E-04	0.019	0.011	0.002	99.9%	0.0000192	0.0000112	0.000002

* Emission factors are from AP-42, Chapter 11.12, Table 11.12.2-2
** PM2.5 = 16.25% of PM10 based on data from NORIT Americas, one of the activated carbon suppliers used at Rockport

Methodology
PTE of PM/PM10/PM2.5 Before Controls (tons/yr) = Maximum Yearly Throughput (tons/yr) x PM/PM10 Emission Factor (lbs/ton) x 1 ton/2000 lbs
PTE of PM/PM10/PM2.5 After Controls (tons/yr) = PTE of PM/PM10 Before Controls (tons/yr) x (1 - Control Efficiency %)
PTE of PM/PM10/PM2.5 Before Controls (lb/hr) = Maximum hourly Throughput (ton/hr) x PM/PM10 Emission Factor (lbs/ton)
PTE of PM/PM10/PM2.5 After Controls (lb/hr) = PTE of PM/PM10 Before Controls (lb/hr) x (1 - Control Efficiency %)

Fluidizing air:
*PAC unloading into the 2 Silos **per unit** takes 1168 hrs, the remaining time or (7592 hrs) will be with 500 scfm of fluidizating air on per unit*

PM (tpy) **per unit *** = 2*[500 (sdcfm)*8176 (hr/yr)*60 (min/hr)*0.014 gr/dscf*0.00014286 (lb/gr)] =
981.14 lb/yr or 0.49 tpy or 0.11 lb/hr

* each unit has 2 silos. 1168 hrs is per 2 units. Therefore, the operating hr are 8760 -(1168/2) = 8176 hrs

PM10 (lb/hr) = 0.11 * 0.644 = 0.072 PM2.5 (lb/hr) = 0.072 * 0.162! 0.012
PM10 (tpy) = 0.49 * 0.644 = 0.32 PM2.5 (tpy) = 0.32 * 0.1625 0.051

ACI Silo Loading and Transfer to Pressure Tank

PAC Loading and Transfer PTE Summary

Process Description	PTE of PM Before Controls (tons/yr)	PTE of PM10 Before Controls (tons/yr)	PTE of PM2.5 Before Controls (tons/yr)	Control Efficiency (%)	PTE of PM After Controls (tons/yr)	PTE of PM10 After Controls (tons/yr)	PTE of PM2.5 After Controls (tons/yr)
Silo Loading and Storage	12.79	8.23	1.33	99.9%	1.3E-02	8.2E-03	1.3E-03
Pressure Tank Loading	0.084	0.049	0.009	99.9%	8.41E-05	4.9056E-05	8.76E-06
Fluidizing air	NA	NA	NA		0.98	0.63	0.103
	12.87	**8.28**	**1.34**		**0.99**	**0.64**	**0.10**
	controlled emissions (lb/1000 ton of PAC) *				**56.16**	**36.17**	**5.88**

*** controlled emissions (lb/1000 ton of PAC) = PTE after control (ton/yr)*2000 (lb/ton)/ 35.04 (thousand ton PAC / yr)**

ACI PTE Summary

	Uncontrolled			Controlled		
	PM	PM10	PM2.5	PM	PM10	PM2.5
PAC Delivery Roads	1.76	0.34	0.08	0.36	0.07	0.02
PAC Handling	12.87	8.28	1.34	0.99	0.64	0.10
Total	14.63	8.62	1.42	1.35	0.71	0.12

Baseline Calculations (Baseline period is January 2008 until December 2009)

Dry waste

Unit 1	189,099.50	tons over the baseline period
Unit 2	182,103.20	tons over the baseline period
Total	371,202.70	

Control efficiency on each Silo = 99.9 %

Unit 1 PM emissions 189.10

	Wet waste (conditioned waste)	Dry waste	Uncontrolled emissions	PM emissions (tpy)	PM10 emissions (tpy)	PM2.5 emissions (tpy)
Unit 1	222,470	189099.5	189118.41	18.91	18.91	9.46
Unit 2	214,329	182179.7	182197.87	18.22	18.22	9.11
Total	**436,799**	**371,279**	**371,316**	**37.13**	**37.13**	**18.57**

Dry waste = Wet Waste*(1-0.15) where 15% is the water mixing ratio
uncontrolled emissions = Dry waste/0.9999
PM emissions = uncontrolled emissions - dry waste
PM10 emissions = PM*1 (based on AP-42, table 1.1-6, for fly ash)
PM2.5 emissions = PM*0.5 (based on AP-42, table 1.1-6, for fly ash)

Increase in emission from ash silos
Due to DSI installation and PAC modification

Increase in waste disposed =				212540 tpy
Total waste after the increase				583,742.70 tpy
Contro efficiency =				99.99 %
Controlled emissions from Ash Silos				
PM	21.3	tpy		
PM10	21.3	tpy		
PM2.5	10.6	tpy		
Total emissions after the increase (tpy)	58.39	58.39	29.19	
Total emissions after the increase (lb/1000 ton)	200.04	200.04	100.02	

Where
PM10 emissions = PM*1 (based on AP-42, table 1.1-6, for fly ash)
PM2.5 emissions = PM*0.5 (based on AP-42, table 1.1-6, for fly ash)

Increase in Ash Hauling **Paved** Road Emissions

The source estimates the total increase in the number of trucks = 12503 trucks per year

Process	Number of trucks	Uncontrolled PM emissions (tpy) *	Uncontrolled PM10 emissions (tpy) *	Uncontrolled PM2.5 emissions (tpy) *	Control Efficiency	Controlled PM emissions (tpy)[4]	Controlled PM10 emissions (tpy)[4]	Controlled PM2.5 emissions (tpy)[4]
Unit 1	6377	25.0	4.8	1.2	79.6	5.11	0.97	0.24
Unit 2	6126	24.0	4.6	1.1	79.6	4.91	0.93	0.23
Total	12503.00	49.08	9.35	2.29	159.20	10.20	1.91	0.47
				Total controlled emissions after increase (tpy)		28.02	5.30	1.30
				Total controlled emissions after increase (lb/1000 ton)		81.58	15.44	3.79

*Emissions are calculated based on the number of trucks compared to 11,124 trucks for unit 1 and 10,716 trucks for for unit 2

[4]Controlled PTE (tons/year) = Uncontrolled PTE (tons/year) * (1-control efficiency/100)

Increase in Fugitive Emissions from **Unpaved** Roads

Unpaved Roads
Loaded Trucks
According to AP-42, Chapter 13.2.2 - Unpaved Roads (11/06), the PM/PM10/PM2.5 emission factors for unpaved roads can be estimated from the following equation:

Method: Ef= k * [(s/12)^a] * [(W/3)^b]

where:	k=	4.9	(Particle size multiplier) (k = 4.9 for PM, k = 1.5 for PM10, k = 0.15 for PM2.5)
	s=	6.0	mean % silt content of unpaved roads
	a=	0.7	Empirical constant (a = 0.7 for PM, a = 0.9 for PM10 and PM2.5)
	b=	0.45	Empirical constant (b = 0.45 for PM and PM10)
	W=	25	tons average vehicle weight

PM Emission Factor (loaded trucks) = $(4.9 \times (6.0/12)^{0.7} \times (35/3)^{0.45}) \times ((365 - 120)/365)$ = 7.83 lbs/mile

PM10 Emission Factor (loaded trucks) = $(1.5 \times (6.0/12)^{0.9} \times (35/3)^{0.45 \times} ((365 - 120)/365)$ = 2.09 lbs/mile

PM2.5 Emission Factor (loaded trucks) = $(0.15 \times (6.0/12)^{0.9} \times (35/3)^{0.45 \times} ((365 - 120)/365)$ = 0.21 lbs/mile

Length of Unpaved Roads in One Direction = 0.25 miles

Fugitive Emissions from Unpaved Roads

Potential to Emit (PTE) of PM/PM10 Before Control from Loaded Trucks on Unpaved Roads:
Throughput: 250,060 tons/year

Vehicle Type	Maximum Trucks Per Year	Average Vehicle Weight (tons)	Total Trip Number (trips/yr)	Traffic Component (%)	Vehicle Mile Traveled (VMT) (miles/yr)	PTE of PM (tons/yr)	PTE of PM10 (tons/yr)	PTE of PM2.5 (tons/yr)
Truck - loaded	12,503	25	12,503	100.0%	3,126	12.24	3.26	0.33
						21.38	5.70	0.57
Empty Trucks						21379.9246	5697.645	569.7645
According to AP-42, Chapter 13.2.2 - Unpaved Roads (11/06), the PM/PM10/PM2.5 emission factors for unpaved roads can be estimated from the following equation:						0.03112768	0.008295	0.00083

Method: Ef = k * [(s/12)^a] * [(W/3)^b]

where:	k =	4.9	(Particle size multiplier) (k = 4.9 for PM, k = 1.5 for PM10, k = 0.15 for PM2.5)
	s =	6.0	mean % silt content of unpaved roads
	a =	0.7	Empirical constant (a = 0.7 for PM a = 0.9 for PM10 and PM2.5)
	b =	0.45	Empirical constant (b = 0.45 for PM and PM10)
	W =	5	tons average vehicle weight

Fugitive Emissions from Unpaved Roads

PM Emission Factor (trucks) =	$(4.9 \times (6.0/12)^{0.7} \times (15/3)^{0.45})$ =	3.80	lbs/mile
PM10 Emission Factor (trucks) =	$(1.5 \times (6.0/12)^{0.9} \times (15/3)^{0.45}$ =	1.01	lbs/mile
PM2.5 Emission Factor (loaded trucks) =	$(0.15 \times (6.0/12)^{0.9} \times (15/3)^{0.45}$ =	0.10	lbs/mile
	Length of Unpaved Roads in One Direction =	0.25	miles

Potential to Emit (PTE) of PM/PM10 Before Control from Empty Trucks on Unpaved Roads:
Throughput: 436,800 tons/year

Vehicle Type	Maximum Trucks Per Year	Average Vehicle Weight	Total Trip Number	Traffic Component	Vehicle Mile Traveled (VMT)	PTE of PM	PTE of PM10	PTE of PM2.5
		(tons)	(trips/yr)	(%)	(miles/yr)	(tons/yr)	(tons/yr)	(tons/yr)
Truck - empty	21,840	5	21,840	100.0%	5,460	10.36	2.76	0.28

Vehicle Type	PM (uncontrolled)	PM (controlled)	PM10 (uncontrolled)	PM10 (controlled)	PM2.5 (uncontrolled)	PM2.5 (controlled)
	(tons/yr)	(tons/yr)	(tons/yr)	(tons/yr)	(tons/yr)	(tons/yr)
Loaded Trucks	12.24	6.12	3.26	1.63	0.33	0.16
Empty Trucks	10.36	5.18	2.76	1.38	0.28	0.14
Total for Trucks on Unpaved Roads	22.60	11.30	6.02	3.01	0.60	0.30
Total controlled emissions after the increase (tpy)				27.17	7.24	0.72
Total controlled emissions after the increase (lb/1000 tons))				79.12	21.09	2.11

Methodology
PTE of PM/PM10/PM2.5 (tons/yr) =
Vehicle Miles Traveled (mi/yr) x PM/PM10 Emission Factor (lbs/mi) x 1 ton/2,000 lbs
Control Efficiency = 50%

Increase in Fugitive Emissions from Paved and Unpaved Roads

	Uncontrolled			Controlled		
	PM	**PM10**	**PM2.2**	**PM**	**PM10**	**PM2.5**
Paved Roads	49.08	9.35	2.29	10.20	1.91	0.47
Unpaved Roas	22.60	6.02	0.60	11.30	3.01	0.30
Total	71.69	15.37	2.90	21.50	4.92	0.77

Total controlled emissions after the increase (tpy)	55.19	12.54	2.03
Total controlled emissions after the increase(lb/1000 ton)	160.70	36.52	5.90

Disposal Actvities

Emissions can be described by the overburden equations for bulldozer operations and grader operations found in Table 11.9-1 of Section 11.9 in AP-42[19].

For the D-6 dozer and the roller:

$PM = (5.7 * s^{1.2})/M^{1.3} = (5.7 * 15^{1.2})/12^{1.3} = 146.96 / 25.29 = 5.81$ lb/hr

$PM_{10} = 0.75 * ((1.0 * s^{1.5})/M^{1.4}) = 0.75 * ((1.0 * 15^{1.5})/12^{1.4}) = 0.75 * 1.79 =$ 1.34 lb/hr

$PM_{2.5} = PM * 0.105 = 5.81 * 0.105 = 0.61$ lb/hr

Where

s = silt content, taken to be 15% due to wetting
M = Material moisture content, taken to be 12% to account for drying of the material in transit and during placement.

It is assumed that the operation of the dozer will increase by 1 hour per day and the operation of the roller will increase by 2 hours per day for 260 days per year.

The operation of the 12 Caterpillar road grader will increase by 1 hour per day for 260 days per year traveling an average of 7 mph. The equations to describe the emissions from the grader operation are as follow:

$PM = 0.040 * S^{2.5} = 0.040 * 7.1^{2.5} = 5.37$ lb/VMT

$PM_{10} = 0.60 * (0.051 * S^{2.0}) = 0.60 * (0.051 * 7.1^{2.0}) = 1.54$ lb/VMT

$PM_{2.5} = TSP * 0.031 = 5.37 * 0.031 = 0.167$ lb/VMT

Where

S = mean wind speed, taken to be 7.1 mph based on 2010 Evansville Airport data.

The water truck emissions will be described by the unpaved road equations, with an average weight of 25.75 tons. Half of the miles will be considered operated at full weight and the remaining miles will be considered operated at minimum weight. We will estimate this vehicle travels at ten miles per hour and its operation will increase by 1 hours per day five days per week for 260 days per year as shown below:

For PM:

$E_{PMl} = (4.9 * (15/12)^{0.7}) * (36.5/3)^{0.45} = 5.73 * 3.07 = 17.59$ lb/VMT = 22.867 tpy

$E_{PMe} = (4.9 * (15/12)^{0.7}) * (15/3)^{0.45} = 5.73 * 2.06 = 11.80$ lb/VMT = 15.34 tpy

Average = 19.10 tpy

For PM_{10}:

$E_{pm10l} = (1.5 * (15/12)^{0.9}) * (36.5/3)^{0.45} = 1.83 * 3.07 = 5.62$ lb/VMT = 7.306

$E_{pm10e} = (1.5 * (15/12)^{0.9}) * (15/3)^{0.45} = 1.83 * 2.06 = 3.77$ lb/VMT = 4.901

Average= 6.10 tpy

For $PM_{2.5}$:

$E_{pm25l} = (0.15 * (15/12)^{0.9}) * (36.5/3)^{0.45} = 0.18 * 3.07 = 0.56$ lb/VMT = 0.728 tpy

$E_{pm25e} = (0.15 * (15/12)^{0.9}) * (15/3)^{0.45} = 0.18 * 2.06 = 0.37$ lb/VMT = 0.481 tpy

Average = 0.60

The emissions in tons per year attributable to the operation of the landfill are shown bellow. We will assume that wetting of the material being placed and the pozzolanic properties of the material will result in a 50% control factor.

Baseline landfill operating emissions by equipment type and unit in tons per year.

	Uncontrolled Emissions			Controlled Emissions at 50% Control		
	TSP	PM_{10}	$PM_{2.5}$	TSP	PM_{10}	$PM_{2.5}$
Dozer	0.76	0.17	0.08	0.38	0.09	0.04
Roller	1.51	0.35	0.16	0.76	0.17	0.08
Grader	4.89	1.40	0.15	2.44	0.70	0.08
Water Truck	19.10	6.10	0.60	9.55	3.05	0.30
Total (TPY)	26.26	8.03	0.99	13.13	4.01	0.50
Total emissions after increase (tpy)				63.05	19.04	2.38
Total emissions after increase (lb/1000 ton)				183.59	55.45	6.92

6.2.1.1 Calculations

In order to determine the increases or decreases in emissions from the handling and disposal of the combustion waste stream, it is necessary to establish the baseline conditions. The baseline period for waste disposal is established by looking at the amount of material disposed of at the plant for the period January 1, 2012 through December 31, 2016 in accordance with the other PM calculations performed for this project. Table 6 shows the monthly coal combustion waste disposal for the plant aggregated into running 12 month averages based on the conditioned ash being hauled to the landfill. The 24 month period from July 2012 to June 2014 was used to establish the baseline value of 437,708 tons per year of conditioned combustion waste for the plant as a whole and is highlighted in Table 6. This is an increase of 909 tons of conditioned combustion waste disposed of from the amount determined for the DSI Permit Application.

The ash handling and disposal process uses a pneumatic system to move the ash in a dry state from the electrostatic precipitators to the ash storage silos. At the ash storage silos, the ash is removed from the pneumatic transport air by filter separators and dropped into the silos. Air moving into and out of the silos as the ash levels change due to the loading or unloading of ash to/from the silo passes through static pressure bin vent filters that remove ash from the air exiting the silo. When the ash is removed from the silo for disposal it flows through a pin mixer where approximately 15% by weight water is added to the ash for dust control and purposes of disposal. The ash is then loaded into 20 ton trucks via a chute for transport to the landfill. The trip from the plant averages 4.56 miles on paved plant roadways and 0.5 miles on unpaved surfaces in the landfill. Based on the 12 month peak average established for the 2012 to 2016 period, 21,886 truck trips would be required to dispose of the waste at 20 tons per trip.

To determine the baseline ash emitted in the transport air moving the dry ash from the electrostatic precipitator to the silo, which after going through the filter separator is released to the ambient air, the 15% moisture added to the ash as it is loaded into the trucks for disposal must be removed from the total tonnage identified in Table 6. This conversion results in a 12 month average value of 372,052 tons of dry combustion waste being placed in the various ash silos at the plant during the baseline period.

Table 6. Monthly conditioned ash disposal at the landfill for Rockport Plant from 2012 to 2016 with Baseline Period highlighted.

	January	February	March	April	May	June	July	August	September	October	November	December
2016												
Plant Tons	24035	19137	13087	24932	28357	33709	46200	62677	32601	27120	38808	36521
12 Month Cumulative Plant Tons	344436	344386	338744	340813	331506	324338	326552	347236	349170	343696	366698	387184
!2 Month Avg of 24 Months	393225	388484	362741	358537	358296	352380	357340	371289	364979	359319	366403	369480
2015												
Plant Tons	31374	19187	18729	22863	37664	40877	43986	41993	30667	32594	15806	16035
12 Month Cumulative Plant Tons	442014	432581	386738	376261	385085	380422	388128	395341	380788	374942	366108	351775
!2 Month Avg of 24 Months	405556	404497	404113	406560	413945	421580	423424	425919	422064	420138	414045	404679
2014												
Plant Tons	46943	28620	64572	33340	28840	45540	36280	34780	45220	38440	24640	30368
12 Month Cumulative Plant Tons	369097	376413	421488	436858	442804	462738	458720	456497	463340	465333	461981	457583
!2 Month Avg of 24 Months	416855	412349	434909	434534	431762	437708	431802	425743	428627	426008	417675	410452
2013												
Plant Tons	41166	21304	19497	17970	22894	25606	40298	37003	38377	36447	27992	34766
12 Month Cumulative Plant Tons	464613	448284	448330	432210	420719	412677	404883	394989	393913	386682	373368	363320
!2 Month Avg of 24 Months												415035
2012												
Plant Tons	43302	37633	19451	34090	34385	33648	48092	46897	39453	43678	41306	44814
12 Month Cumulative Plant Tons												466749

Based on design criteria, the filter separator strings on each silo are designed to operate at 99.99% removal of ash from the transport air. This means that up to 0.01% of the ash removed from the precipitator hoppers may be discharged with the transport air after passing through the filter separator strings. Based on PM, this results in the following emissions from each unit, spread over the four silos serving each unit for a total of eight ash silos serving both units:

$Plant_{total}$ = 372,052 / 0.9999 = 372,089 TPY
$Plant_{PMemission}$ = 372,089 – 372,052 = 37 TPY

Since this material is essentially all fly ash, the AP-42 emission factor ratios for fly ash emissions should apply to this material. Based on Table 1.1-6 in AP-42[4], these emission factor ratios are as follow:

PM_{10} to PM = 0.02A / 0.02A = 1.0
$PM_{2.5}$ to PM = 0.01A / 0.02A = 0.5

Adjusting the emitted PM values per unit for PM_{10} and $PM_{2.5}$ as shown above generates the following values for emissions from the transport air used to move the ash into the silos:

Plant $PM_{10emissions}$ = 37 TPYPM * 1.0 = 37 TPY
Plant $PM_{2.5emissions}$ = 37 TPYPM * 0.5 = 18.5 TPY

Once the material is in the silos, it is then conditioned with approximately 15% water by weight as it is loaded into 20 ton dump trucks for hauling to the landfill. The total fugitive emissions from these trucks can be described by the following calculations and assumptions:

Loaded Weight – 25 Tons

Empty Weight – 5 Tons
Average Weight – 15 Tons
14 Wheels
4.64 miles round trip distance for Unit 2 on paved surfaces
4.48 miles round trip distance for Unit 1 on paved surfaces
0.25 miles distance traveled at each weight on unpaved surfaces
Silt loading on paved road surface[5] – 12 g/m^2
Constant k_p[6] – 5.24 g/VMT for PM, 1.0 g/VMT for PM_{10}, and 0.25 g/VMT for $PM_{2.5}$
Constant k_u[7] – 4.9 lb/VMT for PM, 1.5 lb/VMT for PM_{10}, and 0.15 for $PM_{2.5}$
Constant a[8] – 0.7 for PM, 0.9 for PM_{10} and $PM_{2.5}$
Constant b[9] – 0.45 for PM, PM_{10}, and $PM_{2.5}$
Silt loading on unpaved road surface[10] – 6.0%

For the paved roads on which the ash hauling trucks travel, this generates the following emission factors in g/VMT using Equation 1 from AP-42 Section 13.2.1[11]:

$$E = (k_p \text{ X } (\text{silt loading})^{0.91}) \text{ X } (\text{Avg. Weight})^{1.02}$$

For TSP:

$E_{tsp} = (5.24 * (12)^{0.91}) * (15)^{1.02} = 50.28 * 15.83 = 795.93$ g/VMT

For PM_{10}:

$E_{pm10} = (1.0 * (12)^{0.91}) * (15)^{1.02} = 9.60 * 15.83 = 151.97$ g/VMT

For $PM_{2.5}$:

$E_{pm25} = (0.25 * (12)^{0.91}) * (15)^{1.02} = 2.40 * 15.83 = 37.99$ g/VMT

Baseline assumes that there are 21,886 trucks hauling conditioned waste from the plant for 4.56 miles on paved plant roads. From this we obtain the uncontrolled emissions in tons/year shown in Table 7 from the following equation:

$$EM \text{ (Tons)} = ((E * 4.48 * 21{,}886) / 453.59) / 2000$$

Emission control is currently managed via wetting the roads and sweeping as needed, which allows a control efficiency of 79.6% based on IDEM guidance supplied in September 2011.

Table 7. Baseline Paved Road Emissions from Ash Disposal Trucks in Tons/Year.

	Uncontrolled	**Controlled at**

		79.6%
PM	86.02	17.55
PM_{10}	16.43	3.35
$PM_{2.5}$	4.11	0.84

For the unpaved surfaces at the landfill on which all the trucks will travel, this generates the following emission factors in lb/VMT using Equation 1 from AP-42 Section 13.2.2.

$$E = (k_u * (\text{silt loading}/12)^a) * (\text{Weight}/3)^b$$

For PM:

$E_{tspl} = (4.9 * (6/12)^{0.7}) * (25/3)^{0.45} = 3.02 * 2.60 = 7.85$ lb/VMT

$E_{tspe} = (4.9 * (6/12)^{0.7}) * (5/3)^{0.45} = 3.02 * 1.26 = 3.80$ lb/VMT

For PM_{10}:

$E_{pm10l} = (1.5 * (6/12)^{0.9}) * (25/3)^{0.45} = 0.80 * 2.60 = 2.08$ lb/VMT

$E_{pm10e} = (1.5 * (6/12)^{0.9}) * (5/3)^{0.45} = 0.80 * 1.26 = 1.01$ lb/VMT

For $PM_{2.5}$:

$E_{pm25l} = (0.15 * (6/12)^{0.9}) * (25/3)^{0.45} = 0.08 * 2.60 = 0.21$ lb/VMT

$E_{pm25e} = (0.15 * (6/12)^{0.9}) * (5/3)^{0.45} = 0.08 * 1.26 = 0.10$ lb/VMT

Baseline assumes that there are 21,886 trucks hauling conditioned waste from the plant per year traveling on unpaved surfaces at the landfill. From the above equations and the following, we obtain the estimated emissions in tons/year:

$$EM\ (Tons) = ((E_l * 0.25 * 21{,}886) + (E_e * 0.25 * 21{,}885))/2000$$

Emission control on the unpaved surfaces will be via watering as needed to minimize dust during dry conditions resulting in a 50% control factor. Total uncontrolled and controlled emissions from the unpaved road operations at the landfill are shown in Table 8.

Table 8. Baseline unpaved surface emissions from ash hauling at the landfill in Tons/Year.

	Loaded	**Empty**	**Total Uncontrolled**	**Total Controlled at 50%**
PM	21.48	10.40	31.88	15.94

PM_{10}	5.69	2.76	8.45	4.23
$PM_{2.5}$	0.57	0.27	0.84	0.42

The total annual controlled baseline fugitive emissions from truck traffic hauling the waste to the landfill and returning to the plant is shown in Table 9.

Table 9. Baseline controlled roadway fugitive emissions from ash haul trucks in Tons/Year.

	Paved Controlled	**Unpaved Controlled**	**Total**
PM	17.55	15.94	33.49
PM_{10}	3.35	4.23	7.58
$PM_{2.5}$	0.84	0.42	1.26

In addition to the actual truck traffic hauling the ash to the landfill, fugitive dust is created by the loading of the trucks at the silos located at the plant, dumping of the trucks at the landfill, the operation of machinery to place the ash in its final resting place and to compact the ash.

The loading of the conditioned ash and the dumping of the conditioned ash at the landfill can be described by the following equation from Section 13.2.4 of AP-42[13]:

$$E = (k*0.0032)*(((U/5)^{1.3})/((M/2)^{1.4}))$$

where

E = emission factor in lb/Ton of material handled
k = particle size multiplier of 0.74 for TSP, 0.35 for PM_{10}, and 0.053 for $PM_{2.5}$
U = mean wind speed in mph
M = material moisture content

In the case of Rockport Plant, the closest National Weather Service station from which we can obtain an annual wind speed is the airport in Evansville, Indiana. For the year 2016 the average annual wind speed is 7.1 mph based on the Evansville Airport 3505 dataset. The moisture of the material being handled is approximately 15% by weight at the discharge of the pin mixers which discharge into the dump trucks. These parameters give the following uncontrolled emission factors for the handling of the conditioned ash:

$$E_{PM} = (0.74*0.0032)*(((7.1/5)^{1.3})/((15/2)^{1.4})) = 0.00022 \text{ lb/Ton}$$

$$E_{PM10} = (0.35*0.0032)*(((7.1/5)^{1.3})/((15/2)^{1.4})) = 0.00011 \text{ lb/Ton}$$

$$E_{PM2.5} = (0.053*0.0032)*(((7.1/5)^{1.3})/((15/2)^{1.4})) = 0.00002 \text{ lb/Ton}$$

Based on these emission factors, the estimated uncontrolled emissions from handling the conditioned ash at the silos and again in dumping it from the truck at the landfill is shown in Table 10**.** Emission controls being used are the wetting done in the pin mixers that

makes the conditioned waste material into a thick damp material and the inherent shielding of the truck loading operation by the silo and the drop chute used in loading. The shielding and drop chute are assumed to reduce truck loading emissions by 75% and the moisture in the material is assumed to reduce emissions by 90%. This gives a combined 97.5% reduction for truck loading operations and a 90% reduction over uncontrolled levels for the dumping of the material at the landfill.

Table 10. Baseline truck emissions for combustion waste loading and unloading in tons/year.

	Uncontrolled			**Controlled**		
	PM	**PM10**	**PM2.5**	**PM**	**PM10**	**PM2.5**
Truck Loading	0.048	0.024	0.004	<0.001	<0.001	<0.001
Truck Unloading	0.048	0.024	0.004	0.005	0.002	0.001
Total	0.096	0.048	0.008	0.006	0.003	0.001

Emissions associated with the final placement and compaction of the conditioned waste material can be described by the overburden equations for bulldozer operations and grader operations found in Table 11.9-1 of Section 11.9 in AP-42[14]. We believe that the overburden equations are appropriate since the ash is handled in a wet state and is compacted into place within a short time after being placed. In addition, the high percentage of Powder River Basin coal ash in the mixture has a pozzolanic characteristic that causes it to harden as it dries out. This hardening characteristic leads to minimal material being loose on the surface and available to blow off in the wind or when driven over. The equations we will be using to describe the operation of the D-6 dozer and roller used to compact the material with the emissions reported in lb/hr of operation:

$$PM = (5.7 * s^{1.2})/M^{1.3} = (5.7 * 15^{1.2})/12^{1.3} = 146.96 / 25.29 = 5.81 \text{ lb/hr}$$

$$PM_{10} = 0.75 * ((1.0 * s^{1.5})/M^{1.4}) = 0.75 * ((1.0 * 15^{1.5})/12^{1.4}) = 0.75 * 1.79 = 1.34 \text{ lb/hr}$$

$$PM_{2.5} = TSP * 0.105 = 5.81 * 0.105 = 0.61 \text{ lb/hr}$$

Where

s = silt content, taken to be 15% due to wetting
M = Material moisture content, taken to be 12% to account for drying of the material in transit and during placement.
It is assumed that the dozer operates an average of 7 hours per day and the roller operates an average of 4 hours per day for 260 days per year.

In addition to the D-6 dozer and roller used at the landfill, there is a size 12 Caterpillar road grader in use 7 hours per day for 260 days per year traveling an average of 7 mph

and a 5000 gallon four wheeled water truck used to wet the ash as required. The equations to describe the emissions from the grader operation are as follow:

$PM = 0.040 * S^{2.5} = 0.040 * 7.1^{2.5} = 5.37$ lb/VMT

$PM_{10} = 0.60 * (0.051 * S^{2.0}) = 0.60 * (0.051 * 7.1^{2.0}) = 1.54$ lb/VMT

$PM_{2.5} = TSP * 0.031 = 5.37 * 0.031 = 0.167$ lb/VMT

Where

S = mean wind speed, taken to be 7.1 mph based on 2016 Evansville Airport data.

The water truck emissions will be described by the unpaved road equations previously discussed for a vehicle with four wheels weighing a minimum of 15 tons and a maximum of 36.5 tons, with an average weight of 25.75 tons. Half of the miles will be considered operated at full weight and the remaining miles will be considered operated at minimum weight. Conservatively, we will estimate this vehicle travels at ten miles per hour and operates three hours per day five days per week for 260 days per year as shown below:

For TSP:

$E_{pml} = (4.9 * (15/12)^{0.7}) * (36.5/3)^{0.45} = 5.73 * 3.07 = 17.59$ lb/VMT

$E_{pme} = (4.9 * (15/12)^{0.7}) * (15/3)^{0.45} = 5.73 * 2.06 = 11.80$ lb/VMT

For PM_{10}:

$E_{pm10l} = (1.5 * (15/12)^{0.9}) * (36.5/3)^{0.45} = 1.83 * 3.07 = 5.62$ lb/VMT

$E_{pm10e} = (1.5 * (15/12)^{0.9}) * (15/3)^{0.45} = 1.83 * 2.06 = 3.77$ lb/VMT

For $PM_{2.5}$:

$E_{pm25l} = (0.15 * (15/12)^{0.9}) * (36.5/3)^{0.45} = 0.18 * 3.07 = 0.56$ lb/VMT

$E_{pm25e} = (0.15 * (15/12)^{0.9}) * (15/3)^{0.45} = 0.18 * 2.06 = 0.37$ lb/VMT

The emissions in tons per year attributable to the operation of the landfill are shown in Table 11. It is assumed that wetting of the material being placed and the pozzolanic properties of the material will result in a 50% control factor.

Table 11. Baseline landfill operating emissions by equipment type and unit in tons per year.

	Uncontrolled Emissions	**Controlled Emissions at**

				50% Control		
	PM	**PM_{10}**	**$PM_{2.5}$**	**PM**	**PM_{10}**	**$PM_{2.5}$**
Dozer/Roller	8.31	1.92	0.87	4.15	0.96	0.44
Grader	34.21	9.81	1.06	17.11	4.91	0.53
Water Truck	57.31	18.31	1.81	28.66	9.16	0.91
Total (TPY)	87.78	26.71	3.20	49.92	15.03	1.88

The total controlled emissions from the baseline operating conditions described in this section are shown in Table 12 in tons per year.

Table 12. Total controlled baseline landfill related emissions in tons per year.

Activity	**PM**	**PM10**	**PM2.5**
Ash Handling to Silo	37.00	37.00	18.50
Trucking to Landfill	33.49	7.58	1.26
Truck Loading and Unloading	0.006	0.003	0.001
Landfill Operations	49.92	15.03	1.88
Total	120.42	59.61	21.64

Since the changes attributable to the ash handling and landfill modification portion of the combined project have not reached an independent baseline point at the time of this application, the changes attributable to this portion of the project, shown in Tables 14, 15, and 16 include the same incremental increases for the handling and disposal of coal combustion waste shown the application that resulted in the issuance of the Title V Permit Modification 147-32899-00020 per direction given by IDEM Management .In addition, the major changes to the ACI System and the DSI system installed concurrently with these changes also have not reached a baseline point under the IDEM Guidance making their baselines zero. Additionally, the Unit 1 SCR System has not been fully constructed at the time of this application. Subsequently the particulate emissions attributable to that change remain at zero.

6.3 Sulfuric Acid Mist Emission Changes

6.3.1 Emission Analysis

Sulfuric acid mist is a minor constituent of the flue gas on both units. However, there will be a change in the emission of H_2SO_4 from Unit 2 due to the installation of the SCR. Unit 1, began operations of its SCR during the second half of 2017, was evaluated as part of its Permit Revision issued on February 20, 2015 as Significant Permit Modification 147-34888-00020 and will be operating as projected in that application at the time the Unit 2 SCR begins operation, with the exception of the changes to the anhydrous ammonia storage system described in this application. The changes to the anhydrous ammonia system will have no impact on the H_2SO_4 generation in the steam generator and SCR Systems on the two units once the Unit 2 SCR enters service. The Dry Sorbent Injection (DSI) Systems on both Units 1 and 2 installed under Significant Permit Modification 147-32899-00020 were placed into operation by mid-2015 to remove acid gasses and in addition to reducing HCl as required by the Mercury and Air Toxics Rule (MATS) will have an impact on the amount of H_2SO_4 emitted from each unit and ultimately the combined stack.

The most reliable estimator of sulfuric acid mist is used in the preparation of the Toxic Release Inventory (TRI) reports, which are based on emissions on a January to December basis. We will use the methodology used in calculating the H_2SO_4 reported in the TRI reports for the period 2012 – 2016. The sulfuric acid mist emissions reported in the TRI are calculated using the EPRI methodology[16], which takes into account fuel types and control equipment installed on the unit. The basic EPRI equation for the amount of H_2SO_4 Mist generated in combustion, as implemented for Rockport Plant, is as follows:

H_2SO_4 Mist = K * F1 * E2 (7)

Where

K = Molecular weight and units conversion constant, equal to 3,063. This value is derived as follows: 98.07/64.04 ∗ 2000 = 3,063. Here, 98.07 is the molecular weight of H_2SO_4; 64.04 is the molecular weight of SO_2; conversion from tons per year to pounds per year requires multiplying by 2000.

F1 = Fuel Impact Factor (0.0018 for subbituminous coal, 0.0082 for eastern low sulfur bituminous, 0.011 for eastern medium and high sulfur coal, and 0.00254 for the Rockport fuel blend)

E2 = Sulfur dioxide (SO_2) emissions, calculated from coal burn data, tons/yr with a 0.875 sulfur retention credit for the Rockport blend. The underlying data for this factor is shown in Table 17 below.

Once we have the above factors we can compute the annual combustion formed H_2SO_4 Mist for coal using the above equation, the result of which is shown in Table 18 below. The values in Table 18 may differ slightly from the TRI reported values due to rounding differences based in the systems used in calculating the TRI data versus the manual method used for performing these computations:

Table 17. Unit 1 and Unit 2 Uncontrolled SO_2 Calculations for H_2SO_4 Mist determination (Factor E2).

Year	Unit 1				Unit 2			
	Tons Coal	Coal BTU/lb	Coal %S	Tons SO_2	Tons Coal	Coal BTU/lb	Coal %S	Tons SO_2
2012	5186369	8952	0.27	28006.39	5057177	8951	0.28	28320.19
2013	5220029	8868	0.31	32364.18	3619316	8735	0.31	22439.76
2014	4696507	8894	0.34	31936.25	4403300	8868	0.33	29061.78
2015	3344841	8862	0.31	20742.69	3732794	8851	0.31	23143.32
2016	3045493	8874	0.30	18272.96	3605709	8819	0.30	21634.25

Table 18. H_2SO_4 Mist generated by coal combustion in each unit by year in pounds per year using Equation 7.

Year	Unit 1	Unit 2
2012	190,653.99	192,790.19
2013	220,319.72	152,759.06
2014	217,406.58	197,838.58
2015	141,206.23	157,548.56
2016	124,393.50	147,275.54

The amount of H_2SO_4 Mist actually emitted from the baseline condition is adjusted then by various factors for control devices, the air heater and electrostatic precipitator, using the following equation:

$$H_2SO_4\ Mist_{emitted} = H_2SO_4\ Mist_{gen} * CF\ 1 * CF2 * CF3 \quad (8)$$

Where

Control Factor 1 (CF1) relates to the removal of H_2SO_4 Mist in the air heater. The control factors for this removal are 0.49 for low sulfur bituminous coal, 0.85 for high sulfur bituminous coal, and 0.56 for subbituminous coal. For the Rockport fuel blend the factor used is 0.55.

Control Factor 2 (CF2) relates to the removal of H_2SO_4 Mist in the cold side electrostatic precipitator. The control factors for this removal are 0.49 for low sulfur bituminous, 0.77 for high sulfur bituminous, and 0.73 for subbituminous coal. For the Rockport fuel blend, the factor used is 0.694.

Control Factor 3 (CF3) relates to the removal of H_2SO_4 Mist from the flue gas by the Dry Sorbent Injection Systems that entered service in December 2014 (Unit 2) and April 2015 (Unit 1). The EPRI methodology recommends using 0.2 for the DSI Control Factor when DSI is operational. Since the system was being started up in 2015, we will use a control factor of 0.3 for 2015 and then the full 0.2 factor for 2016. This is being applied only to the coal portion of the H_2SO_4 Mist.

Table 19 shows the estimated annual H_2SO_4 Mist emitted from Rockport Plant based on coal combustion for each unit in both pounds and tons.

Table 19. H_2SO_4 Mist emitted by coal combustion in each unit by year in pounds per year and tons per year.

Year	Unit 1		Unit 2	
	Pounds	**Tons**	**Pounds**	**Tons**
2012	72772.62	36.39	73588.02	36.79
2013	84096.04	42.04	58308.13	29.15
2014	82984.09	41.49	75514.99	37.76
2015	16169.53	8.08	18040.89	9.02
2016	9496.20	4.75	11243.01	5.62

In order to establish the baseline for H_2SO_4 Mist it is necessary to add in the small amount of H_2SO_4 Mist from the combustion of fuel oil in the main steam generators. In lieu of calculating the emissions, we will use the reported TRI values for oil combustion for the period 2012 to 2015. The 2016 value is not yet available. As a surrogate for the 2016 values, the individual unit H_2SO_4 Mist oil values used for 2016 are identical to 2015 due to the similarities in unit operation between the two years. Table 20 shows the unit by unit values for coal, oil, and total annual tons of H_2SO_4 Mist along with the plant totals from the main steam generators.

Table 20. Baseline H_2SO_4 Mist by unit and plant in tons per year.

Year	Unit 1			Unit 2			Plant Tons
	Coal Tons	**Oil Tons**	**Unit Total**	**Coal Tons**	**Oil Tons**	**Unit Total**	
2012	36.39	0.22	36.61	36.79	0.28	37.07	73.68
2013	42.04	0.29	42.33	29.15	0.39	29.54	71.78
2014	41.49	0.31	41.80	37.76	0.40	38.16	79.96
2015	8.08	0.46	8.54	9.02	0.50	9.52	18.06
2016	4.75	0.46*	5.21	5.62	0.50*	6.12	11.33

* Estimated based on similarity to 2015 fuel oil characteristics and unit capacity factors.

Based on the information in Table 20, the peak 24 month baseline emission of H_2SO_4 Mist of 75.88 tons per year from both units is based on the average of 2013 and 2014 data.

For the H_2SO_4 Mist emissions following the construction of both the Unit 1 and Unit 2 SCR projects, the addition of the SCR will slightly increase the H_2SO_4 Mist from the amount generated by the steam generator on each unit due to the impact of the low reactivity catalyst on the SO_2 in the flue gas. H_2SO_4 Mist will then be removed from the flue gas by the Dry Sorbent Injection (DSI) System that will become operational in 2015 for compliance with the MATS Rule and the minor amount of ammonia slip from the SCR. For purposes of this analysis, we will assume a default control factor of 0.2 (80% removal) for the DSI System based on the EPRI Methodology being employed[17] for this

calculation since we do not have objective test based information on impact the DSI system will have on the emission of H_2SO_4 Mist. For purposes of this analysis, fuel consumption for both units will be based on the current 85/15 subbituminous to bituminous fuel blend that will remain unchanged and be calculated based on a 100% capacity factor and a 0.75 lb/MMBtu emission rate.

Since SCR will be operating on both Units following the project being covered by this application, and the fuel blend is not expected to change from the range it has been in over the past few years. Using the fuel data for both units from 2012 to 2016 shown in Table 17 as an average, we find that the likely BTU value of the fuel blend used on both units will be approximately 8867 BTU/lb with a sulfur content of 0.31%. Using a 100% capacity factor and the average coal characteristics previously described, based on the design heat input of 12,374 MMBtu/hr, each unit is estimated to consume 6,112,340.1 tons of blended coal.

Following the installation of the SCR on both units, the calculation of projected H_2SO_4 Mist emissions are somewhat more complex due to the addition of the SCR that will increase the generation of H_2SO_4 Mist via the catalytic reaction of SO_2 in the SCR Reactor and the removal of some H_2SO_4 Mist via its reaction with the ammonia slip from the SCR. These changes result in differences in coefficients and the addition of the formation of H_2SO_4 Mist in the SCR that must be added onto the amount of H_2SO_4 Mist created formed in the main steam generator, prior to estimating the capture of the H_2SO_4 Mist via the various mechanisms that are in play on a unit equipped with an SCR and DSI. Equation 9, shows this more detailed calculation of the evolution of H_2SO_4 Mist in the steam generator following the addition of SCR. as follows:

$$H_2SO_4\ Mist_{generated} = (K * F1 * E2) + (K * S2 * f_{sops} * E2) \quad (9)$$

Where

K = 3063
F1 =0.00254 for the Rockport fuel blend as defined earlier.
E2 = based on the design coal blend of 0.75 lb/MMBtu SO_2 emission rate with a 8867 BTU value, at 100% capacity factor based on the total fuel consumption for Unit 1 is calculated to be 6,112,340.1 tons, and a 0.875 sulfur retention factor, the amount of SO_2 generated by each unit is estimated to be 33,159.45 tons per year of SO_2.
S2 = catalyst oxidation rate. Based on the use of low oxidation catalyst, this is estimated at 0.1% or 0.001.
f_{sops} = 0.98 for year round operation

This generates the following for the generation of H_2SO_4 Mist in the combustion process and SCR for both units:

H_2SO_4 Mist = ((3063 * 0.00254 * 33,159.45) + (3063 ∗ 0.001 ∗ 0.98 ∗ 33,159.45)) * 2 = (257,981.16 + 99,536.05) * 2 = 715,034.42 lb/yr generated by both units

H_2SO_4 Mist is then removed from the flue gas through three processes. The first process is the consumption of H_2SO_4 Mist by the ammonia slip in the SCR and should be applied only to the H_2SO_4 Mist generated in the SCR, based on the EPRI Methodology. The remaining H_2SO_4 Mist from both sources is then reduced by control factors for the air heater and the use of the DFGD system via the following equations:

$$H_2SO_4\ Mist_{emitted} = (715{,}034.42 - (K_s * B * f_{sreagent} * S_{NH3}))* F2_{AH}* F2_{DSI} \qquad (10)$$

Where

K_s = conversion factor of 3799
B = coal burn in TBtu/yr, for this case 216.79 TBtu/yr
$f_{sreagent}$ = portion of year SCR operated with coal fire and ammonia injection, taken to be 0.95 for base load operation, based on the EPRI Methodology.
S_{NH3} = average ammonia slip over time, taken to be 0.75 ppmv over the catalyst guarantee period for SCR.
$F2_{AH}$ = Air Heater control factor taken to be 0.55 as described earlier.
$F2_{DSI}$ = The default DSI control factor is given as 0.2

This gives us the following calculation for H_2SO_4 Mist emitted from both units adjusting for the H_2SO_4 Mist captured in the SCR by the ammonia slip prior to the flue gas going through the air heater and DSI System.

$H_2SO_4\ Mist_{emitted}$ = (715,034.42 – (3799 * 216.79 ∗ 0.95 * 0.75))* 0.55 * 0.2 = (715,034.42 – 586,804.46) * 0.55 * 0.2 = 14105.30 lb/yr => 7.05 TPY

Table 21 shows the projected total H_2SO_4 Mist for the project following the completion of the SCR installation on Unit 2. The values in this table are based on an annual capacity factor to 100% on both units, along with adding the peak oil generated H_2SO_4 Mist emissions for the period 2012 – 2015 used in the baseline calculations of 0.46 TPY for Unit 1 and 0.50 TPY for Unit 2. This gives a projected future emission level of 8.02 TPY for H_2SO_4 Mist from both units. The baseline calculated for H_2SO_4 Mist was 75.88 TPY for both units based on the average of 2013 and 2014 emissions, resulting in a projected decrease in emissions even if the units are operated at 100% capacity factors. The PSD trigger level for H_2SO_4 Mist is an increase over baseline of 7 TPY. Since there is a projected decrease in H_2SO_4 Mist following the completion of this project when compared to the baseline, PSD is not triggered for H_2SO_4 Mist.

6.3.2 Proposed Enforceable Limitations and Compliance Demonstration

Since PSD is not triggered at a 100% capacity factor with no H_2SO_4 Mist specific emission controls imposed, other than those that exist for other independent reasons (Consent Decree, etc.) with their own existing operational requirements, it is not necessary to impose any specific limitations on H_2SO_4 Mist.

Table 21. Projected future emissions of H_2SO_4 Mist based on a 100% Capacity Factor.

	100% Cap Factor Uncontrolled SO_2 Emissions (Tons)	**100% Cap Factor Uncontrolled H_2SO_4 Formation (lb)**	**100% Cap Factor Controlled H_2SO_4 Emissions (Tons)**	**Maximum Oil Generated H_2SO_4 2011 -2015 (Tons)**	**Total 100% Cap Factor H2SO4 Projected Emissions (Tons)**
Unit 1	33,159.45	257,981.16	3.53	0.46	3.99
Unit 2	33,159.45	257,981.16	3.53	0.50	4.03
Plant Total					8.02

7.0 CONCLUSION

Based on the preceding information on the changes attributable to the installation of the SCR and associated systems on Unit 2 and the PSD analyses in Table 20 (75.88 tons per year baseline emission of H_2SO_4 Mist) and Table 21 (8.02 tons per year projected emission of H_2SO_4 Mist) of this document, it has been demonstrated that the installation of an SCR on Unit 2, as described in this application, will not trigger PSD and may be permitted as a Significant Source/Permit Modification under the provisions of 326 IAC 2-7-10.5(g)(3)(A).

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

March 21, 2018

Mr. John LaGrange
Indiana Michigan Power dba AEP – Rockport
2791 N. US Highway 231
Rockport, IN 47635

Re: Public Notice
Indiana Michigan Power dba AEP - Rockport
Permit Level: Title V–Significant Permit Modification
Permit Number: 147-38415-00020

Dear Mr. LaGrange:

Enclosed is a copy of your draft Title V-Significant Permit Modification, Technical Support Document, emission calculations, and the Public Notice which will be printed in your local newspaper.

The Office of Air Quality (OAQ) has prepared two versions of the Public Notice Document. The abbreviated version will be published in the newspaper, and the more detailed version will be made available on the IDEM's website and provided to interested parties. Both versions are included for your reference. The OAQ has requested that The Journal Democrat in Rockport, Indiana publish the abbreviated version of the public notice no later than March 28, 2018. You will not be responsible for collecting any comments, nor are you responsible for having the notice published in the newspaper.

OAQ has submitted the draft permit package to the Spencer County Public Library, 210 Walnut Street in Rockport, Indiana 47635. As a reminder, you are obligated by 326 IAC 2-1.1-6(c) to place a copy of the complete permit application at this library no later than ten (10) days after submittal of the application or additional information to our department. We highly recommend that even if you have already placed these materials at the library, that you confirm with the library that these materials are available for review and request that the library keep the materials available for review during the entire permitting process.

Please review the enclosed documents carefully. This is your opportunity to comment on the draft permit and notify the OAQ of any corrections that are needed before the final decision. Questions or comments about the enclosed documents should be directed to Mehul Sura, Indiana Department of Environmental Management, Office of Air Quality, 100 N. Senate Avenue, Indianapolis, Indiana, 46204 or call (800) 451-6027, and ask for extension 3-3838or dial (317) 233-3838.

Sincerely,

Vicki Biddle

Vicki Biddle
Permits Branch
Office of Air Quality

Enclosures
PN Applicant Cover Letter 1/9/2017

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

ATTENTION: PUBLIC NOTICES, LEGAL ADVERTISING

March 21, 2015

The Journal Democrat
P. O. Box 6
Rockport, IN 47635

Enclosed, please find one Indiana Department of Environmental Management Notice of Public Comment for Indiana Michigan Power Company d/b/a American Electric Power (AEP), Rockport Plant in Spencer County, Indiana.

Since our agency must comply with requirements which call for a Notice of Public Comment, we request that you print this notice one time, no later than March 28, 2018.

Please send a notarized form, clippings showing the date of publication, and the billing to the Indiana Department of Environmental Management, Accounting, Room N1345, 100 North Senate Avenue, Indianapolis, Indiana, 46204.

To ensure proper payment, please reference account # 100174737.

We are required by the Auditor's Office to request that you place the Federal ID Number on all claims. If you have any conflicts, questions, or problems with the publishing of this notice or if you do not receive complete public notice information for this notice, please call Vicki Biddle at 800-451-6027 and ask for extension 3-6867or dial 317-233-6867.

Sincerely,

Vicki Biddle

Vicki Biddle
Permit Branch
Office of Air Quality

Permit Level: Title V – Significant Permit Modification
Permit Number: 147-38415-00020

Enclosure

PN Newspaper Letter 1/9/2017

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

March 21, 2018

To: Spencer County Public Library

From: Jenny Acker, Branch Chief
Permits Branch
Office of Air Quality

Subject: **Important Information to Display Regarding a Public Notice for an Air Permit**

Applicant Name: Indiana Michigan Power dba AEP– Rockport Plant
Permit Number: 147-38415-00020

Enclosed is a copy of important information to make available to the public. This proposed project is regarding a source that may have the potential to significantly impact air quality. Librarians are encouraged to educate the public to make them aware of the availability of this information. The following information is enclosed for public reference at your library:

- Notice of a 30-day Period for Public Comment
- Request to publish the Notice of 30-day Period for Public Comment
- Draft Permit and Technical Support Document

You will not be responsible for collecting any comments from the citizens. Please refer all questions and request for the copies of any pertinent information to the person named below.

Members of your community could be very concerned in how these projects might affect them and their families. **Please make this information readily available until you receive a copy of the final package.**

If you have any questions concerning this public review process, please contact Joanne Smiddie-Brush, OAQ Permits Administration Section at 1-800-451-6027, extension 3-0185. Questions pertaining to the permit itself should be directed to the contact listed on the notice.

Enclosures
PN Library 1/9/2017

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

Notice of Public Comment

March 21, 2018
Indiana Michigan Power Co. d/b/a/ American Electric Power – Rockport Plant
145-38415-00020

Dear Concerned Citizen(s):

You have been identified as someone who could potentially be affected by this proposed air permit. The Indiana Department of Environmental Management, in our ongoing efforts to better communicate with concerned citizens, invites your comment on the draft permit.

Enclosed is a Notice of Public Comment, which has been placed in the Legal Advertising section of your local newspaper. The application and supporting documentation for this proposed permit have been placed at the library indicated in the Notice. These documents more fully describe the project, the applicable air pollution control requirements and how the applicant will comply with these requirements.

If you would like to comment on this draft permit, please contact the person named in the enclosed Public Notice. Thank you for your interest in the Indiana's Air Permitting Program.

Please Note: *If you feel you have received this Notice in error, or would like to be removed from the Air Permits mailing list, please contact Patricia Pear with the Air Permits Administration Section at 1-800-451-6027, ext. 3-6875 or via e-mail at PPEAR@IDEM.IN.GOV. If you have recently moved and this Notice has been forwarded to you, please notify us of your new address and if you wish to remain on the mailing list. Mail that is returned to IDEM by the Post Office with a forwarding address in a different county will be removed from our list unless otherwise requested.*

Enclosure
PN AAA Cover Letter 1/9/2017

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

AFFECTED STATE NOTIFICATION OF PUBLIC COMMENT PERIOD
DRAFT INDIANA AIR PERMIT

March 21, 2018

A 30-day public comment period has been initiated for:

Permit Number: 147-38415-00020
Applicant Name: Indiana Michigan Power Co. d/b/a AEP – Rockport
Plant Location: Rockport, Spencer County, Indiana

The public notice, draft permit and technical support documents can be accessed via the **IDEM Air Permits Online** site at:
http://www.in.gov/ai/appfiles/idem-caats/

Questions or comments on this draft permit should be directed to the person identified in the public notice by telephone or in writing to:

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

Questions or comments regarding this email notification or access to this information from the EPA Internet site can be directed to Chris Hammack at chammack@idem.IN.gov or (317) 233-2414.

Mail Code 61-53

IDEM Staff	VBIDDLE 3/21/2018 Indiana Michigan Power d/b/a AEP-Rockport 147-38415-00020 DRAFT			AFFIX STAMP HERE IF USED AS CERTIFICATE OF MAILING
Name and address of Sender	▶	Indiana Department of Environmental Management Office of Air Quality – Permits Branch 100 N. Senate Indianapolis, IN 46204	Type of Mail: **CERTIFICATE OF MAILING ONLY**	

Line	Article Number	Name, Address, Street and Post Office Address	Postage	Handing Charges	Act. Value (If Registered)	Insured Value	Due Send if COD	R.R. Fee	S.D. Fee	S.H. Fee	Rest. Del. Fee Remarks
1		John LaGrange INDIANA MICHIGAN POWER DBA AEP ROCKPORT 2791 N US Hwy 231 Rockport IN 47635 (Source CAATS)									
2		Ms. Francis Lueken 223 W. 10th Street, P.O. Box 206 Ferdinand IN 47532 *(Affected Party)*									
3		Lester Purviance 2687 East CR 600 North Grandview IN 47615 *(Affected Party)*									
4		Richard & Betty Michel 2222 E. County Rd 700 N. Grandview IN 47615 *(Affected Party)*									
5		Mr. Tim Duncan 7499 N. CR 200 E. Grandview IN 47615 *(Affected Party)*									
6		Mr. Ferman Yearby III 313 Elm Rockport IN 47635 *(Affected Party)*									
7		Rockport City Council and Mayors Office P.O. Box 151 Rockport IN 47635 *(Local Official)*									
8		Mr. Don Mottley Save Our Rivers 6222 Yankeetown Hwy Boonville IN 47601 *(Affected Party)*									
9		Ms. Kathy Tretter Dubois-Spencer Counties Publishing Co, Inc P.O. Box 38 Ferdinand IN 47532-0038 *(Affected Party)*									
10		Mr. Steve Sisley 4410 E State Road Grandview IN 47615 *(Affected Party)*									
11		Spencer County Commissioners 200 Main St., Courthouse Rockport IN 47635 *(Local Official)*									
12		Spencer County Health Department Main Street Courthouse, 1st Floor, Room 1 Rockport IN 47635-1492 *(Health Department)*									
13		Mr. Mark Wilson Evansville Courier & Press P.O. Box 268 Evansville IN 47702-0268 (Affected Party)									
14		Spencer County Public Library 210 Walnut St. Rockport IN 47635 *(Library)*									
15		David Boggs 216 Western Hills Dr Mt Vernon IN 47620 *(Affected Party)*									

Total number of pieces Listed by Sender	Total number of Pieces Received at Post Office	Postmaster, Per (Name of Receiving employee)	
15			The full declaration of value is required on all domestic and international registered mail. The maximum indemnity payable for the reconstruction of nonnegotiable documents under Express Mail document reconstructing insurance is $50,000 per piece subject to a limit of $50, 000 per occurrence. The maximum indemnity payable on Express mil merchandise insurance is $500. The maximum indemnity payable is $25,000 for registered mail, sent with optional postal insurance. See ***Domestic Mail Manual*** **R900, S913**, and **S921** for limitations of coverage on inured and COD mail. See ***International Mail Manual*** for limitations o coverage on international mail. Special handling charges apply only to Standard Mail (A) and Standard Mail (B) parcels.

FACSIMILIE OF PS Form 3877

Mail Code 61-53

IDEM Staff	VBIDDLE 3/21/2018 Indiana Michigan Power d/b/a AEP-Rockport 147-38415-00020 DRAFT		AFFIX STAMP HERE IF USED AS CERTIFICATE OF MAILING
Name and address of Sender	▶	Indiana Department of Environmental Management Office of Air Quality – Permits Branch 100 N. Senate Indianapolis, IN 46204	Type of Mail: **CERTIFICATE OF MAILING ONLY**

Line	Article Number	Name, Address, Street and Post Office Address	Postage	Handing Charges	Act. Value (If Registered)	Insured Value	Due Send if COD	R.R. Fee	S.D. Fee	S.H. Fee	Rest. Del. Fee Remarks
1		John 800 Adams Ave Evansville IN 47713 (Affected Party)									
2		Erin Whalen Earthjustice 1617 John F. Kennedy Blvd., Ste. 1130 Philadelphia PA 19103 *(Affected Party)*									
3		Shannon Fisk Earthjustice 1617 John F. Kennedy Blvd., Ste. 1130 Philadelphia PA 19103 *(Affected Party)*									
4		Anthony Raduazo Sierra Club Environmental Law Program 2101 Webster Street, Ste. 1250 Oakland CA 94612-3050 *(Affected Party)*									
5											
6											
7											
8											
9											
10											
11											
12											
13											
14											
15											

Total number of pieces Listed by Sender	Total number of Pieces Received at Post Office	Postmaster, Per (Name of Receiving employee)	
4			The full declaration of value is required on all domestic and international registered mail. The maximum indemnity payable for the reconstruction of nonnegotiable documents under Express Mail document reconstructing insurance is $50,000 per piece subject to a limit of $50, 000 per occurrence. The maximum indemnity payable on Express mil merchandise insurance is $500. The maximum indemnity payable is $25,000 for registered mail, sent with optional postal insurance. See ***Domestic Mail Manual*** **R900, S913**, and **S921** for limitations of coverage on inured and COD mail. See ***International Mail Manual*** for limitations o coverage on international mail. Special handling charges apply only to Standard Mail (A) and Standard Mail (B) parcels.

FACSIMILIE OF PS Form 3877