



Joseph E. Kernan  
Governor

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Commissioner

July 7, 2004

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www.in.gov/idem

TO: Interested Parties / Applicant  
RE: PSI - Gibson / 051-7175-00013  
FROM: Paul Dubenetzky  
Chief, Permits Branch  
Office of Air Quality

### Notice of Decision: Approval – Effective Immediately

Please be advised that on behalf of the Commissioner of the Department of Environmental Management, I have issued a decision regarding the enclosed matter. Pursuant to IC 13-15-5-3, this permit is effective immediately, unless a petition for stay of effectiveness is filed and granted, and may be revoked or modified in accordance with the provisions of IC 13-15-7-1.

If you wish to challenge this decision, IC 4-21.5-3-7 and IC 13-15-6-1(b) or IC 13-15-6-1(a) require that you file a petition for administrative review. This petition may include a request for stay of effectiveness and must be submitted to the Office of Environmental Adjudication, 100 North Senate Avenue, Government Center North, Room 1049, Indianapolis, IN 46204.

For an **initial Title V Operating Permit**, a petition for administrative review must be submitted to the Office of Environmental Adjudication within **thirty (30)** days from the receipt of this notice provided under IC 13-15-5-3, pursuant to IC 13-15-6-1(b).

For a **Title V Operating Permit renewal**, a petition for administrative review must be submitted to the Office of Environmental Adjudication within **fifteen (15)** days from the receipt of this notice provided under IC 13-15-5-3, pursuant to IC 13-15-6-1(a).

The filing of a petition for administrative review is complete on the earliest of the following dates that apply to the filing:

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

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

- (1) the name and address of the person making the request;
- (2) the interest of the person making the request;
- (3) identification of any persons represented by the person making the request;
- (4) the reasons, with particularity, for the request;
- (5) the issues, with particularity, proposed for considerations at any hearing; and

- (6) identification of the terms and conditions which, in the judgment of the person making the request, would be appropriate in the case in question to satisfy the requirements of the law governing documents of the type issued by the Commissioner.

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

To petition the U.S. EPA to object to the issuance of a Title V operating permit, contact:

U.S. Environmental Protection Agency  
401 M Street  
Washington, D.C. 20406

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

# PART 70 OPERATING PERMIT OFFICE OF AIR QUALITY

## PSI Energy, Inc. - Gibson Generating Station S.R. 64 W & C.R. 975 Owensville, Indiana 47665

(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.: T051-7175-00013	
Issued by: Original Signed by Janet G. McCabe, Assistant Commissioner Office of Air Quality	Issuance Date: July 7, 2004 Expiration Date: July 7, 2009

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**Certification**

**Emergency Occurrence Report**

**Quarterly Deviation and Compliance Monitoring Report**

**Appendix A: Acid Rain Permit**

## 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(15)] [326 IAC 2-7-1(21)]

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The Permittee owns and operates a stationary electric utility generating station.

Responsible Official: Station Manager of the Gibson Generating Station  
Source Address: S.R. 64 W & C.R. 975, Owensville, Indiana 47570  
Mailing Address: c/o Steven Pearl, 1000 East Main Street, Plainfield, Indiana 46168  
Source Telephone: (317) 838-1758  
SIC Code: 4911  
County Location: Gibson  
Source Location Status: Attainment or unclassifiable for all criteria pollutants  
Source Status: Part 70 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(15)]

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

- (a) One (1) dry bottom, pulverized coal-fired boiler, identified as Boiler No. 1, construction commenced prior to August 17, 1971, with a nominal heat input capacity of 5875 million Btu per hour (MMBtu/hr), with an electrostatic precipitator (ESP) for control of particulate matter, and to be equipped with Selective Catalytic Reduction (SCR) for control of NO<sub>x</sub> during the ozone season, and exhausting to stack A. Stack A has continuous emissions monitors (CEMs) for nitrogen oxides (NO<sub>x</sub>) and sulfur dioxide (SO<sub>2</sub>) and a continuous opacity monitor (COM).
- (b) One (1) dry bottom, pulverized coal-fired boiler, identified as Boiler No. 2, construction commenced prior to August 17, 1971, with a nominal heat input capacity of 5875 million Btu per hour (MMBtu/hr), with an electrostatic precipitator (ESP) for control of particulate matter, and to be equipped with Selective Catalytic Reduction (SCR) for control of NO<sub>x</sub> during the ozone season, and exhausting to stack A. Stack A has continuous emissions monitors (CEMs) for nitrogen oxides (NO<sub>x</sub>) and sulfur dioxide (SO<sub>2</sub>) and a continuous opacity monitor (COM).
- (c) One (1) dry bottom, pulverized coal-fired boiler, identified as Boiler No. 3, construction commenced prior to August 17, 1971, with a nominal heat input capacity of 5897 million Btu per hour (MMBtu/hr), with a flue gas conditioning system and an electrostatic precipitator (ESP) for control of particulate matter, and to be equipped with Selective Catalytic Reduction (SCR) for control of NO<sub>x</sub> during the ozone season, and exhausting to stack B. Stack B has continuous emissions monitors (CEMs) for nitrogen oxides (NO<sub>x</sub>) and sulfur dioxide (SO<sub>2</sub>) and a continuous opacity monitor (COM).
- (d) One (1) dry bottom, pulverized coal-fired boiler, identified as Boiler No. 4, construction commenced prior to August 17, 1971, with a nominal heat input capacity of 5897 million

Btu per hour (MMBtu/hr), with an electrostatic precipitator (ESP) for control of particulate matter, and to be equipped with Selective Catalytic Reduction (SCR) for control of NO<sub>x</sub> during the ozone season, with a flue gas desulfurization (FGD) system for control of sulfur dioxide, and exhausting to stack D during normal operations, and exhausting to Stack B during startup, shutdown, or other periods when the FGD is not in operation. Stack D has continuous emissions monitors (CEMs) for nitrogen oxides (NO<sub>x</sub>) and sulfur dioxide (SO<sub>2</sub>) and Boiler 4 has a continuous opacity monitor (COM).

- (e) One (1) dry bottom, pulverized coal-fired boiler, identified as Boiler No. 5, installed in 1982, with a nominal heat input capacity of 5900 million Btu per hour (MMBtu/hr), with an electrostatic precipitator (ESP) for control of particulate matter, and to be equipped with Selective Catalytic Reduction (SCR) for control of NO<sub>x</sub> during the ozone season, with a flue gas desulfurization (FGD) system for control of sulfur dioxide, and exhausting to stack C. Stack C has continuous emissions monitors (CEMs) for nitrogen oxides (NO<sub>x</sub>) and sulfur dioxide (SO<sub>2</sub>) and Boiler 5 has a continuous opacity monitor (COM).
- (f) A coal transfer system, with a nominal throughput of 6,000 tons of coal per hour, consisting of the following equipment:
  - (1) Two (2) railcar unloading stations, each with a drop point to a hopper identified as DP-5 and DP-25, with the drop point controlled by a partial enclosure, and exhausting to the ambient air.
  - (2) Two (2) active piles, each with a drop point to a hopper identified as DP-1 and DP-16, with each drop point enclosed and controlled by a baghouse, and exhausting to the ambient air.
  - (3) Three (3) storage piles, having an estimated combined storage capacity including the active piles of 4,000,000 tons, with fugitive emissions controlled by watering trucks.
  - (4) Four (4) enclosed hoppers, each with a drop point to conveyors identified as DP-2, DP-6, DP-17 and DP-26, with each drop point enclosed and controlled by a baghouse, and exhausting to the ambient air.
  - (5) An enclosed conveyor system, with 18 drop points identified as DP-3, DP-4, DP-7 through DP-15, and DP-18 through DP-24, with each drop point enclosed and controlled by a baghouse, excluding the two (2) active pile conveyors which have the drop points (DP-18 and DP-22) controlled by telescopic chutes, and exhausting to the ambient air.
  - (6) Five (5) enclosed coal bunkers, each with a nominal capacity of 15,000 tons of coal. Bunkers are loaded via a conveyor tripper system with a total capacity of 3,000 tons per hour to the units 1 and 2 bunkers, and 3,000 tons per hour to the units 3, 4 and 5 bunkers. Particulate matter generated from loading bunkers is controlled with a baghouse, and exhausts to the ambient air.
- (g) A limestone processing system, consisting of the following equipment:
  - (1) One (1) unloading station for trucks or railcar, with a drop point to a hopper identified as LSDP-1 with a nominal throughput of 2,500 tons of limestone per hour, with the drop point controlled by a partial enclosure, and exhausting to the ambient air.
  - (2) Two (2) enclosed hoppers, each with a drop point to conveyors identified as

LSDP-2 and LSDP-5 with a nominal throughput of 200 tons of limestone per hour, with each drop point enclosed and controlled by a baghouse, and exhausting to the ambient air.

- (3) One (1) storage pile, with a nominal storage capacity of 50,000 tons, with a drop point to a hopper identified as LSDP-4, with the drop point enclosed and exhausting to the ambient air.
- (4) An enclosed conveyor system, with four (4) drop points identified as LSDP-3 and LSDP-8 through LSDP-10, with each drop point enclosed and controlled by a baghouse, and exhausting to the ambient air.
- (5) One (1) enclosed hammermill, with a drop point to a conveyor identified as LSDP-6, with the drop point enclosed and controlled by a baghouse, and exhausting to the ambient air.
- (6) Two (2) day bins for temporary storage of limestone, with a nominal loading capacity of 150 tons per hour, with dust from loading the bins controlled by bin vent filters, and exhausting to the ambient air.

A.3 Specifically Regulated Insignificant Activities [326 IAC 2-7-1(21)] [326 IAC 2-7-4(c)]  
[326 IAC 2-7-5(15)]

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

- (a) Grinding and machining operations controlled with fabric filters, scrubbers, mist collectors, wet collectors and electrostatic precipitators with a design grain loading of less than or equal to 0.03 grains per actual cubic foot and a gas flow rate less than or equal to 4000 actual cubic feet per minute, including the following: deburring; buffing; polishing; abrasive blasting; pneumatic conveying; and woodworking operations.[326 IAC 6-3-2]
- (b) Conveyors as follows: [326 IAC 6-3]
  - (1) Covered conveyor for coal or coke conveying of less than or equal to 360 tons per day;
  - (2) Covered conveyors for limestone conveying of less than or equal to 7,200 tons per day for sources other than mineral processing plants constructed after August 31, 1983;
  - (3) Underground conveyors.
- (c) Coal bunker and coal scale exhausts and associated dust collector vents. [326 IAC 6-3]

A.4 Part 70 Permit Applicability [326 IAC 2-7-2]

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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); and
- (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]**

This permit 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.3 Enforceability [326 IAC 2-7-7]**

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

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

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

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

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

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

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

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

(a) The Permittee shall furnish to IDEM, OAQ, within a reasonable time, any information that IDEM, OAQ, may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit, or to determine compliance with this permit. The submittal by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34). Upon request, the Permittee shall also furnish to IDEM, OAQ, copies of records required to be kept by this permit.

(b) For information furnished by the Permittee to IDEM, OAQ, the Permittee may include a claim of confidentiality in accordance with 326 IAC 17.1. When furnishing copies of requested records directly to U. S. EPA, the Permittee may assert a claim of confidentiality in accordance with 40 CFR 2, Subpart B.

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

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

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

- (c) A responsible official is defined at 326 IAC 2-7-1(34).

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

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

Indiana Department of Environmental Management  
Compliance Branch, Office of Air Quality  
100 North Senate Avenue, P. O. Box 6015  
Indianapolis, Indiana 46206-6015

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; and
  - (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).

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

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

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- (a) If required by specific condition(s) in Section D of this permit, the Permittee shall prepare and maintain Preventive Maintenance Plans (PMPs) within ninety (90) days after issuance of this permit, including the following information on each facility:
- (1) Identification of the individual(s) responsible for inspecting, maintaining, and repairing emission control devices;

- (2) A description of the items or conditions that will be inspected and the inspection schedule for said items or conditions; and
- (3) Identification and quantification of the replacement parts that will be maintained in inventory for quick replacement.

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

Indiana Department of Environmental Management  
Compliance Branch, Office of Air Quality  
100 North Senate Avenue, P. O. Box 6015  
Indianapolis, Indiana 46206-6015

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

- (b) The Permittee shall implement the PMPs, including any required record keeping, as necessary to ensure that failure to implement a PMP does not cause or contribute to an exceedance of any limitation on emissions.
- (c) A copy of the PMPs shall be submitted to IDEM, OAQ upon request and within a reasonable time, and shall be subject to review and approval by IDEM, OAQ. IDEM, OAQ, may require the Permittee to revise its PMPs whenever lack of proper maintenance causes or is the primary contributor to an exceedance of any limitation on emissions.

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

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

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

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

OAQ, within four (4) daytime business hours after the beginning of the emergency, or after the emergency was discovered or reasonably should have been discovered;

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

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

Indiana Department of Environmental Management  
Compliance Branch, Office of Air Quality  
100 North Senate Avenue, P. O. Box 6015  
Indianapolis, Indiana 46206-6015

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

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

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

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

- (6) The Permittee immediately took all reasonable steps to correct the emergency.
- (c) In any enforcement proceeding, the Permittee seeking to establish the occurrence of an emergency has the burden of proof.
  - (d) This emergency provision supersedes 326 IAC 1-6 (Malfunctions). This permit condition is in addition to any emergency or upset provision contained in any applicable requirement.
  - (e) IDEM, OAQ, may require that the Preventive Maintenance Plans required under 326 IAC 2-7-4-(c)(9) be revised in response to an emergency.
  - (f) Failure to notify IDEM, OAQ, by telephone or facsimile of an emergency lasting more than one (1) hour in accordance with (b)(4) and (5) of this condition shall constitute a violation of 326 IAC 2-7 and any other applicable rules.
  - (g) If the emergency situation causes a deviation from a technology-based limit, the Permittee may continue to operate the affected emitting facilities during the emergency provided the Permittee immediately takes all reasonable steps to correct the emergency and minimize emissions.
  - (h) The Permittee shall include all emergencies in the Quarterly Deviation and Compliance

Monitoring Report.

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

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- (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]**

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- (a) All terms and conditions of previous permits issued pursuant to permitting programs approved into the state implementation plan have been either
- (1) incorporated as originally stated,
  - (2) revised, or
  - (3) deleted
- by this permit.
- (b) All previous registrations and permits are superseded by this 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)]**

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

Indiana Department of Environmental Management  
Compliance Data Section, Office of Air Quality  
100 North Senate Avenue, P.O. Box 6015  
Indianapolis, Indiana 46206-6015

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

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

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

**B.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]**

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

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

B.16 Permit Renewal [326 IAC 2-7-3] [326 IAC 2-7-4]

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

Request for renewal shall be submitted to:

Indiana Department of Environmental Management  
Permits Branch, Office of Air Quality  
100 North Senate Avenue, P.O. Box 6015  
Indianapolis, Indiana 46206-6015

- (b) Timely Submittal of Permit Renewal [326 IAC 2-7-4(a)(1)(D)]
  - (1) A timely renewal application is one that is:
    - (A) Submitted at least nine (9) months prior to the date of the expiration of this permit; and
    - (B) 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.
  - (2) If IDEM, OAQ, upon receiving a timely and complete 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.
- (c) Right to Operate After Application for Renewal [326 IAC 2-7-3] [326 IAC 2-7-4]

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 a reasonable deadline specified in writing by IDEM, OAQ, any additional information identified as being needed to process the application. [326 IAC 2-7-4(a)(2)(D) and (E)]

- (d) United States Environmental Protection Agency Authority [326 IAC 2-7-8(e)]  
If IDEM, OAQ, fails to act in a timely way on a Part 70 permit renewal, the U.S. EPA may invoke its authority under Section 505(e) of the Clean Air Act to terminate or revoke and reissue a Part 70 permit.

B.17 Source Modification [326 IAC 1-2-42] [326 IAC 2-7-10.5]

- (a) The Permittee shall obtain approval as required by 326 IAC 2-7-10.5 from the IDEM, OAQ prior to making any modification to the source. Pursuant to 326 IAC 1-2-42, "Modification" means one (1) or more of the following activities at an existing source:
- (1) A physical change or change in the method of operation of any existing emissions unit that increases the potential to emit any regulated pollutant that could be emitted from the emissions unit, or that results in emissions of any regulated pollutant not previously emitted.
  - (2) Construction of one (1) or more new emissions units that have the potential to emit regulated air pollutants.
  - (3) Reconstruction of one (1) or more existing emission units that increases the potential to emit of any regulated air pollutant.
- (b) Any application requesting a source modification shall be submitted to:
- Indiana Department of Environmental Management  
Permits Branch, Office of Air Quality  
100 North Senate Avenue, P.O. Box 6015  
Indianapolis, Indiana 46206-6015
- Any such application shall be certified by the "responsible official" as defined by 326 IAC 2-7-1(34).
- (c) The Permittee shall also comply with the applicable provisions of 326 IAC 2-7-11 (Administrative Permit Amendments) or 326 IAC 2-7-12 (Permit Modification) prior to operating the approved modification.

B.18 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 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]
- (c) Any application requesting an amendment or modification of this permit shall be submitted to:
- Indiana Department of Environmental Management  
Permits Branch, Office of Air Quality  
100 North Senate Avenue, P.O. Box 6015  
Indianapolis, Indiana 46206-6015
- Any such application shall be certified by the "responsible official" as defined by 326 IAC 2-7-1(34).

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

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

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

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

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- (a) The Permittee may make any change or changes at the source that are described in 326 IAC 2-7-20(b), (c), or (e), without a prior permit revision, if each of the following conditions is met:
  - (1) The changes are not modifications under any provision of Title I of the Clean Air Act;
  - (2) Any preconstruction approval required by 326 IAC 2-7-10.5 has been obtained;
  - (3) The changes do not result in emissions which exceed the emissions allowable under this permit (whether expressed herein as a rate of emissions or in terms of total emissions);
  - (4) The Permittee notifies the:  
  
Indiana Department of Environmental Management  
Permits Branch, Office of Air Quality  
100 North Senate Avenue, P. O. Box 6015  
Indianapolis, Indiana 46206-6015  
  
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 accessible on-site which document, on a

rolling five (5) year basis, all such changes and emissions trading that are subject to 326 IAC 2-7-20(b), (c), or (e) and makes such records available, upon reasonable request, for public review.

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

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

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

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

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

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 are physically present or electronically accessible 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  
Permits Branch, Office of Air Quality  
100 North Senate Avenue, P.O. Box 6015  
Indianapolis, Indiana 46206-6015

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

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

B.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, I/M & Billing 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]

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

## SECTION C SOURCE OPERATION CONDITIONS

Entire Source

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

- C.1 Particulate Emission Limitations For Processes with Process Weight Rates Less Than One Hundred (100) pounds per hour [40 CFR 52 Subpart P] [326 IAC 6-3-2]
- (a) Pursuant to 40 CFR 52 Subpart P, particulate matter emissions from any process not already regulated by 326 IAC 6-1 or any New Source Performance Standard, and which has a maximum process weight rate less than 100 pounds per hour shall not exceed 0.551 pounds per hour.
- (b) 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. This condition is not federally enforceable.
- C.2 Opacity [326 IAC 5-1]
- Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary Alternative Opacity Limitations), opacity shall meet the following, unless otherwise stated in this permit:
- (a) Opacity shall not exceed an average of forty percent (40%) in any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.
- (b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.
- C.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. 326 IAC 4-1-3 (a)(2)(A) and (B) are not federally enforceable.
- 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. 326 IAC 9-1-2 is not federally enforceable.
- C.5 Fugitive Dust Emissions [326 IAC 6-4]
- The Permittee shall not allow fugitive dust to escape beyond the property line or boundaries of the property, right-of-way, or easement on which the source is located, in a manner that would violate 326 IAC 6-4 (Fugitive Dust Emissions). 326 IAC 6-4-2(4) is not federally enforceable.
- C.6 Motor Vehicle Fugitive Dust Sources [326 IAC 6-4-4]
- Pursuant to 326 IAC 6-4-4, no vehicle shall be driven or moved on any public street, road, alley, highway, or other thoroughfare, unless such vehicle is so constructed as to prevent its contents from dripping, sifting, leaking, or otherwise escaping therefrom so as to create conditions which result in fugitive dust. This section applies only to the cargo any vehicle may be conveying and mud tracked by the vehicle.

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

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

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

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

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

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

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

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

Indiana Department of Environmental Management  
Compliance Data Section, Office of Air Quality  
100 North Senate Avenue, P. O. Box 6015  
Indianapolis, Indiana 46206-6015

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

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

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

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

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

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

**C.11 Compliance Monitoring [326 IAC 2-7-5(3)] [326 IAC 2-7-6(1)]**

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Unless otherwise specified in this permit, all monitoring and record keeping requirements not already legally required shall be implemented within ninety (90) days of permit issuance. If required by Section D, the Permittee shall be responsible for installing any necessary equipment

and initiating any required monitoring related to that equipment. If due to circumstances beyond its control, that equipment cannot be installed and operated within ninety (90) days, the Permittee may extend the compliance schedule related to the equipment for an additional ninety (90) days provided the Permittee notifies:

Indiana Department of Environmental Management  
Compliance Branch, Office of Air Quality  
100 North Senate Avenue, P. O. Box 6015  
Indianapolis, Indiana 46206-6015

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

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

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

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

- (a) The Permittee shall calibrate, maintain, and operate all necessary continuous opacity monitoring systems (COMS) and related equipment. For a boiler, the COM shall be in operation at all times that the induced draft fan is in operation.
- (b) All continuous opacity monitoring systems shall meet the performance specifications of 40 CFR 60, Appendix B, Performance Specification No. 1, and are subject to monitor system certification requirements pursuant to 326 IAC 3-5.
- (c) In the event that a breakdown of a continuous opacity monitoring system occurs, a record shall be made of the time and reason of the breakdown and efforts made to correct the problem.
- (d) Whenever a continuous opacity monitor (COM) is malfunctioning or will be down for calibration, maintenance, or repairs for a period of one (1) hour or more, compliance with the applicable opacity limits shall be demonstrated by the following:
  - (1) Visible emission (VE) notations shall be performed once per hour during daylight operations following the shutdown or malfunction of the primary COM. A trained employee shall record whether emissions are normal or abnormal for the state of operation of the emission unit at the time of the reading.
    - (A) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.
    - (B) If abnormal emissions are noted during two consecutive emission notations, the Permittee shall begin Method 9 opacity observations within four hours of the second abnormal notation.
    - (C) VE notations may be discontinued once a COM is online or formal Method 9 readings have been implemented.
  - (2) If a COM is not online within twenty-four (24) hours of shutdown or malfunction

of the primary COM, the Permittee shall provide certified opacity reader(s), who may be employees of the Permittee or independent contractors, to self-monitor the emissions from the emission unit stack.

- (A) Visible emission readings shall be performed in accordance with 40 CFR 60, Appendix A, Method 9, for a minimum of five (5) consecutive six (6) minute averaging periods beginning not more than twenty-four (24) hours after the start of the malfunction or down time.
  - (B) Method 9 opacity readings shall be repeated for a minimum of five (5) consecutive six (6) minute averaging periods at least once every four (4) hours during daylight operations, until such time that a COM is in operation.
  - (C) Method 9 readings may be discontinued once a COM is online.
  - (D) Any opacity exceedances determined by Method 9 readings shall be reported with the Quarterly Opacity Exceedances Reports.
- (3) If abnormal emissions are observed, the Permittee shall take reasonable response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports. Observation of abnormal emissions that do not violate an applicable opacity limit is not a deviation from this permit. Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports, shall be considered a deviation from this permit.
- (e) Nothing in this permit shall excuse the Permittee from complying with the requirements to operate a continuous opacity monitoring system pursuant to 326 IAC 3-5, 40 CFR 60 and Construction Permit PSD (26) 1215.

C.13 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, 40 CFR 75, or other approved methods as specified in this permit.

C.14 Pressure Gauge and Other Instrument Specifications [326 IAC 2-1.1-11] [326 IAC 2-7-5(3)] [326 IAC 2-7-6(1)]

- (a) Whenever a condition in this permit requires the measurement of pressure drop across any part of the unit or its control device, the gauge employed shall have a scale such that the expected normal reading shall be no less than twenty percent (20%) of full scale and be accurate within plus or minus two percent ( $\pm 2\%$ ) of full scale reading.
- (b) Whenever a condition in this permit requires the measurement of a voltage, current, temperature, or flow rate, the instrument employed shall have a scale such that the expected normal reading shall be no less than twenty percent (20%) of full scale and be accurate within plus or minus two percent ( $\pm 2\%$ ) of full scale reading.
- (c) The Permittee may request the IDEM, OAQ approve the use of a pressure gauge or other instrument that does not meet the above specifications provided the Permittee can demonstrate an alternative pressure gauge or other instrument specification will adequately ensure compliance with permit conditions requiring the measurement of pressure drop or other parameters.

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

**C.15 Emergency Reduction Plans [326 IAC 1-5-2] [326 IAC 1-5-3]**

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

- (a) The Permittee prepared and submitted written emergency reduction plans (ERPs) consistent with safe operating procedures on February 12, 1980. The plans (ERPs) were approved on March 19, 1980.
- (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.16 Risk Management Plan [326 IAC 2-7-5(12)] [40 CFR 68]**

- (a) If a regulated substance, subject to 40 CFR 68, is present at a source in more than a threshold quantity, 40 CFR 68 is an applicable requirement.
- (b) The Permittee shall verify that a Risk Management Plan or a revised plan was prepared as required by 40 CFR 68 and submitted to IDEM, OAQ.

All documents submitted pursuant to this condition shall include the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

**C.17 Compliance Response Plan - Preparation, Implementation, Records, and Reports [326 IAC 2-7-5] [326 IAC 2-7-6]**

- (a) The Permittee is required to prepare a Compliance Response Plan (CRP) for each compliance monitoring condition of this permit. If a Permittee is required to have an Operation, Maintenance and Monitoring (OMM) Plan or Parametric Monitoring Plan and Start-up, Shutdown, and Malfunction (SSM) Plan under 40 CFR 63, such plans shall be deemed to satisfy the requirements for a CRP for those compliance monitoring conditions. A CRP shall be submitted to IDEM, OAQ upon request. The CRP shall be prepared within ninety (90) days after issuance of this permit by the Permittee, supplemented from time to time by the Permittee, maintained on site, and comprised of:

- (1) Reasonable response steps that may be implemented in the event that a response step is needed pursuant to the requirements of Section D of this permit; and an expected timeframe for taking reasonable response steps.
- (2) If, at any time, the Permittee takes reasonable response steps that are not set forth in the Permittee's current Compliance Response Plan or Operation, Maintenance and Monitoring (OMM) Plan or Parametric Monitoring Plan and Start-up, Shutdown, and Malfunction (SSM) Plan and the Permittee documents such response in accordance with subsection (e) below, the Permittee shall amend its Compliance Response Plan or Operation, Maintenance and Monitoring (OMM) Plan or Parametric Monitoring Plan and Start-up, Shutdown, and Malfunction (SSM) Plan to include such response steps taken.

The OMM Plan or Parametric Monitoring and SSM Plan shall be submitted within the time frames specified by the applicable 40 CFR 63 requirement.

- (b) For each compliance monitoring condition of this permit, reasonable response steps shall be taken when indicated by the provisions of that compliance monitoring condition as follows:

- (1) Reasonable response steps shall be taken as set forth in the Permittee's current Compliance Response Plan or Operation, Maintenance and Monitoring (OMM) Plan or Parametric Monitoring Plan and Start-up, Shutdown, and Malfunction (SSM) Plan; or
  - (2) If none of the reasonable response steps listed in the Compliance Response Plan or Operation, Maintenance and Monitoring (OMM) Plan or Parametric Monitoring Plan and Start-up, Shutdown, and Malfunction (SSM) Plan is applicable or responsive to the excursion, the Permittee shall devise and implement additional response steps as expeditiously as practical. Taking such additional response steps shall not be considered a deviation from this permit so long as the Permittee documents such response steps in accordance with this condition.
  - (3) If the Permittee determines that additional response steps would necessitate that the emissions unit or control device be shut down, and it will be ten (10) days or more until the unit or device will be shut down, then the Permittee shall promptly notify the IDEM, OAQ of the expected date of the shut down. The notification shall also include the status of the applicable compliance monitoring parameter with respect to normal, and the results of the response actions taken up to the time of notification.
  - (4) Failure to take reasonable response steps shall be considered a deviation from the permit.
- (c) The Permittee is not required to take any further response steps for any of the following reasons:
- (1) A false reading occurs due to the malfunction of the monitoring equipment and prompt action was taken to correct the monitoring equipment.
  - (2) The Permittee has determined that the compliance monitoring parameters established in the permit conditions are technically inappropriate, has previously submitted a request for a minor permit modification to the permit, and such request has not been denied.
  - (3) An automatic measurement was taken when the process was not operating.
  - (4) The process has already returned or is returning to operating within "normal" parameters and no response steps are required.
- (d) When implementing reasonable steps in response to a compliance monitoring condition, if the Permittee determines that an exceedance of an emission limitation has occurred, the Permittee shall report such deviations pursuant to Section B-Deviations from Permit Requirements and Conditions.
- (e) The Permittee shall record all instances when the response steps required in Section D are taken. In the event of an emergency, the provisions of 326 IAC 2-7-16 (Emergency Provisions) requiring prompt corrective action to mitigate emissions shall prevail.
- (f) Except as otherwise provided by a rule or provided specifically in Section D, all monitoring as required in Section D shall be performed when the emission unit is operating, except for time necessary to perform quality assurance and maintenance activities.

C.18 Actions Related to Noncompliance Demonstrated by a Stack Test [326 IAC 2-7-5][326 IAC 2-7-6]

- (a) When the results of a stack test performed in conformance with Section C - Performance Testing, of this permit exceed the level specified in any condition of this permit, the Permittee shall take appropriate response actions. The Permittee shall submit a description of these response actions to IDEM, OAQ, within thirty (30) days of receipt of the test results. The Permittee shall take appropriate action to minimize excess emissions from the affected facility while the response actions are being implemented.
- (b) A retest to demonstrate compliance shall be performed within one hundred twenty (120) days of receipt of the original test results. Should the Permittee demonstrate to IDEM, OAQ that retesting in one-hundred and twenty (120) days is not practicable, IDEM, OAQ may extend the retesting deadline.
- (c) IDEM, OAQ reserves the authority to take any actions allowed under law in response to noncompliant stack tests.

The response action documents submitted pursuant to this condition do require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

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

C.19 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) The Permittee shall submit an emission statement certified pursuant to the requirements of 326 IAC 2-6. This statement must be received in accordance with the compliance schedule specified in 326 IAC 2-6-3, and must comply with the minimum requirements specified in 326 IAC 2-6-4. The submittal should cover the period identified in 326 IAC 2-6. The emission statement shall meet the following requirements:
  - (1) Indicate estimated actual emissions of criteria pollutants from the source, in compliance with 326 IAC 2-6 (Emission Reporting);
  - (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 purposes of Part 70 fee assessment.

The emission statement must be submitted to:

Indiana Department of Environmental Management  
Technical Support and Modeling Section, Office of Air Quality  
100 North Senate Avenue, P. O. Box 6015  
Indianapolis, Indiana 46206-6015

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

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

C.20 General Record Keeping Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-6]

- (a) Records of all required monitoring data, reports and support information required by this permit shall be retained for a period of at least five (5) years from the date of monitoring

sample, measurement, report, or application. These records shall be physically present or electronically accessible at the source location for a minimum of three (3) years. The records may be stored elsewhere for the remaining two (2) years as long as they are available upon request. If the Commissioner makes a request for records to the Permittee, the Permittee shall furnish the records to the Commissioner within a reasonable time.

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

**C.21 General Reporting Requirements [326 IAC 2-7-5(3)(C)] [326 IAC 2-1.1-11]**

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- (a) The Permittee shall submit the attached Quarterly Deviation and Compliance Monitoring Report or its equivalent. Any deviation from permit requirements, the date(s) of each deviation, the cause of the deviation, and the response steps taken must be reported. This report shall be submitted within thirty (30) days of the end of the reporting period. The Quarterly Deviation and Compliance Monitoring Report shall include the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).
- (b) The report required in (a) of this condition and reports required by conditions in Section D of this permit shall be submitted to:  
  
Indiana Department of Environmental Management  
Compliance Data Section, Office of Air Quality  
100 North Senate Avenue, P. O. Box 6015  
Indianapolis, Indiana 46206-6015
- (c) Unless otherwise specified in this permit, any notice, report, or other submission required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ, on or before the date it is due.
- (d) Unless otherwise specified in this permit, all reports required in Section D of this permit shall be submitted within thirty (30) days of the end of the reporting period. All reports do require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).
- (e) The first report shall cover the period commencing on the date of issuance of this permit and ending on the last day of the reporting period. Reporting periods are based on calendar years, unless otherwise specified in this permit. For the purpose of this permit, "calendar year" means the twelve (12) month period from January 1 to December 31 inclusive.

**Stratospheric Ozone Protection**

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

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

- (a) Persons opening appliances for maintenance, service, repair, or disposal must comply with the required practices pursuant to 40 CFR 82.156.
- (b) Equipment used during the maintenance, service, repair, or disposal of appliances must

comply with the standards for recycling and recovery equipment pursuant to 40 CFR 82.158.

- (c) Persons performing maintenance, service, repair, or disposal of appliances must be certified by an approved technician certification program pursuant to 40 CFR 82.161.
- (d) Pursuant to 40 CFR 82, Subpart E (The Labeling of Products Using Ozone-Depleting Substances), all containers in which a Class I or Class II substance is stored or transported and all products containing a Class I substance shall be labeled as required under 40 CFR Part 82.

### **Ambient Monitoring Requirements [326 IAC 7-3]**

#### **C.23 Ambient Monitoring [326 IAC 7-3]**

- (a) The Permittee shall operate continuous ambient sulfur dioxide air quality monitors and a meteorological data acquisition system according to a monitoring plan submitted to the commissioner for approval. The monitoring plan shall include requirements listed in 326 IAC 7-3-2(a)(1), 326 IAC 7-3-2(a)(2) and 326 IAC 7-3-2(a)(3).
- (b) The Permittee and other operators subject to the requirements of this rule, located in the same county, may submit a joint monitoring plan to satisfy the requirements of this rule. [326 IAC 7-3-2(c)]
- (c) The Permittee may petition the commissioner for an administrative waiver of all or some of the requirements of 326 IAC 7-3 if such owner or operator can demonstrate that ambient monitoring is unnecessary to determine continued maintenance of the sulfur dioxide ambient air quality standards in the vicinity of the source. [326 IAC 7-3-2(d)]

### **Part 2 MACT Application Submittal Requirement**

#### **C.24 Application Requirements for Section 112(j) of the Clean Air Act [40 CFR 63.52(e)] [40 CFR 63.56(a)] [40 CFR 63.9(b)] [326 IAC 2-7-12]**

- (a) The Permittee shall submit a Part 2 Maximum Achievable Control Technology (MACT) Application in accordance with 40 CFR 63.52(e)(1). The Part 2 MACT Application shall meet the requirements of 40 CFR 63.53(b).
- (b) Notwithstanding paragraph (a), the Permittee is not required to submit a Part 2 MACT Application if the Permittee no longer meets the applicability criteria of 40 CFR 63.50 by the application deadline in 40 CFR 63.52(e)(1). For example, the Permittee would not have to submit a Part 2 MACT Application if, by the application deadline:
  - (1) The source is no longer a major source of hazardous air pollutants, as defined in 40 CFR 63.2;
  - (2) The source no longer includes one or more units in an affected source category for which the U.S. EPA failed to promulgate an emission standard by May 15, 2002; or
  - (3) The MACT standard or standards for the affected source categories included at the source are promulgated.
- (c) Notwithstanding paragraph (a), pursuant to 40 CFR 63.56(a), the Permittee shall comply with an applicable promulgated MACT standard in accordance with the schedule provided in the MACT standard if the MACT standard is promulgated prior to the Part 2 MACT Application deadline or prior to the issuance of permit with a case-by-case

Section 112(j) MACT determination. The MACT requirements include the applicable General Provisions requirements of 40 CFR 63, Subpart A. Pursuant to 40 CFR 63.9(b), the Permittee shall submit an initial notification not later than 120 days after the effective date of the MACT, unless the MACT specifies otherwise. The initial notification shall be submitted to:

Indiana Department of Environmental Management  
Compliance Data Section, Office of Air Quality  
100 North Senate Avenue, P.O. Box 6015  
Indianapolis, Indiana 46206-6015

and

United States Environmental Protection Agency, Region V  
Director, Air and Radiation Division  
77 West Jackson Boulevard  
Chicago, Illinois 60604-3590

## SECTION D.1 FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)] (The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

One (1) dry bottom, pulverized coal-fired boiler, identified as Boiler No. 1, construction commenced prior to August 17, 1971, with a nominal heat input capacity of 5875 million Btu per hour (MMBtu/hr), with an electrostatic precipitator (ESP) for control of particulate matter, and to be equipped with Selective Catalytic Reduction (SCR) for control of Nox during the ozone season, and exhausting to stack A. Stack A has continuous emissions monitors (CEMs) for nitrogen oxides (NO<sub>x</sub>) and sulfur dioxide (SO<sub>2</sub>) and a continuous opacity monitor (COM).

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

#### D.1.1 Particulate Emission Limitations [326 IAC 2-2]

Pursuant to PSD permit PSD (26) 1215, issued March 17, 1978, particulate matter emissions from the Boiler No. 1 stack shall not exceed 0.12 pound per million Btu heat input (lb/MMBtu).

#### D.1.2 Temporary Alternative Opacity Limitations [326 IAC 5-1-3]

Pursuant to 326 IAC 5-1-3(e) (Temporary Alternative Opacity Limitations), the following applies:

- (a) When building a new fire in a boiler, opacity may exceed the 40% opacity limitation established in 326 IAC 5-1-2 for a period not to exceed four (4) hours (forty (40) six (6)-minute averaging periods) or until the flue gas temperature reaches two hundred fifty (250) degrees Fahrenheit, whichever occurs first.

Operation of the electrostatic precipitator is not required during these times.

- (b) When shutting down a boiler, opacity may exceed the 40% opacity limitation established in 326 IAC 5-1-2 for a period not to exceed four (4) hours (forty (40) six (6)-minute averaging periods).
- (c) When removing ashes from the fuel bed or furnace in a boiler or blowing tubes, opacity may exceed the applicable limit established in 326 IAC 5-1-2. However, opacity levels shall not exceed sixty percent (60%) for any six (6)-minute averaging period and opacity in excess of the applicable limit shall not continue for more than one (1) six (6)-minute averaging period in any sixty (60) minute period. The averaging periods shall not be permitted for more than three (3) six (6)-minute averaging periods in a twelve (12) hour period. [326 IAC 5-1-3(b)]

#### D.1.3 Sulfur Dioxide (SO<sub>2</sub>) [326 IAC 7-4-12.1]

Pursuant to 326 IAC 7-4-12.1 (Gibson County Sulfur Dioxide Emission Limitations), the SO<sub>2</sub> emissions from Boiler No. 1 shall not exceed 3.19 pounds per million Btu (lbs/MMBtu) based on a thirty (30) day rolling weighted average.

#### D.1.4 Operation Standards [326 IAC 2-1.1-5(a)(4)] [40 CFR 261] [40 CFR 279] [329 IAC 13]

- (a) All coal burned, including coal treated with any additive, shall meet the ASTM definition of coal.
- (b) The burning of hazardous waste, as defined by 40 CFR 261, is prohibited in this facility. Any boiler tube chemical cleaning waste liquids, binding agent, or used oil combusted shall meet the toxicity characteristic requirements for non-hazardous waste.
- (c) Any boiler or condenser tube chemical cleaning waste liquids fired in the boiler shall only

contain the cleaning solution and two full volume boiler rinses.

**D.1.5 Preventive Maintenance Plan [326 IAC 2-7-5(13)]**

- (a) A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for this facility and its emission control devices.
- (b) The PMP for an electrostatic precipitator shall include the following inspections, performed according to the indicated schedules:
  - (1) Plate and electrode alignment, every major maintenance outage, but no less than every 2 years;
  - (2) ESP TR set components, performed whenever there is an outage of any nature lasting more than three days, unless such inspections have been performed within the last six months. At a minimum, the following inspections shall be performed:
    - (A) Internal inspection of shell for corrosion (including but not limited to doors, hatches, insulator housings, and roof area).
    - (B) Effectiveness of rapping (including but not limited to buildup of dust on discharge electrodes and plates).
    - (C) Gas distribution (including but not limited to buildup of dust on distribution plates and turning vanes).
    - (D) Dust accumulation (including but not limited to buildup of dust on shell and support members that could result in grounds or promote advanced corrosion).
    - (E) Major misalignment of plates (including but not limited to a visual check of plate alignment).
    - (F) Rapper, vibrator and TR set control cabinets (including but not limited to motors and lubrication).
    - (G) Rapper assembly (including but not limited to loose bolts, ground wires, water in air lines, and solenoids).
    - (H) Vibrator and rapper seals (including but not limited to air in-leakage, wear, and deterioration).
    - (I) TR set controllers (including but not limited to low voltage trip point, over current trip point, and spark rate).
    - (J) Vibrator air pressure settings.
  - (3) Air and water infiltration, once per month. The recommended method for this inspection is for audible checks around ash hoppers/hatches, duct expansion joints, and areas of corrosion.

**Compliance Determination Requirements**

**D.1.6 Testing Requirements [326 IAC 2-7-6(1),(6)] [326 IAC 2-1.1-11]**

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Within the two (2) calendar years following the most recent stack test, compliance with the PM limitation in Condition D.1.1 shall be determined by a performance stack test conducted utilizing methods as approved by the Commissioner. This test shall be repeated at least once every two (2) calendar years following this valid compliance demonstration. Testing shall be conducted in accordance with Section C- Performance Testing.

For the purpose of this permit, "calendar year" means the twelve (12) month period from January 1 to December 31 inclusive.

**D.1.7 Operation of Electrostatic Precipitator [326 IAC 2-7-6(6)]**

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Except as otherwise provided by statute or rule or in this permit, the electrostatic precipitator shall be operated at all times that the Boiler No. 1 is in operation and combusting fuel.

**D.1.8 Continuous Emissions Monitoring [326 IAC 3-5]**

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Pursuant to 326 IAC 3-5 (Continuous Monitoring of Emissions), continuous emission monitoring systems shall be calibrated, maintained, and operated for measuring opacity, which meet all applicable performance specifications of 326 IAC 3-5-2.

**D.1.9 Sulfur Dioxide Emissions and Sulfur Content [326 IAC 7-2] [326 IAC 7-4-12.1]**

- 
- (a) Pursuant to 326 IAC 7-2-1(c), the Permittee shall demonstrate that the sulfur dioxide emissions do not exceed the equivalent of 3.19 pounds per MMBtu using a thirty (30) day rolling weighted average.
- (b) Pursuant to 326 IAC 7-2-1(e) and 326 IAC 3-7, coal sampling and analysis data shall be collected as follows:
- (1) Coal sampling shall be performed using the methods specified in 326 IAC 3-7-2(a), and sample preparation and analysis shall be performed as specified in 326 IAC 3-7-2(c), (d), and (e); or
  - (2) 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.
- (c) 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)]

**D.1.10 Nitrogen Oxides Monitoring Requirement [326 IAC 10-4-4(b)(1)] [326 IAC 10-4-12(b) and (c)] [40 CFR 75]**

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The Permittee shall record, report, and quality assure the data from the monitoring systems for the NO<sub>x</sub> budget units in accordance with 326 IAC 10-4-12 and 40 CFR 75.

**D.1.11 Cleaning Waste Characterization [326 IAC 2-1.1-5(a)(4)] [40 CFR 261]**

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The Permittee shall use appropriate methodology as identified in 40 CFR Part 261 to characterize all boiler chemical cleaning wastes that will be evaporated, to determine compliance with the Operation Standards condition in this D section.

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

**D.1.12 Transformer-Rectifier (T-R) Sets [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]**

- 
- (a) The ability of the ESP to control particulate emissions shall be monitored once per shift, when the unit is 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) Reasonable response steps shall be taken in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports whenever the percentage of T-R sets in service falls below ninety percent (90%). T-R set failure resulting in less than ninety percent (90%) availability is not a deviation from this permit. Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports, shall be considered a deviation from this permit.

**D.1.13 Opacity Readings [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]**

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- (a) Appropriate response steps shall be taken in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports whenever the opacity exceeds twenty-five percent (25%) for three (3) consecutive six (6) minute averaging periods. In the event of opacity exceeding twenty-five percent (25%), response steps will be taken such that the cause(s) of the excursion are identified and corrected and opacity levels are brought back below twenty-five percent (25%). Examples of expected response steps include, but are not limited to, boiler loads being reduced and ESP T-R sets being returned to service.
- (b) Opacity readings in excess of twenty-five percent (25%) but not exceeding the opacity limit for the unit are not a deviation from this permit. Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports, shall be considered a deviation from this permit.

**D.1.14 SO<sub>2</sub> Monitoring System Downtime [326 IAC 2-7-6] [326 IAC 2-7-5(3)]**

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Whenever the automatic coal sampling system is malfunctioning or down for repairs or adjustments, the following shall be used to provide information related to SO<sub>2</sub> emissions:

- (a) Fuel sampling shall be conducted as specified in 326 IAC 3-7-2(a) or (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.
- (b) If during the life of this permit the Permittee notifies the IDEM that, pursuant to 326 IAC 7-2-1(g), continuous emission monitoring data will be used instead of fuel sampling and analysis, then whenever the SO<sub>2</sub> continuous emission monitoring system is malfunctioning or down for repairs or adjustments, the following shall be used to provide information related to SO<sub>2</sub> emissions:
  - (1) If the CEM system is down for less than eight (8) 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.
  - (2) If the CEM system is down for eight (8) hours or more, fuel sampling shall be conducted as specified in 326 IAC 3-7-2(a) or (b), except that all samples shall be collected after the bunker. 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.

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

#### **D.1.15 Record Keeping Requirements**

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- (a) To document compliance with Section C - Opacity and Conditions D.1.1, D.1.2, D.1.8, D.1.12, and D.1.13, the Permittee shall maintain records in accordance with (1) through (4) below. Records shall be complete and sufficient to establish compliance with the limits established in Section C - Opacity and in Conditions D.1.1 and D.1.2.
- (1) Data and results from the most recent stack test.
  - (2) All continuous opacity monitoring data, pursuant to 326 IAC 3-5.
  - (3) The results of all visible emission (VE) notations and Method 9 visible emission readings taken during any periods of COM downtime.
  - (4) All ESP parametric monitoring readings.
- (b) To document compliance with Conditions D.1.3, D.1.9 and D.1.14, the Permittee shall maintain records in accordance with (1) through (3) below. Records shall be complete and sufficient to establish compliance with the SO<sub>2</sub> limits as required in Conditions D.1.3 and D.1.9. The Permittee shall maintain records in accordance with (2) and (3) below during SO<sub>2</sub> CEM system downtime if a backup CEM is not used.
- (1) Whenever using CEMS data to demonstrate compliance with Condition D.1.3, the Permittee shall maintain all SO<sub>2</sub> continuous emissions monitoring data, pursuant to 326 IAC 7-2-1(g), with calendar dates and beginning and ending times of any CEM downtime.
  - (2) Whenever the Permittee is not using CEMS data to demonstrate compliance with Condition D.1.3, the Permittee shall maintain all fuel sampling and analysis data, pursuant to 326 IAC 7-2.
  - (3) Whenever the Permittee is not using CEMS data to demonstrate compliance with Condition D.1.3, the Permittee shall maintain actual fuel usage since last compliance determination period.
- (c) To document compliance with Condition D.1.5, the Permittee shall maintain records of the results of all boiler and emission control equipment inspections, including any additional inspections prescribed by the Preventive Maintenance Plan.
- (d) 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.
- (e) All records shall be maintained in accordance with Section C - General Record Keeping

Requirements, of this permit.

D.1.16 Reporting Requirements

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- (a) A quarterly report of opacity exceedances shall be submitted to the address listed in Section C - General Reporting Requirements, of this permit, within thirty (30) days after the end of the quarter being reported. The report submitted by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).
  
- (b) A quarterly report of the thirty (30) day rolling weighted average sulfur dioxide emission rate in pounds per million Btus, and records of the daily average coal sulfur content, coal heat content, weighing factor, and daily average 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, within thirty (30) days after the end of the quarter being reported. [326 IAC 7-2-1(c)(1)]

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

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

## SECTION D.2 FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)] (The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

One (1) dry bottom, pulverized coal-fired boiler, identified as Boiler No. 2, construction commenced prior to August 17, 1971, with a nominal heat input capacity of 5875 million Btu per hour (MMBtu/hr), with an electrostatic precipitator (ESP) for control of particulate matter, and to be equipped with Selective Catalytic Reduction (SCR) for control of Nox during the ozone season, and exhausting to stack A. Stack A has continuous emissions monitors (CEMs) for nitrogen oxides (NO<sub>x</sub>) and sulfur dioxide (SO<sub>2</sub>) and a continuous opacity monitor (COM).

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

#### D.2.1 Particulate Emission Limitations [326 IAC 2-2]

Pursuant to PSD permit PSD (26) 1215, issued March 17, 1978, particulate matter emissions from the Boiler No. 2 stack shall not exceed 0.12 pound per million Btu heat input (lb/MMBtu).

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

Pursuant to 326 IAC 5-1-3(e) (Temporary Alternative Opacity Limitations), the following applies:

- (a) When building a new fire in a boiler, or shutting down a boiler, opacity may exceed the 40% opacity limitation established in 326 IAC 5-1-2 for a period not to exceed four (4) hours (forty (40) six (6)-minute averaging periods) or until the flue gas temperature reaches two hundred fifty (250) degrees Fahrenheit, whichever occurs first.

Operation of the electrostatic precipitator is not required during these times.

- (b) When shutting down a boiler, opacity may exceed the 40% opacity limitation established in 326 IAC 5-1-2 for a period not to exceed four (4) hours (forty (40) six (6)-minute averaging periods).
- (c) When removing ashes from the fuel bed or furnace in a boiler or blowing tubes, opacity may exceed the applicable limit established in 326 IAC 5-1-2. However, opacity levels shall not exceed sixty percent (60%) for any six (6)-minute averaging period and opacity in excess of the applicable limit shall not continue for more than one (1) six (6)-minute averaging period in any sixty (60) minute period. The averaging periods shall not be permitted for more than three (3) six (6)-minute averaging periods in a twelve (12) hour period. [326 IAC 5-1-3(b)]

#### D.2.3 Sulfur Dioxide (SO<sub>2</sub>) [326 IAC 7-4-12.1]

Pursuant to 326 IAC 7-4-12.1 (Gibson County Sulfur Dioxide Emission Limitations), the SO<sub>2</sub> emissions from Boiler No. 2 shall not exceed 3.19 pounds per million Btu (lbs/MMBtu) based on a thirty (30) day rolling weighted average.

#### D.2.4 Operation Standards [326 IAC 2-1.1-5(a)(4)] [40 CFR 261] [40 CFR 279] [329 IAC 13]

- (a) All coal burned, including coal treated with any additive, shall meet the ASTM definition of coal.
- (b) The burning of hazardous waste, as defined by 40 CFR 261, is prohibited in this facility. Any boiler tube chemical cleaning waste liquids, binding agent, or used oil combusted shall meet the toxicity characteristic requirements for non-hazardous waste.

- (c) Any boiler or condenser tube chemical cleaning waste liquids fired in the boiler shall only contain the cleaning solution and two full volume boiler rinses.

D.2.5 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

- (a) A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for this facility and its emission control devices.
- (b) The PMP for an electrostatic precipitator shall include the following inspections, performed according to the indicated schedules:
  - (1) Plate and electrode alignment, every major maintenance outage, but no less than every 2 years;
  - (2) ESP TR set components, performed whenever there is an outage of any nature lasting more than three days, unless such inspections have been performed within the last six months. At a minimum, the following inspections shall be performed:
    - (A) Internal inspection of shell for corrosion (including but not limited to doors, hatches, insulator housings, and roof area).
    - (B) Effectiveness of rapping (including but not limited to buildup of dust on discharge electrodes and plates).
    - (C) Gas distribution (including but not limited to buildup of dust on distribution plates and turning vanes).
    - (D) Dust accumulation (including but not limited to buildup of dust on shell and support members that could result in grounds or promote advanced corrosion).
    - (E) Major misalignment of plates (including but not limited to a visual check of plate alignment).
    - (F) Rapper, vibrator and TR set control cabinets (including but not limited to motors and lubrication).
    - (G) Rapper assembly (including but not limited to loose bolts, ground wires, water in air lines, and solenoids).
    - (H) Vibrator and rapper seals (including but not limited to air in-leakage, wear, and deterioration).
    - (I) TR set controllers (including but not limited to low voltage trip point, over current trip point, and spark rate).
    - (J) Vibrator air pressure settings.
  - (3) Air and water infiltration, once per month. The recommended method for this inspection is for audible checks around ash hoppers/hatches, duct expansion joints, and areas of corrosion.

**Compliance Determination Requirements**

**D.2.6 Testing Requirements [326 IAC 2-7-6(1),(6)] [326 IAC 2-1.1-11]**

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Within the two (2) calendar years following the most recent stack test, compliance with the PM limitation in Condition D.2.1 shall be determined by a performance stack test conducted utilizing methods as approved by the Commissioner. This test shall be repeated at least once every two (2) calendar years following this valid compliance demonstration. Testing shall be conducted in accordance with Section C- Performance Testing.

For the purpose of this permit, "calendar year" means the twelve (12) month period from January 1 to December 31 inclusive.

**D.2.7 Operation of Electrostatic Precipitator [326 IAC 2-7-6(6)]**

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Except as otherwise provided by statute or rule or in this permit, the electrostatic precipitator shall be operated at all times that the Boiler No. 2 is in operation and combusting fuel.

**D.2.8 Continuous Emissions Monitoring [326 IAC 3-5]**

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Pursuant to 326 IAC 3-5 (Continuous Monitoring of Emissions), continuous emission monitoring systems shall be calibrated, maintained, and operated for measuring opacity, which meet all applicable performance specifications of 326 IAC 3-5-2.

**D.2.9 Sulfur Dioxide Emissions and Sulfur Content [326 IAC 7-2] [326 IAC 7-4-12.1]**

---

- (a) Pursuant to 326 IAC 7-2-1(c), the Permittee shall demonstrate that the sulfur dioxide emissions do not exceed the equivalent of 3.19 pounds per MMBtu using a thirty (30) day rolling weighted average.
- (b) Pursuant to 326 IAC 7-2-1(e) and 326 IAC 3-7, coal sampling and analysis data shall be collected as follows:
  - (1) Coal sampling shall be performed using the methods specified in 326 IAC 3-7-2(a), and sample preparation and analysis shall be performed as specified in 326 IAC 3-7-2(c), (d), and (e); or
  - (2) 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.
- (c) 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)]

**D.2.10 Nitrogen Oxides Monitoring Requirement [326 IAC 10-4-4(b)(1)] [326 IAC 10-4-12(b) and (c)] [40 CFR 75]**

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The Permittee shall record, report, and quality assure the data from the monitoring systems for the NO<sub>x</sub> budget units in accordance with 326 IAC 10-4-12 and 40 CFR 75.

**D.2.11 Cleaning Waste Characterization [326 IAC 2-1.1-5(a)(4)] [40 CFR 261]**

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The Permittee shall use appropriate methodology as identified in 40 CFR Part 261 to characterize all boiler chemical cleaning wastes that will be evaporated, to determine compliance with the Operation Standards condition in this D section.

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

D.2.12 Transformer-Rectifier (T-R) Sets [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]

- (a) The ability of the ESP to control particulate emissions shall be monitored once per shift, when the unit is 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) Reasonable response steps shall be taken in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports whenever the percentage of T-R sets in service falls below ninety percent (90%). T-R set failure resulting in less than ninety percent (90%) availability is not a deviation from this permit. Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports, shall be considered a deviation from this permit.

D.2.13 Opacity Readings [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]

- (a) Appropriate response steps shall be taken in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports whenever the opacity exceeds twenty-five percent (25%) for three (3) consecutive six (6) minute averaging periods. In the event of opacity exceeding twenty-five percent (25%), response steps will be taken such that the cause(s) of the excursion are identified and corrected and opacity levels are brought back below twenty-five percent (25%). Examples of expected response steps include, but are not limited to, boiler loads being reduced and ESP T-R sets being returned to service.
- (b) Opacity readings in excess of twenty-five percent (25%) but not exceeding the opacity limit for the unit are not a deviation from this permit. Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports, shall be considered a deviation from this permit.

D.2.14 SO<sub>2</sub> Monitoring System Downtime [326 IAC 2-7-6] [326 IAC 2-7-5(3)]

Whenever the automatic coal sampling system is malfunctioning or down for repairs or adjustments, the following shall be used to provide information related to SO<sub>2</sub> emissions:

- (a) Fuel sampling shall be conducted as specified in 326 IAC 3-7-2(a) or (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.
- (b) If during the life of this permit the Permittee notifies the IDEM that, pursuant to 326 IAC 7-2-1(g), continuous emission monitoring data will be used instead of fuel sampling and analysis, then whenever the SO<sub>2</sub> continuous emission monitoring system is malfunctioning or down for repairs or adjustments, the following shall be used to provide information related to SO<sub>2</sub> emissions:
  - (1) If the CEM system is down for less than eight (8) 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.
  - (2) If the CEM system is down for eight (8) hours or more, fuel sampling shall be conducted as specified in 326 IAC 3-7-2(a) or (b), except that all samples shall

be collected after the bunker. 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.

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

### **D.2.15 Record Keeping Requirements**

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- (a) To document compliance with Section C - Opacity and Conditions D.2.1, D.2.2, D.2.8, D.2.12, and D.2.13, the Permittee shall maintain records in accordance with (1) through (4) below. Records shall be complete and sufficient to establish compliance with the limits established in Section C - Opacity and in Conditions D.2.1 and D.2.2.
- (1) Data and results from the most recent stack test.
  - (2) All continuous opacity monitoring data, pursuant to 326 IAC 3-5.
  - (3) The results of all visible emission (VE) notations and Method 9 visible emission readings taken during any periods of COM downtime.
  - (4) All ESP parametric monitoring readings.
- (b) To document compliance with Conditions D.2.3, D.2.9 and D.2.14, the Permittee shall maintain records in accordance with (1) through (3) below. Records shall be complete and sufficient to establish compliance with the SO<sub>2</sub> limits as required in Conditions D.2.3 and D.2.9. The Permittee shall maintain records in accordance with (2) and (3) below during SO<sub>2</sub> CEM system downtime if a backup CEM is not used.
- (1) Whenever using CEMS data to demonstrate compliance with Condition D.2.3, the Permittee shall maintain all SO<sub>2</sub> continuous emissions monitoring data, pursuant to 326 IAC 7-2-1(g), with calendar dates and beginning and ending times of any CEM downtime; and
  - (2) Whenever the Permittee is not using CEMS data to demonstrate compliance with Condition D.2.3, the Permittee shall maintain all fuel sampling and analysis data, pursuant to 326 IAC 7-2.
  - (3) Whenever the Permittee is not using CEMS data to demonstrate compliance with Condition D.2.3, the Permittee shall maintain actual fuel usage since last compliance determination period.
- (c) To document compliance with Condition D.2.5, the Permittee shall maintain records of the results of all boiler and emission control equipment inspections, including any additional inspections prescribed by the Preventive Maintenance Plan.
- (d) 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.

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

#### D.2.16 Reporting Requirements

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- (a) A quarterly report of opacity exceedances shall be submitted to the address listed in Section C - General Reporting Requirements, of this permit, within thirty (30) days after the end of the quarter being reported. The report submitted by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).
- (b) A quarterly report of the thirty (30) day rolling weighted average sulfur dioxide emission rate in pounds per million Btus, and records of the daily average coal sulfur content, coal heat content, weighing factor, and daily average 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, within thirty (30) days after the end of the quarter being reported. [326 IAC 7-2-1(c)(1)]

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

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

## SECTION D.3

## FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)] (The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

One (1) dry bottom, pulverized coal-fired boiler, identified as Boiler No. 3, construction commenced prior to August 17, 1971, with a nominal heat input capacity of 5897 million Btu per hour (MMBtu/hr), with an electrostatic precipitator (ESP) for control of particulate matter, and to be equipped with Selective Catalytic Reduction (SCR) for control of Nox during the ozone season, and exhausting to stack B. Stack B has continuous emissions monitors (CEMs) for nitrogen oxides (NO<sub>x</sub>) and sulfur dioxide (SO<sub>2</sub>) and a continuous opacity monitor (COM).

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

#### D.3.1 Particulate Emission Limitations [326 IAC 2-2]

Pursuant to PSD permit PSD (26) 1215, issued March 17, 1978, particulate matter emissions from the Boiler No. 3 stack shall not exceed 0.12 pound per million Btu heat input (lb/MMBtu).

#### D.3.2 Temporary Alternative Opacity Limitations [326 IAC 5-1-3]

Pursuant to 326 IAC 5-1-3(e) (Temporary Alternative Opacity Limitations), the following applies:

- (a) When building a new fire in a boiler, or shutting down a boiler, opacity may exceed the 40% opacity limitation established in 326 IAC 5-1-2 for a period not to exceed five (5) hours (fifty (50) six (6)-minute averaging periods) or until the flue gas temperature reaches two hundred fifty (250) degrees Fahrenheit, whichever occurs first.

Operation of the electrostatic precipitator is not required during these times.

- (b) When shutting down a boiler, opacity may exceed the 40% opacity limitation established in 326 IAC 5-1-2 for a period not to exceed four (4) hours (forty (40) six (6)-minute averaging periods).
- (c) When removing ashes from the fuel bed or furnace in a boiler or blowing tubes, opacity may exceed the applicable limit established in 326 IAC 5-1-2. However, opacity levels shall not exceed sixty percent (60%) for any six (6)-minute averaging period and opacity in excess of the applicable limit shall not continue for more than one (1) six (6)-minute averaging period in any sixty (60) minute period. The averaging periods shall not be permitted for more than three (3) six (6)-minute averaging periods in a twelve (12) hour period. [326 IAC 5-1-3(b)]

#### D.3.3 Sulfur Dioxide (SO<sub>2</sub>) [326 IAC 7-4-12.1]

Pursuant to 326 IAC 7-4-12.1 (Gibson County Sulfur Dioxide Emission Limitations), the SO<sub>2</sub> emissions from Boiler No. 3 shall not exceed 3.19 pounds per million Btu (lbs/MMBtu) based on a thirty (30) day rolling weighted average.

#### D.3.4 Operation Standards [326 IAC 2-1.1-5(a)(4)] [40 CFR 261] [40 CFR 279] [329 IAC 13]

- (a) All coal burned, including coal treated with any additive, shall meet the ASTM definition of coal.
- (b) The burning of hazardous waste, as defined by 40 CFR 261, is prohibited in this facility. Any boiler tube chemical cleaning waste liquids, binding agent, or used oil combusted shall meet the toxicity characteristic requirements for non-hazardous waste.

- (c) Any boiler or condenser tube chemical cleaning waste liquids fired in the boiler shall only contain the cleaning solution and two full volume boiler rinses.

**D.3.5 Preventive Maintenance Plan [326 IAC 2-7-5(13)]**

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- (a) A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for this facility and its emission control devices.
- (b) The PMP for an electrostatic precipitator shall include the following inspections, performed according to the indicated schedules:
  - (1) Plate and electrode alignment, every major maintenance outage, but no less than every 2 years;
  - (2) ESP TR set components, performed whenever there is an outage of any nature lasting more than three days, unless such inspections have been performed within the last six months. At a minimum, the following inspections shall be performed:
    - (A) Internal inspection of shell for corrosion (including but not limited to doors, hatches, insulator housings, and roof area).
    - (B) Effectiveness of rapping (including but not limited to buildup of dust on discharge electrodes and plates).
    - (C) Gas distribution (including but not limited to buildup of dust on distribution plates and turning vanes).
    - (D) Dust accumulation (including but not limited to buildup of dust on shell and support members that could result in grounds or promote advanced corrosion).
    - (E) Major misalignment of plates (including but not limited to a visual check of plate alignment).
    - (F) Rapper, vibrator and TR set control cabinets (including but not limited to motors and lubrication).
    - (G) Rapper assembly (including but not limited to loose bolts, ground wires, water in air lines, and solenoids).
    - (H) Vibrator and rapper seals (including but not limited to air in-leakage, wear, and deterioration).
    - (I) TR set controllers (including but not limited to low voltage trip point, over current trip point, and spark rate).
    - (J) Vibrator air pressure settings.
  - (3) Air and water infiltration, once per month. The recommended method for this inspection is for audible checks around ash hoppers/hatches, duct expansion joints, and areas of corrosion.

**Compliance Determination Requirements**

D.3.6 Testing Requirements [326 IAC 2-7-6(1),(6)] [326 IAC 2-1.1-11]

Within the two (2) calendar years following the most recent stack test, compliance with the PM limitation in Condition D.3.1 shall be determined by a performance stack test conducted utilizing methods as approved by the Commissioner. This test shall be repeated at least once every two (2) calendar years following this valid compliance demonstration. Testing shall be conducted in accordance with Section C- Performance Testing.

For the purpose of this permit, "calendar year" means the twelve (12) month period from January 1 to December 31 inclusive.

D.3.7 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 shall be operated at all times that the Boiler No. 3 is in operation and combusting fuel.
- (b) Except as otherwise provided by statute or rule or in this permit, the flue gas conditioning system shall be operated as needed to mitigate opacity levels below both the opacity limit pursuant to 326 IAC 5-1 and the opacity limit specified in Condition D.3.13(a) of this permit.

D.3.8 Continuous Emissions Monitoring [326 IAC 3-5]

Pursuant to 326 IAC 3-5 (Continuous Monitoring of Emissions), a continuous monitoring system for the measurement of opacity, which meets the performance specifications of 326 IAC 3-5-2, shall be installed, calibrated, operated, and maintained.

D.3.9 Sulfur Dioxide Emissions and Sulfur Content [326 IAC 7-2] [326 IAC 7-4-12.1]

- (a) Pursuant to 326 IAC 7-2-1(c), the Permittee shall demonstrate that the sulfur dioxide emissions do not exceed the equivalent of 3.19 pounds per MMBtu using a thirty (30) day rolling weighted average.
- (b) Pursuant to 326 IAC 7-2-1(e) and 326 IAC 3-7, coal sampling and analysis data shall be collected as follows:
  - (1) Coal sampling shall be performed using the methods specified in 326 IAC 3-7-2(a), and sample preparation and analysis shall be performed as specified in 326 IAC 3-7-2(c), (d), and (e); or
  - (2) 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.
- (c) 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)]

D.3.10 Nitrogen Oxides Monitoring Requirement [326 IAC 10-4-4(b)(1)] [326 IAC 10-4-12(b) and (c)] [40 CFR 75]

The Permittee shall record, report, and quality assure the data from the monitoring systems for the NO<sub>x</sub> budget units in accordance with 326 IAC 10-4-12 and 40 CFR 75.

D.3.11 Cleaning Waste Characterization [326 IAC 2-1.1-5(a)(4)] [40 CFR 261]

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The Permittee shall use appropriate methodology as identified in 40 CFR Part 261 to characterize all boiler chemical cleaning wastes that will be evaporated, to determine compliance with the Operation Standards condition in this D section.

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

#### **D.3.12 Transformer-Rectifier (T-R) Sets [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]**

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- (a) The ability of the ESP to control particulate emissions shall be monitored once per shift, when the unit is 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) Reasonable response steps shall be taken in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports whenever the percentage of T-R sets in service falls below ninety percent (90%). T-R set failure resulting in less than ninety percent (90%) availability is not a deviation from this permit. Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports, shall be considered a deviation from this permit.

#### **D.3.13 Opacity Readings [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]**

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- (a) Appropriate response steps shall be taken in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports whenever the opacity exceeds twenty-five percent (25%) for three (3) consecutive six (6) minute averaging periods. In the event of opacity exceeding twenty-five percent (25%), response steps will be taken such that the cause(s) of the excursion are identified and corrected and opacity levels are brought back below twenty-five percent (25%). Examples of expected response steps include, but are not limited to, boiler loads being reduced and ESP T-R sets being returned to service.
- (b) Opacity readings in excess of twenty-five percent (25%) but not exceeding the opacity limit for the unit are not a deviation from this permit. Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports, shall be considered a deviation from this permit.

#### **D.3.14 SO<sub>2</sub> Monitoring System Downtime [326 IAC 2-7-6] [326 IAC 2-7-5(3)]**

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Whenever the automatic coal sampling system is malfunctioning or down for repairs or adjustments, the following shall be used to provide information related to SO<sub>2</sub> emissions:

- (a) Fuel sampling shall be conducted as specified in 326 IAC 3-7-2(a) or (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.
- (b) If during the life of this permit the Permittee notifies the IDEM that, pursuant to 326 IAC 7-2-1(g), continuous emission monitoring data will be used instead of fuel sampling and analysis, then whenever the SO<sub>2</sub> continuous emission monitoring system is malfunctioning or down for repairs or adjustments, the following shall be used to provide information related to SO<sub>2</sub> emissions:

- (1) If the CEM system is down for less than eight (8) 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.
- (2) If the CEM system is down for eight (8) hours or more, fuel sampling shall be conducted as specified in 326 IAC 3-7-2(a) or (b), except that all samples shall be collected after the bunker. 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.

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

#### D.3.15 Record Keeping Requirements

- (a) To document compliance with Section C - Opacity and Conditions D.3.1, D.3.2, D.3.8, D.3.12, and D.3.13, the Permittee shall maintain records in accordance with (1) through (4) below. Records shall be complete and sufficient to establish compliance with the limits established in Section C - Opacity and in Conditions D.3.1 and D.3.2.
  - (1) Data and results from the most recent stack test.
  - (2) All continuous opacity monitoring data, pursuant to 326 IAC 3-5.
  - (3) The results of all visible emission (VE) notations and Method 9 visible emission readings taken during any periods of COM downtime.
  - (4) All ESP parametric monitoring readings.
- (b) To document compliance with Conditions D.3.3, D.3.9 and D.3.14, the Permittee shall maintain records in accordance with (1) through (3) below. Records shall be complete and sufficient to establish compliance with the SO<sub>2</sub> limits as required in Conditions D.3.3 and D.3.9. The Permittee shall maintain records in accordance with (2) and (3) below during SO<sub>2</sub> CEM system downtime if a backup CEM is not used.
  - (1) Whenever using CEMS data to demonstrate compliance with Condition D.3.3, the Permittee shall maintain all SO<sub>2</sub> continuous emissions monitoring data, pursuant to 326 IAC 7-2-1(g), with calendar dates and beginning and ending times of any CEM downtime.
  - (2) Whenever the Permittee is not using CEMS data to demonstrate compliance with Condition D.3.3, the Permittee shall maintain all fuel sampling and analysis data, pursuant to 326 IAC 7-2.
  - (3) Whenever the Permittee is not using CEMS data to demonstrate compliance with Condition D.3.3, the Permittee shall maintain actual fuel usage since last compliance determination period.
- (c) To document compliance with Condition D.3.5, the Permittee shall maintain records of the results of all boiler and emission control equipment inspections, including any additional inspections prescribed by the Preventive Maintenance Plan.

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

#### D.3.16 Reporting Requirements

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- (a) A quarterly report of opacity exceedances shall be submitted to the address listed in Section C - General Reporting Requirements, of this permit, within thirty (30) days after the end of the quarter being reported. The report submitted by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).
- (b) A quarterly report of the thirty (30) day rolling weighted average sulfur dioxide emission rate in pounds per million Btus, and records of the daily average coal sulfur content, coal heat content, weighing factor, and daily average 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, within thirty (30) days after the end of the quarter being reported. [326 IAC 7-2-1(c)(1)]

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

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

## SECTION D.4 FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)] (The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

One (1) dry bottom, pulverized coal-fired boiler, identified as Boiler No. 4, construction commenced prior to August 17, 1971, with a nominal heat input capacity of 5897 million Btu per hour (MMBtu/hr), with an electrostatic precipitator (ESP) for control of particulate matter, and to be equipped with Selective Catalytic Reduction (SCR) for control of Nox during the ozone season, with a flue gas desulfurization (FGD) system for control of sulfur dioxide, and exhausting to stack D during normal operations, and exhausting to Stack B during startup, shutdown, or other periods when the FGD is not in operation. Stack D has continuous emissions monitors (CEMs) for nitrogen oxides (NO<sub>x</sub>) and sulfur dioxide (SO<sub>2</sub>) and Boiler 4 has a continuous opacity monitor (COM).

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

#### D.4.1 Particulate Emission Limitations [326 IAC 2-2]

Pursuant to PSD permit PSD (26) 1215, issued March 17, 1978, particulate matter emissions from the Boiler No. 4 stack shall not exceed 0.12 pound per million Btu heat input (lb/MMBtu).

#### D.4.2 Temporary Alternative Opacity Limitations [326 IAC 5-1-3]

Pursuant to 326 IAC 5-1-3(e) (Temporary Alternative Opacity Limitations), the following applies:

- (a) During boiler startups an exemption from the 40% opacity limit is allowed for up to fifty (50) six (6)-minute averaging periods} or until the flue gas temperature entering the electrostatic precipitator reaches two hundred fifty (250) degrees Fahrenheit, whichever occurs first. This exemption period includes the sum total of Stack "B" and Stack "D" non-overlapping exceedance periods.

Operation of the electrostatic precipitator is not required during these times.

- (b) During boiler shutdowns, an exemption from the 40% opacity limitation established in 326 IAC 5-1-2 is allowed for a period not to exceed forty (40) six (6)-minute averaging periods}. This exemption period includes the sum total of Stack "B" and Stack "D" non-overlapping exceedance periods.
- (c) When removing ashes from the fuel bed or furnace in a boiler or blowing tubes, opacity may exceed the applicable limit established in 326 IAC 5-1-2. However, opacity levels shall not exceed sixty percent (60%) for any six (6)-minute averaging period and opacity in excess of the applicable limit shall not continue for more than one (1) six (6)-minute averaging period in any sixty (60) minute period. The averaging periods shall not be permitted for more than three (3) six (6)-minute averaging periods in a twelve (12) hour period. [326 IAC 5-1-3(b)]

#### D.4.3 Sulfur Dioxide (SO<sub>2</sub>) [326 IAC 7-4-12.1]

Pursuant to 326 IAC 7-4-12.1 (Gibson County Sulfur Dioxide Emission Limitations), the SO<sub>2</sub> emissions from Boiler No. 4 stack shall not exceed 0.60 pounds per million Btu (lbs/MMBtu) based on a thirty (30) day rolling weighted average and operate an FGD system.

#### D.4.4 Operation Standards [326 IAC 2-1.1-5(a)(4)] [40 CFR 261] [40 CFR 279] [329 IAC 13]

- (a) All coal burned, including coal treated with any additive, shall meet the ASTM definition of coal.

- (b) The burning of hazardous waste, as defined by 40 CFR 261, is prohibited in this facility. Any boiler tube chemical cleaning waste liquids, binding agent, or used oil combusted shall meet the toxicity characteristic requirements for non-hazardous waste.
- (c) Any boiler or condenser tube chemical cleaning waste liquids fired in the boiler shall only contain the cleaning solution and two full volume boiler rinses.

D.4.5 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

- (a) A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for this facility and its emission control devices.
- (b) The PMP for an electrostatic precipitator shall include the following inspections, performed according to the indicated schedules:
  - (1) Plate and electrode alignment, every major maintenance outage, but no less than every 2 years;
  - (2) ESP TR set components, performed whenever there is an outage of any nature lasting more than three days, unless such inspections have been performed within the last six months. At a minimum, the following inspections shall be performed:
    - (A) Internal inspection of shell for corrosion (including but not limited to doors, hatches, insulator housings, and roof area).
    - (B) Effectiveness of rapping (including but not limited to buildup of dust on discharge electrodes and plates).
    - (C) Gas distribution (including but not limited to buildup of dust on distribution plates and turning vanes).
    - (D) Dust accumulation (including but not limited to buildup of dust on shell and support members that could result in grounds or promote advanced corrosion).
    - (E) Major misalignment of plates (including but not limited to a visual check of plate alignment).
    - (F) Rapper, vibrator and TR set control cabinets (including but not limited to motors and lubrication).
    - (G) Rapper assembly (including but not limited to loose bolts, ground wires, water in air lines, and solenoids).
    - (H) Vibrator and rapper seals (including but not limited to air in-leakage, wear, and deterioration).
    - (I) TR set controllers (including but not limited to low voltage trip point, over current trip point, and spark rate).
    - (J) Vibrator air pressure settings.

- (3) Air and water infiltration, once per month. The recommended method for this inspection is for audible checks around ash hoppers/hatches, duct expansion joints, and areas of corrosion.
- (4) Flue gas conditioning system (FGCS) components, performed whenever there is an outage of any nature lasting more than three days, unless such inspections have been performed within the last six months.

### Compliance Determination Requirements

#### D.4.6 Testing Requirements [326 IAC 2-7-6(1),(6)] [326 IAC 2-1.1-11]

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Within the two (2) calendar years following the most recent stack test, compliance with the PM limitation in Condition D.4.1 shall be determined by a performance stack test conducted utilizing methods as approved by the Commissioner. This test shall be repeated at least once every two (2) calendar years following this valid compliance demonstration. Testing shall be conducted in accordance with Section C- Performance Testing.

For the purpose of this permit, "calendar year" means the twelve (12) month period from January 1 to December 31 inclusive.

#### D.4.7 Operation of Electrostatic Precipitator [326 IAC 2-7-6(6)]

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Except as otherwise provided by statute or rule or in this permit, the electrostatic precipitator shall be operated at all times that the Boiler No. 4 is in operation and combusting fuel.

#### D.4.8 Flue Gas Desulfurization System [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]

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Except as otherwise provided by statute or rule or in this permit, the flue gas desulfurization (FGD) system shall be operated as needed to maintain compliance with applicable SO<sub>2</sub> emission limits.

#### D.4.9 Continuous Emissions Monitoring [326 IAC 3-5]

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Pursuant to 326 IAC 3-5 (Continuous Monitoring of Emissions), continuous emission monitoring systems shall be calibrated, maintained, and operated for measuring opacity and SO<sub>2</sub>, which meet all applicable performance specifications of 326 IAC 3-5-2.

#### D.4.10 Sulfur Dioxide Emissions [326 IAC 2-7-5(3)(A)] [326 IAC 2-7-6] [326 IAC 3-5]

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Pursuant to 326 IAC 7-2-1(c), the Permittee shall demonstrate that the sulfur dioxide emissions from Unit 4 does not exceed the equivalents of the limits specified in Conditions D.4.3 (Sulfur Dioxide (SO<sub>2</sub>)) using a thirty (30) day rolling weighted average. Pursuant to 326 IAC 3-5-1(c)(2)(B), compliance shall be demonstrated using CEMS data.

#### D.4.11 Nitrogen Oxides Monitoring Requirement [326 IAC 10-4-4(b)(1)] [326 IAC 10-4-12(b) and (c)] [40 CFR 75]

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The Permittee shall record, report, and quality assure the data from the monitoring systems for the NO<sub>x</sub> budget units in accordance with 326 IAC 10-4-12 and 40 CFR 75.

#### D.4.12 Cleaning Waste Characterization [326 IAC 2-1.1-5(a)(4)] [40 CFR 261]

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The Permittee shall use appropriate methodology as identified in 40 CFR Part 261 to characterize all boiler chemical cleaning wastes that will be evaporated, to determine compliance with the Operation Standards condition in this D section.

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

### D.4.13 Transformer-Rectifier (T-R) Sets [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]

- (a) The ability of the ESP to control particulate emissions shall be monitored once per shift, when the unit is 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) Reasonable response steps shall be taken in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports whenever the percentage of T-R sets in service falls below ninety percent (90%). T-R set failure resulting in less than ninety percent (90%) availability is not a deviation from this permit. Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports, shall be considered a deviation from this permit.

### D.4.14 Opacity Readings [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]

- (a) Appropriate response steps shall be taken in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports whenever the opacity exceeds twenty-five percent (25%) for three (3) consecutive six (6) minute averaging periods. In the event of opacity exceeding twenty-five percent (25%), response steps will be taken such that the cause(s) of the excursion are identified and corrected and opacity levels are brought back below twenty-five percent (25%). Examples of expected response steps include, but are not limited to, boiler loads being reduced, adjustment of flue gas conditioning rate, and ESP T-R sets being returned to service.
- (b) Opacity readings in excess of twenty-five percent (25%) but not exceeding the opacity limit for the unit are not a deviation from this permit. Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports, shall be considered a deviation from this permit.

### D.4.15 Scrubber Operation [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]

- (a) Except as otherwise provided by statute or rule or in this permit, the scrubber shall be operated as needed to maintain compliance with all SO<sub>2</sub> emission limits.
- (b) An inspection of the scrubber shall be performed at least once every two years, in accordance with the Preventive Maintenance Plan prepared in accordance with Section B - Preventive Maintenance Plan. Defective parts shall be replaced. A record shall be kept of the results of the inspection and the part(s) replaced.
- (c) Inspections shall be made whenever there is an outage of any nature lasting more than three days unless such measurements have been taken within the past twelve months.
- (d) Reasonable response steps shall be taken in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports for any improper or abnormal conditions found during an inspection. Discovery of an abnormal or improper condition is not a deviation from this permit. Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports, shall be considered a deviation from this permit.

### D.4.16 SO<sub>2</sub> Monitor Downtime [326 IAC 2-7-6] [326 IAC 2-7-5(1)]

Whenever the SO<sub>2</sub> continuous emission monitoring system is malfunctioning or down for repairs or adjustments, the Permittee shall monitor and record boiler load, recirculation pH, slurry feed

rate, and number of recirculation pumps in service, to demonstrate that the operation of the scrubber continues in a manner typical for the boiler load and sulfur content of the coal fired. Scrubber parametric monitoring readings shall be recorded at least once per hour until the primary CEM or a backup CEM is brought online.

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

#### **D.4.17 Record Keeping Requirements**

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- (a) To document compliance with Section C - Opacity and Conditions D.4.1, D.4.2, D.4.9, D.4.13, and D.4.14, the Permittee shall maintain records in accordance with (1) through (4) below. Records shall be complete and sufficient to establish compliance with the limits established in Section C - Opacity and in Conditions D.4.1 and D.4.2.
- (1) Data and results from the most recent stack test.
  - (2) All continuous opacity monitoring data, pursuant to 326 IAC 3-5.
  - (3) The results of all visible emission (VE) notations and Method 9 visible emission readings taken during any periods of COM downtime.
  - (4) All ESP parametric monitoring readings.
- (b) To document compliance with SO<sub>2</sub> Conditions D.4.3, D.4.9, D.4.10, D.4.15 and D.1.16, the Permittee shall maintain records in accordance with (1) through (3) below. Records shall be complete and sufficient to establish compliance with the SO<sub>2</sub> limits as required in Conditions D.4.3 and D.4.10. The Permittee shall maintain records in accordance with (2) and (3) below during SO<sub>2</sub> CEM system downtime if a backup CEM is not used.
- (1) All SO<sub>2</sub> continuous emissions monitoring data, pursuant to 326 IAC 7-2-1(g),
  - (2) All scrubber parametric monitoring readings taken during any periods of CEM downtime, in accordance with Condition D.4.16.
  - (3) Actual fuel usage during each SO<sub>2</sub> CEM downtime.
- (c) Whenever the flue gas conditioning agent is in use, the Permittee shall maintain records of the injection rate of the flue gas conditioning agent, in parts per million (ppm), on an hourly basis.
- (d) To document compliance with Condition D.4.5, the Permittee shall maintain records of the results of all boiler and emission control equipment inspections, including any additional inspections prescribed by the Preventive Maintenance Plan.
- (e) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

#### **D.4.18 Reporting Requirements**

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- (a) A quarterly report of opacity exceedances and a quarterly summary of the information to document compliance with Condition D.4.2 shall be submitted to the address listed in Section C - General Reporting Requirements, of this permit, using the reporting forms located at the end of this permit, or their equivalent, within thirty (30) days after the end of the quarter being reported. The report submitted by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

(b) 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 the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

## SECTION D.5 FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)] (The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

One (1) dry bottom, pulverized coal-fired boiler, identified as Boiler No. 5, installed in 1982, with a nominal heat input capacity of 5900 million Btu per hour (MMBtu/hr), with an electrostatic precipitator (ESP) for control of particulate matter, and to be equipped with Selective Catalytic Reduction (SCR) for control of Nox during the ozone season, with a flue gas desulfurization (FGD) system for control of sulfur dioxide, and exhausting to stack C. Stack C has continuous emissions monitors (CEMs) for nitrogen oxides (NO<sub>x</sub>) and sulfur dioxide (SO<sub>2</sub>) and Boiler 5 has a continuous opacity monitor (COM).

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

D.5.1 New Source Performance Standard (NSPS) [326 IAC 12] [40 CFR 60, Subpart D] [326 IAC 2-2]  
Pursuant to 326 IAC 12, 40 CFR 60, Subpart D (Standards of Performance for Fossil-Fuel-Fired Steam Generators for Which Construction is Commenced After August 17, 1971), and PSD permit PSD (26) 1215, issued March 17, 1978, emissions from Boiler No. 5 shall not exceed the following:

- (a) One-tenth (0.10) pound PM per million Btu (MMBtu) heat input. [40 CFR 60.42(a)(1)]
- (b) Twenty percent (20%) opacity except for one six-minute period per hour of not more than twenty-seven percent (27%) opacity [40 CFR 60.42(a)(2)]. Pursuant to 40 CFR 60.11(c), this opacity standard is not applicable during periods of startup, shutdown, or malfunction.
- (c) One and two-tenths (1.2) pound SO<sub>2</sub> per million Btu (MMBtu) heat input. [40 CFR 60.43(a)(2)]
- (d) Seven-tenths (0.70) pound NO<sub>x</sub> per million Btu (MMBtu) heat input. [40 CFR 60.44(a)(3)]

D.5.2 Particulate [326 IAC 2-2] [40 CFR 52.21] [Construction Permit PSD (26) 1215]  
Pursuant to Construction Permit PSD (26) 1215 issued on March 17, 1978, 326 IAC 2-2 and 40 CFR 52.21 (Prevention of Significant Deterioration), the PM emissions from the Boiler No. 5 stack C shall not exceed one-tenth (0.10) pound PM per million Btu (MMBtu) heat input.

D.5.3 Temporary Alternative Opacity Limitations [326 IAC 5-1-3]  
Pursuant to 326 IAC 5-1-3(e) (Temporary Alternative Opacity Limitations), the following applies:

- (a) When building a new fire in a boiler, or shutting down a boiler, opacity may exceed the 20% opacity limitation established in 326 IAC 5-1-2 for a period not to exceed five (5) hours (fifty (50) six (6)-minute averaging periods) or until the flue gas temperature reaches two hundred fifty (250) degrees Fahrenheit, whichever occurs first.  
  
Operation of the electrostatic precipitator is not required during these times.
- (b) When shutting down a boiler, opacity may exceed the 20% opacity limitation established in 326 IAC 5-1-2 for a period not to exceed four (4) hours (forty (40) six (6)-minute averaging periods).
- (c) When removing ashes from the fuel bed or furnace in a boiler or blowing tubes, opacity may exceed the applicable limit established in 326 IAC 5-1-2. However, opacity levels shall not exceed sixty percent (60%) for any six (6)-minute averaging period and opacity

in excess of the applicable limit shall not continue for more than one (1) six (6)-minute averaging period in any sixty (60) minute period. The averaging periods shall not be permitted for more than three (3) six (6)-minute averaging periods in a twelve (12) hour period. [326 IAC 5-1-3(b)]

D.5.4 Sulfur Dioxide (SO<sub>2</sub>) [326 IAC 7-4-12.1]

Pursuant to 326 IAC 7-4-12.1 (Gibson County Sulfur Dioxide Emission Limitations), the SO<sub>2</sub> emissions from Boiler No. 5 stack shall not exceed 1.10 pounds per million Btu (lbs/MMBtu) based on a twenty-four (24) hour average and operation of an FGD system.

D.5.5 Operation Standards [326 IAC 2-1.1-5(a)(4)] [40 CFR 261] [40 CFR 279] [329 IAC 13]

- (a) All coal burned, including coal treated with any additive, shall meet the ASTM definition of coal.
- (b) The burning of hazardous waste, as defined by 40 CFR 261, is prohibited in this facility. Any boiler tube chemical cleaning waste liquids, binding agent, or used oil combusted shall meet the toxicity characteristic requirements for non-hazardous waste.
- (c) Any boiler or condenser tube chemical cleaning waste liquids fired in the boiler shall only contain the cleaning solution and two full volume boiler rinses.

D.5.6 General Provisions Relating to NSPS [326 IAC 12-1][40 CFR Part 60, Subpart A]

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

D.5.7 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

- (a) A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for this facility and its emission control devices.
- (b) The PMP for an electrostatic precipitator shall include the following inspections, performed according to the indicated schedules:
  - (1) Plate and electrode alignment, every major maintenance outage, but no less than every 2 years;
  - (2) ESP TR set components, performed whenever there is an outage of any nature lasting more than three days, unless such inspections have been performed within the last six months. At a minimum, the following inspections shall be performed:
    - (A) Internal inspection of shell for corrosion (including but not limited to doors, hatches, insulator housings, and roof area).
    - (B) Effectiveness of rapping (including but not limited to buildup of dust on discharge electrodes and plates).
    - (C) Gas distribution (including but not limited to buildup of dust on distribution plates and turning vanes).
    - (D) Dust accumulation (including but not limited to buildup of dust on shell and support members that could result in grounds or promote advanced corrosion).

- (E) Major misalignment of plates (including but not limited to a visual check of plate alignment).
  - (F) Rapper, vibrator and TR set control cabinets (including but not limited to motors and lubrication).
  - (G) Rapper assembly (including but not limited to loose bolts, ground wires, water in air lines, and solenoids).
  - (H) Vibrator and rapper seals (including but not limited to air in-leakage, wear, and deterioration).
  - (I) TR set controllers (including but not limited to low voltage trip point, over current trip point, and spark rate).
  - (J) Vibrator air pressure settings.
- (3) Air and water infiltration, once per month. The recommended method for this inspection is for audible checks around ash hoppers/hatches, duct expansion joints, and areas of corrosion.
  - (4) Flue gas conditioning system (FGCS) components, performed whenever there is an outage of any nature lasting more than three days, unless such inspections have been performed within the last six months.

### **Compliance Determination Requirements**

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

Within the two (2) calendar years following the most recent stack test, compliance with the PM limitation in Conditions D.5.1, and D.5.2 shall be determined by a performance stack test conducted utilizing methods as approved by the Commissioner. This test shall be repeated at least once every two (2) calendar years following this valid compliance demonstration. Testing shall be conducted in accordance with Section C- Performance Testing.

For the purpose of this permit, "calendar year" means the twelve (12) month period from January 1 to December 31 inclusive.

#### D.5.9 Operation of Electrostatic Precipitator [326 IAC 2-7-6(6)]

Except as otherwise provided by statute or rule or in this permit, the electrostatic precipitator shall be operated at all times that the Boiler No. 5 is in operation and combusting fuel.

#### D.5.10 Flue Gas Desulfurization System [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]

Except as otherwise provided by statute or rule or in this permit, the flue gas desulfurization (FGD) system shall be operated as needed to maintain compliance with applicable SO<sub>2</sub> emission limits.

#### D.5.11 Continuous Emissions Monitoring [326 IAC 3-5] [40 CFR 60, Subpart D]

Pursuant to 326 IAC 3-5 and 40 CFR 60.40, Subpart D, continuous monitoring systems for Boiler No. 5 shall be calibrated, maintained, and operated for measuring opacity, SO<sub>2</sub>, NO<sub>x</sub>, and either CO<sub>2</sub> or O<sub>2</sub>, which meets the performance specifications of 326 IAC 3-5-2 and 40 CFR 60.45.

#### D.5.12 Sulfur Dioxide Emissions [326 IAC 2-7-5(3)(A)] [326 IAC 2-7-6] [326 IAC 3-5]

Pursuant to 326 IAC 7-2-1(c), the Permittee shall demonstrate that the sulfur dioxide emissions from Unit 5 does not exceed the limits specified in Conditions D.5.1(c) and D.5.4 (Sulfur Dioxide

(SO<sub>2</sub>) using a thirty (30) day rolling weighted average. Pursuant to 326 IAC 3-5-1(c)(2)(B), compliance shall be demonstrated using CEMS data.

**D.5.13 Nitrogen Oxides Monitoring Requirement [326 IAC 10-4-4(b)(1)] [326 IAC 10-4-12(b) and (c)] [40 CFR 75]**

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The Permittee shall record, report, and quality assure the data from the monitoring systems for the NO<sub>x</sub> budget units in accordance with 326 IAC 10-4-12 and 40 CFR 75.

**D.5.14 Cleaning Waste Characterization [326 IAC 2-1.1-5(a)(4)] [40 CFR 261]**

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The Permittee shall use appropriate methodology as identified in 40 CFR Part 261 to characterize all boiler chemical cleaning wastes that will be evaporated, to determine compliance with the Operation Standards condition in this D section.

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

**D.5.15 Transformer-Rectifier (T-R) Sets [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]**

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- (a) The ability of the ESP to control particulate emissions shall be monitored once per shift, when the unit is 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) Reasonable response steps shall be taken in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports whenever the percentage of T-R sets in service falls below ninety percent (90%). T-R set failure resulting in less than ninety percent (90%) availability is not a deviation from this permit. Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports, shall be considered a deviation from this permit.

**D.5.16 Opacity Readings [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]**

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- (a) Appropriate response steps shall be taken in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports whenever the opacity exceeds twenty-five percent (25%) for three (3) consecutive six (6) minute averaging periods. In the event of opacity exceeding twenty-five percent (25%), response steps will be taken such that the cause(s) of the excursion are identified and corrected and opacity levels are brought back below twenty-five percent (25%). Examples of expected response steps include, but are not limited to, boiler loads being reduced, adjustment of flue gas conditioning rate, and ESP T-R sets being returned to service.
- (b) Opacity readings in excess of twenty-five percent (25%) but not exceeding the opacity limit for the unit are not a deviation from this permit. Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports, shall be considered a deviation from this permit.

**D.5.17 Scrubber Operation [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]**

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- (a) Except as otherwise provided by statute or rule or in this permit, the scrubber shall be operated as needed to maintain compliance with all SO<sub>2</sub> emission limits.
- (b) An inspection of the scrubber shall be performed at least once every two years, in accordance with the Preventive Maintenance Plan prepared in accordance with Section B - Preventive Maintenance Plan. Defective parts shall be replaced. A record shall be kept of the results of the inspection and the part(s) replaced.

- (c) Inspections shall be made whenever there is an outage of any nature lasting more than three days unless such measurements have been taken within the past twelve months.
- (d) Reasonable response steps shall be taken in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports for any improper or abnormal conditions found during an inspection. Discovery of an abnormal or improper condition is not a deviation from this permit. Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports, shall be considered a deviation from this permit.

**D.5.18 SO<sub>2</sub> Monitor Downtime [326 IAC 2-7-6] [326 IAC 2-7-5(1)]**

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Whenever the SO<sub>2</sub> continuous emission monitoring system is malfunctioning or down for repairs or adjustments, the Permittee shall monitor and record boiler load, recirculation pH, slurry feed rate, and number of recirculation pumps in service, to demonstrate that the operation of the scrubber continues in a manner typical for the boiler load and sulfur content of the coal fired. Scrubber parametric monitoring readings shall be recorded at least once per hour until the primary CEM or a backup CEM is brought online.

**D.5.19 NO<sub>x</sub> Monitoring System Downtime [326 IAC 2-2] [326 IAC 2-7-6] [326 IAC 2-7-5(3)]**

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In instances of NO<sub>x</sub> continuous emission monitoring system (CEMS) downtime, the Permittee shall report the NO<sub>x</sub> mass emissions in accordance with the procedures regulated by 40 CFR Part 75, Appendix D (Optional SO<sub>2</sub> Emissions Data Protocol) for fuel flow meters requirements, 40 CFR Part 75, Appendix E (Optional NO<sub>x</sub> Emissions Estimation Protocol) for emission rate curve establishment, and Appendix G (Determination of CO<sub>2</sub> Emissions). NO<sub>x</sub> mass emissions reported shall be based on the fuel-and-unit-specific NO<sub>x</sub> emission rates ("load curve") established during the latest stack test.

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

**D.5.20 Record Keeping Requirements**

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- (a) To document compliance with Section C - Opacity and Conditions D.5.1, D.5.2, D.5.3, D.5.11, D.5.14 and D.5.15, the Permittee shall maintain records in accordance with (1) through (4) below. Records shall be complete and sufficient to establish compliance with the limits established in Section C - Opacity and in Conditions D.5.1, D.5.2, and D.5.3.
  - (1) Data and results from the most recent stack test.
  - (2) All continuous opacity monitoring data, pursuant to 326 IAC 3-5 and 40 CFR 60.40 (Standards of Performance for Fossil-Fuel-Fired Steam Generators for Which Construction is Commenced After August 17, 1971).
  - (3) The results of all visible emission (VE) notations and Method 9 visible emission readings taken during any periods of COM downtime.
  - (4) All ESP parametric monitoring readings.
- (b) To document compliance with Conditions D.5.1, D.5.4, D.5.10, D.5.11, D.5.12, D.5.16, and D.5.17, the Permittee shall maintain records in accordance with (1) through (3) below. Records shall be complete and sufficient to establish compliance with the SO<sub>2</sub> limits as required in Conditions D.5.4 and D.5.10. The Permittee shall maintain records in accordance with (2) and (3) below during SO<sub>2</sub> CEM system downtime if a backup CEM is not used.

- (1) All SO<sub>2</sub> continuous emissions monitoring data, pursuant to 326 IAC 7-2-1(g) and 40 CFR 60.40 (Standards of Performance for Fossil-Fuel-Fired Steam Generators for Which Construction is Commenced After August 17, 1971), with calendar dates and beginning and ending times of any CEM downtime.
  - (2) All scrubber parametric monitoring readings taken during any periods of CEM downtime, in accordance with Condition D.5.18.
  - (3) Actual fuel usage during each SO<sub>2</sub> CEM downtime.
- (c) Whenever the flue gas conditioning agent is in use, the Permittee shall maintain records of the injection rate of the flue gas conditioning agent, in parts per million (ppm), on an hourly basis.
- (d) To document compliance with Condition D.5.7, the Permittee shall maintain records of the results of all boiler and emission control equipment inspections, including any additional inspections prescribed by the Preventive Maintenance Plan.
- (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 records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

#### D.5.22 Reporting Requirements

- (a) A quarterly report of opacity exceedances and a quarterly summary of the information to document compliance with Conditions D.5.1(c) and D.5.4 shall be submitted to the address listed in Section C - General Reporting Requirements within thirty (30) days after the end of the quarter being reported. The report submitted by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).
- (b) To document compliance with Condition D.5.1 and pursuant to 40 CFR 60.45(g), excess emissions and monitoring system performance (MSP) 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). These reports shall be submitted to:

U.S. Environmental Protection Agency  
Director, Air and Radiation Division  
77 West Jackson Boulevard  
Chicago, IL 60604-3590

and

Indiana Department of Environmental Management  
Compliance Data Section, Office of Air Quality  
100 North Senate Avenue, P. O. Box 6015  
Indianapolis, Indiana 46206-6015

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

- (b) 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 the certification by the “responsible official” as defined by 326 IAC 2-7-1(34).

## SECTION D.6 FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)] (The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

A coal storage and handling system, with a nominal throughput of 6000 tons of coal per hour, consisting of the following equipment:

- (1) Two (2) railcar unloading stations, each with a drop point to a hopper identified as DP-5 and DP-25, with each drop point controlled by a partial enclosure, and exhausting to the ambient air.
- (2) Two (2) active piles, each with a drop point to a hopper identified as DP-1 and DP-16, with each drop point enclosed and controlled by a baghouse, and exhausting to the ambient air.
- (3) Three (3) storage piles, having a combined storage capacity including the active piles of 4,000,000 tons, with fugitive emissions controlled by watering trucks.
- (4) Four (4) enclosed hoppers, each with a drop point to conveyors identified as DP-2, DP-6, DP-17 and DP-26, with each drop point enclosed and controlled by a baghouse, and exhausting to the ambient air.
- (5) An enclosed conveyor system, with 18 drop points identified as DP-3, DP-4, DP-7 through DP-15, and DP-18 through DP-24, with each drop point enclosed and controlled by a baghouse excluding the two (2) active pile conveyors which have the drop points (DP-18 and DP-22) controlled by telescopic chutes, and exhausting to the ambient air.
- (6) Five (5) enclosed coal bunkers, each with a nominal maximum capacity of 15,000 tons of coal. Bunkers are loaded via a conveyor tripper system with a total capacity of 3,000 tons per hour to the units 1 and 2 bunkers, and 3,000 tons per hour to the units 3, 4 and 5 bunkers. Particulate matter generated from loading bunkers is controlled with a baghouse, and exhausts to the ambient air.

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

#### D.6.1 Particulate [326 IAC 6-3-2]

Pursuant to 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes), the particulate emissions from the coal storage and handling drop points and coal bunkers shall not exceed 103.2 pounds per hour when operating at a process weight of 6000 tons per hour. This is determined by the following equation:

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

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

When the process weight rate exceeds two hundred (200) tons per hour, the maximum allowable emission may exceed 103.2 pounds per hour, provided the concentration of particulate matter in the discharge gases to the atmosphere is less than 0.10 pounds per one thousand (1,000) pounds of gases.

#### D.6.2 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for the baghouses, the watering system, and the telescopic chutes.

### **Compliance Determination Requirements**

#### **D.6.3 Particulate Control [326 IAC 2-7-6(6)]**

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- (a) Except as otherwise provided by statute or rule or in this permit, the baghouses for PM control shall be in operation and control emissions at all times the associated coal processing or drop point conveyors are in operation.
- (b) Telescoping chutes shall be kept within a few feet of the top of the coal piles at all times drop points DP-18 and DP-22 are in operation.

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

#### **D.6.4 Visible Emissions Notations [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]**

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- (a) Visible emission notations of the transfer points baghouse exhausts shall be performed once per shift during normal daylight operations. A trained employee shall record whether emissions are normal or abnormal.
- (b) Visible emission notations of the coal unloading station(s) doorways and drop points shall be performed once per shift during normal daylight operations. A trained employee shall record whether any emissions are observed.
- (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) 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.
- (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.
- (f) If any emissions are observed from the coal unloading station doorways and drop points, the Permittee shall take reasonable response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports. 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 in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports, shall be considered a deviation from this permit.
- (g) If abnormal emissions are observed at any baghouse exhaust, the Permittee shall take reasonable response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports. 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 in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports, shall be considered a deviation from this permit.

#### **D.6.5 Baghouse Parametric Monitoring [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]**

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- (a) The Permittee shall record the total static pressure drop across each of the baghouses used in conjunction with the coal transfer drop points at least once per shift when the coal handling is in operation. When for any one reading, the pressure drop across the baghouse is outside the normal range of 3.0 and 6.0 inches of water or a range established during the latest stack test, the Permittee shall take reasonable response steps in accordance with Section C- Compliance Response Plan - Preparation,

Implementation, Records, and Reports. A pressure reading that is outside the above mentioned range is not a deviation from this permit. Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports, shall be considered a deviation from this permit.

- (b) The instrument used for determining the pressure shall comply with Section C - Pressure Gauge and Other 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.6.6 Baghouse Inspections [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]

- (a) An inspection shall be performed each calendar quarter of all bags controlling particulate emissions from the coal processing or conveying. Inspections required by this condition shall not be performed in consecutive months. All defective bags shall be replaced.
- (b) If an abnormal or improper condition is found during an inspection, the Permittee shall take reasonable response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports. Discovery of an abnormal or improper condition is not a deviation from this permit. Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports, shall be considered a deviation from this permit.

D.6.7 Broken or Failed Bag Detection [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]

In the event that bag failure has been observed:

- (a) For multi-compartment units, the affected baghouse compartments will be shut down immediately until the failed units have been repaired or replaced. Within eight (8) business hours of the determination of failure, response steps according to the timetable described in the Compliance Response Plan shall be initiated. For any failure with corresponding response steps and timetable not described in the Compliance Response Plan, response steps shall be devised within eight (8) business hours of discovery of the failure and shall include a timetable for completion. Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports, shall be considered a deviation from this permit. If operations continue after bag failure is observed and it will be ten (10) days or more after the failure is observed before the failed units will be repaired or replaced, the Permittee shall promptly notify the IDEM, OAQ of the expected date the failed units will be repaired or replaced. The notification shall also include the status of the applicable compliance monitoring parameters with respect to normal, and the results of any response actions taken up to the time of notification.
- (b) For single compartment baghouses, if failure is indicated by a significant drop in the baghouse's pressure readings with abnormal visible emissions or the failure is indicated by an opacity violation, or if bag failure is determined by other means, such as gas temperatures, flow rates, air infiltration, leaks, dust traces or triboflows, then failed units and the associated process will be shut down immediately until the failed units have been repaired or replaced. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions).

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

### **D.6.8 Record Keeping Requirements**

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- (a) To document compliance with Section C - Opacity, Section C -Fugitive Dust Emissions, and Condition D.6.4, the Permittee shall maintain records of the visible emission notations of the transfer points, baghouse exhausts, railcar unloading stations and all response steps taken and the outcome for each.
- (b) To document compliance with Condition D.6.5, the Permittee shall maintain records of the total static pressure drop across each baghouse.
- (c) To document compliance with Condition D.6.6, the Permittee shall maintain records of the results of the baghouse inspections.
- (d) To document compliance with Condition D.6.2, the Permittee shall maintain records of any additional inspections prescribed by the Preventive Maintenance Plan.
- (e) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

## SECTION D.7 FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)] (The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

A limestone storage and handling system, consisting of the following equipment:

- (1) One (1) unloading station for trucks or railcar, with a drop point to a hopper identified as LSDP-1, with a nominal throughput of 2,500 tons per hour, with the drop point controlled by a partial enclosure, and exhausting to the ambient air.
- (2) Two (2) enclosed hoppers, each with a drop point to conveyors identified as LSDP-2 and LSDP-5, with a nominal throughput of 200 tons per hour, with each drop point enclosed and controlled by a baghouse, and exhausting to the ambient air.
- (3) One (1) storage pile, with a nominal storage capacity of 50,000 tons, with a drop point to a hopper identified as LSDP-4, with the drop point enclosed and exhausting to the ambient air.
- (4) An enclosed conveyor system, with four (4) drop points identified as LSDP-3 and LSDP-8 through LSDP-10, with each drop point enclosed and controlled by a baghouse, and exhausting to the ambient air.
- (5) One (1) enclosed ball mill, with a drop point to a conveyor identified as LSDP-6, with the drop point enclosed and controlled by a baghouse, and exhausting to the ambient air.
- (6) Two (2) day bins for temporary storage of limestone, with a combined storage capacity of 13,000 tons, with dust from loading the bins controlled by bin vent filters, and exhausting to the ambient air.

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

- (1) Flyash handling facility and transport systems, wet flyash sluiced and conveyed to five (5) ash ponds, with a combined surface area of 435 acres.

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

#### D.7.1 New Source Performance Standard (NSPS): Nonmetallic Mineral Processing Plants [326 IAC 12] [40 CFR 60, Subpart OOO]

- (a) Pursuant to 326 IAC 12 and 40 CFR 60, Subpart OOO (Standards of Performance for Nonmetallic Mineral Processing Plants), the Permittee shall not cause to be discharged into the atmosphere:
  - (1) From any transfer point on belt conveyors or from any other affected facility any stack emissions which:
    - (A) Contain particulate matter that exceeds 0.05 grains per dry standard cubic meter (g/dscm); and
    - (B) Exhibit greater than a seven percent (7%) opacity. [40 CFR 60.672(a)]
  - (2) From any transfer point on belt conveyors or from any other affected facility, any fugitive emissions which exhibit greater than ten percent (10%) opacity. [40 CFR 60.672(b)]

- (3) From any crusher at which a capture system is not used, fugitive emissions which exhibit greater than fifteen percent (15%) opacity. [40 CFR 60.672(c)]
- (4) If any transfer point on a conveyor belt or any other affected facility is enclosed in a building, then each enclosed affected facility must comply with the emission limits in (a) and (b) of this condition, or the Permittee shall not cause to be discharged into the atmosphere:
  - (A) From any building enclosing any transfer point on a conveyor belt or any other affected facility, any visible fugitive emissions except emissions from a vent as defined in 40 CFR 60.671. [40 CFR 60.672(e)]
  - (B) From any vent of any building enclosing any transfer point on a conveyor belt or any other affected facility, emissions which exceed the stack emission limits in (a) of this condition.
- (5) From any baghouse that controls emissions from only an individual, enclosed storage bin, stack emissions which exhibit greater than seven percent (7%) opacity. Multiple storage bins with combined stack emissions shall comply with the emission limits in (a) of this condition.
- (6) Truck dumping of nonmetallic minerals into any screening operation, feed hopper, or crusher is exempt from the requirements of 40 CFR 60.672.
- (b) When an owner or operator replaces an existing facility with a piece of equipment that is of larger size, as defined in 40 CFR 60.671, having the same function as the existing facility, or an owner or operator replaces all existing facilities in a production line with new facilities, then the replacement is subject to 40 CFR 60.672 (Standard for Particulate Matter), 40 CFR 60.674 (Monitoring of Operations), 40 CFR 60.675 (Test Methods and Procedures), and 40 CFR 60.676 (Reporting and Record keeping) of Subpart OOO (Standards of Performance for Nonmetallic Mineral Processing Plants).

#### D.7.2 Particulate [326 IAC 6-3-2]

Pursuant to 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes), the particulate emissions from the storage and handling drop points and bunkers shall not exceed 61 pounds per hour when operating at a process weight of 250 tons per hour. This is determined by the following equation:

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

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

When the process weight rate exceeds two hundred (200) tons per hour, the maximum allowable emission may exceed 61 pounds per hour, provided the concentration of particulate matter in the discharge gases to the atmosphere is less than 0.10 pounds per one thousand (1,000) pounds of gases.

#### D.7.3 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 facilities described in this section except when otherwise specified in 40 CFR Part 60, Subpart OOO.

**D.7.4 Fugitive Dust Emission Limitations [326 IAC 6-4-2]**

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Pursuant to 326 IAC 6-4-2:

- (a) Any ash storage pond area generating fugitive dust shall be in violation of this rule (326 IAC 6-4) if any of the following criteria are violated:

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

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

Where

P = Percentage increase

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

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

- (2) 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:

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

Where

N = Fraction of fugitive dust that is respirable dust;

$P_R$  = allowable percentage increase in dust concentration above background;  
and

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

- (3) The ground level ambient air concentrations exceed fifty (50) micrograms per cubic meter above background concentrations for a sixty (60) minute period.
- (4) If fugitive dust is visible crossing the boundary or property line of a source. This subdivision may be refuted by factual data expressed in subdivisions (1), (2) or (3) of this section. 326 IAC 6-4-2(4) is not federally enforceable.

- (b) 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.

All flyash ponds shall be covered with water at all times.

**D.7.5 Preventive Maintenance Plan [326 IAC 2-7-5(13)]**

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

**Compliance Determination Requirement**

**D.7.6 Particulate Control [326 IAC 2-7-6(6)]**

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Except as otherwise provided by statute or rule or in this permit, to demonstrate compliance with 326 IAC 6-3-2:

- (a) Pursuant to Construction Permit 051-2422-00013, issued on June 25, 1992, the baghouses and bin vent filters shall be in operation and control PM emissions at all times the associated limestone, lime or flyash handling facilities, including the ball mill and drop point conveyors, are in operation.
- (b) The telescopic chute for all conveyors shall be kept within a few feet of the top of the limestone piles at all times the limestone handling system is in operation.

**D.7.7 NSPS Compliance Provisions [40 CFR 60, Subpart OOO]**

Compliance with the PM and opacity emission limitations in Condition D.7.1 shall be determined by the methods and procedures specified in 40 CFR 60.675.

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

**D.7.8 Visible Emissions Notations [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]**

- (a) Visible emission notations of the transfer points and ball mill baghouse exhausts shall be performed once per shift during normal daylight operations. A trained employee shall record whether emissions are normal or abnormal.
- (b) Visible emission notations of the partially enclosed railcar limestone unloading station exhausts shall be performed once per shift during normal daylight operations. A trained employee shall record whether emissions are normal or abnormal.
- (c) If any visible emissions of dust are observed exiting the limestone unloading station doors, the Permittee shall take reasonable response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports. 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 in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports, shall be considered a deviation from this permit.
- (d) Visible emission notations of the ash storage pond area(s) shall be performed at least once per day during normal daylight operations. A trained employee shall record whether emissions are normal or abnormal.
- (e) 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 in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports. Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports, shall be considered a deviation from this permit.
- (f) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation.
- (g) 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.
- (h) 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.

- (i) If abnormal emissions are observed at any baghouse exhaust, the Permittee shall take reasonable response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports. 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.

D.7.9 Baghouse Parametric Monitoring [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]

- (a) The Permittee shall record the total static pressure drop across the baghouses used in conjunction with the limestone transfer drop points at least once per shift when the limestone handling is in operation. When for any one reading, the pressure drop across the baghouse is outside the normal range of 3.0 and 6.0 inches of water or a range established during the latest stack test, the Permittee shall take reasonable response steps in accordance with Section C- Compliance Response Plan - Preparation, Implementation, Records, and Reports. A pressure reading that is outside the above mentioned range is not a deviation from this permit. Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports, shall be considered a deviation from this permit.
- (b) The instrument used for determining the pressure shall comply with Section C - Pressure Gauge and Other 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.7.10 Baghouse Inspections [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]

- (a) An inspection shall be performed within the last month of each calendar quarter of all bags controlling PM emissions from the limestone processing or conveying. All defective bags shall be replaced.
- (b) If an abnormal or improper condition is found during an inspection, the Permittee shall take reasonable response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports. Discovery of an abnormal or improper condition is not a deviation from this permit. Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports, shall be considered a deviation from this permit.

D.7.11 Broken or Failed Bag Detection [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]

In the event that bag failure has been observed:

- (a) For multi-compartment units, the affected baghouse compartments will be shut down immediately until the failed units have been repaired or replaced. Within eight (8) business hours of the determination of failure, response steps according to the timetable described in the Compliance Response Plan shall be initiated. For any failure with corresponding response steps and timetable not described in the Compliance Response Plan, response steps shall be devised within eight (8) business hours of discovery of the failure and shall include a timetable for completion. Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports, shall be considered a deviation from this permit. If operations continue after bag failure is observed and it will be ten (10) days or more after the failure is observed before the failed units will be repaired or replaced, the Permittee shall promptly notify the IDEM, OAQ of the expected date the failed units will be repaired or replaced. The notification shall also include the status of the applicable compliance monitoring parameters with respect to normal, and the results of any response actions taken up to the time of notification.

- (b) For single compartment baghouses, if failure is indicated by a significant drop in the baghouse's pressure readings with abnormal visible emissions or the failure is indicated by an opacity violation, or if bag failure is determined by other means, such as gas temperatures, flow rates, air infiltration, leaks, dust traces or triboflows, then failed units and the associated process will be shut down immediately until the failed units have been repaired or replaced. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions).

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

#### **D.7.12 Record Keeping Requirements**

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- (a) To document compliance with Section C - Opacity and Condition D.7.8, the Permittee shall maintain records of the visible emission notations of the transfer points, baghouse exhausts, limestone unloading station doors, fly ash storage pond area(s) and all response steps taken and the outcome for each.
- (b) To document compliance with Condition D.7.9, the Permittee shall maintain records of the total static pressure drop across each baghouse.
- (c) To document compliance with Condition D.7.10, the Permittee shall maintain records of the results of the baghouse inspections.
- (d) To document compliance with Condition D.7.5, the Permittee shall maintain records of any additional inspections prescribed by the Preventive Maintenance Plan.
- (e) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

## SECTION D.8 FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)] (The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

The following insignificant activities:

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

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

#### D.8.1 Particulate [326 IAC 6-3-2]

Pursuant to 326 IAC 6-3 (Particulate Emission Limitations for Manufacturing Processes), the allowable particulate emission rate from the grinding and machining facilities shall not exceed 0.551 pounds per hour (lbs/hr) based on the following equation:

Interpolation and extrapolation of the data for the process weight rate up to 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

## SECTION E TITLE IV ACID RAIN PROGRAM CONDITIONS

Facility Description [326 IAC 2-7-5(15)] (The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

- (1) One (1) dry bottom, pulverized coal-fired boiler, identified as Boiler No. 1, construction commenced prior to August 17, 1971, with a nominal heat input capacity of 5875 million Btu per hour (MMBtu/hr), with an electrostatic precipitator (ESP) for control of particulate matter, and exhausting to stack A. Boiler No. 1 has continuous emissions monitors (CEMs) for nitrogen oxides (NO<sub>x</sub>) and sulfur dioxide (SO<sub>2</sub>) and a continuous opacity monitor (COM).
- (2) One (1) dry bottom, pulverized coal-fired boiler, identified as Boiler No. 2, construction commenced prior to August 17, 1971, with a nominal heat input capacity of 5875 million Btu per hour (MMBtu/hr), with an electrostatic precipitator (ESP) for control of particulate matter, and exhausting to stack A. Boiler No. 2 has continuous emissions monitors (CEMs) for nitrogen oxides (NO<sub>x</sub>) and sulfur dioxide (SO<sub>2</sub>) and a continuous opacity monitor (COM).
- (3) One (1) dry bottom, pulverized coal-fired boiler, identified as Boiler No. 3, construction commenced prior to August 17, 1971, with a nominal heat input capacity of 5897 million Btu per hour (MMBtu/hr), with an electrostatic precipitator (ESP) for control of particulate matter, and exhausting to stack B. Boiler No. 3 has continuous emissions monitors (CEMs) for nitrogen oxides (NO<sub>x</sub>) and sulfur dioxide (SO<sub>2</sub>) and a continuous opacity monitor (COM).
- (4) One (1) dry bottom, pulverized coal-fired boiler, identified as Boiler No. 4, construction commenced prior to August 17, 1971, with a nominal heat input capacity of 5897 million Btu per hour (MMBtu/hr), with an electrostatic precipitator (ESP) for control of particulate matter, with a flue gas desulfurization (FGD) system for control of sulfur dioxide, and exhausting to stack D. Boiler No. 4 has continuous emissions monitors (CEMs) for nitrogen oxides (NO<sub>x</sub>) and sulfur dioxide (SO<sub>2</sub>) and a continuous opacity monitor (COM).
- (5) One (1) dry bottom, pulverized coal-fired boiler, identified as Boiler No. 5, installed in 1982, with a nominal heat input capacity of 5900 million Btu per hour (MMBtu/hr), with an electrostatic precipitator (ESP) for control of particulate matter, with a flue gas desulfurization (FGD) system for control of sulfur dioxide, and exhausting to stack C. Boiler No. 5 has continuous emissions monitors (CEMs) for nitrogen oxides (NO<sub>x</sub>) and sulfur dioxide (SO<sub>2</sub>) and a continuous opacity monitor (COM).

### Acid Rain Program

#### E.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 Appendix A, and is incorporated by reference.

#### E.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.

## INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT OFFICE OF AIR QUALITY

### PART 70 OPERATING PERMIT CERTIFICATION

Source Name: PSI Energy, Inc. - Gibson Generating Station  
Source Address: S.R. 64 W & C.R. 975, Owensville, Indiana 47570  
Mailing Address: c/o Steven Pearl, 1000 East Main Street, Plainfield, Indiana 46168  
Part 70 Permit No.: T051-7175-00013

**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:

Telephone:

Date:

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT  
OFFICE OF AIR QUALITY  
COMPLIANCE BRANCH  
100 North Senate Avenue  
P.O. Box 6015  
Indianapolis, Indiana 46206-6015  
Phone: 317-233-5674  
Fax: 317-233-5967**

**PART 70 OPERATING PERMIT  
EMERGENCY OCCURRENCE REPORT**

Source Name: PSI Energy, Inc. - Gibson Generating Station  
Source Address: S.R. 64 W & C.R. 975, Owensville, Indiana 47570  
Mailing Address: c/o Steven Pearl, 1000 East Main Street, Plainfield, Indiana 46168  
Part 70 Permit No.: T051-7175-00013

**This form consists of 2 pages**

**Page 1 of 2**

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

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

Facility/Equipment/Operation:

Control Equipment:

Permit Condition or Operation Limitation in Permit:

Description of the Emergency:

Describe the cause of the Emergency:

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

**Page 2 of 2**

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

Form Completed by: \_\_\_\_\_

Title / Position: \_\_\_\_\_

Date: \_\_\_\_\_

Phone: \_\_\_\_\_

A certification is not required for this report.

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

**Part 70 Quarterly Report for Use When Combusting Coal**

Source Name: PSI Energy, Inc. - Gibson Generating Station  
 Source Address: S.R. 64 W & C.R. 975, Owensville, Indiana 47570  
 Mailing Address: c/o Steven Pearl, 1000 East Main Street, Plainfield, Indiana 46168  
 Part 70 Permit No.: T051-7175-00013  
 Facility: Boilers No. 1, 2 and 3.  
 Parameter: Sulfur Dioxide (SO<sub>2</sub>) from coal combustion  
 Limit: 3.19 pounds per million Btu heat input

FACILITY: \_\_\_\_\_ YEAR: \_\_\_\_\_

Day	Daily Average Coal Sulfur Content (%)	Daily Average Coal Heat Content (MMBtu/lb)	Coal Consumption (Tons)	Equivalent Sulfur Dioxide Emissions (lbs/MMBtu)		
				This day	Previous 29 days	30 Day Total
1						
2						
3						
4						
5						
6						
7						
8						
9						
10						
11						
12						
13						
14						
15						
16						
17						

Day	Daily Average Coal Sulfur Content (%)	Daily Average Coal Heat Content (MMBtu/lb)	Coal Consumption (Tons)	Equivalent Sulfur Dioxide Emissions (lbs/MMBtu)		
				This day	Previous 29 days	30 Day Total
18						
19						
20						
21						
22						
23						
24						
25						
26						
27						
28						
29						
30						

- 9 No deviation occurred in this quarter.
- 9 Deviation/s occurred in this quarter.  
 Deviation has been reported on: \_\_\_\_\_

Submitted by: \_\_\_\_\_  
 Title / Position: \_\_\_\_\_  
 Signature: \_\_\_\_\_  
 Date: \_\_\_\_\_  
 Phone: \_\_\_\_\_

Attach a signed certification to complete this report.

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

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

Source Name: PSI Energy, Inc. - Gibson Generating Station  
 Source Address: S.R. 64 W & C.R. 975, Owensville, Indiana 47570  
 Mailing Address: c/o Steven Pearl, 1000 East Main Street, Plainfield, Indiana 46168  
 Part 70 Permit No.: T051-7175-00013

Months: \_\_\_\_\_ to \_\_\_\_\_ Year: \_\_\_\_\_

This report shall be submitted quarterly based on a calendar year. For the purpose of this permit, "calendar year" means the twelve (12) month period from January 1 to December 31 inclusive. Any deviation from the requirements, the date(s) of each deviation, the probable cause of the deviation, and the response steps taken must be reported. Deviations that are required to be reported by an applicable requirement shall be reported according to the schedule stated in the applicable requirement and do 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".	
<input checked="" type="radio"/> NO DEVIATIONS OCCURRED THIS REPORTING PERIOD.	
<input checked="" type="radio"/> THE FOLLOWING DEVIATIONS OCCURRED THIS REPORTING PERIOD	
<b>Permit Requirement</b> (specify permit condition #)	
<b>Date of Deviation:</b>	<b>Duration of Deviation:</b>
<b>Number of Deviations:</b>	
<b>Probable Cause of Deviation:</b>	
<b>Response Steps Taken:</b>	
<b>Permit Requirement</b> (specify permit condition #)	
<b>Date of Deviation:</b>	<b>Duration of Deviation:</b>
<b>Number of Deviations:</b>	
<b>Probable Cause of Deviation:</b>	
<b>Response Steps Taken:</b>	

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

Form Completed By: \_\_\_\_\_

Title/Position: \_\_\_\_\_

Date: \_\_\_\_\_

Phone: \_\_\_\_\_

Attach a signed certification to complete this report.

# Indiana Department of Environmental Management Office of Air Quality

## Addendum to the Technical Support Document for Part 70 Operating Permit

### Source Background and Description

**Source Name:** PSI Energy, Inc. - Gibson Generating Station  
**Source Location:** S.R. 64 W & C.R. 975, Owensville, Indiana 47665  
**County:** Gibson  
**SIC Code:** 4911  
**Operation Permit No.:** T051-7175-00013  
**Permit Reviewer:** Nisha Sizemore

On October 25, 2003, the Office of Air Quality (OAQ) had a notice published in the Princeton Daily Clarion, Princeton, Indiana, stating that PSI Energy, Inc. – Gibson Generating Station had applied for a Part 70 Operating Permit to operate a stationary electric utility generation station. The notice also stated that OAQ proposed to issue a permit for this operation and provided information on how the public could review the proposed permit and other documentation. Finally, the notice informed interested parties that there was a period of thirty (30) days to provide comments on whether or not this permit should be issued as proposed.

On November 24, 2003, Steven L. Pearl, on behalf of PSI Energy, Inc., submitted comments on the proposed Part 70 permit. The summary of the comments and any changes made as a result of the comments follows. New text is shown in bold font and deleted text is shown in strikethrough font.

### Comment 1

Title Page

Delete the second paragraph beginning with "The Permittee must comply...". This paragraph paraphrases conditions already contained in the permit and does not serve any purpose other than to lengthen the title page. This paragraph should be deleted in its entirety.

### Response to Comment 1

The comment is in reference to the provisions that state that the Permittee must comply with all conditions of this permit, and that noncompliance is grounds for enforcement action, permit termination, revocation and reissuance, etc.

IDEM cannot completely remove these provisions from the permit, because 326 IAC 2-7-5(6)(A) requires these provisions to be included in all Part 70 permits. There has been no change to the permit as a result of this comment.

### Comment 2

Section A, Source Summary

Condition A.2(a), Emission Units and Pollution Control Summary: Revise description to include SCR installation, and change monitoring location from Unit 1 to Stack A (monitors are located in the Stack common to Units 1 and 2)

"...with an electrostatic precipitator (ESP) for control of particulate matter, **and to be equipped**

**with Selective Catalytic Reduction (SCR) for control of Nitrogen Oxides during the ozone season on or before May 1, 2005, and exhausting to Stack A. ~~Boiler No. 4~~ Stack A has...**

Condition A.2(b), Emission Units and Pollution Control Summary: Revise description to include SCR installation, and change monitoring location from Unit 2 to Stack A (monitors are located in the Stack common to Units 1 and 2)

**"...with an electrostatic precipitator (ESP) for control of particulate matter, and to be equipped with Selective Catalytic Reduction (SCR) for control of Nitrogen Oxides during the ozone season on or before May 30, 2004, and exhausting to Stack A. ~~Boiler No. 2~~ Stack A has..."**

Condition A.2(c), Emission Units and Pollution Control Summary: Revise description to include SCR installation, and change monitoring location from Unit 3 to Stack B (monitors are located in the stack shared by Unit 3 and Unit 4 part time)

**"...with an electrostatic precipitator (ESP) for control of particulate matter, and to be equipped with Selective Catalytic Reduction (SCR) for control of Nitrogen Oxides during the ozone season on or before May 30, 2004, and exhausting to Stack B. ~~Boiler No. 3~~ Stack B has..."**

Condition A.2(d), Emission Units and Pollution Control Summary: Revise description to include SCR installation, add emission point of Stack B during periods of FGD non-operation, and change SO<sub>2</sub> and NO<sub>x</sub> monitoring location from Unit 4 to Stack D (SO<sub>2</sub> and NO<sub>x</sub> monitors are located in the stack, and the opacity monitor is located in the ductwork)

**"...with an electrostatic precipitator (ESP) for control of particulate matter, and to be equipped with Selective Catalytic Reduction (SCR) for control of Nitrogen Oxides during the ozone season on or before May 30, 2004, and exhausting to Stack D during normal operations, and exhausting to Stack B during startup, shutdown or other periods when the FGD is not in operation. ~~Boiler No. 4~~ Stack D has continuous emissions monitors (CEMs) for nitrogen oxides (NO<sub>x</sub>) and sulfur dioxide (SO<sub>2</sub>), and **Boiler 4** has a continuous opacity monitor (COM)."**

Condition A.2(e), Emission Units and Pollution Control Summary: Revise description to include SCR installation, and change the SO<sub>2</sub> and NO<sub>x</sub> monitoring location from Unit 5 to Stack C (the SO<sub>2</sub> and NO<sub>x</sub> monitors are located in the stack, and the opacity monitor is located in the ductwork)

**"...with an electrostatic precipitator (ESP) for control of particulate matter, and to be equipped with Selective Catalytic Reduction (SCR) for control of Nitrogen Oxides during the ozone season on or before May 30, 2004, and exhausting to Stack C. ~~Boiler No. 5~~ Stack C has continuous emissions monitors (CEMs) for nitrogen oxides (NO<sub>x</sub>) and sulfur dioxide (SO<sub>2</sub>), and **Boiler 5** has a continuous opacity monitor (COM)."**

Condition A.2(f)&(g), Emission Units and Pollution Control Summary: Delete these descriptions, they deal with the Unit 2 Auxiliary Boiler and the Unit 5 Auxiliary Boiler which are retired and rendered inoperative.

Condition A.2(h)(3), Emission Units and Pollution Control Summary: Change to:

**"~~Three (3) One (1)~~ storage piles, having an estimated combined storage capacity including the active piles of 4,000,000 tons, with fugitive emissions controlled by a watering system trucks, and exhausting to the ambient air."**

The coal storage actually consist of three piles rather than one, and dust control watering in conducted by trucks. The piles exist in the ambient air, so it is redundant to say that it exhausts to the ambient air.

Condition A.2(h)(6), Emission Units and Pollution Control Summary: Change to read

**"Five (5) enclosed coal bunkers, each with a ~~normal~~ nominal capacity of 15,000 tons of coal".**

Condition A.2(i), Emission Units and Pollution Control Summary: Delete partial sentence "~~with a maximum throughput of 250 tons of limestone per hour~~". The limestone processing throughput varies within the system described.

Condition A.2(i)(1), Emission Units and Pollution Control Summary: Modify to read:

"...identified as LSDP-1 **with a nominal throughput of 2,500 tons of limestone per hour**, with..."

Condition A.2(i)(2), Emission Units and Pollution Control Summary: Modify to read:

"...identified as LSDP-2 and LSDP-5 **with a nominal throughput of 200 tons of limestone per hour**, with..."

Condition A.2(i)(3), Emission Units and Pollution Control Summary: Modify to read:

"One (1) storage pile, with a **nominal** storage capacity..."

Condition A.2(i)(6), Emission Units and Pollution Control Summary: Correct condition to read:

"Two (2) day bins for temporary storage of limestone, with a ~~normal~~ **nominal** loading capacity of 150 tons per hour ~~each~~ with dust from loading the bins controlled ...".

The total loading capacity is 150 tons per hour to either of the two day bins.

## Response to Comment 2

The requested changes have been made, as shown below. These changes have also been made in the descriptions in the D Sections of the permit.

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

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- (a) One (1) dry bottom, pulverized coal-fired boiler, identified as Boiler No. 1, construction commenced prior to August 17, 1971, with a nominal heat input capacity of 5875 million Btu per hour (MMBtu/hr), with an electrostatic precipitator (ESP) for control of particulate matter, **and to be equipped with Selective Catalytic Reduction (SCR) for control of NOx during the ozone season**, and exhausting to stack A. ~~Boiler No. 1~~ **Stack A** has continuous emissions monitors (CEMs) for nitrogen oxides (NO<sub>x</sub>) and sulfur dioxide (SO<sub>2</sub>) and a continuous opacity monitor (COM).
- (b) One (1) dry bottom, pulverized coal-fired boiler, identified as Boiler No. 2, construction commenced prior to August 17, 1971, with a nominal heat input capacity of 5875 million Btu per hour (MMBtu/hr), with an electrostatic precipitator (ESP) for control of particulate matter, **and to be equipped with Selective Catalytic Reduction (SCR) for control of NOx during the ozone season**, and exhausting to stack A. ~~Boiler No. 2~~ **Stack A** has continuous emissions monitors (CEMs) for nitrogen oxides (NO<sub>x</sub>) and sulfur dioxide (SO<sub>2</sub>) and a continuous opacity monitor (COM).
- (c) One (1) dry bottom, pulverized coal-fired boiler, identified as Boiler No. 3, construction

- commenced prior to August 17, 1971, with a nominal heat input capacity of 5897 million Btu per hour (MMBtu/hr), with an electrostatic precipitator (ESP) for control of particulate matter, **and to be equipped with Selective Catalytic Reduction (SCR) for control of NO<sub>x</sub> during the ozone season**, and exhausting to stack B. ~~Boiler No. 3~~ **Stack B** has continuous emissions monitors (CEMs) for nitrogen oxides (NO<sub>x</sub>) and sulfur dioxide (SO<sub>2</sub>) and a continuous opacity monitor (COM).
- (d) One (1) dry bottom, pulverized coal-fired boiler, identified as Boiler No. 4, construction commenced prior to August 17, 1971, with a nominal heat input capacity of 5897 million Btu per hour (MMBtu/hr), with an electrostatic precipitator (ESP) for control of particulate matter, **and to be equipped with Selective Catalytic Reduction (SCR) for control of NO<sub>x</sub> during the ozone season**, with a flue gas desulfurization (FGD) system for control of sulfur dioxide, and exhausting to stack D **during normal operations, and exhausting to Stack B during startup, shutdown, or other periods when the FGD is not in operation**. ~~Boiler No. 4~~ **Stack D** has continuous emissions monitors (CEMs) for nitrogen oxides (NO<sub>x</sub>) and sulfur dioxide (SO<sub>2</sub>) and **Boiler 4 has** a continuous opacity monitor (COM).
- (e) One (1) dry bottom, pulverized coal-fired boiler, identified as Boiler No. 5, installed in 1982, with a nominal heat input capacity of 5900 million Btu per hour (MMBtu/hr), with an electrostatic precipitator (ESP) for control of particulate matter, **and to be equipped with Selective Catalytic Reduction (SCR) for control of NO<sub>x</sub> during the ozone season**, with a flue gas desulfurization (FGD) system for control of sulfur dioxide, and exhausting to stack C. ~~Boiler No. 5~~ **Stack C** has continuous emissions monitors (CEMs) for nitrogen oxides (NO<sub>x</sub>) and sulfur dioxide (SO<sub>2</sub>) and **Boiler 5 has** a continuous opacity monitor (COM).
- ~~(f) One (1) oil-fired boiler, identified as Unit 2 Auxiliary Boiler, installed in 1974, with a maximum heat input capacity of 159 million Btu per hour (MMBtu/hr), and exhausting to stack Aux-2.~~
- ~~(g) One (1) oil-fired boiler, identified as Unit 5 Auxiliary Boiler, installed in 1982, with a maximum heat input capacity of 226 million Btu per hour (MMBtu/hr), and exhausting to stack Aux-5.~~
- ~~(h)~~**(f)** A coal transfer system, with a nominal throughput of 6,000 tons of coal per hour, consisting of the following equipment:
- (1) Two (2) railcar unloading stations, each with a drop point to a hopper identified as DP-5 and DP-25, with the drop point controlled by a partial enclosure, and exhausting to the ambient air.
  - (2) Two (2) active piles, each with a drop point to a hopper identified as DP-1 and DP-16, with each drop point enclosed and controlled by a baghouse, and exhausting to the ambient air.
  - (3) ~~One (1)~~ **Three (3)** storage pile piles, having an estimated combined storage capacity including the active piles of 4,000,000 tons, with fugitive emissions controlled by a watering system trucks, ~~and exhausting to the ambient air.~~
  - (4) Four (4) enclosed hoppers, each with a drop point to conveyors identified as DP-2, DP-6, DP-17 and DP-26, with each drop point enclosed and controlled by a baghouse, and exhausting to the ambient air.
  - (5) An enclosed conveyor system, with 18 drop points identified as DP-3, DP-4, DP-7 through DP-15, and DP-18 through DP-24, with each drop point enclosed and controlled by a baghouse, excluding the two (2) active pile conveyors which have

the drop points (DP-18 and DP-22) controlled by telescopic chutes, and exhausting to the ambient air.

- (6) Five (5) enclosed coal bunkers, each with a ~~normal~~ **nominal** capacity of 15,000 tons of coal. Bunkers are loaded via a conveyor tripper system with a total capacity of 3,000 tons per hour to the units 1 and 2 bunkers, and 3,000 tons per hour to the units 3, 4 and 5 bunkers. Particulate matter generated from loading bunkers is controlled with a baghouse, and exhausts to the ambient air.
- (f)(g) A limestone processing system, ~~with a maximum throughput of 250 tons of limestone per hour~~, consisting of the following equipment:
- (1) One (1) unloading station for trucks or railcar, with a drop point to a hopper identified as LSDP-1 **with a nominal throughput of 2,500 tons of limestone per hour**, with the drop point controlled by a partial enclosure, and exhausting to the ambient air.
  - (2) Two (2) enclosed hoppers, each with a drop point to conveyors identified as LSDP-2 and LSDP-5 **with a nominal throughput of 200 tons of limestone per hour**, with each drop point enclosed and controlled by a baghouse, and exhausting to the ambient air.
  - (3) One (1) storage pile, with a **nominal** storage capacity of 50,000 tons, with a drop point to a hopper identified as LSDP-4, with the drop point enclosed and exhausting to the ambient air.
  - (4) An enclosed conveyor system, with four (4) drop points identified as LSDP-3 and LSDP-8 through LSDP-10, with each drop point enclosed and controlled by a baghouse, and exhausting to the ambient air.
  - (5) One (1) enclosed hammermill, with a drop point to a conveyor identified as LSDP-6, with the drop point enclosed and controlled by a baghouse, and exhausting to the ambient air.
  - (6) Two (2) day bins for temporary storage of limestone, with a ~~normal~~ **nominal** loading capacity of 150 tons per hour ~~each~~, with dust from loading the bins controlled by bin vent filters, and exhausting to the ambient air.

### Comment 3

#### Condition B.8 (Certification)

Please modify paragraph (b) to read "One (1) certification shall be included, using the attached Certification Form **or its equivalent**, with each submittal requiring certification." This revision will allow us to re-create the certification form in a format compatible for use.

### Response to Comment 3

IDEM has made the requested change, as shown below.

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

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- (b) One (1) certification shall be included, using the attached Certification Form, **or its equivalent**, with each submittal requiring certification. One (1) certification can cover multiple forms in one (1) submittal.

**Comment 4**

Condition B.10 (Preventive Maintenance Plan)

This Section seems to presume that there will be multiple Preventative Maintenance Plans, when in reality all equipment may be included in one Plan. Thus all references to Preventative Maintenance Plans should be changed to Preventative Maintenance Plan or Plan(s), and all references to PMPs should be changed to PMP or PMP(s). This change is applicable to part (a) line 2 and 10, part (b) line 1, and part (c) lines 1 and 3.

Condition B.10(a), Preventive Maintenance Plan: In first sentence, replace word "issuance" with "effectiveness".

Condition B.10(a)(1), Preventive Maintenance Plan: Revise to read "Identification of the individual(s) responsible (by title or classification) for inspecting, maintaining, and repairing emission control devices;"

Condition B.10(b), Preventive Maintenance Plan: Delete final phrase of paragraph so it will read: "...does not cause or ~~contribute~~ or is the primary contributor to an exceedance of any limitation on emissions ~~or potential to emit~~."

Condition B.10(c), Preventive Maintenance Plan: Delete final phrase of paragraph so it will read: "...whenever lack of proper maintenance causes or is the primary contributor to an exceedance of any limitation on emissions ~~or potential to emit~~."

**Response to Comment 4**

The Condition B.10 in its present form does not require the Permittee to prepare multiple preventive maintenance plans; therefore, IDEM does not believe it is necessary to point out that there may be one plan that covers all affected units, or separate plans for each unit.

Pursuant to IC 13-15-5-3, this Part 70 permit becomes effective upon issuance; therefore the effective date of the permit and the issuance date of the permit are the same. It is not necessary to replace the word "issuance" with the word "effectiveness".

Condition B.10(a)(1) has been revised to include the phrase "by title or classification". Condition B.10(a)(1) has been changed as follows:

- (1) Identification of the individual(s), **by title or classification**, responsible for inspecting, maintaining, and repairing emission control devices;

IDEM does not agree to change "does not cause or contribute..." to "does not cause or is the primary contributor..." in paragraph (b) of the condition. The Permittee should implement the PMP such that lack of proper maintenance does not contribute **at all** to an exceedance of any limitation on emissions.

Since any limitation on emissions is the same as a limit on potential to emit, IDEM agrees to delete "or potential to emit" from paragraphs (b) and (c).

- (b) The Permittee shall implement the PMPs, including any required record keeping, as necessary to ensure that failure to implement a PMP does not cause or contribute to an exceedance of any limitation on emissions ~~or potential to emit~~.
- (c) A copy of the PMPs shall be submitted to IDEM, OAQ upon request and within a reasonable time, and shall be subject to review and approval by IDEM, OAQ. IDEM, OAQ, may require the Permittee to revise its PMPs whenever lack of proper maintenance causes or is the primary contributor to an exceedance of any limitation on emissions ~~or potential to emit~~.

#### Comment 5

##### Condition B.11 (Emergency Provisions)

Condition B.11(b)(5), revise the sentence following address to read: "within two (2) working **business** days of the time..."

Condition B.11(e), Emergency Provisions: Change "Preventive Maintenance Plans" to "Preventive Maintenance Plan" or "Preventive Maintenance Plan(s)".

Condition B.11(h), Emergency Provisions: Revise paragraph (h) to read:

"The Permittee shall include all emergencies in the Quarterly Deviation and Compliance Monitoring Report. **Emergencies which have been previously reported or included in reports required elsewhere in the permit do not have to be included in the Quarterly Deviation and Compliance Report.**"

Emergencies that have already been notified within four daytime business hours in accordance with B.11(b)(4) and reported within two working days in accordance with B.11(b)(5) should not need to be reiterated again in the quarterly report.

#### Response to Comment 5

Paragraph (b)(5) uses the time period exactly stated in 326 IAC 2-7-16(b)(5). The notification of an emergency should occur within two (2) working days **of the facility that has the emergency**, not within two (2) of IDEM's working days.

IDEM does not believe it is necessary to point out that there may be one plan that covers all affected units, or separate plans for each unit.

IDEM does not agree that emergencies previously reported in accordance with Condition B.11(b) do not need to be reported again in the Quarterly Deviation and Compliance Monitoring Report. Rule 326 IAC 2-7-6(1) requires that any document or report required by a Part 70 permit must include a certification by the responsible official. Many applicants have stated that obtaining a certification by the responsible official would cause difficulty in meeting the requirement to submit the Emergency Occurrence Report within 2 days. Therefore IDEM and U.S. EPA have agreed that the report which is required to be submitted within 2 days of an emergency does not require a certification by the responsible official. Instead, the emergencies must be reported again in the Quarterly Deviation and Compliance Monitoring Report that is certified by the responsible official. Reporting the emergency again in the Quarterly Deviation and Compliance Monitoring Report fulfills the obligation to satisfy the requirements of 326 IAC 2-7-6(1) which requires reports to be certified.

#### Comment 6

Condition B.12(a), Permit Shield: Certain conditions from previous permits need not be incorporated into the proposed permit because these conditions are no longer applicable. These conditions should be listed along with the reasons for not incorporating in the TSD. Accordingly, condition B.12(a), second sentence beginning on line one, should be revised as follows:

"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~~ **effectiveness**, provided that either the applicable requirements are included and specifically identified in this permit **or Technical Support Document (TSD)**, or the permit **or TSD** contains an explicit determination or concise summary of a determination that other specifically identified requirements are not applicable."

### Response to Comment 6

Pursuant to IC 13-15-5-3, the permit becomes effective upon issuance; therefore the effective date of the permit and the issuance date of the permit are the same. It is not necessary to replace the word "issuance" with the word "effectiveness".

Pursuant to 326 IAC 2-7-15, compliance with the conditions of a Part 70 Permit shall be deemed compliance with any applicable requirements..., provided either of the following: (1) The applicable requirements are included and are specifically identified in a Part 70 permit. (2) The commissioner, in acting on the Part 70 permit application or revision, determines in writing that other requirements specifically identified are not applicable to the source, and the Part 70 permit includes the determination or a concise summary thereof. Therefore, the permit shield under 326 IAC 2-7-15 only applies to requirements that are included in or identified in a Part 70 permit. No change has been made to this condition.

### Comment 7

Condition B.14(a), Deviations from Permit Requirements and Conditions: Modify the last sentence of the first paragraph to read:

"A deviation required to be reported pursuant to an applicable requirement that exists independent of this permit **or elsewhere in this permit**, shall be reported according to the schedule stated in the applicable requirement and does not need to be included in this report."

Similar to the comment regarding condition B.11, a deviation which is required to be included in another report, should not be required to be reiterated in this report.

### Response to Comment 7

IDEM has explained in response to comment 5 that the Permittee needs to comply with the certification requirements for reporting deviations; therefore no change is needed to any permit condition.

### Comment 8

Condition B.16(c), Permit Renewal: Modify end of last sentence, beginning on line 6 to read:

"...any additional information **reasonably** identified as being needed to process the application."

### Response to Comment 8

It is not clear from the comment, which term the commenter wants the word "reasonably" to describe. From the suggested language, it would appear that "reasonably" describes "identified". However, the

condition already states that the notification requesting additional information by a reasonable deadline must be submitted **in writing**, which IDEM believes is the “reasonable” and appropriate method for informing the applicant of the need for additional information. Additionally, the condition already states that the deadline for submitting information must be reasonable. The rule states that IDEM can only request information that is **necessary** to process the application (emphasis added); therefore, there is no need to add the word “reasonably” to describe the information requested. There has been no change to the condition as a result of this comment.

### Comment 9

Condition B.20(a)(5), Operational Flexibility: Revise to read:

"The Permittee maintains records **accessible** on-site which document...".

This change allows records to be electronically accessible on-site from a server which may physically be located elsewhere.

Condition B.20(c), Operational Flexibility: Add sentence to end of (c) which reads:

**Notification per (a)(4) and (b) does not apply to emission trades of SO<sub>2</sub> or NO<sub>x</sub> under Title IV of the Clean Air Act or the NO<sub>x</sub> Budget Trading Program.**

### Response to Comment 9

IDEM agrees that records can be electronically accessible from the site, and has revised the permit condition accordingly.

Condition B.20(c) does not apply to the Acid Rain Program or to the NO<sub>x</sub> Budget Trading Program. However, IDEM would prefer that the condition read as closely as possible to how the rule reads in the Indiana Administrative Code. Therefore, no change has been made to Condition B.20(c) as a result of this comment.

Changes to the condition are shown below:

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

- (a) The Permittee may make any change or changes at the source that are described in 326 IAC 2-7-20(b), (c), or (e), without a prior permit revision, if each of the following conditions is met:
- (5) The Permittee maintains records **accessible** on-site which document, on a rolling five (5) year basis, all such changes and emissions trading that are subject to 326 IAC 2-7-20(b), (c), or (e) and makes such records available, upon reasonable request, for public review.

### Comment 10

Condition B.21, Inspection and Entry: Revise to read:

"Upon presentation of proper identification cards, credentials, and other documents as may be required by law, and subject to **any legal privilege and** to the Permittee's right ...".

Condition B.21(a), Inspection and Entry: Revise part (a) to read

"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~~ **made accessible** under the conditions of this permit;"

References to where an emissions related activity is conducted is irrelevant in this case, and replacing "kept" with "made accessible" will allow for electronic storage accessible from the site even if the server is at another location.

Condition B.21(b), Inspection and Entry: Revise part (b) to read

"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~~ **may review and request copies of** any records that must be kept under the conditions of this permit;"

In cases in which documents are stored and accessible electronically, PSI will be happy to provide copies as requested, but cannot provide access to electronic systems.

### Response to Comment 10

IDEM made every attempt to identify every possible rule or statute that governs the issue of inspection and entry. Beyond rules and statutes, case law can be considered in rule interpretation. However, IDEM does not have to specifically cite case law in permits because case law is used to interpret rule applicability regardless of whether it is specifically cited.

326 IAC 2-7-5(3)(B)(ii)(DD) states that the Permittee shall retain records on-site for three (3) years and shall make them available upon request for the two (2) years following. Therefore, it is appropriate to require the records to be kept on-site and IDEM inspectors have the authority to inspect the area where the records are kept.

IDEM agrees that the records may be electronically accessible from the site, and has revised the condition accordingly.

IDEM does not agree to the commenter's suggested revisions to paragraph (b), since the suggested wording would allow the inspector to **request** copies of documents, but would not require the Permittee to actually provide them.

Changes to the condition are shown below:

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

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~~ **are physically present or electronically accessible** under the conditions of this permit;

### Comment 11

Condition B.23(a), Annual Fee Payment: Revise to read:

"The Permittee shall pay **applicable** annual fees to IDEM, OAQ within thirty (30) calendar days of receipt of a billing."

### Response to Comment 11

It is not necessary to add the word "applicable" to B.23(a), because Condition B.24(b) and 326 IAC 2-7-19(e) already spells out what the Permittee must do if there is a dispute about the applicable fees.

### Comment 12

Condition C.3, Open Burning: Add approval for annual fire training conducted at the station, consistent with language routinely used in annual approvals. Add language:

**Pursuant to 326 IAC 4-1-4.1, approval is hereby granted for the annual training of employees to extinguish fires. The approval is granted with the following conditions:**

- (1) Only No.2 Fuel Oil, Kerosene, Gasoline and Propane may be burned. All burning shall be conducted in a manner to prevent soil contamination.**
- (2) If at any time the burning creates an air pollution problem, a threat to public health, a nuisance, or a fire hazard, the burning shall be extinguished.**
- (3) No burning shall be conducted during unfavorable meteorological conditions such as: high winds, temperature inversions, or air stagnation; when an open burning ban has been officially declared by either appropriate state or local officials; or when a pollution alert or ozone action day has been declared.**
- (4) Burning shall be conducted during daylight hours only.**
- (5) This permit shall be made available at the burning site to state or local officials upon request.**
- (6) All burning must comply with other federal, state and local laws, regulations or ordinances.**
- (7) Burning may take place within one hundred (100) feet of any structure; or three hundred (300) feet of a frequently traveled road, fuel storage area, or pipeline only if adequate precautions are taken. Wind speed, direction and transport winds shall be considered in setting the burning so that there is minimal or no impact to nearby roads, structures, power lines, fuel storage areas or pipelines.**
- (8) The Hamilton County Health Department, Hamilton County Sheriff, the local fire department and the Indiana Department of Environmental Management, Office of Air Quality shall be notified at least twenty four (24) hours in advance of the date and time of the burning.**

### Response to Comment 12

IDEM grants variances to sources for this type of activity. These approvals are available through the Compliance Section of the Indiana Department of Environmental Management's Office of Air Quality under 326 IAC 4-1-4.1 and not through the permitting process under 326 IAC 2. Therefore, the Permittee will need to apply for a separate approval for annual fire extinguish training activities. Fire training approvals are generally only valid for one (1) year while the term of this permit is five (5) years.

### Comment 13

Condition C.4, Incineration: Modify first sentence to read

"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 **or as provided elsewhere in this permit.**"

### Response to Comment 13

No other condition in this Part 70 permit allows the Permittee to operate an incinerator or incinerate waste without complying with 326 IAC 4-2 and 326 IAC 9-1-2. Additionally, evaporating boiler tube chemical cleaning waste liquids would not be considered using the boiler as an incinerator, because "evaporating" liquids that are mostly water is not the same as "incinerating" materials which would burn. No changes have been made to this condition as a result of this comment.

### Comment 14

Condition C.9(c), Performance Testing: At the end of part (c), add sentence

**"The submittal of a third party test report by the Permittee does not require certification by the Responsible Official as defined by 326 IAC 2-7-1(34)."**

A test report prepared and signed by a testing contractor should not require the additional certification of the Responsible Official.

### Response to Comment 14

326 IAC 2-7-5(3)(C)(i) states that all reports required by a Part 70 permit must be certified by the responsible official. Therefore, the Permittee is required to submit the test report with the certification from the responsible official in accordance with 326 IAC 2-7-4(f).

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

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- (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. **The test report requires certification by the responsible official.**

### Comment 15

Condition C.11, Compliance Monitoring: In first sentence, change "issuance" to "effectiveness".

### Response to Comment 15

Pursuant to IC 13-15-5-3, the permit becomes effective upon issuance; therefore the effective date of the permit and the issuance date of the permit are the same. It is not necessary to replace the word "issuance" with the word "effectiveness".

### Comment 16

C.12 (Maintenance of Continuous Opacity Monitoring Equipment)

As a general matter, PSI does not agree that visible emission observations or notations are necessary during brief monitor outages, particularly if the boiler is operating under steady state conditions. PSI

recommends deletion of Condition C.12(d) in its entirety. However, pursuant to our commitment to compliance, PSI will accept this condition if the changes recommended in the following comments (pertaining to Condition C.12(d)) are made.

In paragraph (d), change “one (1) hour” to “four (4) hours”. In cases of monitor maintenance or malfunction, it is not always possible to determine if the monitor will be down for an hour or more in time to coordinate staff availability to conduct the VE notations.

In (d)(1), revise the second sentence to read:

~~“A trained~~ **An** employee shall record whether emissions...”

Revise (d)(1)(A) to read:

~~A trained employee is an employee who has~~ **The employee must have** worked at the plant or **similar facility** at least one month and ~~has been trained~~ **be familiar** in the appearance...

In the event that a certified VE reader is not available after 24 hours of monitor downtime, add C.12(d)(3) which will allow continuation of the VE notations for an additional 24 hours:

**For unscheduled COM shutdowns or malfunctions, if a certified Visible Emissions (VE) reader is not available at the end of the first 24 hours, visible emission notations in accordance with (a) above shall continue for an additional 24 hours in lieu of VE readings.**

In the event that a certified VE reader is not available after 48 hours, or the onsite VE reader has failed to recertify for whatever reason, add C.12(d)(4):

**If a certified Visible Emissions reader is not available after 48 hours, a previously certified VE reader may be used to comply with (2) above.**

Visible Emission Observations or notations should not be required if the facility is not operating; therefore, add C.12(e):

**The Visible Emission Notations and Visible Emission Reading requirements of (d) above shall not apply during periods when the boiler is not in operation and combusting coal.**

### Response to Comment 16

The requirement to have a trained employee work at the plant for at least one month is reasonable and appropriate. The characteristics of emissions from each facility are unique. What appears to be normal emissions from one facility may not be normal for another facility. For example, normal emissions from a unit equipped with a scrubber will appear very different from a similar unit that is not equipped with a scrubber.

The requirement to have a certified visible emissions reader on-site within 24 hours of a COM shutdown or malfunction is reasonable and necessary. The Permittee is required to certify continuous compliance with all conditions of the permit. The Permittee must have sufficient information available in order to be able to certify continuous compliance. If the COMS fails and the Permittee does not perform any supplemental monitoring during the period of time when the COMS is not operating, there will not be sufficient information available for the Permittee to be able to certify continuous compliance during that time period. Therefore, the permit must include a requirement to perform supplemental monitoring whenever the COMS is not in operation and the emission unit is in operation. IDEM believes that after 24 hours of monitor downtime, the Permittee must have a certified person perform Method 9 visible emissions readings to assure that variations in the coal and boiler load do not impact emissions. Normal/abnormal visible emission notations by someone who is not trained to perform Method 9 visible emissions readings, would not be adequate to differentiate such variations.

### Comment 17

Condition C.13, Monitoring Methods: Revise to read:

"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, **40 CFR 75**, or other approved methods as specified in this permit."

### Response to Comment 17

IDEM has made the requested change as shown below.

C.13 Monitoring Methods [326 IAC 3] [40 CFR 60] [40 CFR 63]

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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, **40 CFR 75**, or other approved methods as specified in this permit.

### Comment 18

Condition C.14, Pressure Gauge and Other Instrument Specifications: Delete this condition, it is not necessary and not authorized.

### Response to Comment 18

IDEM believes that monitoring the pressure drop across the baghouses is important for determining the proper operation of the baghouses (see response to comment 51). In order to accurately measure the pressure drop, adequate pressure drop gauges must be used. The authority for the condition is in 326 IAC 2-1.1-11, 326 IAC 2-7-5(3) and 326 IAC 2-7-6(1) and is cited in the title of the condition.

### Comment 19

Condition C.15(a), Emergency Reduction Plans: Modify (a) to read:

"The Permittee prepared and submitted written emergency reduction plans (ERPs) consistent with safe operating procedures on ~~November 14, 1996~~ **on February 12, 1980 and subsequently approved on March 19, 1980.**"

### Response to Comment 19

IDEM agrees. The requested change has been made, as shown below. The condition has been renumbered C.15.

C.15 Emergency Reduction Plans [326 IAC 1-5-2] [326 IAC 1-5-3]

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

- (a) The Permittee prepared and submitted written emergency reduction plans (ERPs) consistent with safe operating procedures on ~~November 14, 1996~~ **February 12, 1980. The plans (ERPs) were approved on March 19, 1980.**
- (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]

## Comment 20

### Condition C.17 (Compliance Response Plan)

As a general matter, PSI does not agree that IDEM has the authority to require a CRP in this permit, and recommends deletion of Condition C.17 in its entirety. However, pursuant to our commitment to compliance, PSI will accept this condition if the changes recommended in the following comments (pertaining to Condition C.17) are made.

In paragraph (a), delete the first sentence. PSI does not concede that a CRP is required in the Part 70 permit nor is it necessary for each compliance monitoring provision. Revise the last sentence, regarding the effective date, to read

The CRP shall be prepared within ninety (90) days after ~~issuance of this permit~~ **effectiveness of the applicable permit conditions** by the Permittee,...

In paragraph (a)(1), delete the last portion of the condition:

~~"; and an expected timeframe for taking reasonable response steps".~~

Delete paragraph (a)(2). PSI does not agree that each unique problem encountered and appropriate response should be added to the CRP or OM&M. The CRP should concentrate on the most likely and common problems encountered and quick response, and should be flexible enough to allow for the unique. Adding each and every problem encountered would eventually create a very large, cluttered and unmanageable document, potentially slowing down the response process in contradiction to the intent of the Compliance Response Plan requirement.

Modify paragraph (b) to read:

~~"For each compliance monitoring condition of permit r~~Reasonable response steps shall be taken when indicated by the provisions of that compliance monitoring condition as follows:"

In paragraph (b)(2), modify the last sentence to read:

Taking such additional response steps shall not be considered a deviation from this permit ~~so long as the Permittee documents such response steps in accordance with this condition.~~

Delete section (b)(3). Sources should be allowed to shut down equipment at their own discretion without notification to IDEM. Additionally, if shutdown of equipment is necessary, the source must be more concerned with the proper shutdown of equipment than notification of IDEM.

In paragraph (b)(4), failure to take response steps should not be considered a deviation if no exceedance of an emission limitation has occurred. Thus, modify (b)(4) to read:

Failure to take reasonable response steps, **in conjunction with emissions in excess of an applicable limitation**, shall be considered a deviation from the permit.

In paragraph (e), revise the first sentence to read:

"The Permittee shall record all instances when, ~~in accordance with Section D,~~ **the response steps required in Section D** are taken ~~as required by this permit.~~"

## Response to Comment 20

Pursuant to IC 13-15-5-3, the permit becomes effective upon issuance; therefore the effective date of the permit and the issuance date of the permit are the same. It is not necessary to replace the word "issuance" with the word "effectiveness".

An important goal of the Part 70 Operating Permit program is to assure that each Permittee has the ability to assure compliance with applicable requirements on a continuous basis.

During the development of the Part 70 permit program, IDEM worked with interested parties, such as the:

Clean Air Act Advisory Council's Permit Committee,  
Indiana Manufacturing Association,  
Indiana Chamber of Commerce, and  
individual Part 70 sources.

A consensus was reached that written plans, outside of the permit document, such as the Compliance Response Plan (CRP), are vital tools that the Permittee can implement to ensure compliance. Plans are also the documents to implement if an emission unit or air pollution control device deviates from its normal operation.

It is correct that 326 IAC 2-7-5 and 326 IAC 2-7-6 do not have or use the exact term "CRP" however, 326 IAC 2-7-6(6) provides the Department the authority to specify provisions in the Part 70 Operating Permit as the Commissioner may require with respect to ensuring compliance with applicable requirements. IDEM has determined that a CRP provision is necessary with respect to compliance assurance.

The requirement to develop and implement the plan does not prescribe any new applicable requirement. The CRP is a compilation of reasonable responses, schedules, work practices and other information developed by the Permittee from the standpoint of good business practices and the prevention of environmental problems. The Permittee has to implement these reasonable responses and schedules to maintain or return to compliance. The steps documented in the plan are reasonable actions to be taken for specific deviations that occur at the emission unit or control device.

Permittees already have maintenance schedules and trouble shooting guidelines that specify options and steps to be taken when the emission unit or control device is not operating or functioning properly. The Permittee has the knowledge, expertise and experience on how to operate the equipment at the plant, and is required to develop the CRP based on this knowledge, experience and expertise. The CRP maintains the documentation, such that changes in personnel will not hinder the proper operation of the emission unit and control device. The CRP provides the plant's employees a quick reference on how to respond when an emission unit or air pollution control device deviates from its normal operation, thus avoiding long periods of deviations.

The notification requirement in (b)(3) only applies to situations where the emissions unit will continue to operate for an extended period of time while the compliance monitoring parameter is out of range. It is intended to provide IDEM an opportunity to assess the situation and determine whether any additional actions are necessary to demonstrate compliance with any applicable requirements.

IDEM agrees to change paragraph (e) as requested.

C.17 Compliance Response Plan - Preparation, Implementation, Records, and Reports  
[326 IAC 2-7-5] [326 IAC 2-7-6]

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(e) The Permittee shall record all instances when, ~~in accordance with Section D,~~ the

response steps **required in Section D** are taken ~~as required by this permit~~. In the event of an emergency, the provisions of 326 IAC 2-7-16 (Emergency Provisions) requiring prompt corrective action to mitigate emissions shall prevail.

#### **Comment 21**

Condition C.18 (Actions Related to Noncompliance Demonstrate by a Stack Test)

Change current paragraph (c) to paragraph (d) and add a new paragraph (c) as follows:

**The Permittee is not required to follow the specific procedures set out in (a) and (b) above if the Permittee and IDEM, OAQ agree to a different schedule of activities to address any noncompliant situation. IDEM, OAQ will agree to any such alternative procedures proposed by the Permittee so long as they are reasonable and consistent with applicable law.**

This addition will allow both IDEM and the Permittee more flexible in resolving any noncompliant situations.

#### **Response to Comment 21**

The condition as currently written provides sufficient flexibility for IDEM, OAQ and the Permittee to establish a different schedule of activities if appropriate. For example, paragraph (b) already states that should the Permittee demonstrate to IDEM, OAQ that retesting in 120 days is not practicable, IDEM, OAQ may extend the retesting deadline. No change to the condition is necessary.

#### **Comment 22**

Condition C.19 (Emission Statement)

Delete paragraph (a)(2). This provision serves no purpose except for fee assessment. Since this source already meets the maximum fee assessment, this condition is unnecessary.

#### **Response to Comment 22**

There is no need to delete paragraph (a)(2). If the source meets the maximum fee assessment according to the requirements of paragraph (a)(1), then paragraph (a)(2) would not be applicable.

#### **Comment 23**

Condition C.20(a), General Record Keeping Requirements: Revise last sentence, starting line 6, to read

"If the Commissioner makes a **reasonable** request for records to the Permittee...".

Condition C.20(b), General Record Keeping Requirements: In first sentence, change "issuance" to "effectiveness".

#### **Response to Comment 23**

IDEM does not agree to the suggested change for paragraph (a) of the condition. Reasonable is an ambiguous term that could easily be interpreted differently by different people. Further, the Commissioner's requests for records would be limited to those records necessary to determine compliance with state and federal air regulations; none of which IDEM would consider to be

unreasonable.

Pursuant to IC 13-15-5-3, the permit becomes effective upon issuance; therefore the effective date of the permit and the issuance date of the permit are the same. It is not necessary to replace the word "issuance" with the word "effectiveness".

#### Comment 24

Condition C.21(a), General Reporting Requirements: Modify first sentence to read:

**"If this permit contains compliance monitoring requirements, the source shall submit the attached Quarterly Deviation and Compliance Monitoring Report or its equivalent."**

This language is taken from an appeal resolution on permit 169-7245-00034 (3/14/03) and permit 041-7242-00009 (3/17/03), and is appropriate in this permit as well.

Condition C.21(d), General Reporting Requirements: Revise second sentence to read:

**All As specified in the specific reporting requirement, reports do require the shall include a certification by the "responsible official" as defined by 326 IAC 2-7-1(34)."**

Condition C.21(e), General Reporting Requirements: In first sentence, change "issuance" to "effectiveness".

Condition C.21, General Reporting Requirements: Add provision C.21(f) which states:

**"Submittal of the reports required by this section, and reports required by the Reporting Requirements section of Section D shall fulfill all reporting requirements for this source."**

#### Response to Comment 24

The permit does contain compliance monitoring requirements; therefore, the requested change to paragraph (a) of the condition is not necessary and would serve no purpose.

IDEM does not agree with the suggested change to paragraph (d) of the condition. Rule 326 IAC 2-7-6(1) requires that any document or report required by a Part 70 permit must include a certification by the responsible official.

Pursuant to IC 13-15-5-3, the permit becomes effective upon issuance; therefore the effective date of the permit and the issuance date of the permit are the same. It is not necessary to replace the word "issuance" with the word "effectiveness".

IDEM does not agree to make a blanket statement that the reports required by condition C.21 and the reports required by Section D shall fulfill all reporting requirements for this source. There may be other reporting requirements such as those pursuant to acid rain program or the NOx allowance rule, which are not specified in Section D of the permit.

#### Comment 25

Section D.1 Description: Revise the second paragraph of the description to include SCR and change monitoring location from Unit 1 to Stack A

...with an electrostatic precipitator (ESP) for control of particulate matter, **and to be equipped with Selective Catalytic Reduction (SCR) for control of Nitrogen Oxides during the ozone**

season on or before May 1, 2005 and exhausting to Stack A. ~~Boiler No. 1 Stack A~~ has...

### Response to Comment 25

The Permittee will receive a NOx budget permit at a later date, which will include any applicable requirements for operating the SCR system to control NOx emissions during the ozone season.

### Comment 26

Condition D.1.1 (Particulate Emission Limitations for Source of Indirect Heating)

Change the condition to read:

~~Particulate Emission Limitations for Sources of Indirect Heating [326 IAC 6-2-3]~~  
**Particulate Matter emissions from the Boiler No. 1 stack shall not exceed 0.12 pound per million Btu heat input (lb/MMBtu).**

This particulate limit was established in the Gibson 5 PSD permit, PSD (26) 1215, issued March 17, 1978. In accordance with 326 IAC 6-2-1(g), any limitation established in a permit issued pursuant to 326 IAC 2 shall prevail. Thus, the limitation established pursuant to the formula in 326 IAC 6-2-3 does not apply.

This comment also applies to Conditions D.2.1, D.3.1 and D.4.1.

### Response to Comment 26

IDEM agrees that the limitation established in the permit prevails. The requested changes have been made. The changes to Condition D.1.1 are shown below.

D.1.1 ~~Particulate Emission Limitations for Sources of Indirect Heating [326 IAC 6-2-3]~~ **[326 IAC 2-2]**  
**Pursuant to PSD permit PSD (26) 1215, issued March 17, 1978, particulate matter emissions from the Boiler No. 1 stack shall not exceed 0.12 pound per million Btu heat input (lb/MMBtu).** Pursuant to ~~326 IAC 6-2-3 (Particulate Emission Limitations for Sources of Indirect Heating: Emission limitations for facilities specified in 326 IAC 6-2-1(c)), the PM emissions from the Boiler No. 2 stack shall not exceed 0.096 pound per million Btu heat input (lb/MMBtu).~~ This limitation was calculated using the following equation:

$$P_t = \frac{(C)(a)(h)}{76.5(Q^{0.75})(N^{0.25})}$$

Where C = 50  $\Gamma$ /m<sup>3</sup>  
Q = 23,703 MMBtu/hr (capacity of boilers 1-4, Aux.2)  
N = 4 (number of stacks)  
a = 0.8  
h = 497.5 Feet (average stack height)

Conditions D.2.1, D.3.1, and D.4.1 have been changed similarly.

### Comment 27

In Sections D.1, D.2, D.3, D.4, and D.5, add a condition titled "Opacity" which states:

**"Pursuant to 326 IAC 5-1-2(1)(A) (Opacity Limitations), 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. Compliance with 326 IAC 5-1-2(1)(A) shall be deemed compliance with 326 IAC 5-1-2(1)(B)."**

Opacity monitoring and compliance has long been established for this facility based on a six minute average, and it is PSI's contention that compliance based on a six minute average is sufficient to

indicate compliance with the 15 non-overlapping 1 minute averages of 60%. The source should not be subjected to the time and expense of revising the monitor procedures and software to specifically monitor for 15 non-overlapping one minute averages in six hours.

Condition D.1.x(b), Opacity: Add second paragraph to this condition which states:

**"Opacity in excess of the applicable limitation may not be considered a violation provided that the total time in excess does not exceed three percent (3%) of the boiler operating time on a quarterly basis, and the primary causes are not due to a lack of maintenance or improper operation."**

Adding such condition will provide the Permittee with some degree of certainty regarding the unavoidable excess opacity readings, but would still provide IDEM, OAQ with enforcement discretion over such excess opacity readings.

### Response to Comment 27

Since it is not entirely impossible for an emission unit to be in compliance with 326 IAC 5-1-2(1)(A) and still be out of compliance with 326 IAC 5-1-2(1)(B), IDEM does not agree to add the requested language

326 IAC 5-1 does not allow exemptions from the opacity limit up to three percent (3%) of the boiler operating time; therefore, IDEM cannot simply create such an exemption where one does not exist in the rule. IDEM will continue to use enforcement discretion; however, the permit will not include the suggested blanket exemption for exceeding the opacity limit up to 3% of the boiler operating time.

### Comment 28

Condition D.1.2(a), Temporary Alternative Opacity Limitations: Revise to read: When building a new fire in a boiler, ~~or shutting down a boiler,~~ opacity may exceed the 40 % opacity limitation established in 326 IAC 5-1-2 for a period not to exceed ~~four (4)~~ **seven (7)** hours (~~forty (40)~~ **seventy (70)** six (6) minute averaging periods) or until the flue gas temperature **entering the electrostatic precipitator** reaches two hundred fifty (250) degrees Fahrenheit, whichever occurs first. This change is consistent with PSI's 2000 TAOL request and is necessary to comply during some boiler startups.

Condition D.1.2(a), Temporary Alternative Opacity Limitations: Revise 2nd paragraph to read: "Operation of the electrostatic precipitator is not required during these times ~~unless necessary to comply with these limits.~~

Condition D.1.2(b), Temporary Alternative Opacity Limitations: Revise to read: "When shutting down a boiler, opacity may exceed the 40% opacity limitations established in 326 IAC 5-1-2 for a period not to exceed four (4) hours (~~forty (40)~~ **five (5)** hours (**fifty (50)** six (6) minute averaging periods). This change is consistent with PSI's 2000 TAOL request and is necessary to comply during some boiler shutdowns.

These comments also apply to Conditions D.2.2, D.3.2, D.4.2, and D.5.4.

### Response to Comment 28

IDEM used the historical data from the Permittee's continuous opacity monitoring systems to determine what level of opacity resulted from various startups and shutdowns over the past several years. The data indicates that, with rare exceptions, the boilers can comply with the temporary alternative opacity limitations listed in the draft permit. These rare exceptions do not support revising the temporary alternative opacity limitations that would apply to all startups and shutdowns. For clarification purposes,

the following revisions have been made to the condition.

D.1.2 Temporary Alternative Opacity Limitations [326 IAC 5-1-3]

Pursuant to 326 IAC 5-1-3(e) (Temporary Alternative Opacity Limitations), the following applies:

- (a) When building a new fire in a boiler, ~~or shutting down a boiler,~~ opacity may exceed the 40% opacity limitation established in 326 IAC 5-1-2 for a period not to exceed four (4) hours (forty (40) six (6)-minute averaging periods) or until the flue gas temperature reaches two hundred fifty (250) degrees Fahrenheit, whichever occurs first.

Operation of the electrostatic precipitator is not required during these times ~~unless necessary to comply with these limits.~~

- (b) When shutting down a boiler, opacity may exceed the 40% opacity limitation established in 326 IAC 5-1-2 for a period not to exceed four (4) hours (forty (40) six (6)-minute averaging periods).
- (c) When removing ashes from the fuel bed or furnace in a boiler or blowing tubes, opacity may exceed the applicable limit established in 326 IAC 5-1-2. However, opacity levels shall not exceed sixty percent (60%) for any six (6)-minute averaging period and opacity in excess of the applicable limit shall not continue for more than one (1) six (6)-minute averaging period in any sixty (60) minute period. The averaging periods shall not be permitted for more than three (3) six (6)-minute averaging periods in a twelve (12) hour period. [326 IAC 5-1-3(b)]

**Comment 29**

Condition D.1.xx, Selective Catalytic Reduction (SCR) System: Add condition which states:

**"Except as otherwise provided by statute or rule or elsewhere in this permit, on or before May 1, 2004 the Selective Catalytic Reduction system shall be operated as needed."**

A similar condition should also be added to Sections D.2, D.3, D.4, and D.5.

**Response to Comment 29**

The Permittee will receive a NOx budget permit at a later date, which will include any applicable requirements for operating the SCR system to control NOx emissions during the ozone season.

**Comment 30**

Condition D.1.4(c), Operation Standards: Revise condition to include condenser tube cleaning as follows: "Any boiler **or condenser** tube chemical cleaning waste liquids, ...".

This comment also applies to Conditions D.2.4, D.3.4, D.4.4, and D.5.6.

**Response to Comment 30**

IDEM has made the requested change as shown below.

D.1.4 Operation Standards [326 IAC 2-1.1-5(a)(4)] [40 CFR 261] [40 CFR 279] [329 IAC 13]

- (a) All coal burned, including coal treated with any additive, shall meet the ASTM definition of coal.

- (b) The burning of hazardous waste, as defined by 40 CFR 261, is prohibited in this facility. Any boiler tube chemical cleaning waste liquids, binding agent, or used oil combusted shall meet the toxicity characteristic requirements for non-hazardous waste.
- (c) Any boiler **or condenser** tube chemical cleaning waste liquids fired in the boiler shall only contain the cleaning solution and two full volume boiler rinses.

The same revisions have been made to Conditions D.2.4, D.3.4, D.4.4, and D.5.5.

### Comment 31

Condition D.1.5(a), Preventative Maintenance Plan: Revise D.1.5(a) as follows:

"A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for this facility's ~~and its~~ emission control devices."

The PMP requirement applies to emission control devices only.

Condition D.1.5(b), Preventative Maintenance Plan: Condition D.1.5(b) should be deleted. Condition B.11 requires that the Permittee prepare and maintain the PMP. Obviously the Permittee is best qualified to develop and implement the PMP, and IDEM should not seek to micro-manage the source by mandating the PMP contents.

These comments also apply to Conditions D.2.5, D.3.5, D.4.5, and D.5.8.

### Response to Comment 31

The Preventive Maintenance Plan requirement must be included in every applicable Title V permit pursuant to 326 IAC 2-7-5(13). This rule refers back to the Preventive Maintenance Plan requirement as described in 326 IAC 1-6-3. This Preventive Maintenance Plan rule sets out the requirements for:

- (1) Identification of the individuals responsible for inspecting, maintaining and repairing the emission control equipment (326 IAC 1-6-3(a)(1)),
- (2) The description of the items or conditions in the facility that will be inspected and the inspection schedule for said items or conditions (326 IAC 1-6-3(a)(2)), and
- (3) The identification and quantification of the replacement parts for the facility which the Permittee will maintain in inventory for quick replacement (326 IAC 1-6-3(a)(2)).

It is clear from the structure of the wording in 326 IAC 1-6-3 that the PMP requirement affects the entirety of the applicable facilities. Only 326 IAC 1-6-3(a)(1) is limited, in that it requires identification of the personnel in charge of only the emission control equipment, and not any other facility equipment. 326 IAC 1-6-3(b) provides that "...as deemed necessary by the commissioner, any person operating a facility shall comply with the requirements of subsection (a) of this section."

Many types of facilities require maintenance in order to prevent excess emissions. In addition to preventive maintenance performed on the control devices, preventive maintenance should be performed on the boilers themselves because lack of proper maintenance on the boiler can result in boiler tube leaks or improper burner air settings which can result in increased emissions.

326 IAC 2-7-5(1) and 326 IAC 2-7-6(1) provide IDEM the authority to require compliance monitoring conditions as necessary to assure continuous compliance with the emission limits. These rule cites are included as part of the title of the compliance monitoring section of the permit. The ESP must operate properly in order for the boilers to achieve compliance; therefore, IDEM believes it is reasonable and necessary to require the source to inspect the ESP periodically. There has been no change to the permit as a result of this comment.

### Comment 32

Condition D.1.7, Operation of Electrostatic Precipitator: Revise to read:

**"Except as otherwise provided by statute or rule or in this permit, the electrostatic precipitator shall be operated at all times that the Boiler No. 1 ~~vented to the ESP~~ is in operation and combusting coal, except during periods of startup, shutdown or emergency."**

If this condition has enough value to include in the permit, it should be specific as to the term "operation" and should include the established exceptions. PSI will not accept a condition that requires ESP operation during times when the operation will present a potential hazard to personnel or equipment.

This comment also applies to Conditions D.2.7, D.3.7, D.4.7, and D.5.10.

### Response to Comment 32

IDEM agrees to further define the word "operation" by inserting the phrase "and combusting fuel." IDEM also agrees to remove the words "vented to the ESP." The phrase "except during periods of startup, shutdown, or emergency" is not necessary because the condition already states "Except as otherwise provided by statute or rule or in this permit..." The applicable requirements regarding the ESP operation during startups, shutdowns, and emergencies are provided elsewhere in the permit. Revisions to the condition are shown below.

#### D.1.7 Operation of Electrostatic Precipitator [326 IAC 2-7-6(6)]

Except as otherwise provided by statute or rule or in this permit, the electrostatic precipitator shall be operated at all times that the Boiler No. 1 ~~vented to the ESP~~ is in operation **and combusting fuel.**

The same revisions have been made to Conditions D.2.7, D.3.7, D.4.7, and D.5.10.

### Comment 33

Condition D.1.12, Transformer-Rectifier (T-R) Sets: As a general matter, PSI does not agree that IDEM has the authority to require compliance monitoring in this permit, and recommends deletion of Condition D.1.12 in its entirety. However, PSI will accept this condition if the changes recommended in the following comments (pertaining to Condition D.1.12) are made.

Condition D.1.12(a), Transformer-Rectifier (T-R) Sets: PSI disagrees that Compliance Monitoring (including this TR set condition) is required in this permit. PSI will agree, however, to monitor the TR sets in service at least once per day (but not once per shift). PSI does not agree to a permit requirement to monitor the ESP parameters such as the primary and secondary voltages and the currents. Such a requirement is part of an overly burdensome record keeping burden created by this permit, and is an attempt to micro-manage facility operations. This provision should be revised to read "The ability of the ESP to control particulate shall be monitored once per ~~shift~~ **day**, when the unit is in operation, by ~~measuring and~~ recording the number of T-R sets in service."

Condition D.1.12(b), Transformer-Rectifier (T-R) Sets: PSI will further not agree to implement a CRP whenever the TR sets in service falls below 90%, as we believe this will inhibit our ability to operate the facility in a normal and efficient manner. If this condition is to be included in the permit, the CRP trigger level should be no higher than 75% of the TR sets in service.

These comments also apply to Conditions D.2.12, D.3.12, D.4.13, and D.5.16.

### **Response to Comment 33**

The ESPs controlling the boilers must operate properly at all times to assure that the boilers maintain continuous compliance with all applicable requirements. In order to assure proper operation of the ESPs, IDEM has included permit conditions requiring the Permittee to monitor the performance of the ESPs by monitoring certain ESP operating parameters once per shift. IDEM has the authority to require such monitoring pursuant to 326 IAC 2-7-5(1) and 326 IAC 2-7-6(1). These rules are cited in the title of the compliance monitoring section of the permit.

While the nature of a facility's operation may not vary from shift to shift, the personnel at the facility does change from shift to shift. The OAQ believes that all shifts should be in tune with the work practices necessary to ensure continual compliance with permit requirements. These work practices should include an understanding and awareness of proper ESP operating parameters. This knowledge and awareness during all shifts can minimize lag time in addressing control failure.

Failure to take any response steps whenever the percentage of T-R sets in service falls below 90%, is considered a violation of the permit. An abnormal condition of the ESP can indicate that the control device is not operating at peak efficiency, or possibly a malfunction of the ESP. Less than optimum operation of the ESP could cause an exceedance of a particulate matter limitation or an exceedance of an opacity limit. Without performing a stack test, the Permittee could not affirm that the abnormal conditions in the ESP were not causing a violation of the particulate matter limits in the permit. It is unlikely that the Permittee would be able to perform a particulate matter stack test immediately upon observing the abnormal conditions of the ESP. Without taking any response steps or doing any stack tests, the only information available regarding emissions would be that the percentage of T-R sets in service is less than 90%. Without any other evidence to the contrary, the abnormal ESP conditions would be credible evidence that the emissions from the stack could be in violation of the particulate matter limits in the permit. For these reasons, the Permittee is required to take response steps whenever the percentage of T-R sets in service falls below 90%, and the failure to take any response steps in accordance with the CRP will be considered a violation of the permit.

PSI does not have any OAQ-approved stack tests that demonstrate that compliance can be achieved when only 75% of the T-R sets are in service. Therefore, IDEM does not agree to change the condition to allow only 75% of the T-R sets to be in service.

### **Comment 34**

Condition D.1.13, Opacity Readings: As stated in the comment to D.1.12, PSI disagrees that Compliance Monitoring is required in this permit. Further, PSI will not agree to an artificial lowering of the opacity limit to 25% as attempted in this condition. In addition to being an artificial lowering of the limit, this condition will cause a significant increase in record keeping, and a significant modification in the opacity monitoring software.

These comments also apply to Conditions D.2.13, D.3.13, D.4.14, and D.5.17.

### **Response to Comment 34**

PSI is required pursuant to 326 IAC 3-5 to operate continuous opacity monitors (COM) to measure opacity from the boilers. Pursuant to 326 IAC 5-1, the boilers are subject to a 40% opacity limit. Pursuant to 326 IAC 2-2, the boilers are also subject to particulate matter emission rates. The particulate matter emission limits and the opacity limits were established completely independently of one another. Therefore, compliance with a 40% opacity limit does not indicate compliance with the applicable particulate matter emissions limit.

During normal operations opacity from the boilers is significantly less than twenty-five percent, as evidenced by the results of IDEM approved stack testing. Since the stack testing demonstrated compliance with the PM emissions when opacity levels were well below the opacity limits, it is

appropriate for PSI to take response steps when the observed opacity is significantly above the levels demonstrated during a compliant stack test.

The condition D.1.13 does not establish an opacity limit that is more stringent than the opacity limits established by 326 IAC 5-1. Rather, the condition requires the Permittee to take response steps when the opacity is above the level indicative of normal operating conditions. An opacity reading that is in compliance with 326 IAC 5-1, but above the level of normal operating conditions and requires a response step is not considered a violation. It is only a violation if the Permittee fails to take any response steps. IDEM has the authority to require such monitoring pursuant to 326 IAC 2-7-5(1) and 326 IAC 2-7-6(1).

Unusually high opacity levels can indicate a process upset or a malfunction of the control device. Either of these situations could cause an exceedance of a particulate matter limitation. Without performing a stack test, the Permittee could not affirm that the unusually high opacity levels were not indicating a violation of the particulate matter limits in the permit. It is unlikely that the Permittee would be able to perform a particulate matter stack test immediately upon observing unusually high opacity levels from a stack. Without taking any response steps or conducting any stack test, the only information available regarding emissions would be that the opacity levels were unusually high. Without any other evidence to the contrary, the unusually high opacity levels would be credible evidence that the emissions from the stack could be in violation of the particulate matter limits in the permit. For these reasons, the Permittee is required to take response steps whenever unusually high opacity levels are observed and the failure to take any response steps in accordance with the CRP will be considered a violation of the permit.

#### **Comment 35**

Condition D.1.14(b), SO<sub>2</sub> Monitoring System Downtime: The last sentence in D.1.14(b) should be revised to read:

**"...whenever the SO<sub>2</sub> continuous emission monitoring system is malfunctioning or down for repairs or adjustments, ~~the following shall be used to provide information related to SO<sub>2</sub> emissions:~~ the Permittee shall comply with the requirements of 40 CFR 75 Subpart D - Missing Data Substitution Procedures."**

Subparts (b)(1) and (b)(2) should be deleted in entirety. This revision is consistent with the federal monitoring requirements, and PSI does not agree with the additional requirements included in this condition.

#### **Response to Comment 35**

IDEM has determined that for SO<sub>2</sub> emissions, which are prone to variability based on coal sulfur values, the Part 75 data substitution procedures may not be as representative as coal sampling and analysis to show compliance with a short term limit when the CEMS is down for a long period of time. Therefore, Part 75 data substitution cannot be used to demonstrate compliance with 326 IAC 7-4-12 for coal boilers.

#### **Comment 36**

Condition D.1.15(a), Record Keeping Requirements: Consistent with previous comments, delete references to D.1.12 and D.1.13, and delete D.1.15(a)(4) pertaining to "All ESP parametric monitoring readings".

Condition D.1.15(b), Record Keeping Requirements: Consistent with comment regarding D.1.14(b), PSI does not agree with the specified SO<sub>2</sub> CEMs system downtime parametric monitoring, thus the last sentence in (b) pertaining to CEMS downtime records should be deleted. Further, SO<sub>2</sub> CEMs are not currently required by this permit and therefore, the permit requirement to maintain SO<sub>2</sub> monitoring records in D.1.15(b)(1) should be deleted.

Condition D.1.15(c), Record Keeping Requirements: Modify to read: "...the Permittee shall maintain records of the results of all ~~boiler and~~ emission control equipment inspections,..." As stated previously, the permit required PMP need not include the boiler.

These comments also apply to Conditions D.2.15, D.3.15, D.4.17, and D.5.21.

### Response to Comment 36

As explained in response to comment 33, IDEM does not agree to delete the parametric monitoring requirements or the CEMS downtime monitoring requirements. As explained in response to comment 31 IDEM does not agree that the PMP does not apply to the boiler. As a result, the record keeping conditions associated with these requirements have been retained in the permit.

IDEM does agree to change Conditions D.1.15(b), D.2.15(b), and D.3.15(b) to clarify that records of SO<sub>2</sub> CEMS data are only required when the Permittee has chosen to demonstrate compliance with the SO<sub>2</sub> limit using CEMS data. The revised condition D.1.15(b) is shown below:

#### D.1.15 Record Keeping Requirements

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- (b) To document compliance with Conditions D.1.3, D.1.9 and D.1.14, the Permittee shall maintain records in accordance with (1) through (3) below. Records shall be complete and sufficient to establish compliance with the SO<sub>2</sub> limits as required in Conditions D.1.3 and D.1.9. The Permittee shall maintain records in accordance with (2) and (3) below during SO<sub>2</sub> CEM system downtime if a backup CEMS is not used.
- (1) **Whenever using CEMS data to demonstrate compliance with Condition D.1.3, the Permittee shall maintain all** ~~At~~ SO<sub>2</sub> continuous emissions monitoring data, pursuant to 326 IAC 7-2-1(g), with calendar dates and beginning and ending times of any CEMS downtime; ~~and~~
  - (2) **Whenever the Permittee is not using CEMS data to demonstrate compliance with Condition D.1.3, the Permittee shall maintain all** ~~At~~ fuel sampling and analysis data, pursuant to 326 IAC 7-2.
  - (3) **Whenever the Permittee is not using CEMS data to demonstrate compliance with Condition D.1.3, the Permittee shall maintain actual** ~~Actual~~ fuel usage since last compliance determination period.

### Comment 37

Condition D.1.16, Reporting Requirements: Add D.1.16(d) to state:

**"Submittal of the reports required by this section shall fulfill all reporting requirements for this source."**

These comments also apply to Conditions D.2.16, D.3.16, and D.4.18.

### Response to Comment 37

IDEM does not agree to make a blanket statement that the reports required by condition C.21 and the reports required by Section D shall fulfill all reporting requirements for this source. There may be other reporting requirements, such as those pursuant to acid rain program or the NO<sub>x</sub> allowance rule, which are not specified in Section D of the permit.

### Comment 38

Condition D.4.10, Sulfur Dioxide Emissions: Delete second paragraph in D.4.10 pertaining to the option for CEMs as a compliance determination. Per 326 IAC 3-5-1(c)(2)(B), SO<sub>2</sub> CEMs are already required with the use of FGD.

### Response to Comment 38

IDEM has changed Condition D.4.10 as shown below:

#### ~~D.4.10 Sulfur Dioxide Emissions [326 IAC 2-7-5(3)(A)] [326 IAC 2-7-6] [326 IAC 3-5]~~

~~Pursuant to 326 IAC 7-2-1(c), the Permittee shall demonstrate that the sulfur dioxide emissions from Unit 4 does not exceed the equivalents of the limits specified in Conditions D.4.3 (Sulfur Dioxide (SO<sub>2</sub>)) using a thirty (30) day rolling weighted average. Pursuant to 326 IAC 3-5-1(c)(2)(B), compliance shall be demonstrated using CEMS data.~~

~~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)]~~

### Comment 39

Condition D.4.15, Scrubber Operation: Delete D.4.15(b) through (d). Condition D.4.5 already requires a PMP for the emission controls, including the FGD. Further, Condition B.11 requires that the Permittee prepare and maintain the PMP. As previously stated, the Permittee is best qualified to develop and implement the PMP, and IDEM should not seek to micro-manage the source by mandating the PMP contents.

This comment also applies to Condition D.5.18.

### Response to Comment 39

326 IAC 2-7-5(1) and 326 IAC 2-7-6(1) provide IDEM the authority to require compliance monitoring conditions as necessary to assure continuous compliance with the emission limits. These rule cites are included as part of the title of the compliance monitoring section of the permit. The scrubber must operate properly in order for the boiler to achieve compliance when combusting high sulfur coal. Without periodic inspections, corrosion on the nozzles or corrosion on the enclosure could affect the pressure drop across the scrubber and lead to decreased control efficiency. Periodic inspections would help assure that these types of problems would be identified and fixed prior to the control device suffering a loss of control efficiency. Therefore, IDEM believes it is reasonable and necessary to require the source to inspect the scrubber periodically. There has been no change to the permit as a result of this comment.

### Comment 40

Condition D.4.16(b), SO<sub>2</sub> Monitor Downtime: Revise to read

**"...the Permittee shall maintain a record of the time and reasons for the downtime, and the efforts made to correct the problem. The Permittee shall comply with the relevant requirements of 40 CFR 75 Subpart D - Missing Data Substitution Procedures."**

The remainder of the paragraph pertaining to parametric monitoring during SO<sub>2</sub> monitor downtime should be deleted.

This comment also applies to Condition D.5.19.

### Response to Comment 40

IDEM has determined that for SO<sub>2</sub> emissions, which are prone to variability based on coal sulfur values, the Part 75 data substitution procedures may not be representative to show compliance with a short term limit when the COMS is down for a long period of time. Therefore, Part 75 data substitution cannot be used to demonstrate compliance with 326 IAC 7-4-12 for coal boilers.

### Comment 41

Condition D.4.17(a), Record Keeping Requirements: See comment to D.1.15(a), revising section numbers accordingly.

Condition D.4.17(b), Record Keeping Requirements: Consistent with comment regarding D.4.15(b) and D.4.16, PSI does not agree with the specified SO<sub>2</sub> CEMS system downtime parametric monitoring, thus the last sentence in (b) pertaining to CEMS downtime records should be deleted. Accordingly, D.4.17(b)(2) and (3) should be deleted.

Condition D.4.17(c), Record Keeping Requirements: Revise to read:

"The Permittee shall maintain records of the injection rate of the flue gas conditioning agent, **if used**, in parts per million (ppm), on an hourly basis."

Flue gas conditioning is not a requirement and may not be used full time.

Condition D.4.17(d), Record Keeping Requirements: See comment to D.1.15(c).

Condition D.4.17(e), Record Keeping Requirements: Delete this section. The compliance determination for this unit is SO<sub>2</sub> CEMS, therefore a fuel sampling and analysis SOP is not required or necessary.

### Response to Comment 41

As explained in response to comment 33, IDEM does not agree to remove the parametric monitoring requirements; therefore, the record keeping requirements associated with the parametric monitoring requirements must also remain in the permit.

IDEM agrees to revise paragraph (c) to clarify that the records are only required to be kept when the flue gas conditioning is in use.

As explained in response to comment 31, IDEM does not agree to change the preventive maintenance plan (PMP) requirements; therefore the record keeping requirements associated with the PMP requirements must also remain in the permit.

IDEM agrees to delete the requirement to develop a standard operating procedure for fuel sampling and analysis, because compliance is to be demonstrated using the SO<sub>2</sub> CEMS.

### D.4.17 Record Keeping Requirements

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- (c) **Whenever the flue gas conditioning agent is in use, the** The Permittee shall maintain records of the injection rate of the flue gas conditioning agent, in parts per million (ppm), on an hourly basis.
- ~~(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, OAG.~~
- ~~(f)~~(e) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

#### Comment 42

Condition D.5.3, Particulate Emission Limitations for sources of indirect Heating [326 IAC 6-2-3]: This condition does not apply and must be deleted. The Unit 5 particulate limit was established in the Gibson 5 PSD permit, PSD (26) 1215, issued March 17, 1978. In accordance with 326 IAC 6-2-1(g), any limitation established in a permit issued pursuant to 326 IAC 2 shall prevail. Additionally, this unit is a NSPS unit with limitations established in 326 IAC 12, and according to 326 IAC 6-2-1(f), the limitation established pursuant to the formula in 326 IAC 6-2-3 does not apply.

#### Response to Comment 42

Condition D.5.3 has been deleted. Condition D.5.1 has been changed to include a reference to the PSD permit, as well as the NSPS.

D.5.1 New Source Performance Standard (NSPS) [326 IAC 12] [40 CFR 60, Subpart D] [326 IAC 2-2]  
Pursuant to 326 IAC 12, and 40 CFR 60, Subpart D (Standards of Performance for Fossil-Fuel-Fired Steam Generators for Which Construction is Commenced After August 17, 1971), and **PSD permit PSD (26) 1215, issued March 17, 1978**, emissions from Boiler No. 5 shall not exceed the following:

- (a) One-tenth (0.10) pound PM per million Btu (MMBtu) heat input. [40 CFR 60.42(a)(1)]
- (b) Twenty percent (20%) opacity except for one six-minute period per hour of not more than twenty-seven percent (27%) opacity [40 CFR 60.42(a)(2)]. Pursuant to 40 CFR 60.11(c), this opacity standard is not applicable during periods of startup, shutdown, or malfunction.
- (c) One and two-tenths (1.2) pound SO<sub>2</sub> per million Btu (MMBtu) heat input. [40 CFR 60.43(a)(2)]
- (d) Seven-tenths (0.70) pound NO<sub>x</sub> per million Btu (MMBtu) heat input. [40 CFR 60.44(a)(3)]

~~D.5.3 Particulate Emission Limitations for Sources of Indirect Heating [326 IAC 6-2-3]~~  
~~Pursuant to 326 IAC 6-2-3 (Particulate Emission Limitations for Sources of Indirect Heating: Emission limitations for facilities specified in 326 IAC 6-2-1(e)), the PM emissions from the Boiler No. 5 stack shall not exceed 0.073 pound per million Btu heat input (lb/MMBtu). This limitation was calculated using the following equation:~~

$$Pt = \frac{(C)(a)(h)}{76.5(Q^{0.75})(N^{0.25})}$$

Where C = 50  $\Gamma/m^3$   
Q = 29,829 MMBtu/hr (capacity of boilers 1-5, Aux.2, Aux.5)  
N = 6 (number of stacks)  
a = 0.8  
h = 496.4 Feet (average stack height)

#### Comment 43

Condition D.5.5, Sulfur Dioxide: Pursuant to 326 IAC 7-4-12.1, the 1.10 pounds per million Btu limit is based on a 24 hour calendar day average rather than a 30 day rolling weighted average.

#### Response to Comment 43

326 IAC 7-4-12.1 states that the limit is based on a twenty-four (24) hour average. The condition has been changed as shown below:

#### D.5.5 Sulfur Dioxide (SO<sub>2</sub>) [326 IAC 7-4-12.1]

Pursuant to 326 IAC 7-4-12.1 (Gibson County Sulfur Dioxide Emission Limitations), the SO<sub>2</sub> emissions from Boiler No. 5 stack shall not exceed 1.10 pounds per million Btu (lbs/MMBtu) based on a ~~thirty (30) day rolling weighted~~ **twenty-four (24) hour** average and operation of an FGD system.

#### Comment 44

Condition D.5.13, Sulfur Dioxide Emissions: In first paragraph, change "Unit 4" to "Unit 5", and delete "equivalents of the". Delete second paragraph pertaining to the option for CEMs as a compliance determination. Per 326 IAC 3-5-1(c)(2)(B), SO<sub>2</sub> CEMs are already required with the use of FGD.

#### Response to Comment 44

IDEM agrees. The requested changes have been made as shown below:

#### D.5.13 Sulfur Dioxide Emissions [326 IAC 2-7-5(3)(A)] [326 IAC 2-7-6] [326 IAC 3-5]

Pursuant to 326 IAC 7-2-1(c), the Permittee shall demonstrate that the sulfur dioxide emissions from Unit ~~4~~ **5** does not exceed ~~the equivalents of~~ the limits specified in Conditions D.5.1(c) and D.5.5 (Sulfur Dioxide (SO<sub>2</sub>)) using a thirty (30) day rolling weighted average. **Pursuant to 326 IAC 3-5-1(c)(2)(B), compliance shall be demonstrated using CEMS data.**

~~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)]~~

#### Comment 45

Condition D.5.20, NO<sub>x</sub> Monitoring System Downtime: Revise to read

"...the Permittee shall **maintain a record of the time and reasons for the downtime, and the efforts made to correct the problem. The Permittee shall comply with the relevant requirements of 40 CFR 75 Subpart D - Missing Data Substitution Procedures.**"

The remainder of the paragraph is unnecessary and should be deleted.

#### **Response to Comment 45**

The Permittee is required to certify continuous compliance with all conditions of the permit. The Permittee must have sufficient information available in order to be able to certify continuous compliance. If the CEMS fails and the Permittee does not perform any supplemental monitoring during the period of time when the CEMS is not operating, there will not be sufficient information available for the Permittee to be able to certify continuous compliance during that time period. Therefore, the permit must include a requirement to perform supplemental monitoring whenever the CEMS is not in operation and the emission unit is in operation.

#### **Comment 46**

Condition D.5.21(a), Record Keeping Requirements: Consistent with comments above, delete references to D.5.16 and D.5.17, and delete D.5.21(a)(4).

Condition D.5.21(b), Record Keeping Requirements: Delete last sentence of first paragraph, and delete (b)(2) and (3). See comments to D.4.17(c).

Condition D.5.21(c), Record Keeping Requirements: Revise to read: "The Permittee shall maintain records of the injection rate of the flue gas conditioning agent, **if used**, in parts per million (ppm), on an hourly basis." Flue gas conditioning is not a requirement and may not be used full time.

#### **Response to Comment 46**

As explained in response to comment 33, IDEM does not agree to remove the parametric monitoring requirements; therefore, the record keeping requirements associated with the parametric monitoring requirements must also remain in the permit.

IDEM agrees to revise paragraph (c) to clarify that the records are only required to be kept when the flue gas conditioning is in use.

#### **D.5.21 Record Keeping Requirements**

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- (c) **Whenever the flue gas conditioning agent is in use, the** The Permittee shall maintain records of the injection rate of the flue gas conditioning agent, in parts per million (ppm), on an hourly basis.

#### **Comment 47**

Delete entire Section D.6. The Unit 2 Auxiliary Boiler and the Unit 5 Auxiliary Boiler have been retired and rendered inoperative. A permit section dedicated to these boilers is no longer necessary. A notation of their status in the TSD should be sufficient.

#### **Response to Comment 47**

Since the boilers have already been retired and rendered physically inoperative, IDEM agrees that Section D.6 is no longer necessary. Section D.6 has been deleted and subsequent D Sections have been renumbered appropriately.

Facility Description [326 IAC 2-7-5(15)] — (The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

One (1) no. 2 fuel oil fired boiler, identified as Unit 2 Auxiliary Boiler, installed in 1974, with a maximum heat input capacity of 159 million Btu per hour (MMBtu/hr), and exhausting to stack Aux-2.

One (1) no. 2 fuel oil fired boiler, identified as Unit 5 Auxiliary Boiler, installed in 1982, with a maximum heat input capacity of 226 million Btu per hour (MMBtu/hr), and exhausting to stack Aux-5.

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

#### **D.6.1 Compliance Schedule for Units Removal**

- ~~(a) Within 180 days after the issuance of this permit, the no. 2 fuel oil fired boilers, Unit 2 Auxiliary Boiler and Unit 5 Auxiliary Boiler, shall be removed from service permanently by being removed from the source or made inoperative by other means. This will also make PSD (326 IAC 2-2) not applicable.~~
- ~~(b) Within 180 days after the issuance of this permit, all fuel and ash handling activities associated with the removal from service of the no. 2 fuel oil fired boilers, Unit 2 Auxiliary Boiler and Unit 5 Auxiliary Boiler, shall be terminated and removed.~~

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

#### **D.6.2 Visible Emissions Notations [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]**

- ~~(a) Visible emission (VE) notations of the boilers' stack exhausts shall be performed once per shift during normal daylight operations while combusting fuel oil. A trained employee shall record whether emissions are normal or abnormal.~~
- ~~(b) If abnormal emissions are observed at any boiler exhaust, the Permittee shall take reasonable response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports. Observation of abnormal emissions that do not violate an applicable opacity limit is not a deviation from this permit. Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports, shall be considered a deviation from this permit.~~
- ~~(c) "Normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.~~
- ~~(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 the generators.~~

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

#### **D.6.3 Record Keeping Requirements**

- ~~To document compliance with Condition D.6.2, the Permittee shall maintain records of visible emission notations of the generators' stack exhausts.~~

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

#### Comment 48

Condition D.7.1, Particulate: Revise to read:

"the particulate emissions from the coal storage and handling drop points and coal bunkers shall not exceed 103.2 pounds per hour when operating at **or below** a process weight of 6000 tons per hour."

#### Response to Comment 48

The particulate emission limit pursuant to this rule is based upon the throughput of material at any given time. Since the throughput of material can vary over time, the applicable particulate emission limit can also vary. The permit states the limit based upon the maximum possible throughput to the process. However, IDEM does not agree that this limit is applicable during periods when the throughputs are much lower than the maximum throughput.

#### Comment 49

Condition D.7.2, Preventive Maintenance Plan: Revise to read:

"A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for ~~these facilities and~~ the emission control devices."

As previously noted, the PMP applies to emission controls.

#### Response to Comment 49

As explained in response to comment 31, IDEM has the authority to require a PMP for the facility as well as the emission control device. However, IDEM does agree that in this specific case, there are some emission units in Section D.7 (now renumbered D.6) that do not need to have a PMP because there is no preventive maintenance that is needed that would effect emissions. IDEM has revised the condition as shown below. Note that this condition has been renumbered D.6.2.

#### D.76.2 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for ~~these facilities and the emission control devices~~ **the baghouses, the watering system, and the telescopic chutes.**

#### Comment 50

Condition D.7.4(a), Visible Emissions Notations: Revise to read: "Visible emission notations of from the transfer points baghouse exhausts shall be performed ~~once per shift~~ **monitored** during normal daylight operations. ~~A trained by an employee shall record~~ **instructed to observe** whether any emissions are observed."

Condition D.7.4(b), Visible Emissions Notations: Revise to read: "Visible emission notations of from the coal unloading station(s) doorways and drop points shall be performed once per shift monitored during

normal daylight operations. A trained by an employee shall record instructed to observe whether any emissions are observed.

Condition D.7.4(d), Visible Emissions Notations: Revise to read: In the case of batch or discontinuous operations, ~~readings shall be taken~~ **monitoring shall be** during that part of the operation...".

Condition D.7.4(e), Visible Emissions Notations: Revise to read: "~~A trained employee is an employee who has~~ **The employee must have** worked at the plant or similar facility at least one month and has been trained be familiar in the appearance...".

Condition D.7.4(f), Visible Emissions Notations: Revise to read: "~~if any~~ **Records shall be kept and response steps taken** if abnormal emissions are observed from the coal unloading station doorways and drop points, ~~the Permittee shall take reasonable response steps in accordance with Section C- Compliance Response Plan - Preparation, Implementation, Records and Reports.~~ Visible emissions that do not violate...".

These comments also apply to Condition D.8.8.

### **Response to Comment 50**

Compliance monitoring conditions such as these requirements to perform visible emission notations, are required in order to demonstrate continuous compliance with the permit requirements. Visible emission notations are used to indicate compliance with 326 IAC 5-1 and the particulate matter limits pursuant to 326 IAC 6-3-2. Since process upset can occur suddenly and without warning, possibly causing a violation of 326 IAC 5-1 or 326 IAC 6-3-2, the OAQ does not believe that daily notations would be sufficient for the Permittee to certify continuous compliance.

Further, while the nature of a facility's operation may not vary from shift to shift, the personnel at the facility does change from shift to shift. The OAQ believes that all shifts should be in tune with the work practices necessary to ensure continual compliance with permit requirements. These work practices should include an understanding and awareness of plant emissions during normal operations. This knowledge and awareness during all shifts can minimize lag time in addressing control failure.

The requirement to have a trained employee work at the plant for at least one month is reasonable and appropriate. The characteristics of emissions from each facility are unique. What appears to be normal emissions from one facility may not be normal for another facility. For example, normal emissions from a unit equipped with a scrubber will appear very different from a similar unit that is not equipped with a scrubber.

### **Comment 51**

Conditions D.7.5 and D.8.9, Baghouse Parametric Monitoring: Delete these conditions. They are not necessary and not authorized.

### **Response to Comment 51**

The monitoring of the pressure drop of the baghouses provides an indication of whether the control device is operating properly. Monitoring of the static pressure drop can alert the operator to relative changes (such as dust cake resistance) over a period of time. The operator can use this information to chart trends and determine if the unit is operating within the optimal range as determined by baseline testing of the unit and manufacturer's specifications. Pressure drop is an indicator of a variety of conditions within the baghouse. Any deviations from the normal operational range of the unit, whether

gradual or sudden, should alert the operator that the unit needs maintenance. The Compliance Response Plan should include response steps to anticipate corrective actions when abnormal conditions arise. Both gradual and sudden changes in the pressure drop could result in damage to the bags if not properly addressed. Further, while the nature of a facility's operation may not vary from shift to shift, the personnel at the facility does change from shift to shift. The OAQ believes that all shifts should be in tune with the work practices necessary to ensure continual compliance with permit requirements. These work practices should include an understanding and awareness of proper operating parameters of the control equipment. This knowledge and awareness during all shifts can minimize lag time in addressing control failure. Therefore, the OAQ believes that pressure drop readings should be taken at least once per shift. The requirements to measure the pressure drops across the baghouses will not be deleted from the permit.

Failure to take any response steps after observing a pressure drop that is outside the normal range is considered a deviation from the permit. An abnormal pressure drop can indicate a pending or current malfunction of the control device, which could cause an exceedance of a particulate matter limitation or an exceedance of an opacity limit. Without taking any response steps or doing any stack tests, the only information available regarding emissions would be that the pressure drop of the baghouse was outside the normal operating range. Without any other evidence to the contrary, the out of range pressure drop would be credible evidence that the control device was not functioning properly and emissions from the stack could be in violation of the particulate matter and opacity limits in the permit. For these reasons, the Permittee is required to take response steps whenever the pressure drop is outside the normal range, and the failure to take any response steps in accordance with the CRP will be considered a deviation from the permit.

#### **Comment 52**

Condition D.7.6 and D.8.10, Baghouse Inspections: Delete these conditions. They are not necessary and not authorized.

#### **Response to Comment 52**

326 IAC 2-7-5(1) and 326 IAC 2-7-6(1) provide IDEM the authority to require compliance monitoring conditions as necessary to assure continuous compliance with the emission limits. These rule cites are included as part of the title of the compliance monitoring section of the permit. The baghouses must operate properly in order for the processes to achieve compliance with the applicable PM emission limits; therefore, IDEM believes it is reasonable and necessary to require the source to inspect the baghouses periodically. There has been no change to the permit as a result of this comment.

#### **Comment 53**

Conditions D.7.7 and D.8.11, Broken or Failed Bag Detection: Delete this entire section. These types of procedures and responses must be left for the facility to include in the PMP.

#### **Response to Comment 53**

The baghouses must operate properly in order for the processes to achieve compliance with the applicable PM emission limits; therefore, IDEM believes it is reasonable and necessary to require the source to take appropriate response steps, as specified in Condition D.7.7, whenever bag failure occurs. There has been no change to the permit as a result of this comment.

#### **Comment 54**

Condition D.7.8(a), Record Keeping Requirements: Revise (a) to read "the Permittee shall maintain records of any abnormal emissions observed during the visible emission notations...".

Condition D.7.8(b), Record Keeping Requirements: Delete part (b), PSI does not agree this should be a mandatory permit requirement.

Condition D.7.8(c), Record Keeping Requirements: Delete part (c), PSI does not agree this should be a mandatory permit requirement.

These comments also apply to Condition D.8.12.

#### **Response to Comment 54**

As explained in responses to comments 50 and 51, IDEM does not agree to change the visible emission notations condition or the parametric monitoring conditions referenced in the record keeping conditions; therefore, there is no change to the record keeping conditions.

#### **Comment 55**

Condition D.8.1(a)(1), New Source Performance Standards: Change the word "stack" to "fugitive". There are no stacks on these facilities.

Condition D.8.1(a)(1)(b), New Source Performance Standards: Change seven percent opacity to ten percent opacity. This is consistent with the limit established in permit CP 051-2422, issued June 25, 1992.

#### **Response to Comment 55**

40 CFR 60.671 defines fugitive emission as particulate matter that is not collected by a capture system and is released to the atmosphere at the point of generation. Emissions from the conveyors do not meet the definition of fugitive emissions because they are captured and collected by a baghouse and released to the atmosphere from the baghouse, rather than directly from the point of origin. 40 CFR 60.671 defines stack emissions as particulate matter that is released to the atmosphere from a capture system. In this case the baghouse is a capture system; therefore, the emissions from the baghouse meet the definition of "stack emissions" regardless of whether there is a stack on these facilities. There has been no change to this condition.

#### **Comment 56**

Condition D.8.2. Particulate: Revise to read:

"the particulate emissions from the coal storage and handling drop points and coal bunkers shall not exceed 61 pounds per hour when operating at **or below** a process weight of 250 tons per hour."

#### **Response to Comment 56**

The particulate emission limit pursuant to this rule is based upon the throughput of material at any given time. Since the throughput of material can vary over time, the applicable particulate emission limit can also vary. The permit states the limit based upon the maximum possible throughput to the process. However, IDEM does not agree that this limit is applicable during periods when the throughputs are lower than the maximum throughput.

### Comment 57

Condition D.8.5, Preventive Maintenance Plan: Revise to read: A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for ~~these facilities~~ and the emission control devices. As previously noted, the PMP applies to emission controls.

### Response to Comment 57

As explained in response to comment 31, IDEM has the authority to require a PMP for the facility as well as the emission control device. However, IDEM does agree that in this specific case, the emission units in Section D.8 (now renumbered D.7) do not need to have a PMP because there is no preventive maintenance that would affect emissions. IDEM has revised the condition as shown below. Note that this condition has been renumbered D.7.5.

#### D.8.7.5 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

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

### Comment 58

On all the forms, revise the mailing address to include "c/o Steven Pearl."

### Response to Comment 58

IDEM has made the requested change on all the forms.

Source Name: PSI Energy, Inc. - Gibson Generating Station  
Source Address: S.R. 64 W & C.R. 975, Owensville, Indiana 47570  
Mailing Address: **c/o Steven Pearl**, 1000 East Main Street, Plainfield, Indiana 46168  
Part 70 Permit No.: T051-7175-00013

### Comment 59

Emergency Occurrence Report form: In the first information submittal box, first bullet, modify statement to read: "The Permittee must notify the Office of Air Quality (OAQ), within four (4) **daytime** business hours..." This change is consistent with the Emergency provision contained in section B.11(b)(4). And (3) In the first information submittal box, second bullet, modify statement to read: "The Permittee must submit notice in writing or by facsimile within two (2) working **business** days..."

### Response to Comment 59

IDEM agrees to change the form to state "four (4) daytime business hours..."

IDEM does not agree to change the form to state "...within two (2) working business days..." See response to comment 5.

Changes are shown below.

**9** This is an emergency as defined in 326 IAC 2-7-1(12)

- C The Permittee must notify the Office of Air Quality (OAQ), within four (4) **daytime** business hours (1-800-451-6027 or 317-233-5674, ask for Compliance Section); and
- C The Permittee must submit notice in writing or by facsimile within two (2) working days (Facsimile Number: 317-233-5967), and follow the other requirements of 326 IAC 2-7-16.

**Comment 60**

Part 70 Quarterly Report for Use When Combusting Coal (Unit 4): Delete this form. The compliance determination method for Unit 4 is CEMS.

**Response to Comment 60**

IDEM has deleted the form, as requested.

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

**Part 70 Quarterly Report for Use When Combusting Coal**

Source Name: \_\_\_\_\_ PSI Energy, Inc. - Gibson Generating Station  
 Source Address: \_\_\_\_\_ S.R. 64 W & C.R. 975, Owensville, Indiana 47570  
 Mailing Address: \_\_\_\_\_ c/o Steven Pearl, 1000 East Main Street, Plainfield, Indiana 46168  
 Part 70 Permit No.: \_\_\_\_\_ T051-7175-00013  
 Facility: \_\_\_\_\_ Boiler No. 4.  
 Parameter: \_\_\_\_\_ Sulfur Dioxide (SO<sub>2</sub>) from coal combustion  
 Limit: \_\_\_\_\_ 0.60 pounds per million Btu heat input

FACILITY: \_\_\_\_\_ YEAR: \_\_\_\_\_

Day	Daily Average Coal Sulfur Content (%)	Daily Average Coal Heat Content (MMBtu/lb)	Coal Consumption (Tons)	Equivalent Sulfur Dioxide Emissions (lbs/MMBtu)		
				This day	Previous 29 days	30-Day Total
1						
2						
3						
4						
5						

Day	Daily Average Coal Sulfur Content (%)	Daily Average Coal Heat Content (MMBtu/lb)	Coal Consumption (Tons)	Equivalent Sulfur Dioxide Emissions- (lbs/MMBtu)		
				This day	Previous 29 days	30-Day Total
6						
7						
8						
9						
10						
11						
12						
13						
14						
15						
16						
17						
18						
19						
20						
21						
22						
23						
24						
25						
26						
27						
28						
29						
30						

~~9~~ No deviation occurred in this quarter.

~~9~~ Deviation/s occurred in this quarter:

Deviation has been reported on: \_\_\_\_\_

Submitted by: \_\_\_\_\_  
Title / Position: \_\_\_\_\_  
Signature: \_\_\_\_\_  
Date: \_\_\_\_\_  
Phone: \_\_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_  
Attach a signed certification to complete this report.

On November 26, 2003, the Indiana Electric Utility Air Work Group (IEUAWG), consisting of American Electric Power, Cinergy Corp, Dominion, Hoosier Energy, Indianapolis Power & Light Company, Indiana-Kentucky Electric Corporation, Northern Indiana Public Service Company, and Vectren Corporation, submitted comments on the proposed Part 70 permit. The summary of the comments and any changes made as a result of the comments follows. New text is shown in bold font and deleted text is shown in strikethrough font.

#### **Comment 1**

Condition C.2 (Opacity)

The IEUAWG is concerned that as currently written, this provision will be impossible to comply with on an ongoing basis. As IDEM is aware, the current particulate technologies cannot prevent all six-minute opacity exceedances no matter how well the control equipment is maintained and operated. Historically, IDEM has handled this situation by allowing somewhere between two and five percent of the operating time to have opacity exceedances for all reasons before beginning an inquiry that could lead to an enforcement action.

While this practice has been highly successfully under the past permitting and compliance scheme, it will not work under Title V. However, since the facility utilizes the same equipment that has been in place for many years to successfully comply with particulate and opacity limits, it is still necessary to have this same allowance. We therefore believe that IDEM should add a provision to this condition that allows up to 3% of the operating hours to exceed the opacity standard for the facility and still allow the certification of full compliance with the provisions of the permit under this section.

Putting this threshold into the permit is not a permanent action that cannot be reconsidered if control technologies improve. IDEM will still have the opportunity to revisit the threshold each time the Title V permit is renewed. This opportunity would allow changes if justified.

In addition, other states and courts have provided such an allowance. For example, the district court in the Eastern District of Tennessee found that Tennessee's 2% allowance was reasonable, as follows:

Finally, NPCA claims that TDEC's interpretation that COM monitoring, with its 2% de minimis exception, is a more restrictive emission standard is unreasonable and, perhaps, therefore not facially valid. I disagree. I agree with the D.C. Circuit Court of Appeals that changing the method of measuring compliance with an emission limitation can affect the stringency of the limitation itself. See *Appalachian Power Company v. EPA*, 208 F.3d 1015, 1027 (D.C. Cir.

2000); *Portland Cement Association v. Ruckelshaus*, 486 F.2d 375, 396-97 (D.C. Cir. 1973). Obviously, monitoring the smokestack emissions continuously with equipment capable of reliably measuring the opacity will identify many more exceedances than will be identified by an operator "eyeballing" the smokestack emissions once a day, or less. I believe that it was completely reasonable for TDEC to consider the COM monitoring by TVA at its plants to be a more restrictive standard than the Tennessee SIP required and therefore concluding that EPA approval of that more restrictive standard was not necessary.

*National Parks Conservation Association Inc. v. Tennessee Valley Authority*, 175 F.Supp.2d 1071, 1078 (E.D. Tenn 2002). Other states such as Ohio, North Carolina, Kentucky, and Florida also have recognized exemption levels. Failure to include such an allowance provides a competitive disadvantage for the State of Indiana, without justification.

In order to implement this necessary provision, we recommend that IDEM change Condition C.2 as follows by adding the language of a new subsection (c) as set forth below:

**C.2 Opacity [326 IAC 5-1]**

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

- (a) Opacity shall not exceed an average 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) **For units for which opacity is monitored continuously, any opacity in excess of the applicable limitations contained in this condition will not be considered a violation provided that the total time in excess does not exceed 3% of the total boiler operating time on a quarterly basis and the primary causes of the exceedances are not due to lack of maintenance or improper operations.**

**Response to Comment 1**

326 IAC 5-1 does not allow exemptions from the opacity limit up to three percent (3%) of the boiler operating time; therefore, IDEM cannot simply create such an exemption in the permit when one does not exist in the rule. IDEM will continue to use enforcement discretion; however, the permit will not include the suggested blanket exemption for exceeding the opacity limit up to 3% of the boiler operating time.

**Comment 2**

Condition C.11 (Compliance Monitoring)

To the extent that these conditions remain in the permit, IEUAWG requests that IDEM confirm that the specific following plans and operational/monitoring activities are not required to be developed and implemented until 90 days after issuance of the permit: Preventive Maintenance Plan (B.10, D.1.5, D.2.5, D.3.5, D.4.5, D.5.8, D.7.2, D.8.5); Pressure Gauge and Other Instrument Specifications (C.14); Emergency Reduction Plan (C.15); Compliance Response Plan (C.17); Transformer-Rectifier (T-R) Sets (D.1.12, D.2.12, D.3.12, D.4.13, D.5.16); Opacity Readings (D.1.13, D.2.13, D.3.13, D.4.14, D.5.17);

SO<sub>2</sub> Monitoring System Downtime (D.1.14, D.2.14, D.3.14, D.4.16, D.5.19); Visible Emission Notations (D.6.2, D.7.4, D.8.8); Scrubber Operation (D.4.15, D.5.18); NO<sub>x</sub> Monitoring System Downtime (D.5.20); Baghouse Parametric Monitoring (D.7.5; D.8.9); Baghouse Inspections (D.7.6, D.8.10); Broken or Failed Bag Detection (D.7.7, D.8.11); Maintenance of Continuous Opacity Monitoring Equipment (C.12); and all related record keeping and reporting.

### Response to Comment 2

Condition C.11 (Compliance Monitoring) states "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." Condition C.20 (General Record Keeping Requirements) states "Unless otherwise specified in this permit, all record keeping requirements not already legally required shall be implemented within ninety (90) days of permit issuance." These statements clearly explain that if a compliance monitoring or record keeping requirement is not already legally required, the Permittee has 90 days to begin implementation of the requirements.

### Comment 3

Condition C.12 (Maintenance of Continuous Opacity Monitoring Equipment)

We think that IDEM is not authorized to impose this condition, but we acknowledge that this form of this condition is much better than previous forms. The IEUAWG could agree that Method 9 readings for ½ hour every 4 hours beginning 24 hours after the downtime commences is reasonable, and could agree that VE notations once per hour is reasonable, but it requests that this process not be required until 4 hours after the commencement of the downtime. The IEUAWG believes that this provision should be revised to allow more flexibility and that subsection (d) should be modified as follows:

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

\* \* \*

- (d) Whenever a continuous opacity monitor (COM) is malfunctioning or will be down for calibration, maintenance, or repairs for a period of one (1) hour or more, **beginning four (4) hours after the commencement of the COM malfunction** compliance with the applicable opacity limits shall be demonstrated by the following:

### Response to Comment 3

The visible emission notations required in this condition are taken in response to COM downtime and, therefore, are required to assure continuous compliance pursuant to 326 IAC 2-7-5(3). The visible emission notations required by Condition C.12(d) are only normal / abnormal observations made by a employee trained in the appearance of normal emissions from that particular stack, rather than Method 9 visible emission readings required to be taken by a certified opacity reader. A trained employee for the purposes of this condition is defined as follows: "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." It clearly is not an overly burdensome task for a trained employee to briefly observe the emissions from the stack once per hour to assure that emissions are normal.

### Comment 4

Condition C.17 (Compliance Response Plan - Failure to Take Response Steps)

As a legal matter, IDEM is not authorized to impose a requirement to develop and implement a "compliance response plan." There is no requirement in the Indiana regulations or statutes that a source develop a "compliance response plan"-on the contrary, that term is not defined anywhere. "Title V does

not impose substantive new requirements," but instead requires that all the "applicable requirements" be consolidated into one document-the Part 70 Operating Permit. See *New York Public Interest Research Group v. Whitman*, 321 F.3d 316, 320 (2d Cir. 2003); (see also the EPA statement in the Federal Register with respect to Indiana's Part 70 program: "Applicable requirements must exist independently of title V permits... [T]itle V authority cannot modify existing applicable requirements." 67 Fed. Reg. 34,844, 34,847 (May 16, 2002).

It is also important to note that IDEM is not authorized to create requirements out of whole cloth. As an agency of state government, IDEM has only the powers expressly conferred by statute.

The authority of the State to engage in administrative action is limited to that which is granted by statute.

*Charles A. Beard Classroom Teachers Ass'n v. Bd. of School Trustees*, 668 N.E.2d 1222, 1224 (Ind. 1996).

A keystone of administrative law is the proposition that an administrative agency has no powers which are not expressly or impliedly granted by statute. *Gordon v. Review Bd. of Indiana Employment Sec. Division*, (1981) Ind.App., 426 N.E.2d 1364; *Indiana State Bd., etc. v. Keller*, (1980) Ind., 409 N.E.2d 583. All doubtful claims to a power claimed by a governmental agency must be resolved against the agency. *Indiana Civil Rights Commission v. Holman*, (1978) 177 Ind.App. 648, 380 N.E.2d 1281; *Monon Railroad Company v. Citizens of Sherwood Forest, Marion County*, (1969) 146 Ind.App. 620, 257 N.E.2d 846; *Good v. Western Pulaski County School Corp.*, (1965) 139 Ind.App. 567, 210 N.E.2d 100. The administrative agency can only exercise its powers in conformity with the statutes. *Boone County Rural Elec. Membership Corp. v. Public Service Commission of Ind.*, (1958) 129 Ind.App. 175, 155 N.E.2d 149.

*Indiana State Bd. of Embalmers v. Kaufman*, 463 N.E.2d 513, 521-22 (Ind. Ct. App. 1984).

However, notwithstanding this condition's invalidity, IEUAWG could be willing to accept this condition on a unit specific basis if the specific monitoring conditions are acceptable. Each member company would be left to determine their own unit specific plan. In any event, a source should not be found in violation if it fails to follow such a plan because every eventuality cannot be predicted in advance.

#### **Response to Comment 4**

An important goal of the Part 70 Operating Permit program is to assure that each Permittee has the ability to assure compliance with applicable requirements on a continuous basis.

During the development of the Part 70 permit program, IDEM worked with interested parties, such as the:

Clean Air Strong Economy (CASE)  
Clean Air Act Advisory Council's Permit Committee,  
Indiana Manufacturing Association,  
Indiana Chamber of Commerce, and  
individual Part 70 sources.

A consensus was reached that written plans, outside of the permit document, such as the Compliance Response Plan (CRP), are vital tools that the Permittee can implement to ensure compliance. Plans are also the documents to implement if an emission unit or air pollution control device deviates from its normal operation.

It is correct that 326 IAC 2-7-5 and 326 IAC 2-7-6 do not have or use the exact term "CRP" however, 326 IAC 2-7-6(6) provides the Department the authority to specify provisions in the Part 70 Operating Permit as the Commissioner may require with respect to ensuring compliance with applicable requirements. IDEM has determined that a CRP provision is necessary with respect to compliance assurance.

The requirement to develop and implement the plan does not prescribe any new applicable requirement. The CRP is a compilation of reasonable responses, schedules, work practices and other information developed by the Permittee from the standpoint of good business practices and the prevention of environmental problems. The Permittee has to implement these reasonable responses and schedules to maintain or return to compliance. The steps documented in the plan are reasonable actions to be taken for specific deviations that occur at the emission unit or control device.

Permittees already have maintenance schedules and trouble shooting guidelines that specify options and steps to be taken when the emission unit or control device is not operating or functioning properly. The Permittee has the knowledge, expertise and experience on how to operate the equipment at the plant, and is required to develop the CRP based on this knowledge, experience and expertise. The CRP maintains the documentation, such that changes in personnel will not hinder the proper operation of the emission unit and control device. The CRP provides the plant's employees a quick reference on how to respond when an emission unit or air pollution control device deviates from its normal operation, thus avoiding long periods of deviations.

#### **Comment 5**

Condition C.18 (Actions Related to Noncompliance Demonstrated by a Stack Test).

IDEM should modify this condition to allow itself and the permit holder more flexibility in the event a stack test is failed. As currently written, this condition specifies certain actions that must be taken when noncompliance is demonstrated by a stack test. In reality, negotiations to resolve the issue generally occur on the spot between the representatives of the source and IDEM. The specific corrective measures are often subsequently developed during consultation with IDEM depending on the specific circumstances. The specific procedures set out in Condition C.18 interfere with the ability of both IDEM and the permit holder to develop timely or subsequent constructive alternatives and these requirements inhibit flexibility. In order to restore the current flexibility both IDEM and the source have when this occurs, the condition should be modified by adding a new subsection (c) as indicated below and relettering the remaining subsections.

C.18 Actions Related to Noncompliance Demonstrated by a Stack Test [326 IAC 2-7-5] [326 IAC 2-7-6]

- (a) When the results of a stack test performed in conformance with Section C - Performance Testing, of this permit exceed the level specified in any condition of this permit, the Permittee shall take appropriate response actions. The Permittee shall submit a description of these response actions to IDEM, OAQ, within thirty (30) days of receipt of the test results. The Permittee shall take appropriate action to minimize excess emissions from the affected facility while the response actions are being implemented.
- (b) A retest to demonstrate compliance shall be performed within one hundred twenty (120) days of receipt of the original test results. Should the Permittee demonstrate to IDEM, OAQ that retesting in one-hundred and twenty (120) days is not practicable, IDEM, OAQ may extend the retesting deadline.

- (c) The Permittee is not required to follow the specific procedures set out in (a) and (b) above if it and IDEM, OAQ agree to a different schedule of activities to address any noncompliant situation. IDEM, OAQ may agree to any such alternative procedures proposed by the Permittee so long as they are reasonable and consistent with applicable law.**
- (d)(e)** IDEM, OAQ reserves the authority to take any actions allowed under law in response to noncompliant stack tests.

The response action documents submitted pursuant to this condition do require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

### Response to Comment 5

The condition as currently written provides sufficient flexibility for IDEM, OAQ and the Permittee to establish a different schedule of activities if appropriate. For example, paragraph (b) already states that should the Permittee demonstrate to IDEM, OAQ that retesting in 120 days is not practicable, IDEM, OAQ may extend the retesting deadline. No change to the condition is necessary.

### Comment 6

Conditions D.1.5, D.2.5, D.3.5, D.4.5, and D.5.8 (Preventive Maintenance Plan)

In several places of the permit, such as Conditions D.1.5, D.2.5, D.3.5, D.4.5, and D.5.8, the permit includes preventive maintenance plan requirements for emission control devices and "facilities," and it also includes specific detailed maintenance requirements to be performed on the equipment. We object to those conditions on three grounds.

First, there is no direct statutory or regulatory authority, state or federal, for the preventive maintenance plan requirement. The preventive maintenance plan requirement arises out of 326 IAC 1-6-1 et seq. That rule "applies to the owner or operator of any facility required to obtain a permit under 326 IAC 2-5.1 or 326 IAC 2-6.1." See 326 IAC 1-6-1. 326 IAC 2-5.1 applies to construction of "new sources" built after late 1998 and exempts "existing sources" operating pursuant to a permit issued under 326 IAC 2-6.1 or 2-7. See 326 IAC 2-5.1-1(2). So, it does not apply to these units. 326 IAC 2-6.1 (Minor Source Operating Program) applies to sources in existence before December 25, 1998, that meet an applicability criterion in 326 IAC 2-5.1-3(a), "[e]xcept for sources required to have a Part 70 permit as described in 326 IAC 2-7-2...." 326 IAC 2-6.1-2. Thus, it does not apply to these units either. Second, even if a PMP were required, it has never been the intent or the practice for the preventive maintenance requirements to apply to emission units-it is the intent of the rule to only apply to emission control devices. This is why the first section of 326 IAC 1-6-3 refers explicitly to "emission control devices."

Third, it is not within IDEM's authority for it to develop the plans and then impose them on the companies. On the contrary, the preventive maintenance plan regulations state that the "person responsible for operating [the subject facility] shall prepare and maintain a preventive maintenance plan." It is the responsibility of the Permittee or operator of the source, not the regulatory agency, to develop any appropriate plans. We object to the permit's prescriptive requirements such as time frames in which to conduct inspections and identification of devices to be checked. Essentially, IDEM is assuming control of these plans which is not within the scope of the regulations or within its authority.

If the PMP requirement is nonetheless included within this permit, it should at a minimum be modified to delete the requirements have a PMP for the facility itself, and be modified to delete the requirements to perform ESP inspections.

## Response to Comment 6

The Preventive Maintenance Plan requirement must be included in every applicable Part 70 permit pursuant to 326 IAC 2-7-5 (13). This rule refers back to the Preventive Maintenance Plan requirement as described in 326 IAC 1-6-3. This Preventive Maintenance Plan rule sets out the requirements for:

- (1) Identification of the individuals responsible for inspecting, maintaining and repairing the emission control equipment (326 IAC 1-6-3 (a)(1)),
- (2) The description of the items or conditions in the facility that will be inspected and the inspection schedule for said items or conditions (326 IAC 1-6-3(a)(2)), and
- (3) The identification and quantification of the replacement parts for the facility which the Permittee will maintain in inventory for quick replacement (326 IAC 1-6-3 (a) (2)).

Pursuant to 326 IAC 1-6-1 (Applicability), 326 IAC 1-6-3 applies to the owner or operator of any facility required to obtain a permit under 326 IAC 2-1-2 and 326 IAC 2-1-4. Therefore, it is clear from the structure of 326 IAC 1-6-3 that the PMP requirement affects the entirety of the applicable facilities. Only 326 IAC 1-6-3 (a)(1) is limited, in that it requires identification of the personnel in charge of only the emission control equipment, and not any other facility equipment. In additional support of this position, 326 IAC 1-6-5 provides that the commissioner may require changes in the maintenance plan to reduce excessive malfunctions in any control device or combustion or process equipment. Therefore, it is also clear from the structure of 326 IAC 1-6-5 that the PMP requirement affects the emission unit as well as the control device.

326 IAC 2-7-5(1) and 326 IAC 2-7-6(1) provide IDEM the authority to require compliance monitoring conditions as necessary to assure continuous compliance with the emission limits. These rule cites are included as part of the title of the compliance monitoring section of the permit. The ESP must operate properly in order for the boilers to achieve compliance; therefore, IDEM believes it is reasonable and necessary to require the source to inspect the ESP periodically. The detailed requirements for inspecting the ESPs are taken from a US EPA Publication titled "Operation and Maintenance Manual for Electrostatic Precipitators", which is document number EPA/625/1-85/017. There has been no change to the permit as a result of this comment.

## Comment 7

Conditions D.1.7, D.2.7, D.3.7, D.4.7, and D.5.10 (Operation of Electrostatic Precipitator)

As currently structured, Condition D.1.7 et al. requires the electrostatic precipitators to be operated at all times when the controlled processes are in operation. These requirements conflict with the regulations that allow continued operation even when the emission control equipment is not operating. Such situations include start-ups, shut-downs, emergencies, malfunctions, and situations where a unit can comply with the underlying regulations without operation of the control equipment. In addition, these requirements may cause a violation of other employee safety regulations during some operating regimens.

There is no regulation or statute that requires continuous operation of the electrostatic precipitator if it is not needed to satisfy an emission limit. In fact, the permit already acknowledges this reality in Condition D.4.8 where the FGD system is only to "be operated as needed to maintain compliance with the applicable SO<sub>2</sub> emission limits." The legal requirement is to comply with the emission limit, and it is up to the source to choose the methods for achieving that compliance.

We believe that this section should be revised to allow non-operation of the control equipment when the limits are met, as would currently be the case. The following proposed revision to this condition accomplishes this goal and is consistent with Condition D.4.8.

D.1.7, D.2.7, D.3.7, D.4.7, and D.5.10 Operation of Electrostatic Precipitator [326 IAC 2-7-6(6)]

Except as otherwise provided by statute or rule or in this permit, the electrostatic precipitator shall be operated as **needed to maintain compliance with applicable emission limits. at all times that the Boiler No. 1 vented to the ESP is in operation.**

#### **Response to Comment 7**

The condition as currently written does not conflict with the regulations that allow continued operation even when the emission control equipment is not operating, because the condition already states "Except as otherwise provided by statute or rule or in this permit..." The applicable requirements regarding the ESP operation during startups, shutdowns, and emergencies are provided elsewhere in the permit. These units are not equipped with continuous emission monitoring systems to measure particulate matter mass emissions, and the Permittee has not conducted any stack tests demonstrating compliance with the particulate matter emission limitations while the ESP was NOT in operation. Additionally, the Permittee has not submitted any information to demonstrate that compliance with the particulate matter mass emission limitations can be achieved without the use of the ESP; therefore, IDEM does not agree to make the requested revisions to the condition.

#### **Comment 8**

Conditions D.1.12, D.2.12, D.3.12, D.4.13, and D.5.16 (Transformer-Rectifier (T-R) Sets)

For the reasons set forth in comment number 4, we believe that these provisions exceed IDEM's cited authorities. Presumably, IDEM relies on 326 IAC 2-7-5(3) for imposing these additional monitoring and parametric requirements. However, the Indiana Air Pollution Control Board could not have lawfully delegated that authority to IDEM. The Board's rulemaking authority can be exercised only with observance of elaborate procedural and substantive safeguards. See, e.g., Ind. Code §§ 13-14-8-4 and 13-14-9; *Indiana Environmental Management Bd. v. Indiana-Kentucky Electric Corporation*, 393 N.E.2d 213 (Ind. Ct. App. 1979). The legislature surely did not expressly provide for monitoring requirements to be promulgated by the boards according to such rigorous rulemaking procedures, while allowing IDEM to impose different monitoring requirements on an ad hoc, case-by-case basis. On this basis, Ind. Code § 13-14-1-3 and 326 IAC 2-7-5(3)(A) should be read as requiring that IDEM impose in permits and enforcement orders only those monitoring requirements that the Air Pollution Control Board has promulgated by rule. The statutes cannot be read as authorizing the Air Pollution Control Board to delegate to IDEM authority to make up monitoring requirements on an ad hoc basis. After all, even the Board could not do that.

This same argument applies to IDEM's various other "parametric monitoring" schemes. An agency has only the powers granted by statute, and all doubtful claims to power must be resolved against the agency. *Charles A. Beard Classroom Teachers Ass'n v. Bd. of School Trustees*, 668 N.E.2d 1222, 1224 (Ind. 1996); *Indiana State Bd. of Embalmers v. Kaufman*, 463 N.E.2d 513, 521-22 (Ind. Ct. App. 1984). In addition, in reviewing the requirements of this provision, we cannot see where the stated requirements will serve to assure compliance with either the mass or the opacity limits contained in the permit. Our experience with particulate control devices tells us that these relationships are highly site and fuel specific. Using a "one size fits all" approach in Title V permits result in taking operational flexibility away from the source and does not serve to further compliance with the permits. For these reasons, IEUAWG encourages IDEM to remove this section of the permit

#### **Response to Comment 8**

IC 13-14-1-13 (Duties of the Department: Monitoring and Reporting) states the following:

The Commissioner shall establish and administer monitoring and reporting requirements as necessary to carry out the duties and exercise the powers provided in the following:

- 1) Air pollution control laws.
- 2) Water pollution control laws.
- 3) Environmental management laws.

This statute clearly provides broader authority than just allowing the Commissioner to simply copy monitoring and reporting requirements that are specifically established in some other law.

Additionally, the provisions of 326 IAC 2-7-5(3) state that the Part 70 permits must include: "Monitoring and related record-keeping and reporting requirements which assure that all reasonable information is provided to evaluate **continuous compliance** with the applicable requirements." There are no other rules applicable to this source that already include the level of detailed monitoring and related record keeping and reporting requirements necessary to assure that all reasonable information is provided to evaluate continuous compliance; therefore, as required by 326 IAC 2-7-5(3), additional compliance monitoring, record keeping and reporting requirements must be included in the Part 70 permit.

The conditions referenced by the commenter do not establish a "one size fits all" approach to compliance monitoring. ESP T/R sets must achieve at least some level of functionality for the ESP to properly control emissions. Site specific stack test results were reviewed to determine the percent of functional T/R sets necessary to assure compliance.

#### **Comment 9**

Conditions D.1.13, D.2.13, D.3.13, D.4.14, and D.5.17 (Opacity Readings)

For the reasons set forth in comments numbered 4 and 8, we believe that IDEM has greatly exceeded their statutory and regulatory authority in this provision in attempting to set a "trigger" below the applicable limit and by attempting to change the time period for evaluating the limit. The only proper way to take this action is through notice and comment rulemaking where full technical justification is made available to the regulated community and other interested parties to review. Conditions D.1.13 et al. set opacity triggers below the forty percent limit established by regulation and requires activities to be conducted based on that trigger. This essentially changes the limit promulgated in the Board's rule without any basis in law. It also conflicts with the regulatory provision allowing up to sixty percent opacity for a certain period of time without causing a violation of the opacity regulations. IDEM must remove this requirement and restructure this section to conform to the properly promulgated opacity regulations. The cited sections do not give IDEM the authority to ignore existing state laws and regulations. We believe that the following changes to this section conform to the underlying state laws and regulations relating to opacity and compliance:

- D.1.13, D.2.13, D.3.13, D.4.14, and D.5.17      Opacity Readings [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]
- (a) Appropriate response steps shall be taken in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records and Reports whenever the opacity exceeds **forty percent (40%)** ~~twenty-five percent (25%)~~ for three (3) consecutive six (6) minute averaging periods. In the event of opacity exceeding **forty percent (40%)**, ~~twenty-five percent (25%)~~, response steps will be taken such that the cause(s) of the excursion are identified and corrected and opacity levels are brought back below **forty percent (40%)**. ~~twenty-five percent (25%)~~. Examples of expected response steps include, but are not limited to, boiler loads being reduced and ESP T-R sets being returned to service.

- (b) Opacity readings in excess of **forty percent (40%)** ~~twenty-five percent (25%)~~ but not exceeding the opacity limit for the unit are not a deviation from this permit. Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records and Reports, shall be considered a deviation from this permit.

### Response to Comment 9

The condition does not establish an opacity limit that is more stringent than the opacity limits established by 326 IAC 5-1. Rather, the condition requires the Permittee to take response steps when the opacity is above the level indicative of normal operating conditions. During normal operations opacity from the boilers is significantly less than twenty-five percent, as evidenced by the results of IDEM approved stack testing. Since the stack testing demonstrated compliance with the PM emissions when opacity levels were well below the opacity limits, it is appropriate for the Permittee to take response steps when the observed opacity is significantly above the levels demonstrated during a compliant stack test. An opacity reading that is in compliance with 326 IAC 5-1, but above the level of normal operating conditions and requires a response step is not considered a violation. It is only a violation if the Permittee fails to take any response steps. IDEM has the authority to require such monitoring pursuant to 326 IAC 2-7-5(1) and 326 IAC 2-7-6(1).

Failure to take any response steps after observing an opacity level that is above the level typical for normal operations is considered a deviation from the permit. Unusually high opacity levels can indicate a process upset or a malfunction of the control device. Either of these situations could cause an exceedance of a particulate matter limitation. Without performing a stack test, the Permittee could not affirm that the unusually high opacity levels were not indicating a violation of the particulate matter limits in the permit. It is unlikely that the Permittee would be able to perform a particulate matter stack test immediately upon observing unusually high opacity levels from a stack. Without taking any response steps or doing any stack tests, the only information available regarding emissions would be that the opacity levels were unusually high. Without any other evidence to the contrary, the unusually high opacity levels would be credible evidence that the emissions from the stack could be in violation of the particulate matter limits in the permit. For these reasons, the Permittee is required to take response steps whenever unusually high opacity levels are observed and the failure to take any response steps in accordance with the CRP will be considered a violation of the permit.

### Comment 10

Condition D.5.18 (Scrubber Operation)

For the reasons set forth in comments numbered 4, 6, and 8, IEUAWG objects to any provision that specifies the frequency of control equipment inspections and specifies the items within the control equipment to be inspected. Permits are designed to establish regulatory requirements and to demand compliance with those requirements. The method by which a source achieves compliance is within its sound discretion. Prescribing inspection requirements is outside the jurisdiction of IDEM. Each source must determine what to inspect and the frequency based on the performance of the piece of equipment. In addition, this condition is redundant with other conditions to the extent that it requires scrubber inspections. Condition D.5.18 should be modified to remove the requirements to perform scrubber inspections.

### Response to Comment 10

326 IAC 2-7-5(1) and 326 IAC 2-7-6(1) provide IDEM the authority to require compliance monitoring conditions as necessary to assure continuous compliance with the emission limits. These rule cites are included as part of the title of the compliance monitoring section of the permit. The scrubber must

operate properly in order for the boiler to achieve compliance when combusting high sulfur coal; therefore, IDEM believes it is reasonable and necessary to require the source to inspect the scrubber periodically.

#### **Comment 11**

Condition D.5.19 (SO<sub>2</sub> Monitor Downtime)

For the reasons set forth in comments numbered 4, 6, and 8, we believe the requirements in this condition are unauthorized. The regulations do not require this level of record keeping or for the source "to demonstrate" that continued operations are "typical." The acid rain program data substitution requirements are sufficient, along with the averaging period for the SO<sub>2</sub> emission limit. Condition D.5.19 should be modified as follows:

D.5.19 SO<sub>2</sub> Monitoring Downtime [326 IAC 2-7-6] [326 IAC 2-7-5(1)]

**The Permittee shall comply with 40 CFR Part 75, Appendix D, in connection with any downtime for its SO<sub>2</sub> monitor.** ~~Whenever the SO<sub>2</sub> continuous emission monitoring system is malfunctioning or down for repairs or adjustments, the Permittee shall monitor and record boiler load, recirculation pH, slurry feed rate, and number of recirculation pumps in service, to demonstrate that the operation of the scrubber continues in a manner typical for the boiler load and sulfur content of the coal fired. Scrubber parametric monitoring readings shall be recorded at least once per hour until the primary CEMS or a backup CEMS is brought online.~~

#### **Response to Comment 11**

IDEM has determined that for SO<sub>2</sub> emissions, which are prone to variability based on coal sulfur values, the Part 75 data substitution procedures may not be representative to show compliance with a short term limit over a long period of time. Therefore, Part 75 data substitution cannot be used to demonstrate compliance with 326 IAC 7-4-12 for coal boilers.

#### **Comment 12**

Condition D.5.20 (NO<sub>x</sub> Monitoring System Downtime)

For the reasons set forth in comments numbered 4, 6, and 8, we believe the requirements in this condition are unauthorized. The regulations do not require this level of record keeping or for the source "to demonstrate" that continued operations are "typical." The acid rain program data substitution requirements are sufficient. Condition D.5.19 should be modified as follows:

D.5.20 NO<sub>x</sub> Monitoring System Downtime [326 IAC 2-2] [326 2-7-6] [326 IAC 2-7-5(3)]

**The Permittee shall comply with 40 CFR Part 75, Appendix E, in connection with any downtime for its NO<sub>x</sub> monitor.** ~~In instances of NO<sub>x</sub> continuous emission monitoring system (CEMS) downtime, the Permittee shall report the NO<sub>x</sub> mass emissions in accordance with the procedures regulated by 40 CFR Part 75, Appendix D (Optional SO<sub>2</sub> Emissions Data Protocol) for fuel flow meters requirements, 40 CFR Part 75, Appendix E (Optional NO<sub>x</sub> Emissions Estimation Protocol) for emission rate curve establishment, Appendix G (Determination of CO<sub>2</sub> Emissions). NO<sub>x</sub> mass emissions reported shall be based on the fuel and unit-specific NO<sub>x</sub> emission rates ("load curve") established during the latest stack test.~~

#### **Response to Comment 12**

The Permittee is required to certify continuous compliance with all conditions of the permit. The Permittee must have sufficient information available in order to be able to certify continuous compliance. If the CEMS fails and the Permittee does not perform any supplemental monitoring during the period of

time when the CEMS is not operating, there will not be sufficient information available for the Permittee to be able to certify continuous compliance during that time period. Therefore, the permit must include a requirement to perform supplemental monitoring whenever the CEMS is not in operation and the emission unit is in operation.

**Comment 13**

Conditions D.7.2 and D.8.5 (Preventive Maintenance Plan)

As noted in comment number 4, IDEM does not have authority to impose these conditions. Nonetheless, if these conditions remain in the permit, IDEM should at a minimum modify them to indicate that they are required only for emission control devices, not for emitting units, to be consistent with the Preventive Maintenance Plan rule set out at 326 IAC 1-6-3.

D.7.2 and D.8.5 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for **the emission control devices for facilities referenced in this subsection.** ~~these facilities and the emission control devices.~~

**Response to Comment 13**

As explained in response to comment 6, IDEM has the authority to require a PMP for the facility as well as the emission control device. However, IDEM does agree that in this specific case, there are some emission units in Section D.7 (now renumbered D.6) that do not need to have a PMP because there is no preventive maintenance that is needed that would effect emissions. IDEM also agrees that, in this specific case, the emission units in Section D.8 (now renumbered D.7) do not need to have a PMP because there is no preventive maintenance that is needed that would effect emissions. IDEM has revised the conditions as shown below. Note that the conditions have been renumbered D.6.2 and D.7.5.

~~D.7.2~~ Preventive Maintenance Plan [326 IAC 2-7-5(13)]

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for ~~these facilities and the emission control devices~~ **the baghouses, the watering system, and the telescopic chutes.**

~~D.8.5~~ Preventive Maintenance Plan [326 IAC 2-7-5(13)]

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

**Comment 14**

Conditions D.7.5 and D.8.9 (Baghouse Parametric Monitoring)

For the reasons set forth in comments numbered 4, 6, and 8, IDEM is not authorized to impose this baghouse parametric monitoring. In addition, the emission levels from these small baghouses are so insignificant that detailed parametric monitoring should not be required, consistent with the IDEM guidance dated May 16, 1996. That guidance stated that compliance monitoring plans are only required if:

- (1) The unit emits particulate matter, sulfur dioxide, or volatile organic compounds; and
- (2) The unit is subject to a NSPS or NESHAP (for these units current requirements will satisfy as a compliance monitoring plan); or
- (3) The unit has a device to control emissions; and the allowable emissions exceed 10 pounds an hour; or

- (4) The unit does not have a control device, and has actual emissions exceeding 25 tons per year.

These units do not satisfy even these policy criteria, and therefore these conditions should be removed as follows:

#### **Response to Comment 14**

The guidance cited in the comment lists criteria to establish which units required a compliance monitoring plan to be submitted as part of the Part 70 application. If a unit does not meet the requirements to submit a compliance monitoring plan, it does not mean that the unit should be exempt from any and all compliance monitoring requirements as part of the Part 70 permit.

Even so, IDEM believes the units do satisfy the criteria of the guidance. All of the units emit particulate matter. Some of the units are subject to the NSPS for Nonmetallic Mineral Processing Plants. Those units meet the first two criteria listed in the guidance and would therefore need a monitoring plan. Other units are not subject to the NSPS, but are subject to 326 IAC 6-3-2 which allows particulate matter emissions of 103 pounds per hour (for those in Section D.7, now renumbered Section D.6), and 61 pounds per hour (for those in Section D.8, now renumbered Section D.7). Those units would meet the first and third criteria of the guidance because they emit particulate matter, use a control device to comply, and have allowable particulate matter emissions greater than 10 pounds per hour.

The monitoring of the pressure drop of the baghouses provides an indication of whether the control device is operating properly. Monitoring of the static pressure drop can alert the operator to relative changes (such as dust cake resistance) or failed bags, over a period of time. The operator can use this information to chart trends and determine if the unit is operating within the optimal range as determined by baseline testing of the unit and manufacturer's specifications. Pressure drop is an indicator of a variety of conditions within the baghouse. Any deviations from the normal operational range of the unit, whether gradual or sudden, should alert the operator that the unit needs maintenance. The Compliance Response Plan should include response steps to anticipate corrective actions when abnormal conditions arise. Both gradual and sudden changes in the pressure drop could result in damage to the bags if not properly addressed. Further, while the nature of a facility's operation may not vary from shift to shift, the personnel at the facility does change from shift to shift. The OAQ believes that all shifts should be in tune with the work practices necessary to ensure continual compliance with permit requirements. These work practices should include an understanding and awareness of proper operating parameters of the control equipment. This knowledge and awareness during all shifts can minimize lag time in addressing control failure. Therefore, the OAQ believes that pressure drop readings should be taken at least once per shift. The requirements to measure the pressure drops across the baghouses will not be deleted from the permit.

#### **Comment 15**

Conditions D.7.6 and D.8.10 (Baghouse Inspections)

For the reasons set forth in comments numbered 4, 6, and 8, IDEM is not authorized to impose these baghouse inspections. In addition, the emission levels from these small baghouses are so insignificant that detailed parametric monitoring should not be required, consistent with the IDEM guidance dated May 16, 1996. These conditions should be removed.

#### **Response to Comment 15**

326 IAC 2-7-5(1) and 326 IAC 2-7-6(1) provide IDEM the authority to require compliance monitoring conditions as necessary to assure continuous compliance with the emission limits. These rule cites are

included as part of the title of the compliance monitoring section of the permit. The baghouses must operate properly in order for the processes to achieve compliance with the applicable PM emission limits; therefore, IDEM believes it is reasonable and necessary to require the source to inspect the baghouses periodically.

#### **Comment 16**

Conditions D.7.7 and D.8.11 (Broken or Failed Bag Detection)

For the reasons set forth in comments numbered 4, 6, and 8, IDEM is not authorized to impose these failed bag requirements. In addition, the emission levels from these small baghouses are so insignificant that detailed parametric monitoring should not be required, consistent with the IDEM guidance dated May 15, 1996. These conditions should be removed.

#### **Response to Comment 16**

The baghouses must operate properly in order for the processes to achieve compliance with the applicable PM emission limits; therefore, IDEM believes it is reasonable and necessary to require the source to take appropriate response steps, as specified in Condition D.7.7, whenever bag failure occurs. There has been no change to the permit as a result of this comment.

Upon further review, IDEM determined that the following revisions to the permit were necessary.

#### **Revision #1**

Corrections have been made to Condition C.7 (Stack Height) in order to correctly state which provisions are not federally enforceable.

##### **C.7 Stack Height [326 IAC 1-7]**

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

#### **Revision #2**

The rule cite in the title of Condition C.16 was corrected as shown below.

##### **C.16 Risk Management Plan [326 IAC 2-7-5(12)] [40 CFR 68.215]**

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#### **Revision #3**

Conditions D.7.1 (now renumbered D.6.1), D.8.2 (now renumbered D.7.2), and D.9.1 (now renumbered D.8.1) have been revised to be consistent with the updates to 326 IAC 6-3-2.

##### **D.6.1 Particulate [326 IAC 6-3-2]**

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Pursuant to 326 IAC 6-3-2 (~~Process Operations~~ **Particulate Emission Limitations for Manufacturing Processes**), the particulate emissions from the coal storage and handling drop points and coal bunkers shall not exceed 103.2 pounds per hour when operating at a process weight of 6000 tons per hour. This is determined by the following equation:

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

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

When the process weight rate exceeds two hundred (200) tons per hour, the maximum allowable emission may exceed 103.2 pounds per hour, provided the concentration of particulate matter in the discharge gases to the atmosphere is less than 0.10 pounds per one thousand (1,000) pounds of gases.

**D.7.2 Particulate [326 IAC 6-3-2]**

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Pursuant to 326 IAC 6-3-2 (~~Process Operations~~ **Particulate Emission Limitations for Manufacturing Processes**), the particulate emissions from the storage and handling drop points and bunkers shall not exceed 61 pounds per hour when operating at a process weight of 250 tons per hour. This is determined by the following equation:

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

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

When the process weight rate exceeds two hundred (200) tons per hour, the maximum allowable emission may exceed 61 pounds per hour, provided the concentration of particulate matter in the discharge gases to the atmosphere is less than 0.10 pounds per one thousand (1,000) pounds of gases.

**D.8.1 Particulate [326 IAC 6-3-2]**

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Pursuant to 326 IAC 6-3 (~~Process Operations~~ **Particulate Emission Limitations for Manufacturing Processes**), the allowable particulate emission rate from the grinding and machining facilities shall not exceed 0.551 pounds per hour (lbs/hr) based on the following equation:

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

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

**Revision #4**

Condition C.19 (Emission Statement) has been revised as shown below:

**C.19 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) The Permittee shall submit an ~~annual~~ emission statement certified pursuant to the requirements of 326 IAC 2-6-, **that This statement must be received by July 1 of each year in accordance with the compliance schedule specified in 326 IAC 2-6-3, and must comply with the minimum requirements specified in 326 IAC 2-6-4. The submittal should cover the period identified in 326 IAC 2-6.** The ~~annual~~ emission statement shall meet the following requirements:

- (1) Indicate estimated actual emissions of criteria pollutants from the source, in compliance with 326 IAC 2-6 (Emission Reporting);
  - (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 purposes of Part 70 fee assessment.
- (b) ~~The annual emission statement covers the twelve (12) consecutive month time period starting January 1 and ending December 31. The annual emission statement must be submitted to:~~

Indiana Department of Environmental Management  
Technical Support and Modeling Section, Office of Air Quality  
100 North Senate Avenue, P. O. Box 6015  
Indianapolis, Indiana 46206-6015

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

- (c)(b) The ~~annual~~ 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.

## Revision #5

Since the exhaust from Boiler 4 can pass through either Stack "B" or Stack "D" during a startup or shutdown, Condition D.4.2 has been revised to clarify that all exceedances of the boiler's limit should be accounted for in calculating the compliance with the temporary alternative opacity limit. The revisions are shown below.

### D.4.2 Temporary Alternative Opacity Limitations [326 IAC 5-1-3]

Pursuant to 326 IAC 5-1-3(e) (Temporary Alternative Opacity Limitations), the following applies:

- (a) ~~When building a new fire in a boiler, or shutting down a boiler, opacity may exceed the 40% opacity limitation established in 326 IAC 5-1-2 for a period not to exceed five (5) hours (fifty (50) six (6)-minute averaging periods) or until the flue gas temperature entering the electrostatic precipitator reaches two hundred fifty (250) degrees Fahrenheit, whichever occurs first.~~ **During boiler startups an exemption from the 40% opacity limit is allowed for up to ~~may exceed the 40% opacity limitation established in 326 IAC 5-1-2 for a period not to exceed five (5) hours (fifty (50) six (6)-minute averaging periods)~~ or until the flue gas temperature entering the electrostatic precipitator reaches two hundred fifty (250) degrees Fahrenheit, whichever occurs first. This exemption period includes the sum total of Stack "B" and Stack "D" non-overlapping exceedance periods.**

Operation of the electrostatic precipitator is not required during these times unless necessary to comply with these limits.

- (b) ~~When shutting down a boiler, opacity may exceed~~ **During boiler shutdowns, an exemption from the 40% opacity limitation established in 326 IAC 5-1-2 is allowed for a period not to exceed ~~four (4) hours (forty (40) six (6)-minute averaging periods).~~ This exemption period includes the sum total of Stack "B" and Stack "D" non-overlapping exceedance periods.**

- (c) When removing ashes from the fuel bed or furnace in a boiler or blowing tubes, opacity may exceed the applicable limit established in 326 IAC 5-1-2. However, opacity levels shall not exceed sixty percent (60%) for any six (6)-minute averaging period and opacity in excess of the applicable limit shall not continue for more than one (1) six (6)-minute averaging period in any sixty (60) minute period. The averaging periods shall not be permitted for more than three (3) six (6)-minute averaging periods in a twelve (12) hour period. [326 IAC 5-1-3(b)]

#### Revision #6

The description of Boiler #3 has been revised to include a reference to the unit's flue gas conditioning system. Additionally, Condition D.3.7 has been changed to include a requirement to operate the flue gas conditioning system as needed to comply with applicable limits. The revisions are shown below.

- (c) One (1) dry bottom, pulverized coal-fired boiler, identified as Boiler No. 3, construction commenced prior to August 17, 1971, with a nominal heat input capacity of 5897 million Btu per hour (MMBtu/hr), with **a flue gas conditioning system and** an electrostatic precipitator (ESP) for control of particulate matter, and exhausting to stack B. Stack B has continuous emissions monitors (CEMs) for nitrogen oxides (NO<sub>x</sub>) and sulfur dioxide (SO<sub>2</sub>) and Boiler 4 has a continuous opacity monitor (COM).

#### D.3.7 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 shall be operated at all times that the Boiler No. 3 is in operation and combusting fuel.
- (b) **Except as otherwise provided by statute or rule or in this permit, the flue gas conditioning system shall be operated as needed to mitigate opacity levels below both the opacity limit pursuant to 326 IAC 5-1 and the opacity limit specified in Condition D.3.13(a) of this permit.**

#### Revision #7

In accordance with the credible evidence rule (62 Fed. Reg. 8314, Feb 24, 1997); Section 113(a) of the Clean Air Act, 42 U.S. C. § 7413 (a); and a letter from the United States Environmental Protection Agency (USEPA) to IDEM, OAQ dated May 18, 2004, all permits must address the use of credible evidence; otherwise, USEPA will object to the permits. The following language will be incorporated into the permit to address credible evidence:

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

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

## Indiana Department of Environmental Management Office of Air Quality

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

#### Source Background and Description

**Source Name:** PSI Energy, Inc. - Gibson Generating Station  
**Source Location:** S.R. 64 W & C.R. 975, Owensville, Indiana 47665  
**County:** Gibson  
**SIC Code:** 4911  
**Operation Permit No.:** T051-7175-00013  
**Permit Reviewer:** Patrick B. Burton

The Office of Air Quality (OAQ) has reviewed a Part 70 permit application from PSI Energy, Inc. relating to the operation of this stationary electric utility generating station.

#### Permitted Emission Units and Pollution Control Equipment

The source consists of the following permitted emission units and pollution control devices:

- (1) One (1) dry bottom, pulverized coal-fired boiler, identified as Boiler No. 1, construction commenced prior to August 17, 1971, with a nominal heat input capacity of 5875 million Btu per hour (MMBtu/hr), with an electrostatic precipitator (ESP) for control of particulate matter, and exhausting to stack A. Boiler No. 1 has continuous emissions monitors (CEMs) for nitrogen oxides (NO<sub>x</sub>) and sulfur dioxide (SO<sub>2</sub>) and a continuous opacity monitor (COM).
- (2) One (1) dry bottom, pulverized coal-fired boiler, identified as Boiler No. 2, construction commenced prior to August 17, 1971, with a nominal heat input capacity of 5875 million Btu per hour (MMBtu/hr), with an electrostatic precipitator (ESP) for control of particulate matter, and exhausting to stack A. Boiler No. 2 has continuous emissions monitors (CEMs) for nitrogen oxides (NO<sub>x</sub>) and sulfur dioxide (SO<sub>2</sub>) and a continuous opacity monitor (COM).
- (3) One (1) dry bottom, pulverized coal-fired boiler, identified as Boiler No. 3, construction commenced prior to August 17, 1971, with a nominal heat input capacity of 5897 million Btu per hour (MMBtu/hr), with an electrostatic precipitator (ESP) for control of particulate matter, and exhausting to stack B. Boiler No. 3 has continuous emissions monitors (CEMs) for nitrogen oxides (NO<sub>x</sub>) and sulfur dioxide (SO<sub>2</sub>) and a continuous opacity monitor (COM).
- (4) One (1) dry bottom, pulverized coal-fired boiler, identified as Boiler No. 4, construction commenced prior to August 17, 1971, with a nominal heat input capacity of 5897 million Btu per hour (MMBtu/hr), with an electrostatic precipitator (ESP) for control of particulate matter, with a flue gas desulfurization (FGD) system for control of sulfur dioxide, and exhausting to stack D. Boiler No. 4 has continuous emissions monitors (CEMs) for nitrogen oxides (NO<sub>x</sub>) and sulfur dioxide (SO<sub>2</sub>) and a continuous opacity monitor (COM).
- (5) One (1) dry bottom, pulverized coal-fired boiler, identified as Boiler No. 5, installed in 1982, with a nominal heat input capacity of 5900 million Btu per hour (MMBtu/hr), with an

electrostatic precipitator (ESP) for control of particulate matter, with a flue gas desulfurization (FGD) system for control of sulfur dioxide, and exhausting to stack C. Boiler No. 5 has continuous emissions monitors (CEMs) for nitrogen oxides (NO<sub>x</sub>) and sulfur dioxide (SO<sub>2</sub>) and a continuous opacity monitor (COM).

- (6) A coal transfer system, with a nominal throughput of 6,000 tons of coal per hour, consisting of the following equipment:
  - (a) Two (2) railcar unloading stations, each with a drop point to a hopper identified as DP-5 and DP-25, with the drop point controlled by a partial enclosure, and exhausting to the ambient air.
  - (b) Two (2) active piles, each with a drop point to a hopper identified as DP-1 and DP-16, with each drop point enclosed and controlled by a baghouse, and exhausting to the ambient air.
  - (c) One (1) storage pile, having an estimated combined storage capacity including the active piles of 4,000,000 tons, with fugitive emissions controlled by a watering system, and exhausting to the ambient air.
  - (d) Four (4) enclosed hoppers, each with a drop point to conveyors identified as DP-2, DP-6, DP-17 and DP-26, with each drop point enclosed and controlled by a baghouse, and exhausting to the ambient air.
  - (e) An enclosed conveyor system, with 18 drop points identified as DP-3, DP-4, DP-7 through DP-15, and DP-18 through DP-24, with each drop point enclosed and controlled by a baghouse, excluding the two (2) active pile conveyors which have the drop points (DP-18 and DP-22) controlled by telescopic chutes, and exhausting to the ambient air.
  - (f) Five (5) enclosed coal bunkers, each with a normal nominal capacity of 15,000 tons of coal. Bunkers are loaded via a conveyor tripper system with a total capacity of 3,000 tons per hour to the units 1 and 2 bunkers, and 3,000 tons per hour to the units 3, 4 and 5 bunkers. Particulate matter generated from loading bunkers is controlled with a baghouse, and exhausts to the ambient air.
- (7) A limestone processing system, with a maximum throughput of 250 tons of limestone per hour, consisting of the following equipment:
  - (a) One (1) unloading station for trucks or railcar, with a drop point to a hopper identified as LSDP-1, with the drop point controlled by a partial enclosure, and exhausting to the ambient air.
  - (b) Two (2) enclosed hoppers, each with a drop point to conveyors identified as LSDP-2 and LSDP-5, with each drop point enclosed and controlled by a baghouse, and exhausting to the ambient air.
  - (c) One (1) storage pile, with a storage capacity of 50,000 tons, with a drop point to a hopper identified as LSDP-4, with the drop point enclosed and exhausting to the ambient air.
  - (d) An enclosed conveyor system, with four (4) drop points identified as LSDP-3 and LSDP-8 through LSDP-10, with each drop point enclosed and controlled by a baghouse, and exhausting to the ambient air.

- (e) One (1) enclosed ball mill, with a drop point to a conveyor identified as LSDP-6, with the drop point enclosed and controlled by a baghouse, and exhausting to the ambient air.
- (f) Two (2) day bins for temporary storage of limestone, with a normal maximum loading capacity of 150 tons per hour each, with dust from loading the bins controlled by bin vent filters, and exhausting to the ambient air.

### **Unpermitted Emission Units and Pollution Control Equipment**

The source also consists of the following unpermitted facilities/units:

- (1) One (1) oil-fired boiler, identified as Unit 2 Auxiliary Boiler, installed in 1974, with a maximum heat input capacity of 159 million Btu per hour (MMBtu/hr), and exhausting to stack Aux-2.
- (2) One (1) oil-fired boiler, identified as Unit 5 Auxiliary Boiler, installed in 1982, with a maximum heat input capacity of 226 million Btu per hour (MMBtu/hr), and exhausting to stack Aux-5.

### **Insignificant Activities**

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

- (1) Equipment powered by internal combustion engines of capacity equal to or less than 500,000 Btu/hour, except where total capacity of equipment operated by one stationary source exceeds 2,000,000 Btu/hour.
- (2) A gasoline fuel transfer and dispensing operation handling less than or equal to 1,300 gallons per day, such as filling of tanks, locomotives, automobiles, having a storage capacity less than or equal to 10,500 gallons.
- (3) A petroleum fuel, other than gasoline, dispensing facility having a storage capacity less than or equal to 10,500 gallons, and dispensing less than or equal to 230,000 gallons per month.
- (4) The following VOC and HAP storage containers:
  - (a) Storage tanks with capacity less than or equal to 1,000 gallons and annual throughput less than 12,000 gallons.
  - (b) Vessels storing lubricating oils, hydraulic oils, machining oils, and machining fluids.
- (5) Refractory storage not requiring air pollution control equipment.
- (6) Application of oils, greases, lubricants, or other nonvolatile materials applied as temporary protective coatings.
- (7) Machining where an aqueous cutting coolant continuously floods the machining interface.
- (8) Degreasing operations that do not exceed 145 gallons per 12 months, except if subject to 326 IAC 20-6.

- (9) Cleaners and solvents characterized as follows:
  - (a) Having a vapor pressure equal to or less than 2 kPa; 15 mm Hg; or 0.3 psi measured at 38 degrees C (100EF) or;
  - (b) Having a vapor pressure equal to or less than 0.7 kPa; 5mm Hg; or 0.1 psi measured at 20EC (68EF); the use of which for all cleaners and solvents combined does not exceed 145 gallons per 12 months.
- (10) The following equipment related to manufacturing activities not resulting in the emission of HAPs: brazing equipment, cutting torches, soldering equipment, welding equipment.
- (11) Closed loop heating and cooling systems.
- (12) Any of the following structural steel and bridge fabrication activities:
  - (a) Cutting 200,000 linear feet or less of one inch (10) plate or equivalent.
  - (b) Using 80 tons or less of welding consumables.
- (13) Rolling oil recovery systems.
- (14) Solvent recycling systems with batch capacity less than or equal to 100 gallons.
- (15) Activities associated with the treatment of wastewater streams with an oil and grease content less than or equal to 1% by volume.
- (16) Activities associated with the transportation and treatment of sanitary sewage, provided discharge to the treatment plant is under the control of the owner/operator, that is, an on-site sewage treatment facility.
- (17) Any operation using aqueous solutions containing less than 1% by weight of VOCs, excluding HAPs.
- (18) Water based adhesives that are less than or equal to 5% by volume of VOCs, excluding HAPs.
- (19) Replacement or repair of electrostatic precipitators, bags in baghouses and filters in other air filtration equipment.
- (20) Heat exchanger cleaning and repair.
- (21) Process vessel degreasing and cleaning to prepare for internal repairs.
- (22) Stockpiled soils from soil remediation activities that are covered and waiting transportation for disposal.
- (23) Paved and unpaved roads and parking lots with public access.
- (24) Conveyors as follows:
  - (a) Covered conveyor for coal or coke conveying of less than or equal to 360 tons per day;

- (b) Covered conveyors for limestone conveying of less than or equal to 7,200 tons per day for sources other than mineral processing plants constructed after August 31, 1983;
  - (c) Underground conveyors.
- (25) Coal bunker and coal scale exhausts and associated dust collector vents.
- (26) Asbestos abatement projects regulated by 326 IAC 14-10.
- (27) Purging of gas lines and vessels that is related to routing maintenance and repair of buildings, structures, or vehicles at the source where air emissions from those activities would not be associated with any production process.
- (28) Flue gas conditioning systems and associated chemicals such as the following: sodium sulfate, ammonia, and sulfur trioxide.
- (29) Equipment used to collect any material that might be released during a malfunction, process upset, or spill cleanup, including catch tanks, temporary liquid separators, tanks, and fluid handling equipment.
- (30) Blowdown for any of the following: sight glass; boiler; compressors; pumps; and cooling tower.
- (31) On-site fire and emergency response training approved by the department.
- (32) Emergency generators as follows:
  - (a) Gasoline generators not exceeding 110 horsepower.
  - (b) Diesel generators not exceeding 1600 horsepower.
- (33) Other emergency equipment as follows:
  - (a) Stationary fire pumps.
- (34) Grinding and machining operations controlled with fabric filters, scrubbers, mist collectors, wet collectors and electrostatic precipitators with a design grain loading of less than or equal to 0.03 grains per actual cubic foot and a gas flow rate less than or equal to 4000 actual cubic feet per minute, including the following: deburring; buffing; polishing; abrasive blasting; pneumatic conveying; and woodworking operations.
- (35) Purge double block and bleed valves.
- (36) Vents from ash transport systems not operated at positive pressure.
- (37) A laboratory as defined in 326 IAC 2-7-1(21)(D).
- (38) Farm Operations.
- (39) The following activities and categories have emissions equal to or less than the following insignificant thresholds:

#### **Insignificant Emission Thresholds**

Lead (Pb) = 0.6 ton/year or 3.29 lbs/day	Carbon Monoxide (CO) = 25 lbs/day
Sulfur Dioxide (SO <sub>2</sub> ) = 5 lbs/hour or 25 lbs/day	Particulate Matter (PM) = 5 lbs/hour or 25 lbs/day
Nitrogen Oxides (NOx) = 5 lbs/hour or 25 lbs/day	VOC's = 3 lbs/hour or 15 lbs/day

- (a) Two (2) fuel oil storage tanks, identified as A and B, constructed in 1975 and 1976, each with a storage capacity of 460,000 gallons.
- (b) Five (5) fuel oil storage tanks, identified as 1, 2, 3, 4 and 5, constructed in 1975, 1976, 1978, 1979, and 1982, each with a storage capacity of 20,000 gallons.
- (c) Flyash handling system, including pneumatic conveying and wet transport. [326 IAC 6-1]
- (d) Six (6) battery rooms.
- (e) Two (2) diesel dredge pumps, with a maximum capacity of 40 gallons of fuel per hour.
- (f) Five (5) ash ponds, with a combined surface area of 435 acres.
- (g) One (1) FGD landfill, with a surface area of 85 acres.
- (h) One (1) FGD emergency pond, with a surface area of 1 acre.
- (i) Two (2) FGD limestone slurry processing systems including one (1) ball mill, two (2) slurry preparation tanks, two (2) dewatering/fixation stations with a vacuum drum and pug mill, and enclosed conveying system. [326 IAC 6-1]
- (j) Six (6) storage tanks for Betz Inhibitor, BULAB 6040, DUSBLOC 165 and 335, and Apollo Antifreeze.
- (k) Eight (8) degreasing units, constructed before 1980, with capacities of 5 gallons (1 tank), 10 gallons (2 tanks), 20 gallons (1 tank), 30 gallons (3 tanks), and 300 gallons (1 tank).
- (l) Five (5) enclosed coal pulverizers, each with a normal maximum capacity of 285 tons of coal per hour, and exhausting to the boiler. [326 IAC 6]

### Existing Approvals

The source has been operating under previous approvals including, but not limited to, the following:

- (a) Construction Permit PSD (26) 1215, issued on March 17, 1978;
- (b) OP 26-02-90-0118, issued on August 1, 1988;
- (c) OP 26-02-90-0119, issued on August 1, 1988;
- (d) OP 26-02-90-0120, issued on August 1, 1988;

- (e) OP 26-02-90-0121, issued on August 1, 1988;
- (f) OP 26-02-90-0122, issued on August 1, 1988;
- (g) OP 26-02-90-0123, issued on August 1, 1988;
- (h) CP 051-2422-00013, issued on June 25, 1992; and
- (i) Acid Rain Permit (AR) 051-5208-00013, issued on December 31, 1997.

All conditions from previous approvals were incorporated into this Part 70 permit, except for conditions that existed only in previous operation permits and are not currently required by applicable state or federal requirements, and except for the following:

- (1) CP 051-2422-00013, issued on June 25, 1992

Operation Condition No. 4:

That the particulate matter from the limestone, lime and flyash handling facility shall be considered in compliance with 326 IAC 6 provided that:

- (a) All 99.9% efficient bag filters shall be operated at all times during operation.
- (b) Visible bag filter emissions shall not exceed 10% opacity.

Reason not incorporated:

Part (b) of the above condition will not be incorporated because emissions from the bag filters are not considered fugitive for purposes of the NSPS 40 CFR 60, Subpart OOO, and should therefore be required to meet an opacity of 7%. Since this limitation is more stringent, the above opacity limitation will be superseded.

Operation Condition No. 5:

That the limestone handling is subject to New Source Performance Standard (NSPS), Rule 326 IAC 12-1 (40 CFR Part 60.670, Subpart OOO, Standard of Performance for Nonmetallic Mineral Processing Plants). A copy of this rule is enclosed.

- a) The ball mill fugitive emissions shall not exceed 15% opacity to comply with 40 CFR 60.672(a)(2).
- b) Any fugitive emissions from a transfer point on a belt conveyor shall not exceed 10% opacity to comply with 40 CFR 60.672(b).

Reason not incorporated:

Since the ball mill is controlled by a baghouse, the emissions from that unit would not be considered fugitive. Therefore, the limitation for the unit shall be no greater than 7% opacity, as determined by 40 CFR 60.672(a). In addition, all the transfer points of the handling system, except the drop point for the stockpile and the unloading hopper, are enclosed with bag filters. Therefore, these shall also

meet the limitations of 40 CFR 60.672(a).

### Enforcement Issue

- (a) IDEM is aware that equipment has been operated prior to receipt of the proper permit. The subject equipment is listed in this Technical Support Document under the condition entitled *Unpermitted Emission Units and Pollution Control Equipment*.
- (b) IDEM is reviewing this matter and will take appropriate action. This proposed permit is intended to satisfy the requirements of the construction permit rules.

### Recommendation

The staff recommends to the Commissioner that the Part 70 permit be approved. This recommendation is based on the following facts and conditions:

Unless otherwise stated, information used in this review was derived from the application and additional information submitted by the applicant.

An administratively complete Part 70 permit application for the purposes of this review was received on November 14, 1996. Additional information was received on April 27, 1998.

A notice of completeness letter was mailed to the source on January 17, 1997.

### Potential to Emit

Pursuant to 326 IAC 2-1.1-1(16), Potential to Emit is defined as "the maximum capacity of a stationary source 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."

Pollutant	Potential to Emit (tons/year)
PM	greater than 250
PM-10	greater than 250
SO <sub>2</sub>	greater than 250
VOC	greater than 250
CO	greater than 250
NO <sub>x</sub>	greater than 250

Note: For the purpose of determining Title V applicability for particulates, PM-10, not PM, is the regulated pollutant in consideration.

HAP's	Potential to Emit (tons/year)
Cyanide	greater than 10
Lead Compounds	greater than 10
All Other HAPs	less than 10
TOTAL	greater than 25

- (a) The potential to emit (as defined in 326 IAC 2-1.1-1(16)) of PM-10, SO<sub>2</sub>, VOC, CO and NO<sub>x</sub> are equal to or greater than 100 tons per year. Therefore, the source is subject to the provisions of 326 IAC 2-7.
- (b) The potential to emit (as defined in 326 IAC 2-1.1-1(16)) of any single HAP is equal to or

greater than ten (10) tons per year and the potential to emit (as defined in 326 IAC 2-1.1-1(16)) of a combination HAPs is greater than or equal to twenty-five (25) tons per year. Therefore, the source is subject to the provisions of 326 IAC 2-7.

(c) Fugitive Emissions

Since this type of operation is one of the twenty-eight (28) listed source categories under 326 IAC 2-2 and since there are applicable New Source Performance Standards that were in effect on August 7, 1980, the fugitive emissions are counted toward determination of PSD and Emission Offset applicability.

**Actual Emissions**

The following table shows the actual emissions from the source. This information reflects the 2001 OAQ emission data.

Pollutant	Actual Emissions (tons/year)
PM-10	695
SO <sub>2</sub>	148,331
VOC	271
CO	2,264
NO <sub>x</sub>	44,060

**County Attainment Status**

The source is located in Gibson County.

Pollutant	Status
PM-10	Attainment
SO <sub>2</sub>	Attainment or Unclassifiable
NO <sub>2</sub>	Attainment
Ozone	Attainment
CO	Attainment
Lead	Attainment

(a) Volatile organic compounds (VOC) are precursors for the formation of ozone. Therefore, VOC emissions are considered when evaluating the rule applicability relating to the ozone standards. Gibson County has been designated as attainment or unclassifiable for ozone.

(b) Gibson County has been classified as attainment or unclassifiable for SO<sub>2</sub>, PM10, CO and Lead. Gibson County has been classified as attainment or unclassifiable for all other criteria pollutants. Therefore, these emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2 and 40 CFR 52.21.

(c) Fugitive Emissions

Since this type of operation is one of the twenty-eight (28) listed source categories under 326 IAC 2-2 and since there are applicable New Source Performance Standards that

were in effect on August 7, 1980, the fugitive emissions are counted toward determination of PSD and Emission Offset applicability.

### **Part 70 Permit Conditions**

This source is subject to the requirements of 326 IAC 2-7, pursuant to which the source has to meet the following:

- (a) Emission limitations and standards, including those operational requirements and limitations that assure compliance with all applicable requirements at the time of issuance of Part 70 permits.
- (b) Monitoring and related record keeping requirements which assume that all reasonable information is provided to evaluate continuous compliance with the applicable requirements.

### **Federal Rule Applicability**

- (a) 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 the Title V permit as Appendix A, and is incorporated by reference. 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:
  - (1) 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.
  - (2) 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.
  - (3) Any such allowance shall be accounted for according to the procedures established in regulations promulgated under Title IV of the Clean Air Act.
- (b) Boilers 1 through 4 are not subject to the requirements of the New Source Performance Standard, 326 IAC 12, (40 CFR 60.40, Subpart D-Standards of Performance for Fossil-Fuel-Fired Steam Generators for Which Construction is Commenced After August 17, 1971), because construction on these boilers commenced prior to August 17, 1971, as determined by the United States District Court for the Southern District of Indiana in the case of United States of America v. Public Service Company of Indiana, Inc. on September 30, 1977.
- (c) Boiler 5 is subject to the New Source Performance Standard, 326 IAC 12, (40 CFR 60.40, Subpart D-Standards of Performance for Fossil-Fuel-Fired Steam Generators for Which Construction is Commenced After August 17, 1971), because construction on this boiler commenced after August 17, 1971. This rule requires that:
  - (a) Particulate matter emissions not exceed 0.10 pounds per million Btu heat input.
  - (b) Visible emissions not exceed 20% opacity except for one six minute period per

hour of not more than 27% opacity.

- (c) Sulfur dioxide emissions not exceed 1.2 pounds per million Btu heat input.
- (d) Nitrogen oxides emissions not exceed 0.70 pounds per million Btu heat input.
- (e) The owner or operator shall install, calibrate, maintain, and operate continuous monitoring systems for measuring the opacity emissions, sulfur dioxide emissions, nitrogen oxides emissions, and either oxygen or carbon dioxide.
  
- (d) The flue gas desulfurization (FGD) landfill is not subject to the New Source Performance Standard, 326 IAC 12, (40 CFR 60.750, Subpart WWW-Standards of Performance for Municipal Solid Waste Landfills), because construction on this landfill commenced prior to the May 30, 1991 Subpart WWW applicability date.
- (e) The flue gas desulfurization (FGD) landfill is not subject to the New Source Performance Standard, 326 IAC 12, (40 CFR 60, Subpart Cc-Emission Guidelines and Compliance Times for Municipal Solid Waste Landfills), because this landfill does not meet the definition of a municipal solid waste landfill as defined in 40 CFR 60.31(c).
- (f) The two (2) no. 2 fuel oil storage tank A and B are not subject to the New Source Performance Standard, 326 IAC 12, (40 CFR 60.110, Subpart K-Standards of Performance for Storage Vessels for Petroleum Liquids for Which Construction , Reconstruction, or Modification Commenced After June 11, 1973, and Prior to May 19, 1978 or 40 CFR 60.110a, Subpart Ka-Standards of Performance for Storage Vessels for Petroleum Liquids for Which Construction , Reconstruction, or Modification Commenced After May 18, 1978, and Prior to July 23, 1984 ) because no. 2 fuel oil is not considered a petroleum liquid.
- (g) The five (5) no. 2 fuel oil day tanks are not subject to the New Source Performance Standard, 326 IAC 12, (40 CFR 60.110b, Subpart Kb-Standards of Performance for Volatile Organic Liquid Storage Vessels (including Petroleum Liquid Storage Vessels) for which Construction, Reconstruction, or Modification Commenced After July 23, 1984) because the tanks were all constructed prior to July 23, 1984.
- (h) The coal processing system is not subject to the New Source Performance Standard, 326 IAC 12, (40 CFR 60.250, Subpart Y-Standards of Performance for Coal Preparation Plants) because it is not a coal preparation plant as defined in 40 CFR 60.251, meaning that they do not use breaking, crushing, screening, wet or dry cleaning, or thermal drying in their process.
- (i) The limestone processing system is subject to the New Source Performance Standard, 326 IAC 12, (40 CFR 60.670, Subpart OOO). This rule requires that particulate matter emissions from any transfer point on belt conveyors (except the drop point for the stockpile and unloading hopper) or from any other affected facility (ball mill and day bins) shall not exceed 0.05 grains per dry standard cubic meter (g/dscm) and shall not exhibit greater than seven percent (7%) opacity. Particulate matter emission requirements also apply to any transfer point on belt conveyors or from any other affected facility, any fugitive emissions from their equipment shall not exhibit greater than ten percent (10%) opacity and from any crusher at which a capture system is not used, fugitive emissions shall not exhibit greater than fifteen percent (15%) opacity.
- (j) The requirements of Section 112(j) of the Clean Air Act (40 CFR Part 63.50 through 63.56) are applicable to this source because the source is a major source of HAPs (i.e.,

the source has the potential to emit 10 tons per year or greater of a single HAP or 25 tons per year or greater of a combination of HAPs) and the source includes one or more units that belong to one or more source categories affected by the Section 112(j) Maximum Achievable Control Technology (MACT) Hammer date of May 15, 2002.

- (1) This rule requires the source to:
    - (A) Submit a Part 1 MACT Application by May 15, 2002; and
    - (B) Submit a Part 2 MACT Application for each affected source category in accordance with the appropriate Part 2 MACT Application deadline listed in Table 1 to 40 CFR 63, Subpart B for the affected source category.
  - (2) The Permittee submitted a Part 1 MACT Application on May 10, 2002.
  - (3) Pursuant to 40 CFR 63.56(a), the Permittee shall comply with an applicable promulgated MACT standard in accordance with the schedule provided in the MACT standard if the MACT standard is promulgated prior to the Part 2 MACT Application deadline or prior to the issuance of permit with a case-by-case Section 112(j) MACT determination. The MACT requirements include the applicable General Provisions requirements of 40 CFR 63, Subpart A. Pursuant to 40 CFR 63.9(b), the Permittee shall submit an initial notification not later than 120 days after the effective date of the MACT, unless the MACT specifies otherwise. The MACT and the General Provisions of 40 CFR 63, Subpart A will become new applicable requirements, as defined by 326 IAC 2-7-1(6), that must be incorporated into the Part 70 permit. After IDEM, OAQ receives the initial notification, any of the following will occur:
    - (A) If three or more years remain on the Part 70 permit term at the time the MACT is promulgated, IDEM, OAQ will notify the source that IDEM, OAQ will reopen the permit to include the MACT requirements pursuant to 326 IAC 2-7-9; or
    - (B) If less than three years remain on the Part 70 permit term at the time the MACT is promulgated, the Permittee must include information regarding the MACT in the renewal application, including the information required in 326 IAC 2-7-4(c); or
    - (C) The Permittee may submit an application for a significant permit modification under 326 IAC 2-7-12 to incorporate the MACT requirements. The application may include information regarding which portions of the MACT are applicable to the emission units at the source and which compliance options will be followed.
- (c) There are no National Emission Standards for Hazardous Air Pollutants (NESHAPs) applicable to this source.

#### **State Rule Applicability - Entire Source**

##### **326 IAC 2-2 (Prevention of Significant Deterioration)**

Pursuant to 326 IAC 2-2 (Prevention of Significant Deterioration), this source is a major source. See State Rule Applicability for the boilers for an explanation of why Boilers 1 through 4 and Unit 2

Auxiliary Boiler did not go through permitting pursuant to 326 IAC 2-2.

326 IAC 2-6 (Emission Reporting)

This source is subject to 326 IAC 2-6 (Emission Reporting), because it has the potential to emit more than one hundred (100) tons per year) of SO<sub>2</sub>. Pursuant to this rule, the owner/operator of the source must annually submit an emission statement for the source. The annual statement must be received by July 1 of each year and contain the minimum requirement as specified in 326 IAC 2-6-4. The submittal should cover the period defined in 326 IAC 2-6-2(8)(Emission Statement Operating Year).

326 IAC 4-1 (Open Burning)

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

326 IAC 5-1 (Opacity Limitations)

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

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

326 IAC 6-4 (Fugitive Dust Emissions)

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

326 IAC 6-4-4 (Motor vehicle fugitive dust sources)

Pursuant to 326 IAC 6-4-4, no vehicle shall be driven or moved on any public street, road, alley, highway, or other thoroughfare, unless such vehicle is so constructed as to prevent its contents from dripping, sifting, leaking, or otherwise escaping therefrom so as to create conditions which result in fugitive dust. This section applies only to the cargo any vehicle may be conveying and mud tracked by the vehicle.

326 IAC 7-3 (Ambient Monitoring)

- (a) The Permittee shall operate continuous ambient sulfur dioxide air quality monitors and a meteorological data acquisition according to a monitoring plan submitted to the commissioner for approval. The monitoring plan shall include requirements listed in 326 IAC 7-3-2(a)(1), 326 IAC 7-3-2(a)(2) and 326 IAC 7-3-2(a)(3).
- (b) The Permittee and other operators subject to the requirements of this rule, located in the same county, may submit a joint monitoring plan to satisfy the requirements of this rule. [326 IAC 7-3-2(c)]
- (c) The Permittee may petition the commissioner for an administrative waiver of all or some of the requirements of 326 IAC 7-3 if such owner or operator can demonstrate that ambient monitoring is unnecessary to determine continued maintenance of the sulfur dioxide ambient air quality standards in the vicinity of the source. [326 IAC 7-3-2(d)]

326 IAC 21-1 (Acid Deposition Control)

Pursuant to 326 IAC 21 (Acid Deposition Control), the Permittee shall comply with all provisions of the Acid Rain permit AR 051-5208-00013, and revision(s) issued for this source.

**State Rule Applicability - Coal-Fired Boilers**

326 IAC 2-2 (Prevention of Significant Deterioration)

- (a) Boiler No. 1, Boiler No. 2, and Unit 2 Auxiliary Boiler are not subject to the requirements of 326 IAC 2-2, Prevention of Significant Deterioration (PSD) since the commencement dates of construction occurred before the August 7, 1977 applicability date.
- (b) Although installation of Boiler No. 3 and Boiler No. 4 commenced after the applicability date for PSD, the United States District Court for the Southern District of Indiana in the case of United States of America v. Public Service Company of Indiana, Inc. on September 30, 1977, decided that the groundwork had been started for these boilers before the applicability date and intentions were known that actual construction for these boilers would be commenced after the applicability date. Therefore, these boilers were considered as units constructed before the PSD applicability date and were not reviewed pursuant to 326 IAC 2-2 (Prevention of Significant Deterioration).
- (c) Boiler 5 was permitted pursuant to 326 IAC 2-2 on March 17, 1978. To achieve NSPS, as well as "Best Available Control Technology" (BACT), this unit was required to operate an electrostatic precipitator (ESP) and flue gas desulfurization (FGD) system to remove particulate matter and sulfur dioxide from the exhaust gas.

326 IAC 5-1-3 (Temporary Alternative Opacity Limitations)

(1) Pursuant to 326 IAC 5-1-3(e) (Temporary Alternative Opacity Limitations), the following applies:

- (1) For Boiler No. 1 and Boiler No. 2, when building a new fire in a boiler, or shutting down a boiler, opacity may exceed the 40% opacity limitation. 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 four (4) hours (forty (40) six (6)-minute averaging periods) or until the flue gas temperature reaches two hundred fifty (250) degrees Fahrenheit, whichever occurs first.
  - (2) For Boiler No. 3, Boiler No. 4, and Boiler No. 5, when building a new fire in a boiler, or shutting down a boiler, opacity may exceed the 40% opacity . 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 five (5) hours (fifty (50) six (6)-minute averaging periods) or until the flue gas temperature reaches two hundred fifty (250) degrees Fahrenheit, whichever occurs first.
  - (3) When shutting down a boiler, opacity may exceed the 40% opacity limitation established in 326 IAC 5-1-2 for a period not to exceed four (4) hours (forty (40) six (6)-minute averaging periods).
  - (4) Operation of the electrostatic precipitator is not required during these times unless necessary to comply with these limits.
- (2) When removing ashes from the fuel bed or furnace in a boiler or blowing tubes, opacity may exceed the applicable limit established in 326 IAC 5-1-2. However, opacity levels

shall not exceed sixty percent (60%) for any six (6)-minute averaging period and opacity in excess of the applicable limit shall not continue for more than one (1) six (6)-minute averaging period in any sixty (60) minute period. The averaging periods shall not be permitted for more than three (3) six (6)-minute averaging periods in a twelve (12) hour period. [326 IAC 5-1-3(b)]

**326 IAC 6-2-3 (Particulate Matter Emissions Limitations for Sources of Indirect Heating)**

Pursuant to 326 IAC 6-2-3 (Particulate Matter Emissions for Sources of Indirect Heating), the PM emissions from the Boilers No. 1 through 4 shall each be limited to 0.096 pound per million Btu heat input (lb/MMBtu). This limitation will satisfy the requirement to maintain PM emissions below the amounts assumed in the PSD modeling analysis that was performed for Boiler No. 5. This limitation was calculated using the following equation:

$$Pt = \frac{(C) (a) (h)}{76.5 (Q^{0.75}) (N^{0.25})} \quad \text{Where } C = 50 \text{ F/m}^3$$

$Q = 23,703 \text{ MMBtu/hr (capacity of boilers 1-4, Aux.2)}$   
 $N = 4 \text{ (number of stacks)}$   
 $a = 0.8$   
 $h = 497.5 \text{ Feet (average stack height)}$

Calculations for 326 IAC 6-2-3 PM limit:

$$Pt = \frac{(50) (0.8) (497.5)}{76.5 (23,703^{0.75}) (4^{0.25})}$$

$$Pt = \frac{19900}{76.5 (1910.304) (1.4142)}$$

$$Pt = \frac{19900}{206,670.7036}$$

$$Pt = \underline{\underline{.096 \text{ lbs/MMBtu}}}$$

The electrostatic precipitators (ESP) shall be in operation at all times Boilers No. 1, 2, 3, and 4 are in operation, in order to comply with the 0.096 lb/MMBtu PM limit.

Controlled PM Emissions for Boiler No. 1, Boiler No. 2 - based on AP-42 Emission Factors:

Controlled PM Emissions in lbs/MMBtu = (lbs/hr)x (hr/max.capacity of boiler MMBtu)

Controlled PM Emissions in lbs/MMBtu = 80.16 lbs/hr x hr/5875 MMBtu

Controlled PM Emissions in lbs/MMBtu = **0.0136 lbs/MMBtu**

**326 IAC 6-2-3 (Particulate Matter Emissions for Sources of Indirect Heating)**

Pursuant to 326 IAC 6-2-3 (Particulate Matter Emissions for Sources of Indirect Heating), the PM emissions from the Boiler No. 5 stack shall not exceed 0.073 pound per million Btu heat input (lb/MMBtu). This limitation was calculated using the following equation:

$$Pt = \frac{(C) (a) (h)}{76.5 (Q^{0.75}) (N^{0.25})} \quad \text{Where } C = 50 \text{ F/m}^3$$

$Q = 29,829 \text{ MMBtu/hr (capacity of boilers 1-5, Aux.2, Aux.5)}$   
 $N = 6 \text{ (number of stacks)}$   
 $a = 0.8$   
 $h = 496.4 \text{ Feet (average stack height)}$

Calculations for 326 IAC 6-2-3 PM limit:

$$Pt = \frac{(50) (0.8) (496.4)}{76.5 (29,829^{0.75}) (6^{0.25})}$$

$$Pt = \frac{19856}{76.5 (2269.755) (1.565)}$$

$$Pt = \frac{19856}{271,740.743}$$

$$Pt = \underline{\underline{.073 \text{ lbs/MMBtu}}}$$

The electrostatic precipitators (ESP) shall be in operation at all times Boiler No. 5 is in operation, in order to comply with the 0.073 lb/MMBtu PM limit. This was calculated using the following equation:

Controlled PM Emissions for Boiler No. 5 - based on AP-42 Emission Factors:

Controlled PM Emissions in lbs/MMBtu = (lbs/hr)x (hr/max.capacity of boiler MMBtu)  
Controlled PM Emissions in lbs/MMBtu = 80.50 lbs/hr x hr/5900 MMBtu  
Controlled PM Emissions in lbs/MMBtu = **0.0136 lbs/MMBtu**

326 IAC 7-4-12.1 (Gibson County Sulfur Dioxide Emission Limitations)

Pursuant to 326 IAC 7-4-12.1 (Gibson County Sulfur Dioxide Emission Limitations), the SO<sub>2</sub> emissions from the coal-fired boilers shall not exceed the following amounts:

<u>Facility Description</u>	<u>Emissions (lbs/MMBtu)</u>
Boiler 1	3.19
Boiler 2	3.19
Boiler 3	3.19
Boiler 4	0.6
Boiler 5	1.10

The 1.10 lbs/MMBtu limitation in 326 IAC 7-4-12.1 for Boiler 5 shall satisfy the SO<sub>2</sub> limit requirements of 1.20 lbs/MMBtu in 40 CFR60.43(a)(2).

326 IAC 10-4 (NO<sub>x</sub> Budget Trading Program)

Pursuant to 326 IAC 10-4-2(16) each of these units is considered an "electricity generating unit (EGU)" because it commenced operation before January 1, 1997, and served a generator during 1995 or 1996 that had a nameplate capacity greater than twenty-five (25) megawatts that produced electricity for sale under a firm contract to the electric grid. Pursuant to 326 IAC 10-4-1(a)(1), an "EGU" is a NO<sub>x</sub> budget unit. Because this source meets the criteria of having one (1) or more NO<sub>x</sub> budget units, it is a NO<sub>x</sub> budget source. The Permittee shall be subject to the requirements of this rule. The NO<sub>x</sub> authorized account representative has already submitted the permit application.

Pursuant to 326 IAC 10-4-12(c), the Permittee installed the appropriate monitoring systems and completed all certification tests as required by 326 IAC 10-4-12(b)(1) through (3) on or before May 1, 2003. The Permittee shall record, report, and quality assure the data from the monitoring systems.

326 IAC 3-5 (Continuous Emissions Monitoring)

Pursuant to 326 IAC 3-5 (Continuous Monitoring of Emissions), continuous monitoring systems shall be calibrated, maintained, and operated for measuring opacity, which meet the performance specifications of 326 IAC 3-5-2. This rule applies to Gibson Generating Station because they are coal-fired steam generators of greater than one hundred million (100,000,000) British thermal units (Btus) per hour heat input capacity. [326 IAC 3-5-1(b)(2)]

**State Rule Applicability - Oil-Fired Auxiliary Boilers**

326 IAC 2-2 (Prevention of Significant Deterioration)

Unit 2 Auxiliary Boiler was constructed in 1974 and predates the PSD rules.

Within 180 days after the issuance of this permit, the no. 2 fuel oil fired boilers, Unit 2 Auxiliary Boiler and Unit 5 Auxiliary Boiler, shall be removed from service permanently by being removed

from the source or made inoperative by other means. This will also make PSD (326 IAC 2-2) not applicable.

Within 180 days after the issuance of this permit, all fuel and ash handling activities associated with the removal from service of the no. 2 fuel oil fired boilers, Unit 2 Auxiliary Boiler and Unit 5 Auxiliary Boiler, shall be terminated and removed.

### **State Rule Applicability - Coal Handling and Storage**

#### **326 IAC 6-3-2 (Process Operations)**

Pursuant to 326 IAC 6-3-2 (Process Operations), the particulate emissions from the coal storage and handling drop points and coal bunkers shall not exceed 103.2 pounds per hour when operating at a process weight of 6000 tons per hour. This is determined by the following equation:

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

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

When the process weight rate exceeds two hundred (200) tons per hour, the maximum allowable emission may exceed 103.2 pounds per hour, provided the concentration of particulate matter in the discharge gases to the atmosphere is less than 0.10 pounds per one thousand (1,000) pounds of gases.

The baghouses shall be in operation at all times the associated drop point conveyors are in operation, in order to comply with this limit.

### **State Rule Applicability - Limestone Handling and Storage**

#### **326 IAC 6-3-2 (Process Operations)**

Pursuant to 326 IAC 6-3-2 (Process Operations), the particulate emissions from the limestone storage and handling drop points and temporary storage bins shall not exceed 61 pounds per hour when operating at a process weight of 250 tons per hour. This is determined by the following equation:

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

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

When the process weight rate exceeds two hundred (200) tons per hour, the maximum allowable emission may exceed 61 pounds per hour, provided the concentration of particulate matter in the discharge gases to the atmosphere is less than 0.10 pounds per one thousand (1,000) pounds of gases.

Pursuant to CP 051-2422-00013, issued on June 25, 1992, the baghouses and bin vent filters shall be in operation and control PM emissions at all times the associated limestone, lime or flyash handling facilities, including the ball mill and drop point conveyors, are in operation.

#### **326 IAC 6-4-2 (Fugitive Dust Emission Limitations)**

Pursuant to 326 IAC 6-4-2:

- (a) Any ash storage pond area or coal piles generating fugitive dust in shall be in violation of this rule (326 IAC 6-4) if any of the following criteria are violated:

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

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

Where

P = Percentage increase

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

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

- (2) 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:

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

Where

N = Fraction of fugitive dust that is respirable dust;

$P_R$  = allowable percentage increase in dust concentration above background;

and

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

- (3) The ground level ambient air concentrations exceed fifty (50) micrograms per cubic meter above background concentrations for a sixty (60) minute period.
- (4) If fugitive dust is visible crossing the boundary or property line of a source. This subdivision may be refuted by factual data expressed in subdivisions (1), (2) or (3) of this section. 326 IAC 6-4-2(4) is not federally enforceable.

- (b) 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.

### **State Rule Applicability - Insignificant Activities**

#### **326 IAC 6-3-2 (Process Operations)**

Pursuant to 326 IAC 6-3 (Process Operations), the particulate emissions from the grinding and welding processes, which are not already regulated by 326 IAC 6-1 or any New Source Performance Standard, shall not exceed 0.551 pounds per hour because the maximum process weight rate for these activities are less than 100 pounds per hour.

#### **326 IAC 8-3 (Organic Solvent Degreasing Operations)**

Pursuant to 326 IAC 8-3 (Organic Solvent Degreasing Operations), this rule does not apply to the degreasing units listed in the insignificant activities section because these units were constructed prior to January 1, 1980.

#### **326 IAC 8-4-3 (Petroleum Liquid Storage Tanks)**

Pursuant to 326 IAC 8-4-1 (Applicability), 326 IAC 8-4-3 (Petroleum Liquid Storage Tanks) does

not apply to storage tanks A and B and day tanks 1 through 5 because they were constructed prior to January 1, 1980 or have capacities less than 39,000 gallons.

**326 IAC 8-4-6 (Gasoline Dispensing Facilities)**

Pursuant to 326 IAC 8-4-1 (Applicability), 326 IAC 8-4-6 (Gasoline Dispensing Facilities) does not apply to the storage tank or dispensing facility because they were constructed prior to July 1, 1989 and have monthly throughputs of less than 10,000 gallons.

**326 IAC 8-8.1 (Municipal Solid Waste Landfills Not Located in Clark, Floyd, Lake, and Porter Counties)**

Pursuant to 326 IAC 8-8.1-3(a)(1) (Requirements; incorporation by reference of federal standards), 326 IAC 8-8.1 (Municipal Solid Waste Landfills Not Located in Clark, Floyd, Lake, and Porter Counties) does not apply to the flue gas desulfurization (FGD) landfill because the sludge waste is exclusively from an industrial waste stream, not a residential waste stream. Therefore, the FGD landfill does not meet the definition of a municipal solid waste landfill and 326 IAC 8-8.1 does not apply.

**Testing Requirements - Coal-Fired Boilers**

Within the two (2) calendar years following the most recent stack test, compliance with the PM limitations in Conditions D.1.1, D.2.1, D.3.1, D.4.1, D.5.1, D.5.2 and D.5.3 shall be determined by a performance stack test conducted utilizing methods as approved by the Commissioner. This test shall be repeated at least once every two (2) calendar years following this valid compliance demonstration. Testing shall be conducted in accordance with Section C- Performance Testing.

For the purpose of this permit, "calendar year" means the twelve (12) month period from January 1 to December 31 inclusive.

**Compliance Requirements**

Permits issued under 326 IAC 2-7 are required to ensure that sources can demonstrate compliance with applicable state and federal rules on a more or less continuous basis. All state and federal rules contain compliance provisions, however, these provisions do not always fulfill the requirement for a more or less continuous demonstration. When this occurs IDEM, OAQ, in conjunction with the source, must develop specific conditions to satisfy 326 IAC 2-7-5. As a result, compliance requirements are divided into two sections: Compliance Determination Requirements and Compliance Monitoring Requirements.

Compliance Determination Requirements in Section D of the permit are those conditions that are found more or less directly within state and federal rules and the violation of which serves as grounds for enforcement action. If these conditions are not sufficient to demonstrate continuous compliance, they will be supplemented with Compliance Monitoring Requirements, also Section D of the permit. Unlike Compliance Determination Requirements, failure to meet Compliance Monitoring conditions would serve as a trigger for response steps 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 response steps within a specific time period.

- (1) The coal-fired boilers Boiler No. 1, Boiler No. 2, Boiler No. 3, Boiler No. 4 and Boiler No. 5 have applicable compliance monitoring conditions as specified below:

**Transformer-Rectifier (T-R) Sets [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]**

- (a) The ability of the ESP to control particulate emissions shall be monitored once per shift, when the unit is 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) Reasonable response steps shall be taken in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports whenever the percentage of T-R sets in service falls below ninety percent (90%). T-R set failure resulting in less than ninety percent (90%) availability is not a deviation from this permit. Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports, shall be considered a violation of this permit.

Opacity Readings [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]

- (a) Appropriate response steps shall be taken in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports whenever the opacity exceeds twenty-five percent (25%) for three (3) consecutive six (6) minute averaging periods. In the event of opacity exceeding twenty-five percent (25%), response steps will be taken such that the cause(s) of the excursion are identified and corrected and opacity levels are brought back below twenty-five percent (25%). Examples of expected response steps include, but are not limited to, boiler loads being reduced, adjustment of flue gas conditioning rate, and ESP T-R sets being returned to service.
- (b) Opacity readings in excess of twenty-five percent (25%) but not exceeding the opacity limit for the unit are not a deviation from this permit. Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports, shall be considered a violation of this permit.
- (2) The coal-fired boilers Boiler No. 4 and Boiler No. 5 have additional applicable compliance monitoring conditions as specified below:

Scrubber Operation [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]

- (a) Except as otherwise provided by statute or rule or in this permit, the scrubber shall be operated as needed to maintain compliance with all applicable SO<sub>2</sub> emission limits.
- (b) An inspection of the scrubber shall be performed at least once every two years, in accordance with the Preventive Maintenance Plan prepared in accordance with Section B - Preventive Maintenance Plan. Defective parts shall be replaced. A record shall be kept of the results of the inspection and the part(s) replaced.
- (c) Inspections shall be made whenever there is an outage of any nature lasting more than three days unless such measurements have been taken within the past twelve months.
- (d) Reasonable response steps shall be taken in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports for any improper or abnormal conditions found during an inspection. Discovery of an abnormal or improper condition is not a deviation from this permit. Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports, shall be considered a violation of this permit.

SO<sub>2</sub> Monitor Downtime [326 IAC 2-7-6] [326 IAC 2-7-5(1)]

Whenever the SO<sub>2</sub> continuous emission monitoring system is malfunctioning or down for repairs or adjustments, the Permittee shall monitor and record boiler load, recirculation pH, slurry feed

rate, and number of recirculation pumps in service, to demonstrate that the operation of the scrubber continues in a manner typical for the boiler load and sulfur content of the coal fired. Scrubber parametric monitoring readings shall be recorded at least once per hour until the primary CEM or a backup CEM is brought online.

- (3) The coal-fired boiler Boiler No. 5 has applicable compliance monitoring conditions as specified below:

NO<sub>x</sub> Monitoring System Downtime [326 IAC 2-2] [326 IAC 2-7-6] [326 IAC 2-7-5(3)]

In instances of NO<sub>x</sub> continuous emission monitoring system (CEMS) downtime, the Permittee shall report the NO<sub>x</sub> mass emissions in accordance with the procedures regulated by 40 CFR Part 75, Appendix D (Optional SO<sub>2</sub> Emissions Data Protocol) for fuel flow meters requirements, 40 CFR Part 75, Appendix E (Optional NO<sub>x</sub> Emissions Estimation Protocol) for emission rate curve establishment, and Appendix G (Determination of CO<sub>2</sub> Emissions). NO<sub>x</sub> mass emissions reported shall be based on the fuel-and-unit-specific NO<sub>x</sub> emission rates ("load curve") established during the latest stack test.

- (4) The coal storage and handling systems have applicable compliance monitoring conditions as specified below.

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

- (a) Visible emission notations of the transfer points baghouse exhausts shall be performed once per shift during normal daylight operations. A trained employee shall record whether emissions are normal or abnormal.
- (b) Visible emission notations of the coal unloading station(s) doorways and drop points shall be performed once per shift during normal daylight operations. A trained employee shall record whether any emissions are observed.
- (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) 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.
- (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.
- (f) If any emissions are observed from the coal unloading station doorways and drop points, the Permittee shall take reasonable response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports. 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 in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports, shall be considered a violation of this permit.
- (g) If abnormal emissions are observed at any baghouse exhaust, the Permittee shall take reasonable response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports. 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 in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports, shall be considered a violation of this permit.

Baghouse Parametric Monitoring [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]

- (a) The Permittee shall record the total static pressure drop across each of the baghouses used in conjunction with the coal transfer drop points at least once per shift when the coal handling is in operation. When for any one reading, the pressure drop across the baghouse is outside the normal range of 3.0 and 6.0 inches of water or a range established during the latest stack test, the Permittee shall take reasonable response steps in accordance with Section C- Compliance Response Plan - Preparation, Implementation, Records, and Reports. A pressure reading that is outside the above mentioned range is not a deviation from this permit. Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports, shall be considered a violation of this permit.
- (b) The instrument used for determining the pressure shall comply with Section C - Pressure Gauge and Other 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.

Baghouse Inspections [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]

- (a) An inspection shall be performed each calendar quarter of all bags controlling particulate emissions from the coal processing or conveying. Inspections required by this condition shall not be performed in consecutive months. All defective bags shall be replaced.
- (b) If an abnormal or improper condition is found during an inspection, the Permittee shall take reasonable response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports. Discovery of an abnormal or improper condition is not a deviation from this permit. Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports, shall be considered a violation of this permit.

Broken or Failed Bag Detection [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]

In the event that bag failure has been observed:

- (a) For multi-compartment units, the affected baghouse compartments will be shut down immediately until the failed units have been repaired or replaced. Within eight (8) business hours of the determination of failure, response steps according to the timetable described in the Compliance Response Plan shall be initiated. For any failure with corresponding response steps and timetable not described in the Compliance Response Plan, response steps shall be devised within eight (8) business hours of discovery of the failure and shall include a timetable for completion. Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports, shall be considered a violation of this permit. If operations continue after bag failure is observed and it will be ten (10) days or more after the failure is observed before the failed units will be repaired or replaced, the Permittee shall promptly notify the IDEM, OAQ of the expected date the failed units will be repaired or replaced. The notification shall also include the status of the applicable compliance monitoring parameters with respect to normal, and the results of any response actions taken up to the time of notification.
- (b) For single compartment baghouses, if failure is indicated by a significant drop in the

baghouse's pressure readings with abnormal visible emissions or the failure is indicated by an opacity violation, or if bag failure is determined by other means, such as gas temperatures, flow rates, air infiltration, leaks, dust traces or triboflows, then failed units and the associated process will be shut down immediately until the failed units have been repaired or replaced. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions).

- (5) The limestone storage and handling systems have applicable compliance monitoring conditions as specified below:

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

- (a) Visible emission notations of the transfer points and ball mill baghouse exhausts shall be performed once per shift during normal daylight operations. A trained employee shall record whether emissions are normal or abnormal.
- (b) Visible emission notations of the partially enclosed railcar limestone unloading station exhausts shall be performed once per shift during normal daylight operations. A trained employee shall record whether emissions are normal or abnormal.
- (c) If any visible emissions of dust are observed exiting the limestone unloading station doors, the Permittee shall take reasonable response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports. 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 in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports, shall be considered a violation of this permit.
- (d) Visible emission notations of the ash storage pond area(s) shall be performed at least once per day during normal daylight operations. A trained employee shall record whether emissions are normal or abnormal.
- (e) 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 in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports. Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports, shall be considered a violation of this permit.
- (f) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation.
- (g) 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.
- (h) 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.
- (i) If abnormal emissions are observed at any baghouse exhaust, the Permittee shall take reasonable response steps in accordance with Section C - Compliance Response Plan -

Preparation, Implementation, Records, and Reports. 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.

Baghouse Parametric Monitoring [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]

- (a) The Permittee shall record the total static pressure drop across the baghouses used in conjunction with the limestone transfer drop points at least once per shift when the limestone handling is in operation. When for any one reading, the pressure drop across the baghouse is outside the normal range of 3.0 and 6.0 inches of water or a range established during the latest stack test, the Permittee shall take reasonable response steps in accordance with Section C- Compliance Response Plan - Preparation, Implementation, Records, and Reports. A pressure reading that is outside the above mentioned range is not a deviation from this permit. Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports, shall be considered a violation of this permit.
- (b) The instrument used for determining the pressure shall comply with Section C - Pressure Gauge and Other 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.

Baghouse Inspections [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]

- (a) An inspection shall be performed within the last month of each calendar quarter of all bags controlling PM emissions from the limestone processing or conveying. All defective bags shall be replaced.
- (b) If an abnormal or improper condition is found during an inspection, the Permittee shall take reasonable response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports. Discovery of an abnormal or improper condition is not a deviation from this permit. Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports, shall be considered a violation of this permit.

Broken or Failed Bag Detection [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]

In the event that bag failure has been observed:

- (a) For multi-compartment units, the affected compartments will be shut down immediately until the failed units have been repaired or replaced. Operations may continue only if there are no visible emissions or if the event qualifies as an emergency and the Permittee satisfies the emergency provisions of this permit (Section B- Emergency Provisions). Within eight (8) business hours of the determination of failure, response steps according to the timetable described in the Compliance Response Plan shall be initiated. For any failure with corresponding response steps and timetable not described in the Compliance Response Plan, response steps shall be devised within eight (8) business hours of discovery of the failure and shall include a timetable for completion. Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports, shall be considered a violation of this permit.
- (b) For single compartment baghouses, failed units and the associated process will be shut down immediately until the failed units have been repaired or replaced. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency

Provisions).

- (5) The Unit 2 Auxiliary Boiler and Unit 5 Auxiliary Boiler have applicable compliance monitoring conditions as specified below:

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

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- (a) Visible emission (VE) notations of the boilers' stack exhausts shall be performed once per shift during normal daylight operations while combusting fuel oil. A trained employee shall record whether emissions are normal or abnormal.
- (b) If abnormal emissions are observed at any boiler exhaust, the Permittee shall take reasonable response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports. Observation of abnormal emissions that do not violate an applicable opacity limit is not a deviation from this permit. Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports, shall be considered a deviation from this permit.
- (c) "Normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.
- (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 the generators.

### Conclusion

The operation of this stationary electric utility generating station shall be subject to the conditions of the attached proposed **Part 70 Permit No. T051-7175-00013**.