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Commissioner

September 14, 2004

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TO: Interested Parties / Applicant

RE: PSI Energy, Inc - Cayuga Generating Station / 165-7174-00001

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. - Cayuga Generating Station State Road 63 Cayuga, Indiana 47928

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

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

This permit is issued in accordance with 326 IAC 2 and 40 CFR Part 70 Appendix A and contains the conditions and provisions specified in 326 IAC 2-7 as required by 42 U.S.C. 7401, et. seq. (Clean Air Act as amended by the 1990 Clean Air Act Amendments), 40 CFR Part 70.6, IC 13-15 and IC 13-17. This permit also addresses certain new source review requirements for existing equipment and is intended to fulfill the new source review procedures pursuant to 326 IAC 2-2 and 326 IAC 2-7-10.5, applicable to those conditions.

Operation Permit No.: T165-7174-00001	
Issued by: Original Signed by Janet G. McCabe, Assistant Commissioner Office of Air Quality	Issuance Date: September 14, 2004 Expiration Date: September 14, 2009

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**Certification**  
**Emergency Occurrence Report**  
**Natural Gas Fired Boiler Certification**  
**Quarterly 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 Cayuga Generating Station and Manager of the Cayuga combustion turbine
Source Address:	On S.R. 63, Cayuga, Indiana 47928
Mailing Address:	c/o Steven Pearl, 1000 East Main Street, Plainfield, Indiana 46168
Source Telephone:	(317) 838-1758
SIC Code:	4911
County Location:	Vermillion
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, installed in 1967, with a nominal heat input capacity of 4,802 million Btu per hour (MMBtu/hr), with an electrostatic precipitator (ESP) for control of particulate matter, and exhausting to stack 1. Stack 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). Boiler No. 1 was configured with a low NO<sub>x</sub> burner in 1993.
- (b) One (1) dry bottom, pulverized coal-fired boiler, identified as Boiler No. 2, installed in 1968, with a nominal heat input capacity of 4,802 million Btu per hour (MMBtu/hr), with an electrostatic precipitator (ESP) for control of particulate matter, and exhausting to stack 2. Stack 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). Boiler No. 2 was configured with a low NO<sub>x</sub> burner in 1993.
- (c) One (1) natural gas and no. 2 fuel oil-fired combustion turbine, identified as Unit No. 4, installed in 1992, with a nominal heat input capacity of 1,297 million Btu per hour (MMBtu/hr), with hybrid burners to control NO<sub>x</sub> while burning natural gas and water injection for control of nitrogen oxides while combusting fuel oil, and exhausting to stack 4.
- (d) One (1) no. 2 fuel oil-fired generator, identified as Unit No. 3A, installed in 1972, with a nominal heat input capacity of 30 million Btu per hour (MMBtu/hr), exhausting to stack 3A.

- (e) One (1) no. 2 fuel oil-fired generator, identified as Unit No. 3B, installed in 1972, with a nominal heat input capacity of 30 million Btu per hour (MMBtu/hr), exhausting to stack 3B.
- (f) One (1) no. 2 fuel oil-fired generator, identified as Unit No. 3C, installed in 1972, with a nominal heat input capacity of 30 million Btu per hour (MMBtu/hr), exhausting to stack 3C.
- (g) One (1) no. 2 fuel oil-fired generator, identified as Unit No. 3D, installed in 1972, with a nominal heat input capacity of 30 million Btu per hour (MMBtu/hr), exhausting to stack 3D.
- (h) A dual conveyor coal processing system, with a nominal throughput of 1900 tons of coal per hour (950 tons of coal per hour each side), consisting of the following equipment:
  - (1) One (1) railcar unloading station, with a drop point to two (2) hoppers identified as DP-1, with the drop point enclosed with emissions uncontrolled, and exhausting to the ambient air.
  - (2) One (1) storage area, having a nominal storage capacity including the active piles of 982,800 tons, with fugitive emissions controlled as needed by a watering truck.
  - (3) One (1) enclosed hopper, with a drop point to a conveyor identified as DP-2, with the drop point enclosed with emissions controlled by a water spray dust suppression system as needed, and exhausting to the ambient air.
  - (4) One (1) enclosed hopper and two (2) reclaim feeders, with an underground drop points identified as DP-11 and DP-12, with emissions controlled by the underground enclosure, and routed to the conveyor system.
  - (5) An enclosed dual conveyor system, with 6 drop points identified as DP-3 through DP-6, DP-8, and DP-13, with each drop point enclosed with emissions controlled by the enclosure. Drop points DP-3 through DP-5, DP-8, and DP-13 are controlled as needed by a water spray dust suppression system, and DP-6 is controlled by rotoclones.
  - (6) An enclosed conveyor system with drop point identified as DP-9, controlled by a telescoping chute.
  - (7) Coal bunker and coal scale exhausts and associated dust collector vents.

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) Degreasing operations that do not exceed one hundred forty-five (145) gallons per twelve months, except if subject to 326 IAC 20-6.
- (b) One (1) fuel oil storage tank, identified as T-1, installed in 1992, with a capacity of 395,000 gallons, used to store fuel oil for the combustion turbine, and exhausting through vent T-1.
- (c) One (1) fuel oil-fired auxiliary boiler, identified as Aux-1, constructed before 1968, with a heat input capacity of 0.05 million Btu per hour, and exhausting to exhaust stack S-1.

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), by title or classification, 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. Any emergencies that have been previously reported pursuant to Paragraph (b)(5) of this condition and certified by the Responsible Official need only be referenced by the date of the original report.

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

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

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

- (b) If, after issuance of this permit, it is determined that the permit is in nonconformance with an applicable requirement that applied to the source on the date of permit issuance, IDEM, OAQ, shall immediately take steps to reopen and revise this permit and issue a compliance order to the Permittee to ensure expeditious compliance with the applicable requirement until the permit is reissued. The permit shield shall continue in effect so long as the Permittee is in compliance with the compliance order.
- (c) No permit shield shall apply to any permit term or condition that is determined after issuance of this permit to have been based on erroneous information supplied in the permit application. Erroneous information means information that the Permittee knew to be false, or in the exercise of reasonable care should have been known to be false, at the time the information was submitted.
- (d) Nothing in 326 IAC 2-7-15 or in this permit shall alter or affect the following:
  - (1) The provisions of Section 303 of the Clean Air Act (emergency orders), including the authority of the U.S. EPA under Section 303 of the Clean Air Act;
  - (2) The liability of the Permittee for any violation of applicable requirements prior to or at the time of this permit's issuance;
  - (3) The applicable requirements of the acid rain program, consistent with Section 408(a) of the Clean Air Act; and
  - (4) The ability of U.S. EPA to obtain information from the Permittee under Section 114 of the Clean Air Act.
- (e) This permit shield is not applicable to any change made under 326 IAC 2-7-20(b)(2) (Sections 502(b)(10) of the Clean Air Act changes) and 326 IAC 2-7-20(c)(2) (trading based on State Implementation Plan (SIP) provisions).

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

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

- (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) deletedby 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)]

- (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]

- (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)]

**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][IC 13-30-3-1] [IC 13-17-3-2]

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

- (a) Enter upon the Permittee's premises where a Part 70 source is located, or emissions related activity is conducted, or where records 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, Billing, Licensing, and Training Section), to determine the appropriate permit fee.

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

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]

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]**

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

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

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

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

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

Indiana Department of Environmental Management  
Compliance Data Section, Office of Air Quality  
100 North Senate Avenue, 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]**

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)]**

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.
- (d) 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.

**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]**

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

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

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(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) Pursuant to 326 IAC 2-6-3(a)(1), the Permittee shall submit by July 1 of each year an emission statement covering the previous calendar year. The emission statement shall

contain, at a minimum, the information specified in 326 IAC 2-6-4(c) and shall meet the following requirements:

- (1) Indicate estimated actual emissions of all pollutants listed in 326 IAC 2-6-4(a);
- (2) Indicate estimated actual emissions of regulated pollutants as defined by 326 IAC 2-7-1(32) ("Regulated pollutant which is used only for purposes of Section 19 of this rule") from the source, for purposes of Part 70 fee assessment.

The statement must be submitted to:

Indiana Department of Environmental Management  
Technical Support and Modeling Section, Office of Air Quality  
100 North Senate Avenue, 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]

- (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]**

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- (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]**

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- (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, installed in 1967, with a nominal heat input capacity of 4,802 million Btu per hour (MMBtu/hr), with an electrostatic precipitator (ESP) for control of particulate matter, and exhausting to stack 1. Stack 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). Boiler No. 1 was configured with a low NO<sub>x</sub> burner in 1993.

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

#### D.1.1 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(c), the PM emissions from the Boiler No. 1 stack shall not exceed 0.227 pound per million Btu heat input (lbs/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 F/m<sup>3</sup>  
Q = 9,604 MMBtu/hr (capacity of Boilers 1-2)  
N = 2 (number of stacks)  
a = 0.8  
h = 500 Feet (average stack height)

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

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

- (1) For the first three (3) years following the issuance date of the Part 70 operating permit for this source, when building a new fire in Boiler No. 1, opacity may exceed the 40% opacity limitation established in 326 IAC 5-1-2 for a period not to exceed two (2) hours (20 six minute-averaged periods) or until the flue gas temperature entering the electrostatic precipitator (ESP) reaches 250 degrees Fahrenheit, whichever occurs first. For the first three (3) years following the issuance date of the Part 70 operating permit for this source, when building a new fire in Boiler No. 2, opacity may exceed the 40% opacity limitation established in 326 IAC 5-1-2 for a period not to exceed three (3) hours (30 six minute-averaged periods) after the flue gas temperature entering the electrostatic precipitator (ESP) reaches 250 degrees Fahrenheit.
- (2) For the first three (3) years following the issuance date of the Part 70 operating permit for this source, 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 three (3) hours (30 six minute-averaged periods) after the flue gas temperature entering the electrostatic precipitator (ESP) has dropped below 250 degrees Fahrenheit.
- (3) Following the expiration of the alternative limitations in (a)(1) and (a)(2) of this condition, when building a new fire in a boiler, or shutting down a boiler, opacity may exceed the 40% opacity limit established in 326 IAC 5-1-2; however, opacity levels shall not exceed sixty percent (60%) for any six (6)-minute averaging period. Opacity in excess of the applicable limit established in 326 IAC 5-1-2 shall not continue for more than two (2) six (6)-minute averaging periods in any twenty-four (24) hour period.

- (4) Operation of the electrostatic precipitator is not required during these times.
- (b) 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 periods 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.

D.1.3 Sulfur Dioxide (SO<sub>2</sub>) [326 IAC 7-4-8]

Pursuant to 326 IAC 7-4-8 (Vermillion County Sulfur Dioxide Emission Limitations), the SO<sub>2</sub> emissions from Boiler No. 1 shall not exceed 4.40 pounds per million Btu (lbs/MMBtu), demonstrated using a thirty (30) day rolling average. This limitation will ensure that SO<sub>2</sub> emissions do not exceed the amount assumed in the modeling analysis performed for the Vermillion County SO<sub>2</sub> SIP limits.

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]

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)]

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

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

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 2-7-5(A)] [326 IAC 2-7-6]

- (a) Pursuant to 326 IAC 7-2-1(c), the Permittee shall demonstrate that the sulfur dioxide emissions from Unit 1 do not exceed the equivalents of the limits specified in Conditions D.1.3 (Sulfur Dioxide (SO<sub>2</sub>)) 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)]**

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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.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**

- (a) To document compliance with Section C - Opacity and Conditions D.1.1, D.1.2, D.1.8, and D.1.12, 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 CEMS 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, installed in 1968, with a nominal heat input capacity of 4,802 million Btu per hour (MMBtu/hr), with an electrostatic precipitator (ESP) for control of particulate matter, and exhausting to stack 2. Stack 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). Boiler No. 4 2 was configured with a low NO<sub>x</sub> burner in 1993.

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

#### D.2.1 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(c), the PM emissions from the Boiler No. 2 stack shall not exceed 0.227 pound per million Btu heat input (lbs/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 F/m<sup>3</sup>  
Q = 9,604 MMBtu/hr (capacity of Boilers 1-2)  
N = 2 (number of stacks)  
a = 0.8  
h = 500 Feet (average stack height)

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

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

- (1) For the first three (3) years following the issuance date of the Part 70 operating permit for this source, when building a new fire in Boiler No. 2, opacity may exceed the 40% opacity limitation established in 326 IAC 5-1-2 for a period not to exceed two (2) hours (20 six minute-averaged periods) or until the flue gas temperature entering the electrostatic precipitator (ESP) reaches 250 degrees Fahrenheit, whichever occurs first. For the first three (3) years following the issuance date of the Part 70 operating permit for this source, when building a new fire in Boiler No. 2, opacity may exceed the 40% opacity limitation established in 326 IAC 5-1-2 for a period not to exceed three (3) hours (30 six minute-averaged periods) or until the flue gas temperature entering the electrostatic precipitator (ESP) reaches 250 degrees Fahrenheit, whichever occurs first.
- (2) For the first three (3) years following the issuance date of the Part 70 operating permit for this source, 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 three (3) hours (30 six minute-averaged periods) or until the flue gas temperature entering the electrostatic precipitator (ESP) has dropped below 250 degrees Fahrenheit, whichever occurs first.
- (3) Following the expiration of the alternative limitations in (a)(1) and (a)(2) of this condition, when building a new fire in a boiler, or shutting down a boiler, opacity may exceed the 40% opacity limit established in 326 IAC 5-1-2; however, opacity levels shall not exceed sixty percent (60%) for any six (6)-minute averaging period. Opacity in excess of the applicable limit established in 326 IAC 5-1-2

shall not continue for more than two (2) six (6)-minute averaging periods in any twenty-four (24) hour period.

- (4) Operation of the electrostatic precipitator is not required during these times.
- (b) 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 periods 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.

D.2.3 Sulfur Dioxide (SO<sub>2</sub>) [326 IAC 7-4-8]

Pursuant to 326 IAC 7-4-8 (Vermillion County Sulfur Dioxide Emission Limitations), the SO<sub>2</sub> emissions from Boiler No. 2 shall not exceed 4.40 pounds per million Btu (lbs/MMBtu), demonstrated using a thirty (30) day rolling average. This limitation will ensure that SO<sub>2</sub> emissions do not exceed the amount assumed in the modeling analysis performed for the Vermillion County SO<sub>2</sub> SIP limits.

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]**

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.

#### **D.2.7 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 Boiler No. 2 is in operation and combusting fuel.

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

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 2-7-5(A)] [326 IAC 2-7-6]**

- (a) Pursuant to 326 IAC 7-2-1(c), the Permittee shall demonstrate that the sulfur dioxide emissions from Unit 2 do not exceed the equivalents of the limits specified in Conditions D.2.3 (Sulfur Dioxide (SO<sub>2</sub>)) 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]**

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]**

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**

- (a) To document compliance with Section C - Opacity and Conditions D.2.1, D.2.2, D.2.8, and D.2.12, 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) natural gas and no. 2 fuel oil-fired combustion turbine, identified as Unit No. 4, installed in 1992, with a nominal heat input capacity of 1,297 million Btu per hour (MMBtu/hr), with hybrid burners to control NO<sub>x</sub> while burning natural gas and water injection for control of nitrogen oxides while combusting fuel oil, and exhausting to stack 4.

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

#### D.3.1 General Provisions Relating to NSPS [326 IAC 12-1] [40 CFR 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 GG.

#### D.3.2 New Source Performance Standard (NSPS) [326 IAC 12] [40 CFR 60, Subpart GG]

Pursuant to 40 CFR 60, Subpart GG (Stationary Gas Turbines), emissions from the combustion turbine shall be limited as follows:

- (a) Nitrogen oxides (NO<sub>x</sub>) emissions, as required by 40 CFR 60.332, shall not exceed:

$$\text{STD} = 0.0075 \frac{(14.4)}{Y} + F,$$

where STD = allowable NO<sub>x</sub> emissions (percent by volume at 15 percent oxygen on a dry basis).

Y = manufacturer's rated heat rate at manufacturer's rated load (kilojoules per watt hour) or, actual measured heat rate based on lower heating value of fuel as measured at actual peak load for the facility. The value of Y shall not exceed 14.4 kilojoules per watt hour.

F = NO<sub>x</sub> emission allowance for fuel-bound nitrogen as defined in paragraph (a)(3) of 40 CFR 60.332.

The limitations established by the above equation equal a NO<sub>x</sub> emission limitation of 91.5 ppmv @ 15% oxygen while burning natural gas, and 92.8 ppmv @ 15% oxygen while burning fuel oil.

Water injection shall be used to control NO<sub>x</sub> emissions to the level required by equation stated above when combusting fuel oil. The water injection system shall be operating at the proper injection ratio, as determined by the initial compliance testing, whenever the turbines are in operation and combusting fuel oil, except during the 14 minute start-up and 14 minute shutdown periods.

- (b) Sulfur dioxide (SO<sub>2</sub>) emissions, as required by 40 CFR 60.333, shall not exceed 0.015 percent by volume at 15 percent oxygen on a dry basis, or the Permittee shall only use fuel with a sulfur content less than or equal to 0.8 percent by weight;

#### D.3.3 Prevention of Significant Deterioration (PSD) [326 IAC 2-2-3]

Pursuant to 326 IAC 2-2-3 (PSD requirements) and Construction Permit No. 165-2113-00001, issued on June 25, 1992, the emissions in the exhaust from the turbine shall not exceed any of the following limits:

- (a) While burning natural gas:
- (1) 25 ppmvd NO<sub>x</sub> at 15 percent oxygen
  - (2) 0.8 percent sulfur content by weight in the fuel

- (b) While burning natural gas at 100% load and 49 degrees F ambient temperature:
  - (1) 0.0056 pounds VOC per million Btu heat input;
  - (2) 0.0209 pounds CO per million Btu heat input;
- (c) While burning fuel oil:
  - (1) 42 ppmvd NO<sub>x</sub> at 15 percent oxygen
  - (2) 0.05 percent sulfur content by weight in the fuel
- (d) While burning fuel oil at 100% load and 26 degrees F ambient temperature:
  - (1) 0.0071 pounds VOC per million Btu heat input; and
  - (2) 0.0211 pounds CO per million Btu heat input.
- (e) Fuel usage limits:
  - (1) 2,803 million cubic feet per month of natural gas;
  - (2) 15.94 million gallons per month of fuel oil; and
  - (3) For every 1000 gallons of fuel oil used, natural gas limits are lowered by 0.176 million cubic feet.
- (f) The limits on NO<sub>x</sub> emissions apply at all times except during the 14 minute start-up and 14 minute shutdown periods.

**D.3.4 Opacity Limitations [326 IAC 2-2-3]**

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Pursuant to 326 IAC 2-2-3 (PSD requirements) and Construction Permit No. 165-2113-00001, issued on June 25, 1992, the exhaust from the turbine shall not exceed twenty percent (20%) opacity as determined by EPA Method 9, except during the 14 minute start-up and 14 minute shut-down periods.

**D.3.5 Sulfur Dioxide (SO<sub>2</sub>) [326 IAC 7-1.1]**

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Pursuant to 326 IAC 7-1.1-2 (Sulfur Dioxide Emission Limitations), the SO<sub>2</sub> emissions from the turbine shall not exceed five-tenths (0.5) pound per million Btu (lbs/MMBtu).

**D.3.6 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 this facility and its control device.

**Compliance Determination Requirements**

**D.3.7 Continuous Monitoring System [326 IAC 12] [40 CFR 60, Subpart GG]**

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Pursuant to 40 CFR 60, Subpart GG (Stationary Gas Turbines), a continuous monitoring system for the measurement of fuel consumption and the ratio of water to fuel being fired in the turbine, shall be calibrated, operated, and maintained.

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

**D.3.8 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 turbine stack exhaust 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 turbine.

#### D.3.9 Sulfur Content and Nitrogen Content [326 IAC 12] [40 CFR 60, Subpart GG]

Pursuant to 40 CFR 60, Subpart GG, the Permittee shall monitor the nitrogen and sulfur content of the fuel being fired in the turbine. The frequency of determination of these values shall be as follows:

- (a) If the turbine is supplied its fuel from a bulk storage tank, the values shall be determined on each occasion that fuel is transferred to the storage tank from any other source. More frequent sampling on a daily as burned basis shall be deemed as equivalent and may be used in place of the tank sampling.
- (b) If the turbine is supplied its fuel without intermediate bulk storage the values shall be determined and recorded daily. Owners, operators or fuel vendors may develop custom schedules for determination of the values based on the design and operation of the affected facility and the characteristics of the fuel supply. These custom schedules shall be substantiated with data and must be approved by the Administrator before they can be used to comply with the monitoring requirements.
- (c) Pursuant to the June 21, 1995 approval letter from Felicia George, Assistant Commissioner, Office of Air Management, the Natural gas combusted shall be monitored through the analysis of pipeline gas from the natural gas supplier. Gas samples shall be taken once per calendar quarter at the closest proximity to the site of the turbines. In the event of less than 30 days of turbine operation in a quarter, the quarterly sampling is waived. For these purposes, one day of operation shall be defined as any day that gas is burned for more than one (1) hour.
- (d) Analysis of the natural gas and fuel oil shall be performed using methodologies approved in 40 CFR 60, 40 CFR 75, or other methods approved by the EPA.

The sulfur content information obtained from this monitoring shall be used to document compliance with the limits stated in Conditions D.3.2, D.3.3 and D.3.5.

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

##### D.3.10 Record Keeping Requirements

- (a) To document compliance with Section C - Opacity and Conditions D.3.1, D.3.2, D.3.3, D.3.4, D.3.5, and D.3.7, the Permittee shall maintain records in accordance with (1) through (4) below. Records maintained for (3) shall be taken according to Condition D.3.7 and shall be complete and sufficient to establish compliance with the sulfur content limits established in Condition D.3.2.
  - (1) Data and results from the most recent stack test;
  - (2) All continuous emissions monitoring data;
  - (3) All fuel nitrogen content and sulfur content monitoring data; and

- (4) All fuel oil and natural gas usage data used to show compliance with Condition D.3.3.
- (b) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

#### D.3.11 Reporting Requirements

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The Permittee shall submit a quarterly summary of the following:

- (a) Pursuant to Construction Permit No. 165-2113-00001, issued on June 25, 1992, The Permittee shall submit a quarterly summary of the following:
    - (1) The date and times of operation of the turbine.
    - (2) The maximum load and corresponding water to fuel ratio for each period of operation.
    - (3) The fuel type used during all periods of turbine operation.
    - (4) The sulfur content of the fuel oil.
    - (5) For each calendar month, the total combined natural gas and No. 2 fuel oil usage for the month and for the last 12 month period.
    - (6) Additional information required by 40 CFR 60.334, including the following:
      - (A) For nitrogen oxides:
        - (1) One-hour periods during which the average water-to-fuel ratio, as measured by the continuous monitoring system, falls below the water-to-fuel ratio determined to demonstrate compliance with Condition D.3.2(a); and
        - (2) Any period during which the fuel bound nitrogen of the fuel is greater than the maximum nitrogen content allowed by the fuel-bound nitrogen allowance used during the initial performance test.
- The summary shall contain the average water-to-fuel ratio, average fuel consumption, ambient conditions, gas turbine load, and nitrogen content of the fuel during the period of excess emissions, and the graphs or figures developed under 40 CFR 60.335(a).
- (B) For sulfur dioxides:
    - (1) Any daily period during which the sulfur content of the natural gas fuel being fired in the gas turbine exceeds 0.8 percent by weight.
    - (2) Any daily period during which the sulfur content of the fuel oil being fired in the gas turbine exceeds 0.05 percent by weight.
    - (3) All fuel sampling and analysis data.
    - (4) Actual fuel usage since last compliance determination period.
  - (C) For ice fog and emergency fuel as required by 40 CFR 60.334(c)(3) and (4).
  - (D) For each calendar month, the total combined natural gas and No. 2 fuel oil usage for the month and for the last 12 consecutive month period.

- (b) The summaries 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)(2)]
- (c) 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.)

- (1) One (1) no. 2 fuel oil-fired generator, identified as Unit No. 3A, installed in 1972, with a nominal heat input capacity of 30 million Btu per hour (MMBtu/hr), exhausting to stack 3A.
- (2) One (1) no. 2 fuel oil-fired generator, identified as Unit No. 3B, installed in 1972, with a nominal heat input capacity of 30 million Btu per hour (MMBtu/hr), exhausting to stack 3B.
- (3) One (1) no. 2 fuel oil-fired generator, identified as Unit No. 3C, installed in 1972, with a nominal heat input capacity of 30 million Btu per hour (MMBtu/hr), exhausting to stack 3C.
- (4) One (1) no. 2 fuel oil-fired generator, identified as Unit No. 3D, installed in 1972, with a nominal heat input capacity of 30 million Btu per hour (MMBtu/hr), exhausting to stack 3D.

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

#### D.4.1 Sulfur Dioxide (SO<sub>2</sub>) [326 IAC 7-1.1-1]

Pursuant to 326 IAC 7-1.1 (SO<sub>2</sub> Emissions Limitations), the SO<sub>2</sub> emissions from each generator shall not exceed five-tenths (0.5) pound per million Btu heat input.

#### D.4.2 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.

### Compliance Determination Requirements

#### D.4.3 Sulfur Dioxide Emissions and Sulfur Content [326 IAC 3] [326 IAC 7-2] [326 IAC 7-1.1-2]

- (a) Pursuant to 326 IAC 7-2-1(c)(3), the Permittee shall demonstrate that the sulfur dioxide emissions do not exceed the equivalent of 0.5 pounds per MMBtu, using a calendar month average.
- (b) Pursuant to 326 IAC 7-2-1(e) and 326 IAC 3-7-4, fuel sampling and analysis data shall be collected as follows:
  - (1) The Permittee may rely upon vendor analysis of fuel delivered, if accompanied by a vendor certification [326 IAC 3-7-4(b)]; or,
  - (2) The Permittee shall perform sampling and analysis of fuel oil samples in accordance with 326 IAC 3-7-4(a).
    - (A) Oil samples shall be collected from the tanker truck load prior to transferring fuel to the storage tank; or
    - (B) Oil samples shall be collected from the storage tank immediately after each addition of fuel to the tank.
    - (C) As an alternate to (A) and (B) above, samples may be collected prior to combustion (as burned) on each day fuel is combusted.
- (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)]

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

#### **D.4.4 Visible Emissions Notations**

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- (a) Visible emission (VE) notations of the generators' 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 generators' 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.4.5 Record Keeping Requirements**

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- (a) To document compliance with Condition D.4.1, the Permittee shall maintain records in accordance with (1) through (6) below.
    - (1) Calendar dates covered in the compliance determination period;
    - (2) Actual fuel oil usage since last compliance determination period and equivalent sulfur dioxide emissions;
    - (3) A certification, signed by the owner or operator, that the records of the fuel supplier certifications, or the records of fuel sampling and analysis, represent all of the fuel combusted during the period; and
- If the fuel supplier certification is used to demonstrate compliance the following, as a minimum, shall be maintained:
- (4) Fuel supplier certifications;
  - (5) The name of the fuel supplier; and
  - (6) A statement from the fuel supplier that certifies the sulfur content of the fuel oil.

The Permittee shall retain records of all recording/monitoring data and support information for a period of five (5) years, or longer if specified elsewhere in this permit, from the date of the monitoring sample, measurement, or report. Support information includes all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by this permit.

- (b) To document compliance with Condition D.4.4, the Permittee shall maintain records of visible emission notations of the generators' stack exhausts.
- (c) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

#### D.4.6 Reporting Requirements

A summary of the information to document compliance with Condition D.4.1 shall be submitted to the address listed in Section C - General Reporting Requirements upon request.

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 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) A dual conveyor coal processing system, with a nominal throughput of 1900 tons of coal per hour (950 tons of coal per hour each side), consisting of the following equipment:
- (1) One (1) railcar unloading station, with a drop point to two (2) hoppers identified as DP-1, with the drop point enclosed with emissions uncontrolled, and exhausting to the ambient air.
  - (2) One (1) storage area, having a nominal storage capacity including the active piles of 982,800 tons, with fugitive emissions controlled as needed by a watering truck.
  - (3) One (1) enclosed hopper, with a drop point to a conveyor identified as DP-2, with the drop point enclosed with emissions controlled by a water spray dust suppression system as needed, and exhausting to the ambient air.
  - (4) One (1) enclosed hopper and two (2) reclaim feeders, with an underground drop points identified as DP-11 and DP-12, with emissions controlled by the underground enclosure, and routed to the conveyor system.
  - (5) An enclosed dual conveyor system, with 6 drop points identified as DP-3 through DP-6, DP-8, and DP-13, with each drop point enclosed with emissions controlled by the enclosure. Drop points DP-3 through DP-5, DP-8, and DP-13 are controlled as needed by a water spray dust suppression system, and DP-6 is controlled by rotoclones.
  - (6) An enclosed conveyor system with drop point identified as DP-9, controlled by a telescoping chute.
  - (7) Coal bunker and coal scale exhausts and associated dust collector vents.

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

#### D.5.1 Particulate [326 IAC 6-3-2]

Pursuant to 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes), the particulate emission rate from the coal processing drop points, coal scale exhausts, and coal bunkers shall not exceed 86.19 pounds per hour when operating at a process weight rate of 1900 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:

$$E = 55.0 P^{0.11} - 40 \quad \text{where } E = \text{rate of emission in pounds per hour and} \\ P = 950 \text{ (process weight rate in tons per hour)}$$

#### D.5.2 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 their control devices.

### **Compliance Determination Requirements**

#### **D.5.3 Particulate Control [326 IAC 2-7-6(6)]**

Except as otherwise provided by statute or rule or in this permit, in order to comply with Section C - Opacity and Condition D.5.1, the dust collectors shall be in operation at all times the coal bunker and coal scales are in operation.

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

#### **D.5.4 Visible Emissions Notations [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]**

- (a) Visible emission notations of the coal unloading station, coal bunker, coal scale exhausts and associated dust collector vents exhausts shall be performed once per shift during normal daylight operations when transferring coal. A trained employee shall record whether emissions are normal or abnormal.
- (b) If abnormal emissions are observed from the coal unloading station, coal bunker, coal scale exhausts and associated dust collector vents exhausts, 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.
- (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.

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

#### **D.5.5 Record Keeping Requirements**

- (a) To document compliance with Section C - Opacity, Section C -Fugitive Dust Emissions, and Condition D.5.4, the Permittee shall maintain records of the visible emission notations of the coal unloading station, coal bunker, coal scale exhausts and associated dust collector vents exhausts.
- (b) To document compliance with Condition D.5.2, the Permittee shall maintain records of any additional inspections prescribed by the Preventive Maintenance Plan.
- (c) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

## 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.)

The following insignificant activities:

- (1) Degreasing operations that do not exceed 145 gallons per 12 months, except if subject to 326 IAC 20-6.
- (2) One (1) fuel oil storage tank, identified as T-1, installed in 1992, with a capacity of 395,000 gallons, used to store fuel oil for the combustion turbine, and exhausting through vent T-1.
- (3) One (1) fuel oil-fired auxiliary boiler, identified as Aux-1, constructed before 1968, with a heat input capacity of 0.05 million Btu per hour, and exhausting to general ventilation.

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

#### D.6.1 Particulate Emission Limitations for Sources of Indirect Heating [326 IAC 6-2-3]

Pursuant to 326 IAC 6-2-3 (Particulate Matter Emission Limitations for Sources of Indirect Heating, the PM emissions from the 0.05 MMBtu per hour heat input boiler shall be limited to 0.20 pounds per MMBtu heat input.

This limitation is based on the following equation:

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

Where C = 50 F/m<sup>3</sup>  
Q = 9,604.05 MMBtu/hr (capacity of Boilers 1, 2, Aux.1)  
N = 3 (number of stacks)  
a = 0.8  
h = 495.6 Feet (average stack height)

#### D.6.2 Organic Solvent Degreasing Operations: Cold Cleaner Operation [326 IAC 8-3-2]

Pursuant to 326 IAC 8-3-2 (Cold Cleaner Operations), the owner or operator shall:

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

#### D.6.3 Organic Solvent Degreasing Operations: Cold Cleaner Degreaser Operation and Control [326 IAC 8-3-5]

- (a) Pursuant to 326 IAC 8-3-5(a) (Cold Cleaner Degreaser Operation and Control), the owner or operator of a cold cleaner degreaser facility shall ensure that the following control equipment requirements are met:

- (1) Equip the degreaser with a cover. The cover must be designed so that it can be easily operated with one (1) hand if:
    - (A) The solvent volatility is greater than two (2) kiloPascals (fifteen (15) millimeters of mercury or three-tenths (0.3) pounds per square inch measured at thirty-eight degrees Celsius (38°C) (one hundred degrees Fahrenheit (100°F)));
    - (B) The solvent is agitated; or
    - (C) The solvent is heated.
  - (2) Equip the degreaser with a facility for draining cleaned articles. If the solvent volatility is greater than four and three-tenths (4.3) kiloPascals (thirty-two (32) millimeters of mercury) or six-tenths (0.6) pounds per square inch measured at thirty-eight degrees Celsius (38°C) (one hundred degrees Fahrenheit (100°F)), then the drainage facility must be internal such that articles are enclosed under the cover while draining. The drainage facility may be external for applications where an internal type cannot fit into the cleaning system.
  - (3) Provide a permanent, conspicuous label which lists the operating requirements outlined in subsection (b).
  - (4) The solvent spray, if used, must be a solid, fluid stream and shall be applied at a pressure which does not cause excessive splashing.
  - (5) Equip the degreaser with one (1) of the following control devices if the solvent volatility is greater than four and three-tenths (4.3) kiloPascals (thirty-two (32) millimeters of mercury) or six-tenths (0.6) pounds per square inch measured at thirty-eight degrees Celsius (38°C) (one hundred degrees Fahrenheit (100°F)), or if the solvent is heated to a temperature greater than forty-eight and nine-tenths degrees Celsius (48.9°C) (one hundred twenty degrees Fahrenheit (120°F)):
    - (A) A freeboard that attains a freeboard ratio of seventy-five hundredths (0.75) or greater.
    - (B) A water cover when solvent is used is insoluble in, and heavier than, water.
    - (C) Other systems of demonstrated equivalent control such as a refrigerated chiller or carbon adsorption. Such systems shall be submitted to the U.S. EPA as a SIP revision.
- (b) Pursuant to 326 IAC 8-3-5(b) (Cold Cleaner Degreaser Operation and Control), the owner or operator of a cold cleaning facility shall ensure that the following operating requirements are met:
- (1) Close the cover whenever articles are not being handled in the degreaser.
  - (2) Drain cleaned articles for at least fifteen (15) seconds or until dripping ceases.
  - (3) Store waste solvent only in covered containers and prohibit the disposal or transfer of waste solvent in any manner in which greater than twenty percent (20%) of the waste solvent by weight could evaporate.

### **Compliance Determination Requirement**

#### **D.6.4 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.

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

#### **D.6.5 Record Keeping Requirements**

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- (a) To document compliance with 40 CFR 60, Subpart Kb (Volatile Organic Liquid Storage Tanks), the Permittee shall maintain records of the dimension and capacity of the storage tank for the life of the source as required by 40 CFR 60.116b.
- (b) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

## 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.)

- (a) One (1) dry bottom, pulverized coal-fired boiler, identified as Boiler No. 1, installed in 1967, with a nominal heat input capacity of 4,802 million Btu per hour (MMBtu/hr), with an electrostatic precipitator (ESP) for control of particulate matter, and exhausting to stack 1. Stack 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). Boiler No. 1 was configured with a low NO<sub>x</sub> burner in 1993.
- (b) One (1) dry bottom, pulverized coal-fired boiler, identified as Boiler No. 2, installed in 1968, with a nominal heat input capacity of 4,802 million Btu per hour (MMBtu/hr), with an electrostatic precipitator (ESP) for control of particulate matter, and exhausting to stack 2. Stack 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). Boiler No. 2 was configured with a low NO<sub>x</sub> burner in 1993.

### 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. - Cayuga Generating Station  
Source Address: State Road 63, Cayuga, Indiana 47928  
Mailing Address: c/o Steven Pearl, 1000 East Main Street, Plainfield, IN 46168  
Part 70 Permit No.: T165-7174-00001

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

Please check what document is being certified:

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

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

Signature:

Printed Name:

Title/Position:

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. - Cayuga Generating Station  
Source Address: State Road 63, Cayuga, Indiana 47928  
Mailing Address: c/o Steven Pearl, 1000 East Main Street, Plainfield, IN 46168  
Part 70 Permit No.: T165-7174-00001

**This form consists of 2 pages**

**Page 1 of 2**

- 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) 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 Unit No. 4 Monthly Fuel Usage

Source Name: PSI Energy, Inc. - Cayuga Generating Station  
Source Address: State Road 63, Cayuga, Indiana 47928  
Mailing Address: c/o Steven Pearl, 1000 East Main Street, Plainfield, IN 46168  
Part 70 Permit No.: T165-7174-00001  
Facility: Unit No. 4 Combustion Turbine  
Parameter: Fuel Usage Limit  
Limit: 2,803 MMCF/month of natural gas, 15.94 MMGal/month of fuel oil  
For every 1000 gallons of fuel oil used, natural gas limits are lowered by 0.176 million cubic feet.

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

Month	Fuel Oil Usage	Natural Gas Fuel Usage

- 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. - Cayuga Generating Station  
 Source Address: State Road 63, Cayuga, Indiana 47928  
 Mailing Address: c/o Steven Pearl, 1000 East Main Street, Plainfield, IN 46168  
 Part 70 Permit No.: T165-7174-00001

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

This report shall be submitted quarterly based on a calendar year. Any deviation from the requirements, the date(s) of each deviation, the probable cause of the deviation, and the response steps taken must be reported. A deviation required to be reported pursuant to an applicable requirement that exists independent of the permit, shall be reported according to the schedule stated in the applicable requirement and does not need to be included in this report. Additional pages may be attached if necessary. If no deviations occurred, please specify in the box marked "No deviations occurred this reporting period".	
<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. - Cayuga Generating Station  
**Source Location:** State Road 63, Cayuga, Indiana 47928  
**County:** Vermillion  
**SIC Code:** 4911  
**Operation Permit No.:** T165-7174-00001  
**Permit Reviewer:** Patrick B. Burton and Nisha Sizemore

On November 10, 2003, the Office of Air Quality (OAQ) had a notice published in the Daily Clintonian, Clinton, Indiana, stating that PSI Energy, Inc. – Cayuga 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 December 8, 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 strikeout 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.1, General Information: Revise Responsible Official to include "**Manager of the Cayuga Generating Station**" and "**Manager of the Cayuga Combustion Turbine**". Compliance of the coal fired boilers, coal-handling facilities, diesel generators, and related facilities is the responsibility of the Manager of the Cayuga Generating Station. Compliance of the Unit 4 Combustion Turbine and associated facilities is the responsibility of the Manager of the Cayuga Combustion Turbine.

Condition A.2(a), Emission Units and Pollution Control Summary: Change monitor location from "Boiler No. 1" to "**Stack 1**".

Condition A.2(b), Emission Units and Pollution Control Summary: Change monitor location from "Boiler No. 1" to "**Stack 2**". Change reference to "Boiler No. 1" in last sentence to "**Boiler No. 2**".

Condition A.2(c), Emission Units and Pollution Control Summary: Revise description to read: "One (1) natural gas and no. 2 fuel oil-fired combustion turbine, identified as Unit No. 4, installed in 1992, with a ~~maximum~~ **nominal** heat input capacity of 1,297 million Btu per hour (mmBtu/hr), **with Hybrid burners to control NOx while burning natural gas and** with water injection for control of nitrogen oxides **while combusting fuel oil**, and exhausting to stack 4." The rating of a combustion turbine can vary significantly based on operating conditions, thus it is appropriate to label the rating as nominal. The Hybrid burners installed on the CT are an early generation dry low NOx burner, and do not require water injection to control NOx.

Condition A.2(d), Emission Units and Pollution Control Summary: Revise description to read: "...with a ~~maximum~~ **nominal** heat input capacity...". The maximum heat input capacity can vary based on operating conditions, thus it is appropriate to label the rating as nominal.

Condition A.2(e), Emission Units and Pollution Control Summary: Revise description to read: "...with a ~~maximum~~ **nominal** heat input capacity...". The maximum heat input capacity can vary based on operating conditions, thus it is appropriate to label the rating as nominal.

Condition A.2(f), Emission Units and Pollution Control Summary: Revise description to read: "...with a ~~maximum~~ **nominal** heat input capacity...". The maximum heat input capacity can vary based on operating conditions, thus it is appropriate to label the rating as nominal.

Condition A.2(g), Emission Units and Pollution Control Summary: Revise description to read: "...with a ~~maximum~~ **nominal** heat input capacity...". The maximum heat input capacity can vary based on operating conditions, thus it is appropriate to label the rating as nominal.

Condition A.2(h), Emission Units and Pollution Control Summary: The coal processing system described A.2(h) and A.2(h)(1) through (6) is a dual conveyor system, and consist of side by side conveyors, feeders and hoppers, with a nominal capacity of 950 tons per hour each side, 1900 tons per hour total. The description of A.2(h) should be revised to read "A **dual conveyor** coal processing system, with a ~~maximum~~ **nominal** throughput of **1900 tons of coal per hour** (950 tons of coal per hour **each side**), consisting of the following equipment:"

Condition A.2(h)(1), Emission Units and Pollution Control Summary: Revise to read "One (1) railcar unloading station, with a drop point to ~~a~~ **two (2)** hoppers identified as DP-1, with the drop point enclosed and controlled by ~~a baghouse~~ **the enclosure** and...". This facility does not include a baghouse.

Condition A.2(h)(2), Emission Units and Pollution Control Summary: Change to read: "One (1) storage ~~pile area~~, having a **nominal** storage capacity including the active piles of 982,800 tons, with fugitive emissions controlled **as needed** by a watering ~~system truck~~ and ~~exhausting to the ambient air~~."

Condition A.2(h)(3), Emission Units and Pollution Control Summary: Change to read: "...with a drop point to a conveyors identified as DP-2, with the drop point enclosed and controlled ~~by a baghouse~~ **by the enclosure and by a water spray dust suppression system as needed**...". This facility does not include a baghouse.

Condition A.2(h)(4), Emission Units and Pollution Control Summary: Revise to read: One (1) enclosed hopper and ~~one~~ **two (2)** reclaim feeders...".

Condition A.2(h)(5), Emission Units and Pollution Control Summary: Drop point DP-9 is unique from the others included in this provision, DP-9 should be removed and included in a new provision A.2(h)(6).

Further, there are no baghouses at this facility. Modify A.2(h)(5) to read: "An enclosed **dual** conveyor system, with ~~7~~ **6** drop points identified as DP-3 through DP-6, DP-8, ~~DP-9~~, and DP-13, with each drop point enclosed and controlled by **the enclosure** ~~a baghouse excluding the storage pile conveyor which has the drop point (DP-9) controlled by a telescopic chute, with the drop points exhausting to the ambient air.~~ **Drop points DP-3 through DP-5, DP-8 and DP-13 are controlled as needed by a water spray dust suppression system, and DP-6 is controlled by Rotoclones**".

Condition A.2(h)(6), Emission Units and Pollution Control Summary: Add description "**An enclosed conveyor system with drop point identified as DP-9, controlled by a telescoping chute.**"

Condition A.3(a), Emission Units and Pollution Control Summary: Modify to read: "Degreasing operations that do not exceed one hundred forty-five (145) gallons **evaporative loss per** twelve months,...".

Condition A.3(d), Emission Units and Pollution Control Summary: Delete Condition A.3(d) (the 40,000 gallon No. 2 fuel oil tank), this tank is not specifically regulated.

Condition A.3(e), Emission Units and Pollution Control Summary: Delete Condition A.3(e) (the Coal bunker and scale exhausts...), this equipment would be covered under A.2(h).

## Response to Comment 2

The requested changes to A.1 and A.2 have been made, as shown below. These changes have also been made in the descriptions in the D Sections of the permit.

The requested change to A.3(a) has not been made because "evaporative loss" is not included in the definition in the 326 IAC 2-7-1(21). The language in the permit is directly from the definitions in 326 IAC 2-7-1(21).

A.3(d) has been deleted because it is not an insignificant activity that is specifically regulated.

A.3(e) has been moved to A.2(h).

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### A.1 General Information [326 IAC 2-7-4(c)] [326 IAC 2-7-5(15)] [326 IAC 2-7-1(21)]

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

Responsible Official: Station Manager of the Cayuga Generating Station **and Manager of the Cayuga combustion turbine**

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

- (a) One (1) dry bottom, pulverized coal-fired boiler, identified as Boiler No. 1, installed in 1967, with a nominal heat input capacity of 4,802 million Btu per hour (MMBtu/hr), with an electrostatic precipitator (ESP) for control of particulate matter, and exhausting to stack 1. ~~Boiler No.~~ **Stack 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). Boiler No. 1 was configured with a low NO<sub>x</sub> burner in 1993.
- (b) One (1) dry bottom, pulverized coal-fired boiler, identified as Boiler No. 2, installed in

1968, with a nominal heat input capacity of 4,802 million Btu per hour (MMBtu/hr), with an electrostatic precipitator (ESP) for control of particulate matter, and exhausting to stack 2. ~~Boiler No. 4~~ **Stack 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). Boiler No. 4 2 was configured with a low NO<sub>x</sub> burner in 1993.

- (c) One (1) natural gas and no. 2 fuel oil-fired combustion turbine, identified as Unit No. 4, installed in 1992, with a ~~maximum~~ **nominal** heat input capacity of 1,297 million Btu per hour (MMBtu/hr), with **hybrid burners to control NOx while burning natural gas and water injection for control of nitrogen oxides while combusting fuel oil**, and exhausting to stack 4.
- (d) One (1) no. 2 fuel oil-fired generator, identified as Unit No. 3A, installed in 1972, with a ~~maximum~~ **nominal** heat input capacity of 30 million Btu per hour (MMBtu/hr), exhausting to stack 3A.
- (e) One (1) no. 2 fuel oil-fired generator, identified as Unit No. 3B, installed in 1972, with a ~~maximum~~ **nominal** heat input capacity of 30 million Btu per hour (MMBtu/hr), exhausting to stack 3B.
- (f) One (1) no. 2 fuel oil-fired generator, identified as Unit No. 3C, installed in 1972, with a ~~maximum~~ **nominal** heat input capacity of 30 million Btu per hour (MMBtu/hr), exhausting to stack 3C.
- (g) One (1) no. 2 fuel oil-fired generator, identified as Unit No. 3D, installed in 1972, with a ~~maximum~~ **nominal** heat input capacity of 30 million Btu per hour (MMBtu/hr), exhausting to stack 3D.
- (h) A **dual conveyor** coal processing system, with a ~~maximum~~ **nominal** throughput of **1900 tons of coal per hour (950 tons of coal per hour each side)**, consisting of the following equipment:
  - (1) One (1) railcar unloading station, with a drop point to ~~a~~ **two (2) hoppers** identified as DP-1, with the drop point enclosed ~~and~~ **with emissions uncontrolled controlled by a baghouse**, and exhausting to the ambient air.
  - (2) One (1) storage ~~pile area~~, having a **nominal** storage capacity including the active piles of 982,800 tons, with fugitive emissions controlled **as needed** by a watering ~~system truck~~, and exhausting to the ambient air.
  - (3) One (1) enclosed hopper, with a drop point to a conveyor identified as DP-2, with the drop point enclosed ~~and controlled by a baghouse~~ **with emissions controlled by a water spray dust suppression system as needed**, and exhausting to the ambient air.
  - (4) One (1) enclosed hopper and ~~one (1)~~ **two (2) reclaim feeders**, with an underground drop points identified as DP-11 and DP-12, with emissions controlled by the underground enclosure, and routed to the conveyor system.
  - (5) An enclosed **dual** conveyor system, with ~~7~~ **6** drop points identified as DP-3 through DP-6, DP-8, ~~DP-9~~ and DP-13, with each drop point enclosed ~~and controlled by a baghouse~~ **with emissions controlled by the enclosure**. ~~excluding the storage pile conveyor which has the drop point (DP-9) controlled by a telescopic chute, with the drop points exhausting to the ambient air.~~ **Drop points DP-3 through DP-5, DP-8, and DP-13 are controlled as needed by a water spray dust suppression system, and DP-6 is controlled by rotoclones.**

- (6) **An enclosed conveyor system with drop point identified as DP-9, controlled by a telescoping chute.**
- (7) **Coal bunker and coal scale exhausts and associated dust collector vents.**

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) Degreasing operations that do not exceed one hundred forty-five (145) gallons per twelve months, except if subject to 326 IAC 20-6.
- (b) One (1) fuel oil storage tank, identified as T-1, installed in 1992, with a capacity of 395,000 gallons, used to store fuel oil for the combustion turbine, and exhausting through vent T-1.
- (c) One (1) fuel oil-fired auxiliary boiler, identified as Aux-1, constructed before 1968, with a heat input capacity of 0.05 million Btu per hour, and exhausting to exhaust stack S-1.
- ~~(d) One (1) No. 2 fuel oil storage tank, identified as the Generator Storage Tank, with a capacity of 40,000 gallons, installed in 1972, and exhausting to the ambient air.~~
- ~~(e) Coal bunker and coal scale exhausts and associated dust collector vents. [326 IAC 6-3]~~

### 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).

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).

#### 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 (Monday through Friday, non-holidays)** 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.

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. Any emergencies lasting longer than one hour need to be reported under (b)(5) of this condition. Part (h) of this condition is intended to address other types of emergencies that are not required to be reported per (b)(5) and also to provide the Responsible Official's certification of any emergencies that were previously reported without the Responsible Official's certification. In order to clarify the intent of the condition, part (h) has been revised to state that any previously reported emergencies that were certified by the Responsible Official, need only be referenced by date on the Quarterly Report. For emergencies that were previously reported per (b)(5) without the certification of the Responsible Official, reporting those emergencies again by reference in the Quarterly Deviation and Compliance Monitoring Report fulfills the obligation to satisfy the requirements of 326 IAC 2-7-6(1), which requires all reports to be certified. Revisions to Condition B.11(h) are shown below.

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

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- (h) The Permittee shall include all emergencies in the Quarterly Deviation and Compliance Monitoring Report. **Any emergencies that have been previously reported pursuant to Paragraph (b)(5) of this condition and certified by the Responsible Official need only be referenced by the date of the original report.**

**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.

Additionally, appropriate rule cites have been added to the title of the condition. 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] [IC 13-17-3-2]

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

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

### Comment 11

Condition B.24(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: Change the first sentence, beginning in the second line:

**"...shall be implemented within ninety (90) days of the effectiveness of the applicable permit conditions issuance.**

This will allow for any delays or stays of effectiveness of the applicable permit conditions.

#### 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. The requested changes are unnecessary.

#### 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...

It is not always possible to assure the availability of a certified VE reader within 24 hours, especially if the monitor downtime occurs on weekends or holidays. 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.**

Similar to that described above, it may not always be possible to assure that a certified VE reader will be available after 48 hours of monitor downtime. 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.**

Boiler outages are an appropriate time to conduct monitor maintenance, and the source should not be required to conduct VE notations or readings during times when the boiler is offline. Further, if maintenance is being conducted inside a boiler or ESP, the unit fans may be used for ventilation purposes, and in this case, does not constitute boiler operation. 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. 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 or 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 pursuant to acid rain requirements or the NOx allowance rule, which are not specified in Section D of the permit.

#### Comment 25

In Sections D.1 and D.2, 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.

Conditions D.1.x(b) and D.2.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 25

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 26

Condition D.1.2(a), Temporary Alternative Opacity Limitations: Eliminate the three year expiration of the TAOL for startups and shutdowns. PSI recognizes this as an implicit effort to force the conversion from fuel oil to natural gas ignition fuel. PSI objects to this effort and contends that the authority to force such a conversion does not exist. Conversion from fuel oil to natural gas ignition fuel is not practical, and would not achieve the results anticipated by IDEM, OAQ. Opacity during startup and shutdown are only partially due to fuel oil smoke, and thus only a portion of the excess due to startup and shutdown would potentially be reduced. Reduction in particulate emissions would be minimal, possibly less than 0.5 tons per year. The estimated installation cost of \$5,000,000 would translate to a cost of approximately \$364,000 per ton of particulate removed. Limitations in the natural gas supply and transmission capability may hinder unit reliability, especially during the winter season, if the station is not able to obtain sufficient natural gas to start the unit. And finally, introducing natural gas into a solid fuel fired generating station would also introduce significant safety concerns for personnel and equipment.

Condition D.1.2(a)(1), Temporary Alternative Opacity Limitations: Eliminate expiration language, eliminate duplicate language (for unit 2) and revise to read: When building a new fire in Boiler No. 1, opacity may exceed the 40 % opacity limitation established in 326 IAC 5-1-2 for a period not to exceed ~~two (2)~~ **four (4)** hours (40 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)(2), Temporary Alternative Opacity Limitations: Eliminate expiration language and revise to read: "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 ~~three (3) hours (30~~ **four (4) hours (40** six minute -averaged periods) ~~or until the flue gas temperature entering the electrostatic precipitator (ESP) has dropped below 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)(3), Temporary Alternative Opacity Limitations: Delete (a)(3). This provision would apply only on expiration of the TAOL, which PSI objects to.

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~~. PSI will not agree to any condition that requires operation of equipment outside of its design parameters and potentially puts personnel and/or equipment at risk.

This comment also applies to Condition D.2.2.

### Response to Comment 26

IDEM used the 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.

IDEM has the authority under 326 IAC 5-1-3 (e) (1) to establish a TAOL per 326 IAC 5-1-3 (a) for the Startup or Shutdown duration. 326 IAC 5-1-3 (e) (2) provides the Commissioner the authority to include permit conditions to minimize the duration and extent of excess emissions when incorporating the TAOL from an existing valid operating permit. The TAOLs per the operating permit have been incorporated in the Part 70 Permit with the expiration period set for three years after the issuance of this permit. At this time IDEM has information based on operating practices at this source and other similar sources in the State, indicating that the Boilers No.1 and No.2 would be able to comply with the TAOLs established in the regulation under 326 IAC 5-1-3 (a) by undertaking some modifications. IDEM has provided a period of three years from the date of issuance of this permit to undertake these projects and comply with TAOL in the rule included in condition D.1.2 (a)(3). The commenter has not provided detailed technical and economic in-feasibility information regarding undertaking measures to comply with TAOLs established in the regulation. Therefore, IDEM has retained the provision for expiration of TAOL in the permit. In the future, the commenter can provide IDEM detailed information about technical and economic in-feasibility of such measures. IDEM will work closely with the Permittee to evaluate such information and develop strategies to minimize the duration and extent of emissions above the opacity limitation under 326 IAC 5-1-2.

IDEM does agree to change D.1.2(a)(4) as requested. Revisions have also been made to D.1.2(a)(2) to clarify the intent. The revisions are shown below.

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

- 
- (a) Pursuant to 326 IAC 5-1-3(e) (Temporary Alternative Opacity Limitations), the following applies:
- (2) For the first three (3) years following the issuance date of the Part 70 operating permit for this source, 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 three (3) hours (30 six minute-averaged periods) ~~or until~~ **after** the flue gas temperature entering the electrostatic precipitator (ESP) has dropped below 250 degrees Fahrenheit, ~~whichever occurs first~~.
  - (4) Operation of the electrostatic precipitator is not required during these times ~~unless necessary to comply with these limits~~.

Condition D.2.2(a)(4) was changed similarly.

### Comment 27

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 Condition D.2.4.

### Response to Comment 27

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 Condition D.2.4.

### Comment 28

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.3.6, D.4.2, and D.5.2.

### Response to Comment 28

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 found 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. 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 29

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 Condition D.2.7.

### Response to Comment 29

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 ~~is venting and~~ is in operation **and combusting fuel.**

The same revisions have been made to Condition D.2.7.

### Comment 30

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 Condition D.2.12.

### **Response to Comment 30**

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 31**

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 Condition D.2.13.

### **Response to Comment 31**

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 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 32**

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.

This comment also applies to Condition D.2.14.

### Response to Comment 32

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 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 33

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 Condition D.2.15.

### Response to Comment 33

As explained in response to comment 30, IDEM does not agree to delete the parametric monitoring requirements or the CEMS downtime monitoring requirements. As explained in response to comment 28 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) and D.2.15(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 34

Any source reporting requirements condition must include all reporting requirements. If there are additional reporting requirements or reporting requirements required elsewhere in the permit, they should be consolidated into this Reporting Requirements condition.

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.3.11, and D.4.6.

### Response to Comment 34

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 pursuant to acid rain requirements or the NOx allowance rule, which are not specified in Section D of the permit.

### Comment 35

Condition D.3.2(a), New Source Performance Standard: The hybrid burners do not require water injection while combusting natural gas. Revise second paragraph to read: "Water injection shall be used to control NOx emissions to the level required by equation stated above **when combusting fuel oil**. The water injection system shall be operating at the proper injection ratio, as determined by the initial compliance testing, whenever the turbines are in operation **and combusting fuel oil** except during the 14 minute start-up and 14 minute shutdown periods.

Condition D.3.2(a), New Source Performance Standard: Add paragraph to D.3.2(a) to state: "**The limitations established by the above equation equal a NOx emission limitation of 91.5 ppm<sub>dv</sub> @ 15% oxygen while burning natural gas, and 92.8 ppm<sub>dv</sub> @ 15% oxygen while burning fuel oil. Compliance with the limitations contained in Section D.3.3 shall be deemed as compliance with the limitations established in this section.**" The NOx limits contained in Condition D.3.3 are more stringent than those contained in this condition, thus Condition D.3.3 is controlling. This added statement will assist permit users in quickly determining which limitation is controlling and avoid the confusion created by multiple differing limitations.

### Response to Comment 35

IDEM agrees to revise Condition D.3.2(a) to clarify that water injection is required when combusting fuel oil. IDEM agrees to add the language stating the limits as determined by the equation. A typographical error has also been corrected in paragraph (a).

IDEM does not agree to add language indicating that compliance with the PSD limits is deemed compliance with the NSPS limits. In order for IDEM to be able to add such language to the permit, the Permittee would have to comply with the requirements of 326 IAC 2-7-24 (Establishment of Streamlined Requirements for Units Subject to Multiple Requirements). The Permittee has not submitted information adequate to satisfy the requirements of 326 IAC 2-7-24(b).

Revisions to Condition D.3.2(a) are shown below.

D.3.2 New Source Performance Standard (NSPS) [326 IAC 12] [40 CFR 60, Subpart GG]  
Pursuant to 40 CFR 60, Subpart GG (Stationary Gas Turbines), emissions from the combustion turbine shall be limited as follows:

- (a) Nitrogen oxides (NO<sub>x</sub>) emissions, as required by 40 CFR 60.332, shall not exceed:

$$\text{STD} = 0.0075 \frac{(14.4)}{Y} + F,$$

where STD = allowable NO<sub>x</sub> emissions (percent by volume at 15 percent oxygen on a dry basis).

Y = manufacturer's rated heat rate at manufacturer's rated load (kilojoules per watt hour) or, actual measured heat rate based on lower heating value of fuel as measured at actual ~~peak~~ peak load for the facility. The value of Y shall not exceed 14.4 kilojoules per watt hour.

F = NO<sub>x</sub> emission allowance for fuel-bound nitrogen as defined in paragraph (a)(3) of 40 CFR 60.332.

**The limitations established by the above equation equal a NO<sub>x</sub> emission limitation of 91.5 ppm<sub>dv</sub> @ 15% oxygen while burning natural gas, and 92.8 ppm<sub>dv</sub> @ 15% oxygen while burning fuel oil.**

Water injection shall be used to control NO<sub>x</sub> emissions to the level required by equation stated above **when combusting fuel oil**. The water injection system shall be operating at the proper injection ratio, as determined by the initial compliance testing, whenever the turbines are in operation **and combusting fuel oil**, except during the 14 minute start-up and 14 minute shutdown periods.

#### Comment 36

Condition D.3.3(a) & (b), Prevention of Significant Deterioration (PSD): The VOC and CO limits contained in permit 165-2113-00001 are not presented as not to exceed limits, but are presented as BACT under specific operating conditions, and compliance will be determined through good engineering design and efficient operation consistent with the BACT determination. The SO<sub>2</sub> and NO<sub>x</sub> limits, on the other hand will be monitored through fuel sampling and NO<sub>x</sub> CEMs. Therefore, for consistency with the previous permit, the CO and VOC limits contained in sections (a)(2), (a)(3), (b)(2) and (b)(3) should be removed and placed in a new section as follows:

**"Pursuant to 326 IAC 2-2-3 (PSD requirements) BACT for Carbon Monoxide (CO) and Volatile Organic Compounds (VOC) is based on good engineering design and efficient operation and determined to be as follows:**

- (a) **While burning natural gas at 100% load and 49 degrees F ambient temperature:**

- (1) **0.0209 lbs/mmBtu CO**
- (2) **0.0056 lbs/mmBtu VOC**

- (b) **While burning fuel oil at 100% load and 26 degrees F ambient temperature:**

- (1) **0.0211 lbs/mmBtu CO**
- (2) **0.0071 lbs/mmBtu VOC**

#### Response to Comment 36

The BACT limits in CP165-2113-00001 are not to exceed limits. However, IDEM has made the following revisions to Condition D.3.3(a) and (b).

D.3.3 Prevention of Significant Deterioration (PSD) [326 IAC 2-2-3]

Pursuant to 326 IAC 2-2-3 (PSD requirements) and Construction Permit No. 165-2113-00001, issued on June 25, 1992, the emissions in the exhaust from the turbine shall not exceed any of the following limits:

(a) While burning natural gas:

- (1) 25 ppmvd NO<sub>x</sub> at 15 percent oxygen
- (2) ~~0.0056 pounds VOC per million Btu heat input~~
- ~~(3) 0.0209 pounds CO per million Btu heat input~~
- ~~(4) 0.8 percent sulfur content by weight in the fuel~~

**(b) While burning natural gas at 100% load and 49 degrees F ambient temperature:**

- (1) 0.0056 pounds VOC per million Btu heat input;**
- (2) 0.0209 pounds CO per million Btu heat input;**

~~(b)~~(c) While burning fuel oil:

- (1) 42 ppmvd NO<sub>x</sub> at 15 percent oxygen
- (2) ~~0.0071 pounds VOC per million Btu heat input~~
- ~~(3) 0.0211 pounds CO per million Btu heat input~~
- ~~(4) 0.05 percent sulfur content by weight in the fuel~~

**(d) While burning fuel oil at 100% load and 26 degrees F ambient temperature:**

- (1) 0.0071 pounds VOC per million Btu heat input; and**
- (2) 0.0211 pounds CO per million Btu heat input.**

**Comment 37**

Condition D.3.4, Opacity Limitations: Eliminate reference to previous permit, this is unnecessary.

**Response to Comment 37**

Compliance with the 20% opacity limit was determined to be part of the BACT requirements in CP165-2113-00001; therefore, the cite to the previous permit is appropriate.

**Comment 38**

Condition D.3.5, Sulfur Dioxide Limitations: Add sentence to end which states "**Compliance with condition D.3.3 shall demonstrate compliance with this limitation.**" Since the SO<sub>2</sub> limitation contained in D.3.3 is approximately 10% of this limitation, this condition is unnecessary, and needs no more than to be mentioned. This added statement will assist permit users in quickly determining which limitation is controlling and avoid the confusion created by multiple differing limitations.

**Response to Comment 38**

IDEM does not agree to add the requested language. In order for IDEM to be able to add such language to the permit, the Permittee would have to comply with the requirements of 326 IAC 2-7-24

(Establishment of Streamlined Requirements for Units Subject to Multiple Requirements). The Permittee has not submitted information adequate to satisfy the requirements of 326 IAC 2-7-24(b). Additionally, if IDEM did streamline the requirements, then a violation of the PSD limit would also be considered a violation of the 326 IAC 7-1 limit.

#### Comment 39

Condition D.3.7, Continuous Monitoring System: Delete the word "installed" in third line. The monitors have already been installed and need not be required to be installed again. Add sentence to end of D.3.7 which states: "**A continuous emission monitor for the measurement of Nitrogen Oxides has been installed and shall be calibrated, operated and maintained in accordance with the requirements of 40 CFR 60 and 40 CFR 75.**"

#### Response to Comment 39

IDEM agrees that the requirement to install the continuous monitoring system is not necessary because the system has already been installed. Revisions to the condition are shown below.

#### D.3.7 Continuous Monitoring System [326 IAC 12] [40 CFR 60, Subpart GG]

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Pursuant to 40 CFR 60, Subpart GG (Stationary Gas Turbines), a continuous monitoring system for the measurement of fuel consumption and the ratio of water to fuel being fired in the turbine, shall be ~~installed~~; calibrated, operated, and maintained.

#### Comment 40

Condition D.3.8(a), Visible Emission Notations: Revise frequency to "...shall be performed once per ~~shift day~~ during normal daylight operations while combusting fuel oil. ~~An trained-employee shall...~~" Once per day is sufficient to demonstrate proper operation, and the employee required qualifications are defined in Condition D.3.8(d).

Condition D.3.8(b), Visible Emission Notations: Revise last sentence: "Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports, **in conjunction with visible emissions in violation of the applicable opacity limit** shall be considered a deviation from this permit."

Condition D.3.8(d), Maintenance of Continuous Opacity Monitoring Equipment: 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...". As an alternate to the elimination of the word "trained" in D.3.8(a) and D.3.8(d), PSI would accept the replacement of the word "trained" with the word "qualified" along with the deletion of the phrase "has been trained".

This comment also applies to Conditions D.4.4 and D.5.4.

#### Response to Comment 40

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.

#### Comment 41

Condition D.3.9(a), Sulfur Content and Nitrogen Content: Add sentence: **"More frequent sampling on a daily as burned basis shall be deemed as equivalent and may be used in place of the tank sampling."**

Condition D.3.9(c), Sulfur Content and Nitrogen Content: Add condition (c) which reads: **"Pursuant to the June 21, 1995 approval letter from Felicia George, Assistant Commissioner, Office of Air Management, the Natural gas combusted shall be monitored through the analysis of pipeline gas from the natural gas supplier. Gas samples shall be taken once per calendar quarter at the closest proximity to the site of the turbines. In the event of less than 30 days of turbine operation in a quarter, the quarterly sampling is waived. For these purposes, one day of operation shall be defined as any day that gas is burned for more than one (1) hour."** A copy of the June 21, 1995 approval letter is attached.

Condition D.3.9(d), Sulfur Content and Nitrogen Content: Add condition (c) which reads: **"Analysis of the natural gas and fuel oil shall be performed using methodologies approved in 40 CFR 60, 40 CFR 75, or other methods approved by the EPA."**

#### Response to Comment 41

The requested changes have been made as shown below.

#### D.3.9 Sulfur Content and Nitrogen Content [326 IAC 12] [40 CFR 60, Subpart GG]

Pursuant to 40 CFR 60, Subpart GG, the Permittee shall monitor the nitrogen and sulfur content of the fuel being fired in the turbine. The frequency of determination of these values shall be as follows:

- (a) If the turbine is supplied its fuel from a bulk storage tank, the values shall be determined on each occasion that fuel is transferred to the storage tank from any other source. **More frequent sampling on a daily as burned basis shall be deemed as equivalent and may be used in place of the tank sampling.**
- (b) If the turbine is supplied its fuel without intermediate bulk storage the values shall be determined and recorded daily. Owners, operators or fuel vendors may develop custom schedules for determination of the values based on the design and operation of the affected facility and the characteristics of the fuel supply. These custom schedules shall be substantiated with data and must be approved by the Administrator before they can be used to comply with the monitoring requirements.
- (c) **Pursuant to the June 21, 1995 approval letter from Felicia George, Assistant Commissioner, Office of Air Management, the Natural gas combusted shall be**

**monitored through the analysis of pipeline gas from the natural gas supplier. Gas samples shall be taken once per calendar quarter at the closest proximity to the site of the turbines. In the event of less than 30 days of turbine operation in a quarter, the quarterly sampling is waived. For these purposes, one day of operation shall be defined as any day that gas is burned for more than one (1) hour.**

- (d) Analysis of the natural gas and fuel oil shall be performed using methodologies approved in 40 CFR 60, 40 CFR 75, or other methods approved by the EPA.**

The sulfur content information obtained from this monitoring shall be used to document compliance with the limits stated in Conditions D.3.2, D.3.3 and D.3.5.

#### **Comment 42**

Condition D.3.11(a), Reporting Requirements: The reporting requirements contained in D.3.11 are not consistent with the current permit or reporting practices. Condition D.3.11(a)(1) and (2) should be deleted and replaced with the following language taken from the current permit:

- (a) Pursuant to Construction Permit No. 165-2113-00001, issued on June 25, 1992, the Permittee shall submit a quarterly summary of the following:**
- (1) The date and times of operation of the turbine.**
  - (2) The maximum load and corresponding water to fuel ratio for each period of operation.**
  - (3) The fuel type used during all periods of turbine operation.**
  - (4) The sulfur content of the fuel oil.**
  - (5) For each calendar month, the total combined natural gas and No. 2 fuel oil usage for the month and for the last 12 month period.**
  - (6) Additional information required by 40 CFR 60.334**

Condition D.3.11(b), Reporting Requirements: Delete "a quarterly report of opacity exceedances". Opacity monitors are not required or present on this unit, and reporting of opacity is not required.

#### **Response to Comment 42**

The requested changes have been made, except that the detailed requirements of the reports required by the NSPS have been retained in the condition. Revisions are shown below.

#### D.3.11 Reporting Requirements

The Permittee shall submit a quarterly summary of the following:

- (a) Pursuant to Construction Permit No. 165-2113-00001, issued on June 25, 1992, The Permittee shall submit a quarterly summary of the following:
- (1) The date and times of operation of the turbine.**
  - (2) The maximum load and corresponding water to fuel ratio for each period of operation.**
  - (3) The fuel type used during all periods of turbine operation.**
  - (4) The sulfur content of the fuel oil.**

- (5) **For each calendar month, the total combined natural gas and No. 2 fuel oil usage for the month and for the last 12 month period.**
- (6) **Additional information required by 40 CFR 60.334, including the following:**
- (1) **(A)** For nitrogen oxides:
- (i) **(1)** One-hour periods during which the average water-to-fuel ratio, as measured by the continuous monitoring system, falls below the water-to-fuel ratio determined to demonstrate compliance with Condition D.3.2(a); and
- (ii) **(2)** Any period during which the fuel bound nitrogen of the fuel is greater than the maximum nitrogen content allowed by the fuel-bound nitrogen allowance used during the initial performance test.
- The summary shall contain the average water-to-fuel ratio, average fuel consumption, ambient conditions, gas turbine load, and nitrogen content of the fuel during the period of excess emissions, and the graphs or figures developed under 40 CFR 60.335(a).
- (2) **(B)** For sulfur dioxides:
- (i) **(1)** Any daily period during which the sulfur content of the natural gas fuel being fired in the gas turbine exceeds 0.8 percent by weight.
- (ii) **(2)** Any daily period during which the sulfur content of the fuel oil being fired in the gas turbine exceeds 0.05 percent by weight.
- (iii) **(3)** All fuel sampling and analysis data.
- (iv) **(4)** Actual fuel usage since last compliance determination period.
- (3) **(C)** For ice fog and emergency fuel as required by 40 CFR 60.334(c)(3) and (4).
- (4) **(D)** For each calendar month, the total combined natural gas and No. 2 fuel oil usage for the month and for the last 12 consecutive month period.

~~(b)~~ — A quarterly report of opacity exceedances.

~~(e)(b)~~ The summaries 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)(2)]

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

#### Comment 43

Condition D. 4.3(2), Sulfur Dioxide Emissions and Sulfur Content: Add condition (b)(2)(C) to read "**As an alternate to (A) and (B) above, samples may be collected prior to combustion (as burned) on**

**each day fuel is combusted".** As burned samples would provide the most representative emission measurement.

### Response to Comment 43

The requested changes have been made as shown below.

#### D.4.3 Sulfur Dioxide Emissions and Sulfur Content [326 IAC 3] [326 IAC 7-2] [326 IAC 7-1.1-2]

- (a) Pursuant to 326 IAC 7-2-1(c)(3), the Permittee shall demonstrate that the sulfur dioxide emissions do not exceed the equivalent of 0.5 pounds per MMBtu, using a calendar month average.
- (b) Pursuant to 326 IAC 7-2-1(e) and 326 IAC 3-7-4, fuel sampling and analysis data shall be collected as follows:
  - (1) The Permittee may rely upon vendor analysis of fuel delivered, if accompanied by a vendor certification [326 IAC 3-7-4(b)]; or,
  - (2) The Permittee shall perform sampling and analysis of fuel oil samples in accordance with 326 IAC 3-7-4(a).
    - (A) Oil samples shall be collected from the tanker truck load prior to transferring fuel to the storage tank; or
    - (B) Oil samples shall be collected from the storage tank immediately after each addition of fuel to the tank.
    - (C) **As an alternate to (A) and (B) above, samples may be collected prior to combustion (as burned) on each day fuel is combusted.**

### Comment 44

Condition D.4.5(d), Record Keeping Requirements: Delete (a)(1)(3). Records may not be available from fuel supplier, thereby a certification is not possible.

### Response to Comment 44

IDEM has revised (a)(3) of Condition D.4.5 to allow for the option of doing fuel sampling and analysis in case records are not available from the fuel supplier. The revisions are shown below.

#### D.4.5 Record Keeping Requirements

- (a) To document compliance with Condition D.4.1, the Permittee shall maintain records in accordance with (1) through (6) below.
  - (1) Calendar dates covered in the compliance determination period;
  - (2) Actual fuel oil usage since last compliance determination period and equivalent sulfur dioxide emissions;

- (3) A certification, signed by the owner or operator, that the records of the fuel supplier certifications, **or the records of fuel sampling and analysis**, represent all of the fuel combusted during the period; and

#### Comment 45

Condition D.5.1, Particulate: Revise to read: "the particulate emissions from the coal processing drop points and coal bunkers shall not exceed ~~76.93~~ **86.19** pounds per hour when operating at **or below** a process weight of ~~950~~ **1900** tons per hour." This revision corrects the nominal process weight throughput and recalculates the particulate emission limit based on this correction.

#### Response to Comment 45

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.

IDEM agrees to correct the maximum throughput to 1900 tons per hour and correct the allowable emissions based on the revised throughput. The revised condition is shown below.

#### D.5.1 Particulate [326 IAC 6-3-2]

---

Pursuant to 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes), the particulate emission rate from the coal processing drop points and coal bunkers shall not exceed ~~76.93~~ **86.19** pounds per hour when operating at a process weight rate of ~~950~~ **1900** 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:

$$E = 55.0 P^{0.11} - 40 \quad \text{where } E = \text{rate of emission in pounds per hour and} \\ P = 950 \text{ (process weight rate in tons per hour)}$$

#### Comments 46 and 47

Condition D.5.3, Particulate Control: Delete this condition; there are no baghouses present in this system.

Condition D.5.4(g), Visible Emissions Notations: Delete the word "baghouse" in first line, there are no baghouses at this facility.

Condition D.5.5, Parametric Monitoring: Delete this condition; there are no baghouses at this facility.

Condition D.5.6, Baghouse Inspections: Delete this condition; there are no baghouses at this facility.

Condition D.5.7, Broken or Failed Bag Detection: Delete this entire section. There are no baghouses at this facility.

Condition D.5.8(a), Record Keeping Requirements: Revise (a) to read "the Permittee shall maintain records of any abnormal emissions observed during the visible emission notations of the transfer points, baghouse exhaust, railcar unloading stations...". There are no baghouses at this facility.

Condition D.5.8(b), Record Keeping Requirements: Delete part (b), There are no baghouses.

Condition D.5.8(c), Record Keeping Requirements: Delete part (c), There are no baghouses.

Section D.6, Description: Delete description (4), Coal Bunker and coal scale exhausts. This equipment should be covered under Section D.5.

**Response to Comments 46 and 47**

The coal bunker and coal scale exhausts have been moved to Section D.5. as requested. Sections D.5 and D.6 have been revised as shown below.

## SECTION D.5 FACILITY 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) A **dual conveyor** coal processing system, with a ~~maximum~~ **nominal** throughput of **1900 tons of coal per hour (950 tons of coal per hour each side)**, consisting of the following equipment:
- (1) One (1) railcar unloading station, with a drop point to ~~a~~ **two (2)** hoppers identified as DP-1, with the drop point enclosed ~~and with emissions uncontrolled~~ **controlled by a baghouse**, and exhausting to the ambient air.
  - (2) One (1) storage ~~pile area~~, having a **nominal** storage capacity including the active piles of 982,800 tons, with fugitive emissions controlled ~~as needed~~ **by a watering system truck, and exhausting to the ambient air.**
  - (3) One (1) enclosed hopper, with a drop point to a conveyor identified as DP-2, with the drop point enclosed ~~and controlled by a baghouse~~ **with emissions controlled by a water spray dust suppression system as needed**, and exhausting to the ambient air.
  - (4) One (1) enclosed hopper and ~~one (1)~~ **two (2)** reclaim feeders, with an underground drop points identified as DP-11 and DP-12, with emissions controlled by the underground enclosure, and routed to the conveyor system.
  - (5) An enclosed **dual** conveyor system, with ~~7~~ **6** drop points identified as DP-3 through DP-6, DP-8, ~~DP-9~~ and DP-13, with each drop point enclosed ~~and controlled by a baghouse~~ **with emissions controlled by the enclosure**, ~~excluding the storage pile conveyor which has the drop point (DP-9) controlled by a telescopic chute, with the drop points exhausting to the ambient air.~~ **Drop points DP-3 through DP-5, DP-8, and DP-13 are controlled as needed by a water spray dust suppression system, and DP-6 is controlled by rotoclones.**
  - (6) **An enclosed conveyor system with drop point identified as DP-9, controlled by a telescoping chute.**
  - (7) **Coal bunker and coal scale exhausts and associated dust collector vents.**

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

#### D.5.1 Particulate [326 IAC 6-3-2]

Pursuant to 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes), the particulate emission rate from the coal processing drop points, **coal scale exhausts**, and coal bunkers shall not exceed 76.93 pounds per hour when operating at a process weight rate of 950 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:

$$E = 55.0 P^{0.11} - 40 \quad \text{where } E = \text{rate of emission in pounds per hour and} \\ P = 950 \text{ (process weight rate in tons per hour)}$$

**D.5.2 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 their control devices.

**Compliance Determination Requirements**

**D.5.3 Particulate Control [326 IAC 2-7-6(6)]**

Except as otherwise provided by statute or rule or in this permit, in order to comply with Section C - Opacity and Condition D.5.1, the ~~baghouses~~ **dust collectors** shall be in operation at all times the ~~associated drop point conveyors DP-1, DP-2, DP-3 through DP-6, DP-8 and DP-13~~ **coal bunker and coal scales** are in operation.

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

**~~D.5.4 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 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.5.4 Visible Emissions Notations [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]**

- (a) Visible emission notations of the coal unloading station, coal bunker, coal scale exhausts and associated dust collector vents exhausts shall be performed once**

**per shift during normal daylight operations when transferring coal. A trained employee shall record whether emissions are normal or abnormal.**

- (b) If abnormal emissions are observed from the coal unloading station, coal bunker, coal scale exhausts and associated dust collector vents exhausts, 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.**
- (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.**

~~D.5.5 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 coal is being transferred. 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.5.6 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.5.7 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.5.5 Record Keeping Requirements**

~~(a) To document compliance with Section C - Opacity and Condition D.5.4 the Permittee shall maintain records of the visible emission notations of the transfer points, baghouse exhausts, railcar unloading stations, coal piles and all response steps taken and the outcome for each.~~

~~(b) To document compliance with Condition D.5.5, the Permittee shall maintain records of the total static pressure drop across each baghouse.~~

~~(c) To document compliance with Condition D.5.6, the Permittee shall maintain records of the results of the baghouse inspections:~~

**(a) To document compliance with Section C - Opacity, Section C -Fugitive Dust Emissions, and Condition D.5.4, the Permittee shall maintain records of the visible emission notations of the coal unloading station, coal bunker, coal scale exhausts and associated dust collector vents exhausts.**

**(d)(b) To document compliance with Condition D.5.2, the Permittee shall maintain records of any additional inspections prescribed by the Preventive Maintenance Plan.**

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

## 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.)

The following insignificant activities:

- (1) Degreasing operations that do not exceed 145 gallons per 12 months, except if subject to 326 IAC 20-6.
- (2) One (1) fuel oil storage tank, identified as T-1, installed in 1992, with a capacity of 395,000 gallons, used to store fuel oil for the combustion turbine, and exhausting through vent T-1.
- (3) One (1) fuel oil-fired auxiliary boiler, identified as Aux-1, constructed before 1968, with a heat input capacity of 0.05 million Btu per hour, and exhausting to general ventilation.
- (4) ~~Coal bunker and coal scale exhausts and associated dust collector vents. [326 IAC 6-3]~~

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

#### ~~D.6.5 Visible Emissions Notations [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]~~

- ~~(a) Visible emission notations of the coal unloading station, coal bunker, coal scale exhausts and associated dust collector vents exhausts shall be performed once per shift during normal daylight operations when transferring coal. A trained employee shall record whether emissions are normal or abnormal.~~
- ~~(b) If abnormal emissions are observed from the coal unloading station, coal bunker, coal scale exhausts and associated dust collector vents exhausts, 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.~~
- ~~(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.~~

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

#### D.6.6 Record Keeping Requirements

- 
- (a) To document compliance with 40 CFR 60, Subpart Kb (Volatile Organic Liquid Storage Tanks), the Permittee shall maintain records of the dimension and capacity of the storage tank for the life of the source as required by 40 CFR 60.116b.
- (b) ~~To document compliance with Section C - Opacity, Section C - Fugitive Dust Emissions, and Condition D.2.4, the Permittee shall maintain records of the visible emission notations of the coal unloading station, coal bunker, coal scale exhausts and associated dust collector vents exhausts.~~
- (c) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

#### Comment 48

Condition D.6.5, Visible Emission Notations: Delete this section, not relevant to any equipment covered under this section.

Condition D.6.6(b), Record Keeping Requirements: Delete (b), not relevant to any equipment covered under this section.

#### Response to Comment 48

The conditions referenced in the above comment have been moved to Section D.5, as shown in response to comments 46 and 47.

#### Comment 49

Section E(a), Description: Change monitor location from "Boiler No. 1" to "Stack 1".

Section E(b), Description: Change monitor location from "Boiler No. 1" to "Stack 2". Change reference to "Boiler No. 1" in last sentence to "Boiler No. 2".

#### Response to Comment 49

The revisions have been made as shown below.

#### 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.)

- (a) One (1) dry bottom, pulverized coal-fired boiler, identified as Boiler No. 1, installed in 1967, with a nominal heat input capacity of 4,802 million Btu per hour (MMBtu/hr), with an electrostatic precipitator (ESP) for control of particulate matter, and exhausting to stack 1. ~~Boiler No.~~ **Stack 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). Boiler No. 1 was configured with a low NO<sub>x</sub> burner in 1993.
- (b) One (1) dry bottom, pulverized coal-fired boiler, identified as Boiler No. 2, installed in 1968, with a nominal heat input capacity of 4,802 million Btu per hour (MMBtu/hr), with an electrostatic precipitator (ESP) for control of particulate matter, and exhausting to stack 2. ~~Boiler No. 4~~ **Stack 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). Boiler No. ~~4~~ **2** was configured with a low NO<sub>x</sub> burner in 1993.

#### Comment 50

Part 70 Operating Permit Certification: Revise mailing address to "**c/o Steven Pearl, 1000 East Main Street, Plainfield, Indiana 46168**".

Emergency Occurrence Report form: (1) Revise mailing address to "**c/o Steven Pearl, 1000 East Main Street, Plainfield, Indiana 46168**". (2) 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 (Monday through Friday, non-holidays)**...".

Semi-Annual Natural Gas Fired Boiler Certification: Delete this form, there are no natural gas fired boilers at this source and the for form is not applicable.

Unit 4 Monthly Fuel Usage: Revise mailing address to "**c/o Steven Pearl, 1000 East Main Street, Plainfield, Indiana 46168**".

Part 70 Quarterly Deviation and Compliance Monitoring Report: Revise mailing address to "**c/o Steven Pearl, 1000 East Main Street, Plainfield, Indiana 46168**".

#### Response to Comment 50

With respect to the mailing address, IDEM has made the requested change on all the forms.

Source Name: PSI Energy, Inc. - Cayuga Generating Station  
Source Address: State Road 63, Cayuga, Indiana 47928  
Mailing Address: **c/o Steven Pearl**, P.O. Box 188, Cayuga, Indiana 47928  
Part 70 Permit No.: T165-7174-00001

IDEM does not agree to change the Emergency Occurrence Report form to state "...within two (2) working business days..." The time period listed on the form is the time period 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.

The Semi-Annual Natural Gas Fired Boiler Certification has been deleted.

On December 10, 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 strikeout 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 to assure that emission 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 or 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**

IEUAWG objects to the termination of the opacity exemptions for startup/shutdown events. No justification is provided on why such a termination should occur, and no justification is provided regarding why emissions that have been acceptable for the last several decades are not acceptable now. This expiration of the temporary alternative opacity limitations is inappropriate and unjustified.

### **Response 6**

IDEM has the authority under 326 IAC 5-1-3 (e) (1) to establish a TAOL per 326 IAC 5-1-3 (a) for the Startup or Shutdown duration. 326 IAC 5-1-3 (e) (2) provides the Commissioner the authority to include permit conditions to minimize the duration and extent of excess emissions when incorporating the TAOL from an existing valid operating permit. The TAOLs per the operating permit have been incorporated in the Part 70 Permit with the expiration period set for three years after the issuance of this permit. At this time IDEM has information based on operating practices at this source and other similar sources in the State, indicating that the Boilers No.1 and No.2 would be able to comply with the TAOLs established in the regulation under 326 IAC 5-1-3 (a) by undertaking some modifications. IDEM has provided a period of three years from the date of issuance of this permit to undertake these projects and comply with TAOL in the rule included in condition D.1.2 (a)(3). The commenter has not provided detailed technical and economic in-feasibility information regarding undertaking measures to comply with TAOLs established in the regulation. Therefore, IDEM has retained the provision for expiration of TAOL in the permit. In the future, the commenter can provide IDEM detailed information about technical and economic in-feasibility of such measures. IDEM will work closely with the Permittee to evaluate such information and develop strategies to minimize the duration and extent of emissions above the opacity limitation under 326 IAC 5-1-2.

### **Comment 7**

Conditions D.1.5, D.2.5, D.3.6, D.4.2, and D.5.2 (Preventive Maintenance Plan)

In several places of the permit, such as Conditions D.1.5, D.2.5, D.3.6, D.4.2, and D.5.2, 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 7**

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 found 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."

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 8**

Conditions D.1.7 and D.2.7 (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. 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.

**D.1.7 and D.2.7 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 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 8**

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 only demonstrations of compliance with the particulate matter emission limitations are stack tests, all of which were performed while the ESP was in operation. There is no 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 9**

Conditions D.1.12 and D.2.12 (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 9

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." Clearly, 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.

### Comment 10

Conditions D.1.13 and D.2.13 (Opacity Readings)

For the reasons set forth in comments numbered 4 and 9, 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 and 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 **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 10

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 opacity goes 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 11

Conditions D.1.14 and D.2.14 (SO<sub>2</sub> Monitor Downtime)

For the reasons set forth in comments numbered 4, 7, and 9, 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. Conditions D.1.14 and D.2.14 should be modified as follows:

D.1.14 and D.2.14 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 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.~~

### **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.5.5 (Baghouse Parametric Monitoring)

For the reasons set forth in comments numbered 4, 7, and 9, IDEM is not authorized to impose this baghouse parametric monitoring. Therefore this condition should be removed.

### **Response to Comment 12**

Since the Permittee has commented that there are no baghouses controlling these operations (see comments 46 and 47), IDEM has removed the conditions relating to monitoring of such baghouses.

### **Comment 13**

Condition D.5.6 (Baghouse Inspections)

For the reasons set forth in comments numbered 4, 7, and 9, IDEM is not authorized to impose these baghouse inspections. This condition should be removed.

### Response to Comment 13

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 14

Conditions D.5.7 (Broken or Failed Bag Detection)

For the reasons set forth in comments numbered 4, 7, and 9, IDEM is not authorized to impose these failed bag requirements. This condition should be removed.

### Response to Comment 14

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.5.7, 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

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]

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**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.**

### Revision #3

IDEM has changed the reference from "source" to "Permittee" for clarification purposes.

C.16 Risk Management Plan [326 IAC 2-7-5(12)] [40 CFR 68:245]

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

**Revision #4**

The following revisions were made to the Emission Statement condition to incorporate the revisions to 326 IAC 2-6 that became effective March 27, 2004. The revised rule was published in the April 1, 2004 Indiana Register.

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

- (1) ~~Indicate estimated actual emissions of criteria pollutants from the source, in compliance with 326 IAC 2-6 (Emission Reporting)~~ **all pollutants listed in 326 IAC 2-6-4(a);**
- (2) Indicate estimated actual emissions of regulated pollutants as defined by 326 IAC 2-7-1(32) ("Regulated pollutant which is used only for purposes of Section 19 of this rule") from the source, for 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**

Condition B.23 has been revised to update the name of the Section that handles permit fees.

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, ~~IM & Billing~~, **Licensing, and Training** Section), to determine the appropriate permit fee.

**Revision #6**

IDEM has changed the reference from "source" to "Permittee" for clarification purposes.

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

- (a) The ~~source~~ **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).

**Revision #7**

Language on the Quarterly Deviation and Compliance Monitoring Report has been revised for clarification purposes. The revisions are shown below.

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

## 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. - Cayuga Generating Station  
**Source Location:** State Road 63, Cayuga, Indiana 47928  
**County:** Vermillion  
**SIC Code:** 4911  
**Operation Permit No.:** T165-7174-00001  
**Permit Reviewer:** Patrick Burton

The Office of Air Quality (OAQ) has reviewed a Part 70 permit application from PSI Energy, Inc. relating to the operation of a 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, installed in 1967, with a nominal heat input capacity of 4,802 million Btu per hour (MMBtu/hr), with an electrostatic precipitator (ESP) for control of particulate matter, and exhausting to stack 1. 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). Boiler No. 1 was configured with a low NO<sub>x</sub> burner in 1993.
- (2) One (1) dry bottom, pulverized coal-fired boiler, identified as Boiler No. 2, installed in 1968, with a nominal heat input capacity of 4,802 million Btu per hour (MMBtu/hr), with an electrostatic precipitator (ESP) for control of particulate matter, and exhausting to stack 2. 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). Boiler No. 1 was configured with a low NO<sub>x</sub> burner in 1993.
- (3) One (1) natural gas and no. 2 fuel oil-fired combustion turbine, identified as Unit No. 4, installed in 1992, with a maximum heat input capacity of 1,297 million Btu per hour (MMBtu/hr), with water injection for control of nitrogen oxides, and exhausting to stack 4.
- (4) A coal processing system, with a maximum throughput of 950 tons of coal per hour, consisting of the following equipment:
  - (a) One (1) railcar unloading station, with a drop point to a hopper identified as DP-1, with the drop point enclosed and controlled by a baghouse, and exhausting to the ambient air.
  - (b) One (1) storage pile, having a storage capacity including the active piles of 982,800 tons, with fugitive emissions controlled by a watering system, and exhausting to the ambient air.
  - (c) One (1) enclosed hopper, with a drop point to a conveyor identified as DP-2, with the drop point enclosed and controlled by a baghouse, and exhausting to the ambient air.

- (d) One (1) enclosed hopper and one (1) reclaim feeder, with an underground drop points identified as DP-11 and DP-12, with emissions controlled by the underground enclosure, and routed to the conveyor system.
- (e) An enclosed conveyor system, with 7 drop points identified as DP-3 through DP-6, DP-8, DP-9 and DP-13, with each drop point enclosed and controlled by a baghouse excluding the storage pile conveyor which has the drop point (DP-9) controlled by a telescopic chute, with the drop points 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) no. 2 fuel oil-fired generator, identified as Unit No. 3A, installed in 1972, with a maximum heat input capacity of 30 million Btu per hour (MMBtu/hr), exhausting to stack 3A.
- (2) One (1) no. 2 fuel oil-fired generator, identified as Unit No. 3B, installed in 1972, with a maximum heat input capacity of 30 million Btu per hour (MMBtu/hr), exhausting to stack 3B.
- (3) One (1) no. 2 fuel oil-fired generator, identified as Unit No. 3C, installed in 1972, with a maximum heat input capacity of 30 million Btu per hour (MMBtu/hr), exhausting to stack 3C.
- (4) One (1) no. 2 fuel oil-fired generator, identified as Unit No. 3D, installed in 1972, with a maximum heat input capacity of 30 million Btu per hour (MMBtu/hr), exhausting to stack 3D.

### **New Emission Units and Pollution Control Equipment**

There are no new facilities to be reviewed.

### **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) Application of oils, greases, lubricants, or other nonvolatile materials applied as temporary protective coatings.
- (6) Degreasing operations that do not exceed 145 gallons per 12 months, except if subject to 326 IAC 20-6.
- (7) 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.
- (8) Closed loop heating and cooling systems.
- (9) 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.
- (10) Rolling oil recovery systems.
- (11) Activities associated with the treatment of wastewater streams with an oil and grease content less than or equal to 1% by volume.
- (12) 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.
- (13) Any operation using aqueous solutions containing less than 1% by weight of VOCs, excluding HAPs.
- (14) Water based adhesives that are less than or equal to 5% by volume of VOCs, excluding HAPs.
- (15) Noncontact cooling tower systems with forced and induced draft cooling tower system not regulated under a NESHAP.
- (16) Replacement or repair of electrostatic precipitators, bags in baghouses and filters in other air filtration equipment.
- (17) Heat exchanger cleaning and repair.
- (18) Process vessel degreasing and cleaning to prepare for internal repairs.
- (19) Stockpiled soils from soil remediation activities that are covered and waiting transportation for disposal.

- (20) Paved and unpaved roads and parking lots with public access.
- (21) Coal bunker and coal scale exhausts and associated dust collector vents.
- (22) Asbestos abatement projects regulated by 326 IAC 14-10.
- (23) Purging of gas lines and vessels that is related to routing maintenance and repair of buildings, structures, or vehicles at the source where air emissions from those activities would not be associated with any production process.
- (24) Flue gas conditioning systems and associated chemicals such as the following: sodium sulfate, ammonia, and sulfur trioxide.
- (25) Equipment used to collect any material that might be released during a malfunction, process upset, or spill cleanup, including catch tanks, temporary liquid separators, tanks, and fluid handling equipment.
- (26) Blowdown for any of the following: sight glass; boiler; compressors; pumps; and cooling tower.
- (27) On-site fire and emergency response training approved by the department.
- (28) Emergency generators as follows:
  - (A) Gasoline generators not exceeding 110 horsepower.
  - (B) Diesel generators not exceeding 1600 horsepower.
- (29) Stationary fire pumps.
- (30) Vents from ash transport systems not operated at positive pressure.
- (31) A laboratory as defined in 326 IAC 2-7-1(21)(D).
- (32) Farm Operations.
- (33) Other activities and categories with emissions below insignificant thresholds:
  - (A) One (1) fuel oil storage tank, identified as T-1, installed in 1992, with a capacity of 395,000 gallons, used to store fuel oil for the combustion turbine, and exhausting through vent T-1.
  - (B) One (1) No. 2 fuel oil storage tank, identified as the Generator Storage Tank, with a capacity of 40,000 gallons, and exhausting to the ambient air.
  - (C) One (1) fuel oil-fired auxiliary boiler, identified as Aux-1, constructed before 1968, with a heat input capacity of 0.05 million Btu per hour, and exhausting to exhaust stack S-1.

### Existing Approvals

The source has been operating under previous approvals including, but not limited to, the following:

- (1) OP 83-07-90-0091, issued on August 1, 1988;
- (2) OP 83-07-90-0092, issued on August 1, 1988;
- (3) OP 83-07-90-0093, issued on August 1, 1988;
- (4) CP 165-2113-00001, issued on June 25, 1992;
- (5) CP 165-5741-00001, issued on June 11, 1996;
- (6) AR 165-5204-00001, issued on December 31, 1997;and
- (7) Review Request (RR) 16-16819-00001, issued May, 7, 2003.

### **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.

A notice of completeness letter was mailed to the source on January 16, 1997.

### **Emission Calculations**

See Appendix A of this document for detailed emissions calculations for the combustion turbine, (identified as Unit No. 4) and the four (4) generators(identified as Unit No. 3A, Unit No. 3B, Unit No. 3C, and Unit No. 3D).

### **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.”

This table reflects the PTE before controls. Control equipment is not considered federally

enforceable until it has been required in a federally enforceable permit.

Pollutant	Potential to Emit (tons/year)
PM	greater than 100
PM-10	greater than 100
SO <sub>2</sub>	greater than 100
VOC	greater than 100
CO	greater than 100
NO <sub>x</sub>	greater than 100

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)
Lead Compounds	greater than 10
All Other HAPs	less than 10 each
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, 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	319
SO <sub>2</sub>	58,828
VOC	91
CO	768
NO <sub>x</sub>	10,270
Lead	0.05

**County Attainment Status**

The source is located in Vermillion County.

Pollutant	Status
PM-10	attainment
SO <sub>2</sub>	attainment/unclassified
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. Vermillion County has been designated as attainment or unclassifiable for ozone. Therefore, VOC emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2 and 40 CFR 52.21.

### 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

#### 40 CFR 72 through 40 CFR 78 (Acid Rain Permit)

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 Part 70 operating permit as Appendix A, and is incorporated by reference.

#### Title IV Emissions Allowances

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.

#### 40 CFR 60 (New Source Performance Standards)

The two (2) pulverized coal-fired dry bottom boilers, identified as Boiler No.1 and Boiler No. 2, and the fuel oil-fired auxiliary boiler, identified as Aux-1, constructed prior to 1968, are not subject to the requirements of the New Source Performance Standard, 326 IAC 12, (40 CFR 60.40 through 60.48c, Subparts D, Da, Db, and Dc, Standards of Performance for Fossil-Fuel-Fired Steam Generators and Standards of Performance for Industrial-Commercial-Institutional Steam Generating Units), because all of the boilers were constructed before August 17, 1971, and have not been modified after that date.

The turbine is subject to the New Source Performance Standard, 326 IAC 12, (40 CFR 60.330, Subpart GG). This rule limits SO<sub>2</sub> emissions to 0.015% by volume at 15% oxygen on a dry basis or fuel sulfur content to 0.8% by weight, and NO<sub>x</sub> emissions to amount determined by the following equation:

$$\text{STD} = 0.0075 \frac{(14.4)}{Y} + F, \quad \text{where } Y = \text{mfg.'s rated heat rate at peak load} \\ F = \text{NO}_x \text{ percent by volume}$$

The coal processing is not subject to the requirements of the New Source Performance Standard, 326 IAC 12 (40 CFR 60, Subpart Y, Standards of Performance for Coal Preparation Plants) because the coal processing and conveying equipment, storage systems, and transfer and loading systems were all constructed before October 24, 1974, and have not been modified after that date.

The combustion turbine's fuel oil storage tank, identified as T-1, is subject to the New Source Performance Standard, 326 IAC 12, (40 CFR 60.110b, Subpart Kb) because the tank has a capacity greater than 40 cubic meters (approx. 20,000 gallons) and was constructed after July 23, 1984. However, due to the low vapor pressure of no. 2 fuel oil (less than 3.5 kPa), the only requirement that applies is that records of the dimension and capacity of the storage tank be kept.

The boilers' fuel oil storage tank, identified as No. 2 Fuel Oil Storage Tank, and the generators' fuel oil storage tank, identified as Black Start Fuel Tank, are not subject to the New Source Performance Standard. 326 IAC 12, (40 CFR 60.110, Subparts K, Ka, or Kb) because the tanks were constructed prior to June 11, 1973.

The degreasing station is not subject to the National Emission Standards for Hazardous Air Pollutants, 326 IAC 20-6-1 (40 CFR 63, Subpart T) because the solvents listed in 40 CFR 63.460(a) are not used.

#### 40 CFR 63 (National Emission Standards for Hazardous Air Pollutants)

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.
- (4) The combustion turbine, identified as Unit No. 4, is not subject to 40 CFR 63, Subpart YYYYY, (National Emission Standards for Hazardous Air Pollutants for Stationary Combustion Turbines) since the combustion turbines HAP emissions, as permitted in CP 165-2113-00001 on June 25, 1992, is below the major source threshold for HAPs.

#### **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 the explanation of why Boilers 1 through 2 did not go through PSD review pursuant to 326 IAC 2-2 (PSD).

##### **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>, CO, VOC, NO<sub>x</sub> and PM<sub>10</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 5-1-3 (Temporary Alternative Opacity Limitations)

Energizing an Electrostatic Precipitator (ESP) when the flue gas temperature is below the sulfuric acid dew point can result in damage to the precipitator. Condensation of sulfuric acid in the ESP may cause corrosion. It may also condense on the dust in the unit causing hard deposits which reduce the PM collection efficiency of the ESP. During the ignition of a coal-fired boiler, there is also a risk of a fire or an explosion if the ESP is energized too early. Normal sparking can ignite any combustible gases in the unit. It is not reasonable to require the use of an ESP when the ESP cannot be safely energized. Therefore, less restrictive opacity requirements are commonly applied during startup and shutdown for boilers that rely on ESPs for opacity control.

Most of the old State operating permits for utilities with coal-fired boilers included alternative opacity limits for periods of startup and shutdown. These pre-existing alternative limits, also known as opacity exemptions, were not federally enforceable. The Part 70 operating permits for these sources include federally enforceable Temporary Alternative Opacity Limits (TAOLs). The new TAOLs are established using the Quarterly Excess Opacity Emissions Reports from each source. The State is bound by the provisions in 326 IAC 5-1-3(e) to establish limits which, among other things, "limit the duration and extent of excess emissions to the greatest degree practicable," and "minimize the duration and extent of excess emissions."

#### 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 165-5204-00001 and revision(s) issued for this source.

**State Rule Applicability - Coal-fired Boilers No. 1 and No. 2**

326 IAC 2-2 (Prevention of Significant Deterioration)

The coal-fired boilers were constructed prior to the applicability dates of the PSD requirements of 326 IAC 2-2.

326 IAC 5-1-3 (Temporary Alternative Opacity Limitations)

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

- (1) For the first three (3) years following the issuance date of the Part 70 operating permit for this source, when building a new fire in Boiler No. 1, opacity may exceed the 40% opacity limitation established in 326 IAC 5-1-2 for a period not to exceed two (2) hours (20 six minute-averaged periods) or until the flue gas temperature entering the electrostatic precipitator (ESP) reaches 250 degrees Fahrenheit, whichever occurs first. For the first three (3) years following the issuance date of the Part 70 operating permit for this source, when building a new fire in Boiler No. 2, opacity may exceed the 40% opacity limitation established in 326 IAC 5-1-2 for a period not to exceed three (3) hours (30 six minute-averaged periods) or until the flue gas temperature entering the electrostatic precipitator (ESP) reaches 250 degrees Fahrenheit, whichever occurs first.
- (2) For the first three (3) years following the issuance date of the Part 70 operating permit for this source, 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 three (3) hours (30 six minute-averaged periods) or until the flue gas temperature entering the electrostatic precipitator (ESP) has dropped below 250 degrees Fahrenheit, whichever occurs first.
- (3) Following the expiration of the alternative limitations in (a)(1) and (a)(2) of this condition, when building a new fire in a boiler, or shutting down a boiler, opacity may exceed the 40% opacity limit established in 326 IAC 5-1-2; however, opacity levels shall not exceed sixty percent (60%) for any six (6)-minute averaging period. Opacity in excess of the applicable limit established in 326 IAC 5-1-2 shall not continue for more than two (2) six (6)-minute averaging periods in any twenty-four (24) hour period.
- (4) Operation of the electrostatic precipitator is not required during these times unless necessary to comply with these limits.

(b) 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 periods 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 6-2-3 (Particulate Matter Emissions Limitations for Sources of Indirect Heating)**

Pursuant to 326 IAC 6-2-3 (Particulate Matter Emissions Limitations for Sources of Indirect Heating), the PM emissions from Boilers No. 1 and 2 shall each be limited to 0.227 pounds per million Btu heat input based on each boiler having a heat input capacity of 4802 million Btu per hour. These limitations will satisfy the requirement to maintain PM emissions below the amounts assumed in the PSD modeling analysis that was performed for the turbines. The limitation was calculated using the following equation:

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

Where C = 50 F/m<sup>3</sup>  
 Q = 9,604 MMBtu/hr (capacity of Boilers 1-2)  
 N = 2 (number of stacks)  
 a = 0.8  
 h = 500 Feet (average stack height)

Calculations for 326 IAC 6-2-3 PM limit:

$$Pt = \frac{(50) (0.8) (500)}{76.5 (9604^{0.75}) (2^{0.25})}$$

$$Pt = \frac{20000}{76.5 (970.1505) (1.1892)}$$

$$Pt = \frac{20000}{88258.81}$$

$$Pt = \underline{\underline{.227 \text{ lbs/MMBtu}}}$$

The electrostatic precipitators (ESP) shall be in operation at all times Boilers No. 1 and 2 are in operation, in order to comply with the 0.227 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 = 65.53 lbs/hr x hr/4802 MMBtu

Controlled PM Emissions in lbs/MMBtu = **0.0136 lbs/MMBtu**

**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 7-4-8 (Vermillion County Sulfur Dioxide Emission Limitations)**

Pursuant to 326 IAC 7-4-8 (Vermillion County Sulfur Dioxide Emission Limitations), the SO<sub>2</sub> emissions from the coal-fired boilers shall not exceed 4.40 pounds per million Btu (lbs/MMBtu).

**State Rule Applicability - Natural Gas/Fuel Oil-Fired Turbine**

### 326 IAC 2-2 (Prevention of Significant Deterioration)

The turbine was permitted pursuant to 326 IAC 2-2 in CP 165-2113-00001 on June 25, 1992. The requirements of 326 IAC 2-2-3 (BACT) are summarized as follows:

NO<sub>x</sub> limits - 25 ppmvd at 15% oxygen while burning natural gas; and  
42 ppmvd at 15% oxygen while burning fuel oil.

Water injection shall be used to control NO<sub>x</sub> emissions up to the limit specified above. The water injection system shall be operating at the proper injection ratio, as determined by the initial compliance testing, whenever the turbines are in operation except during the 14 minute start-up and 14 minute shutdown periods.

VOC limits - 0.0056 pounds per million Btu while burning natural gas;  
0.0071 pounds per million Btu while burning fuel oil; and  
95 tons VOC emissions per year.

CO limits - 0.0209 pounds per million Btu while burning natural gas; and  
0.0211 pounds per million Btu while burning fuel oil.

SO<sub>2</sub> limits - 0.8% sulfur content by weight for natural gas; and  
0.05% sulfur content by weight for fuel oil.

Usage limits - 2,803 million cubic feet per month of natural gas;  
15.94 million gallons per month of fuel oil; and  
For every 1000 gallons of fuel oil used, natural gas limits are lowered by  
0.176 million cubic feet.

Opacity limits - 20% opacity

### 326 IAC 5-1 (Opacity Limitations)

Pursuant to Construction Permit 165-2113, issued on June 25, 1992, visible emissions from the combustion turbine stacks shall be limited to twenty percent (20%) opacity.

### 326 IAC 7-1.1 (Sulfur Dioxide Emission Limitations)

Pursuant to 326 IAC 7-1.1, the SO<sub>2</sub> emissions from the turbine shall not exceed five-tenths (0.5) pounds per million Btu while combusting fuel oil. As determined by the emissions calculations in Appendix A, the BACT requirement to utilize fuel oil with a 0.05% sulfur content will satisfy the SO<sub>2</sub> limit stated above.

## **State Rule Applicability - Fuel Oil-Fired Generators**

### 326 IAC 2-2 (Prevention of Significant Deterioration)

The four generators were constructed in 1972 prior to the applicability date for the Prevention of Significant Deterioration (PSD) rules. Therefore, the requirements of 326 IAC 2-2 do not apply to the generators.

### 326 IAC 7-1.1-2 (Sulfur Dioxide Emission Limitations)

Pursuant to 326 IAC 7-1.1-2, the SO<sub>2</sub> emissions from each generator shall not exceed five-tenths (0.5) pounds per million Btu. PSI Energy currently uses fuel oil for the generators with a sulfur content of 0.5%. As determined by the emissions calculations in Appendix A, the generators are in compliance with the limit stated above.

## **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 matter (PM) from the coal processing drop points, coal piles and coal bunkers shall not exceed 76.93 pounds per hour when operating at a process weight of 950 tons/hr, as 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 based on the review of the data:

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

$$P = \underline{950} \text{ (process weight rate in tons per hour)}$$

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

$$E = (55.0 \times 950^{0.11}) - 40$$

$$E = (55.0 \times 2.125933) - 40$$

$$E = 116.926315 - 40$$

$$\mathbf{E = 76.93 \text{ lb/hr}}$$

When the process weight exceeds two hundred (200) tons/hour, the maximum allowable emission may exceed 76.93 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 - Insignificant Activities**

326 IAC 6-2-3 (Particulate Matter Emissions Limitations for Sources of Indirect Heating)

Pursuant to 326 IAC 6-2-3 (Particulate Matter Emissions Limitations for Sources of Indirect Heating), the PM emissions from Auxiliary boiler 1 (Aux-1) shall be limited to .068 pounds per million Btu heat input based on the boiler having a heat input capacity of 0.05 million Btu per hour. The limitation was calculated using the following equation:

This limitation is based on the following equation:

$$Pt = \frac{(C) (a) (h)}{76.5 (Q^{0.75}) (N^{0.25})} \quad \text{Where } C = 50 \text{ F/m}^3$$

$$Q = 9,604.05 \text{ MMBtu/hr (capacity of Boilers 1,2, Aux.1)}$$

$$N = 3 \text{ (number of stacks)}$$

$$a = 0.8$$

$$h = 495.6 \text{ Feet (average stack height)}$$

Calculations for 326 IAC 6-2-3 PM limit:

$$Pt = \frac{(50) (0.8) (495.6)}{76.5 (9604.05^{0.75}) (3^{0.25})}$$

$$Pt = \frac{19824}{76.5 (970.1543) (1.3161)} \quad Pt = \frac{19824}{97674.81} \quad Pt = \underline{\underline{.20 \text{ lbs/MMBtu}}}$$

PM Emissions for Aux. boiler 1 - based on AP-42 Emission Factors:

PM Emissions in lbs/MMBtu = (lbs/hr)x (hr/max.capacity of boiler MMBtu)  
PM Emissions in lbs/MMBtu = 0.000714285 lbs/hr x hr/0.05 MMBtu  
PM Emissions in lbs/MMBtu = **0.0143 lbs/MMBtu**

326 IAC 8-3-2 (Organic Solvent Degreasing Operations)

Pursuant to 326 IAC 8-3-2 (Organic Solvent Degreasing Operations), this rule applies to the degreasing units listed in the insignificant activities section. The requirements of this rule shall apply.

326 IAC 8-3-5(a) (Cold Cleaner Operations)

Pursuant to 326 IAC 8-3-5(a) (Cold Cleaner Operations) the owner or operator of a cold cleaner degreaser without remote solvent reservoirs constructed after July 1, 1990, shall ensure that the following requirements are met:

- (5) Equip the degreaser with a cover. The cover must be designed so that it can be easily operated with one (1) hand if:
  - (A) The solvent volatility is greater than two (2) kiloPascals (fifteen (15) millimeters of mercury or three-tenths (0.3) pounds per square inch) measured at thirty-eight degrees Celsius (38EC) (one hundred degrees Fahrenheit (100EF));
  - (B) The solvent is agitated; or
  - (C) The solvent is heater.
- (6) Equip the degreaser with a facility for draining cleaned articles. If the solvent volatility is greater than four and three-tenths (4.3) kiloPascals (thirty-two (32) millimeters of mercury or six-tenths (0.6) pounds per square inch) measured at thirty-eight degrees Celsius (38EC) (one hundred degrees Fahrenheit (100EF)), then the drainage facility must be internal such that articles are enclosed under the cover while draining. The drainage facility may be external for applications where an internal type cannot fit into the cleaning system.
- (7) Provide a permanent, conspicuous label which lists the operating requirements outlined in subsection (b).
- (8) The solvent spray, if used, must be a solid, fluid stream and shall be applied at a pressure which does not cause excessive splashing.
- (9) Equip the degreaser with a facility for draining cleaned articles. If the solvent volatility is greater than four and three-tenths (4.3) kiloPascals (thirty-two (32) millimeters of mercury or six-tenths (0.6) pounds per square inch) measured at thirty-eight degrees Celsius (38EC) (one hundred degrees Fahrenheit (100EF)), or if the solvent is heated to a temperature greater than forty-eight and nine-tenths degrees Celsius (48.9EC) (one hundred twenty degrees Fahrenheit (120EF));
  - (A) A freeboard that attains a freeboard ratio of seventy-five hundredths (0.75) or greater.
  - (B) A water cover when solvent is used is insoluble in, and heavier than, water.
  - (C) Other systems of demonstrated equivalent control such as a refrigerated chiller or carbon adsorption. Such systems shall be submitted to U.S. EPA as a SIP

revision.

**326 IAC 8-3-5(b) (Cold Cleaner Degreaser Operation and Control)**

Pursuant to 326 IAC 8-3-5(b) (Cold Cleaner Degreaser Operation and Control), the owner or operator of a cold cleaning facility construction of which commenced after July 1, 1990, shall ensure that the following operating requirements are met:

- (1) Close the cover whenever articles are not being handled in the degreaser.
- (2) Drain cleaned articles for at least fifteen (15) seconds or until dripping ceases.
- (3) Store waste solvent only in covered containers and prohibit the disposal or transfer of waste solvent in any manner in which greater than twenty percent (20%) of the waste solvent by weight could evaporate.

**326 IAC 8-4-3 (Petroleum Liquid Storage Tanks)**

- (a) The requirements of 326 IAC 8-4-3 (Petroleum Liquid Storage Tanks) do not apply to the fire pump's fuel oil storage tank, identified as the Fire Pump Tank, or the No. 1 fuel oil storage tank, identified as the No.1 Fuel Oil Tank, because they have capacities less than 39,000 gallons and were constructed prior to January 1, 1980.
- (b) The requirements of 326 IAC 8-4-3 (Petroleum Liquid Storage Tanks) do not apply to the boilers' fuel oil storage tank or the generators' fuel oil storage tank because they were constructed prior to January 1, 1980.
- (c) The requirements of 326 IAC 8-4-3 (Petroleum Liquid Storage Tanks) do not apply to the combustion turbine's fuel oil storage tank, identified as T-1, because no. 2 fuel oil has a true vapor pressure less than 1.52 pounds per square inch (psi).

**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 less than 10,000 gallons.

**State Rule Applicability - Fugitive Emissions**

**326 IAC 6-4 (Fugitive Dust Emissions)**

Pursuant to 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. 326 IAC 6-4-2(4) is not federally enforceable.

**Testing Requirements - Coal-Fired Boilers**

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

Within a two (2) year period from the last stack test on September 26, 2001 for Boiler No. 1, compliance with the PM limitation in Condition D.1.1 shall be determined by a performance stack test utilizing Methods 5 or 17 (40 CFR 60, Appendix A), or other methods as approved by the Commissioner. This test shall be repeated at least once every two (2) years from the date of this valid compliance demonstration.

Within a two (2) year period from the last stack test on September 19, 2000, for Boiler No. 2 compliance with the PM limitation in Condition D.2.1 shall be determined by a performance stack test utilizing Methods 5 or 17 (40 CFR 60, Appendix A), or other methods as approved by the

Commissioner. This test shall be repeated at least once every two (2) years from the date of this valid compliance demonstration.

## 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 Permittee, 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 corrective actions and not grounds for enforcement action. However, a violation in relation to a compliance monitoring condition will arise through a Permittee's failure to take the appropriate corrective actions within a specific time period.

The compliance monitoring requirements applicable to this source are as follows:

- (1) The coal-fired boilers 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 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.

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.

This monitoring conditions are necessary to ensure compliance with 326 IAC 5, 326 IAC 6, and 326 IAC 2-7 (Part 70).

- (2) The turbine has 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 (VE) notations of the turbine stack exhaust 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 violation of 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 turbine.

#### Sulfur Content and Nitrogen Content [326 IAC 12] [40 CFR 60, Subpart GG]

Pursuant to 40 CFR 60, Subpart GG, the Permittee shall monitor the nitrogen and sulfur content of the fuel being fired in the turbine. The frequency of determination of these values shall be as follows:

- (a) If the turbine is supplied its fuel from a bulk storage tank, the values shall be determined on each occasion that fuel is transferred to the storage tank from any other source.
- (b) If the turbine is supplied its fuel without intermediate bulk storage the values shall be determined and recorded daily. Owners, operators or fuel vendors may develop custom schedules for determination of the values based on the design and operation of the affected facility and the characteristics of the fuel supply. These custom schedules shall be substantiated with data and must be approved by the Administrator before they can be used to comply with the monitoring requirements.

The sulfur content information obtained from this monitoring shall be used to document compliance with the limits stated in Conditions D.3.2 and D.3.3.

These monitoring conditions are necessary because the unit must operate properly to ensure continuous compliance with 326 IAC 5-1 (Opacity Limitations) and 326 IAC 2-7 (Part 70).

- (3) The generators have applicable compliance monitoring conditions as specified below:

#### Visible Emissions Notations

- (a) Visible emission (VE) notations of the generators' 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 violation of 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.

This monitoring condition is necessary to ensure compliance with 326 IAC 2-7 (Part 70).

- (4) The coal handling and storage system 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.

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 coal is being transferred. 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).

These monitoring conditions are necessary because the process must operate properly to ensure continuous compliance with 326 IAC 5-1 (Opacity Limitations), 326 IAC 6-4, and 326 IAC 2-7 (Part 70).

- (5) The fuel oil-fired auxiliary boiler, identified as Aux-1, has 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 coal unloading station, coal bunker, coal scale exhausts and associated dust collector vents exhausts shall be performed once per shift during normal daylight operations when transferring coal. A trained employee shall record whether emissions are normal or abnormal.

- (b) If abnormal emissions are observed from the coal unloading station, coal bunker, coal scale exhausts and associated dust collector vents exhausts, 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.
- (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.

This monitoring condition is necessary to ensure compliance with 326 IAC 2-7 (Part 70).

#### **Conclusion**

The operation of this stationary electric utility generating station shall be subject to the conditions of the attached proposed **Part 70 Permit No. T165-7174-00001**.