

TO: Interested Parties / Applicant

RE: PSI Energy Inc. – Wabash River Generating Station / 167-7176-00021

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).

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.

Via Certified Mail

September 2, 2004

Mr. Steven L. Pearl  
PSI Energy  
1000 East Main Street  
Plainfield, Indiana 46168

RE: Part 70 Permit  
167-7176-00021

Dear Mr. Pearl;

Attached to this letter you should find a copy of the issued Part 70 (Title V) Permit for PSI Energy, Inc. – Wabash River Generating Station. It has been issued on this date.

If you have any questions separate from the written comments, contact me at (812) 462-3433.

Sincerely,

George M. Needham  
Director  
Vigo County Air Pollution Control

# PART 70 OPERATING PERMIT

## INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT - OFFICE OF AIR QUALITY and VIGO COUNTY AIR POLLUTION CONTROL

**PSI Energy, Inc. - Wabash River Generating Station  
450 Bolton Road**

**West Terre Haute, Indiana 47885**

**and**

**PSI Energy, Inc. - Wabash River Repowering  
445 Bolton Road**

**West Terre Haute, Indiana 47885**

(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 2-7-10.5, applicable to those conditions.

Operation Permit No.: T167-7176-00021

Issued by:  
Janet G. McCabe, Assistant Commissioner  
Office of Air Quality

Issuance Date: September 2, 2004

Expiration Date: September 2, 2009

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## SECTION A SOURCE SUMMARY

This permit is based on information requested by the Indiana Department of Environmental Management (IDEM), Office of Air Quality (OAQ) and Vigo County Air Pollution Control (VCAPC). The information describing the source contained in conditions A.1, A.3, and A.4, is descriptive information and does not constitute enforceable conditions. However, the Permittee should be aware that a physical change or a change in the method of operation that may render this descriptive information obsolete or inaccurate may trigger requirements for the Permittee to obtain additional permits or seek modification of this permit pursuant to 326 IAC 2, or change other applicable requirements presented in the permit application.

### A.1 General Information [326 IAC 2-7-4(c)] [326 IAC 2-7-5(15)] [326 IAC 2-7-1(22)]

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

Responsible Official: Manager of the Wabash River Station / Manager of the Wabash River Repowering  
Source Address: Wabash River Station - 450 Bolton Road, West Terre Haute, Indiana 47885  
Wabash River Repowering - 445 Bolton Road, West Terre Haute, Indiana 47885  
Mailing Address: c/o Steven L. Pearl, 1000 East Main Street, Plainfield, Indiana 46168  
Source Telephone: (812) 535-2329  
SIC Code: 4911  
County Location: Vigo County  
Source Location Status: Maintenance Attainment for Sulfur Dioxide  
Nonattainment for ozone under the 8-hour standard  
Attainment for all other criteria pollutants  
Source Status: Part 70 Permit Program  
Major Source, under PSD Rules;  
Major Source, under Nonattainment NSR  
Major Source, Section 112 of the Clean Air Act  
1 of 28 Source Categories

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

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This source consists of an electric utility generating station with an on-site contractor that produces and supplies synthetic gas ("syngas") derived from petroleum products :

- (a) PSI Energy, Inc. - Wabash River Generating Station (167-00021), the primary operation, is located at 450 Bolton Road, West Terre Haute, Indiana 47885;
- (b) PSI Energy, Inc. – Wabash River Repowering (167-00021), a co-located but independent operation, is located at 445 Bolton Road, West Terre Haute, Indiana 47885, and
- (c) Wabash River Energy, LLC (167-00091), the supporting operation to Wabash River Repowering, is located at 444 West Sandford Ave., West Terre Haute, Indiana 47885.

IDEM and VCAPC have determined that PSI Energy, Inc. - Wabash River Generating Station and Wabash River Energy, LLC are under the common control of PSI Energy, Inc. These two plants are considered one source due to contractual control. Therefore, the term "source" in the Part 70 documents refers to both PSI Energy, Inc. and Wabash River Energy as one source.

Separate Part 70 permits will be issued to PSI Energy, Inc. with Permit No.: 167-7176-00021 and Wabash River Energy with Permit No.: 167-7353-00091 (issued on December 31, 1998) solely for administrative purposes.

### A.3 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:

1. Combustion Turbine, identified as Unit 1A, constructed in 1995, with a nominal rated capacity of 1709.1 million BTU per hour (192 megawatt), utilizing syngas or natural gas in combined cycle mode and natural gas in simple cycle mode, utilizing steam injection for NO<sub>x</sub> control, and exhausting to stack 1A (combined cycle mode) or 1D (simple cycle mode). Stack 1A (combined

- cycle) has continuous emission monitors for SO<sub>2</sub>, NO<sub>x</sub>, CO<sub>2</sub>, and volumetric flow rate as well as a continuous opacity monitor (COM). Stack 1D (bypass) has continuous emission monitors for NO<sub>x</sub> and CO<sub>2</sub>.
2. Repowering Auxiliary Boiler fired on natural gas only, identified as Unit 1B, constructed in 1995, with a nominal rated capacity of 144 million BTU per hour, using low NO<sub>x</sub> burners as NO<sub>x</sub> control, and exhausting to Stack 1B with continuous emission monitors for NO<sub>x</sub> and CO<sub>2</sub>.
  3. Natural gas fired boiler, identified as Unit 1C, constructed in 2001, with a nominal rated capacity of 397.8 million BTU per hour, using low NO<sub>x</sub> burners with flue gas recirculation as NO<sub>x</sub> control, and exhausting to stack 1C with continuous emission monitors for NO<sub>x</sub>, CO<sub>2</sub>, and CO.
  4. Fuel preheater, identified as Unit 1E, constructed in 2001, with a nominal rated capacity of 7.13 million BTU per hour, utilizing natural gas for fuel, using a low emission rate burner for NO<sub>x</sub> control, and exhausting to stack 1E.
  5. Wall fired coal electric utility boiler (pulverized - dry bottom), identified as Unit 2, constructed in 1953, using #2 fuel oil as ignition fuel, with a nominal rated heat input capacity of 913.8 million BTU per hour, using modified burner design (low NO<sub>x</sub>) for NO<sub>x</sub> control and electrostatic precipitator (ESP) for particulate control, exhausting to Stack A. Stack A is equipped with a continuous opacity monitor (COM) to monitor opacity as well as continuous emission monitors for NO<sub>x</sub>, CO<sub>2</sub>, SO<sub>2</sub>, and volumetric flow rate.
  6. Wall fired coal electric utility boiler (pulverized - dry bottom), identified as Unit 3, constructed in 1954, using #2 fuel oil as ignition fuel, with a nominal rated heat input capacity of 922.9 million BTU per hour, using modified burner design (low NO<sub>x</sub>) for NO<sub>x</sub> control and electrostatic precipitator (ESP) for particulate control, exhausting to Stack A. Stack A is equipped with a continuous opacity monitor (COM) to monitor opacity as well as continuous emission monitors for NO<sub>x</sub>, CO<sub>2</sub>, SO<sub>2</sub>, and volumetric flow rate.
  7. Wall fired coal electric utility boiler (pulverized - dry bottom), identified as Unit 4, constructed in 1955, using #2 fuel oil as ignition fuel, with a nominal rated heat input capacity of 922.9 million BTU per hour, using modified burner design (low NO<sub>x</sub>) for NO<sub>x</sub> control and electrostatic precipitator (ESP) for particulate control, exhausting to Stack A. Stack A is equipped with a continuous opacity monitor (COM) to monitor opacity as well as continuous emission monitors for NO<sub>x</sub>, CO<sub>2</sub>, SO<sub>2</sub>, and volumetric flow rate.
  8. Wall fired coal electric utility boiler (pulverized - dry bottom), identified as Unit 5, constructed in 1956, using #2 fuel oil as ignition fuel, with a nominal rated heat input capacity of 1096.2 million BTU per hour, using modified burner design (low NO<sub>x</sub>) for NO<sub>x</sub> control and electrostatic precipitator (ESP) for particulate control, exhausting to Stack A. Stack A is equipped with a continuous opacity monitor (COM) to monitor opacity as well as continuous emission monitors for NO<sub>x</sub>, CO<sub>2</sub>, SO<sub>2</sub>, and volumetric flow rate.
  9. Tangential fired coal electric utility boiler (pulverized - dry bottom, tangential), identified as Unit 6, constructed in 1968, using #2 fuel oil as ignition fuel, with a nominal rated heat input capacity of 2999.0 million BTU per hour, using modified burner design (low NO<sub>x</sub>) for NO<sub>x</sub> control and electrostatic precipitator (ESP) for particulate control, exhausting to Stack A. Stack A is equipped with a continuous opacity monitor (COM) to monitor opacity as well as continuous emission monitors for NO<sub>x</sub>, CO<sub>2</sub>, SO<sub>2</sub>, and volumetric flow rate.
  10. Coal pile maintenance, identified as F-1.
  11. Coal handling, identified as F-2.
  12. Plant roads, identified as F-4.
  13. Diesel Generator, identified as 7A, constructed in 1967, combusting #2 fuel oil, with a nominal rated capacity of 28.6 million BTU per hour, used for intermittent and emergency duty, using no

control, and exhausting to stack 7A.

14. Diesel Generator, identified as 7B, constructed in 1967, combusting #2 fuel oil, with a nominal rated capacity of 28.6 million BTU per hour, used for intermittent and emergency duty, using no control, and exhausting to stack 7B.
15. Diesel Generator, identified as 7C, constructed in 1967, combusting #2 fuel oil, with a nominal rated capacity of 28.6 million BTU per hour, used for intermittent and emergency duty, using no control, and exhausting to stack 7C.

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

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

1. Thaw pit Fuel oil tank: 20,000 gallon (constructed 1990) [326 IAC 12][40 CFR 60, Subpart Kb]
2. Coal pile wind erosion [326 IAC 6-1-2][326 IAC 6-4]
3. Lime silo: 1388 cubic feet [326 IAC 6-1-2]
4. Lime day bin: 87 cubic feet [326 IAC 6-1-2]
5. Unit 6 hydroveyor [326 IAC 6-1-2]
6. Degreaser (maintenance shop): 30 gallon (constructed about 1980) [326 IAC 8-3]
7. Ash hydroveyor separator Units 1&2 [326 IAC 6-1-2]
8. Ash hydroveyor separator Units 3&4 [326 IAC 6-1-2]
9. Ash hydroveyor separator Unit 5 [326 IAC 6-1-2]
10. Parts cleaner (electric shop): 30 gallon (constructed about 1980) [326 IAC 8-3]
11. Parts cleaner (main floor storage area): 30 gallon (constructed about 1980) [326 IAC 8-3]
12. Ash pond: 216 acres [326 IAC 6-1-2][326 IAC 6-4]
13. Ash pond management and maintenance [326 IAC 6-1-2]
14. Two (2) Repowering fuel oil storage tank: 99,500 gallon each (constructed in 1993) [326 IAC 12][40 CFR 60, Subpart Kb]
15. Fuel oil tank: 50,000 gallons (constructed in 1986) [326 IAC 12][40 CFR 60, Subpart Kb]

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

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

- (a) It is a major source, as defined in 326 IAC 2-7-1(22);
- (b) It is a source in a source category designated by the United States Environmental Protection Agency (U.S. EPA) under 40 CFR 70.3 (Part 70 - Applicability); 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]

- (a) 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, VCAPC, the United States Environmental Protection Agency (U.S. EPA) and by citizens in accordance with the Clean Air Act.
- (b) Unless otherwise stated, all terms and conditions in this permit that are local requirements, including any provisions designed to limit the source's potential to emit, are enforceable by Vigo County Air Pollution Control.

### 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 and VCAPC, within a reasonable time, any information that IDEM, OAQ and VCAPC, 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 and VCAPC, copies of records required to be kept by this permit.
- (b) For information furnished by the Permittee to IDEM, OAQ or VCAPC, 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 under this permit or 326 IAC 2-7 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)]

- (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

Vigo County Air Pollution Control  
103 South 3<sup>rd</sup> Street  
Terre Haute, Indiana 47807

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 and VCAPC, 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]

- (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

And

Vigo County Air Pollution Control  
103 South 3<sup>rd</sup> Street  
Terre Haute, Indiana 47807

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 and VCAPC, upon request and within a reasonable time, and shall be subject to review and approval by IDEM, OAQ and VCAPC. IDEM, OAQ and VCAPC, 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]

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- (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 except as provided in 326 IAC 2-7-16 or this condition.
- (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 and VCAPC within four (4) daytime business hours after the beginning of the emergency, or after the emergency was discovered or reasonably should have been discovered;

**IDEM**

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.

**VCAPC**

Telephone Number: 812-462-3433  
Facsimile Number: 812-462-3447

- (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

And

Vigo County Air Pollution Control  
103 South 3<sup>rd</sup> Street  
Terre Haute, Indiana 47807

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 and VCAPC, 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 and VCAPC, 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 and VCAPC, 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 or VCAPC, 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 or VCAPC, 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

And

Vigo County Air Pollution Control  
103 South 3<sup>rd</sup> Street  
Terre Haute, Indiana 47807

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)].

- (b) This permit shall be reopened and revised under any of the circumstances listed in IC 13-15-7-2 or if IDEM, OAQ or VCAPC, 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 or VCAPC, 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 or VCAPC at least thirty (30) days in advance of the date this permit is to be reopened, except that IDEM, OAQ or VCAPC, 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 VCAPC, 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

And

Vigo County Air Pollution Control  
103 South 3<sup>rd</sup> Street  
Terre Haute, Indiana 47807

- (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 and VCAPC, on or before the date it is due.
  - (2) If IDEM, OAQ and VCAPC, 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 and VCAPC, take 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 and VCAPC, 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 and VCAPC, fail 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

And

Vigo County Air Pollution Control  
103 South 3<sup>rd</sup> Street  
Terre Haute, Indiana 47807

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

And

Vigo County Air Pollution Control  
103 South 3<sup>rd</sup> Street  
Terre Haute, Indiana 47807

Any such application shall be certified by the "responsible official" as defined by 326 IAC 2-7-1(34).

- (d) The Permittee may implement administrative amendment changes addressed in the request for an administrative amendment immediately upon submittal of the request. [326 IAC 2-7-11(c)(3)]
- (e) No permit amendment or modification is required for the addition, operation or removal of a nonroad engine, as defined in 40 CFR 89.2.

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

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

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

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- (a) The Permittee may make any change or changes at the source that are described in 326 IAC 2-7-20(b), (c), or (e), without a prior permit revision, if each of the following conditions is met:
- (1) The changes are not modifications under any provision of Title I of the Clean Air Act;
  - (2) Any preconstruction approval required by 326 IAC 2-7-10.5 has been obtained;
  - (3) The changes do not result in emissions which exceed the emissions allowable under this permit (whether expressed herein as a rate of emissions or in terms of total emissions);
  - (4) The Permittee notifies the:

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

And

Vigo County Air Pollution Control  
103 South 3<sup>rd</sup> Street  
Terre Haute, Indiana 47807

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 and VCAPC, 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). The notification requirement per (a)(4) of this condition does not apply to emission trades of SO<sub>2</sub> or NO<sub>x</sub> under 326 IAC 21 or 326 IAC 10-4.
- (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, VCAPC, 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 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 13-17-3-2] [IC 13-30-3-1]

Upon presentation of proper identification cards, credentials, and other documents as may be required by law, and subject to the Permittee's right under all applicable laws and regulations to assert that the information collected by the agency is confidential and entitled to be treated as such, the Permittee shall allow IDEM, OAQ, VCAPC, 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 permit modification that allows for 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

And

Vigo County Air Pollution Control  
103 South 3<sup>rd</sup> Street  
Terre Haute, Indiana 47807

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 and VCAPC, 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 or VCAPC, the applicable fee is due April 1 of each year.

- (b) Except as provided in 326 IAC 2-7-19(e), failure to pay may result in administrative enforcement action or revocation of this permit.
- (c) The Permittee may call the following telephone numbers: 1-800-451-6027 or 317-233-4230 (ask for OAQ, I/M & Billing Section), to determine the appropriate permit fee.

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

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

## SECTION C SOURCE OPERATION CONDITIONS

Entire Source

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

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

The Permittee shall not open burn any material except as provided in 326 IAC 4-1-3, 326 IAC 4-1-4 or 326 IAC 4-1-6. The previous sentence notwithstanding, the Permittee may open burn in accordance with an open burning approval issued by the Commissioner under 326 IAC 4-1-4.1. 326 IAC 4-1-3 (a)(2)(A) and (B) are not federally enforceable.

#### C.3 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.4 Fugitive Dust Emissions [326 IAC 6-4]

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

#### C.5 Fugitive Particulate Matter Emission Limitations [326 IAC 6-5]

Pursuant to 326 IAC 6-5 (Fugitive Particulate Matter Emission Limitations), fugitive particulate matter emissions shall be controlled according to the plan submitted on November 14, 1996. The plan is included as Attachment A.

#### 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 and VCAPC.

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

And

Vigo County Air Pollution Control  
103 South 3<sup>rd</sup> Street  
Terre Haute, Indiana 47807

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 and VCAPC 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 and VCAPC not later than forty-five (45) days after the completion of the testing. An extension may be granted by IDEM, OAQ and VCAPC, if the Permittee submits to IDEM, OAQ and VCAPC, 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

and

Vigo County Air Pollution Control  
103 South 3<sup>rd</sup> Street  
Terre Haute, Indiana 47807

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

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

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

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

- (a) The Permittee shall calibrate, maintain, and operate all necessary continuous opacity monitoring systems (COMS) and related equipment. For a boiler, the COM shall be in operation at all times that the induced draft fan is in operation.
- (b) All continuous opacity monitoring systems shall meet the performance specifications of 40 CFR 60, Appendix B, Performance Specification No. 1, and are subject to monitor system certification requirements pursuant to 326 IAC 3-5.
- (c) In the event that a breakdown of a continuous opacity monitoring system occurs, a record shall be made of the time and reason of the breakdown and efforts made to correct the problem.
- (d) Whenever a continuous opacity monitor (COM) is malfunctioning or will be down for calibration, maintenance, or repairs for a period of one (1) hour or more, compliance with the applicable opacity limits shall be demonstrated by the following:
  - (1) Visible emission (VE) notations shall be performed once per hour during daylight operations following the shutdown or malfunction of the primary COM. A trained employee shall record whether emissions are normal or abnormal for the state of operation of the emission unit at the time of the reading.
    - (A) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.
    - (B) If abnormal emissions are noted during two consecutive emission notations, the Permittee shall begin Method 9 opacity observations within four hours of the second abnormal notation.
    - (C) VE notations may be discontinued once a COM is online or formal Method 9 readings have been implemented.
  - (2) If a COM is not online within twenty-four (24) hours of shutdown or malfunction of the primary COM, the Permittee shall provide certified opacity reader(s), who may be employees of the Permittee or independent contractors, to self-monitor the emissions from the emission unit stack.
    - (A) Visible emission readings shall be performed in accordance with 40 CFR 60, Appendix A, Method 9, for a minimum of five (5) consecutive six (6) minute averaging periods beginning not more than twenty-four (24) hours after the start of the malfunction or down time.
    - (B) Method 9 opacity readings shall be repeated for a minimum of five (5)

consecutive six (6) minute averaging periods at least once every four (4) hours during daylight operations, until such time that a COM is in operation.

- (C) Method 9 readings may be discontinued once a COM is online.
- (D) Any opacity exceedances determined by Method 9 readings shall be reported with the Quarterly Opacity Exceedances Reports.

- (3) If abnormal emissions are observed, the Permittee shall take reasonable response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports. Observation of abnormal emissions that do not violate an applicable opacity limit is not a deviation from this permit. Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports, shall be considered a deviation from this permit.

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

**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 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.
- (b) The Permittee may request the IDEM, OAQ approve the use of an other instrument that does not meet the above specifications provided the Permittee can demonstrate an alternative instrument specification will adequately ensure compliance with permit conditions requiring the measurement of operating 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 June 30, 1980.
- (b) Upon direct notification by IDEM, OAQ and VCAPC, 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]**

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

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

- (a) The Permittee is required to prepare a Compliance Response Plan (CRP) for each compliance monitoring condition of this permit. If a Permittee is required to have an Operation, Maintenance and Monitoring (OMM) Plan or Parametric Monitoring Plan and Start-up, Shutdown, and

Malfunction (SSM) Plan under 40 CFR 63, such plans shall be deemed to satisfy the requirements for a CRP for those compliance monitoring conditions. A CRP shall be submitted to IDEM, OAQ and VCAPC 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 and VCAPC 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, in accordance with Section D, response steps 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 and VCAPC that retesting in one-hundred and twenty (120) days is not practicable, IDEM, OAQ and VCAPC may extend the retesting deadline.
- (c) IDEM, OAQ and VCAPC reserve the authority to take any actions allowed under law in response to noncompliant stack tests.

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

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

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

- (a) The Permittee shall submit an 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 shall meet the following requirements:
  - (1) Indicate estimated actual emissions of criteria pollutants from the source, in compliance with 326 IAC 2-6 (Emission Reporting);
  - (2) Indicate estimated actual emissions of regulated pollutants as defined by 326 IAC 2-7-1(32) ("Regulated pollutant which is used only for purposes of Section 19 of this rule") from the source, for purposes of Part 70 fee assessment.
- (b) The annual emission statement covers the twelve (12) consecutive month time period starting January 1 and ending December 31. The annual emission statement must be submitted to:

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

And

Vigo County Air Pollution Control  
103 South 3<sup>rd</sup> Street  
Terre Haute, Indiana 47807

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

- (c) 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 and VCAPC, 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 or Vigo County Air Pollution Control makes a request for records to the Permittee, the Permittee shall furnish the records to the Commissioner or Vigo County Air Pollution Control 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

And

Vigo County Air Pollution Control  
103 South 3<sup>rd</sup> Street  
Terre Haute, Indiana 47807

- (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 and VCAPC, 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

Vigo County Air Pollution Control  
103 South 3<sup>rd</sup> Street  
Terre Haute, Indiana 47807

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)]

Combustion Turbine, identified as Unit 1A, constructed in 1995, with a nominal rated capacity of 1709.1 million BTU per hour (192 megawatt), utilizing syngas or natural gas in combined cycle mode and natural gas in simple cycle mode, utilizing steam injection for NO<sub>x</sub> control, and exhausting to stack 1A (combined cycle mode) or 1D (simple cycle mode). Stack 1A (combined cycle) has continuous emission monitors for SO<sub>2</sub>, NO<sub>x</sub>, CO<sub>2</sub>, and volumetric flow rate as well as a continuous opacity monitor (COM). Stack 1D (bypass) has continuous emission monitors for NO<sub>x</sub> and CO<sub>2</sub>.

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

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

#### D.1.1 General Provisions Relating to NSPS [326 IAC 12][40 CFR 60, Subpart A]

The provisions of 40 CFR Part 60, Subpart A - General Provisions, which are incorporated under 326 IAC 12, apply to the combustion turbine (Unit 1A) except when otherwise specified in 40 CFR Part 60, Subpart GG.

#### D.1.2 NSPS Nitrogen Oxide Standard [326 IAC 12][40 CFR 60.332]

Pursuant to 40 CFR 60.332(a)(1) and 40 CFR 60.332(b) the Permittee shall not allow to be discharged into the atmosphere, any gases which contain nitrogen oxides in excess of 0.0075 percent (%) (75 ppm @ 15% oxygen, dry basis). This is based on the following equation:

$$\text{STD} = 0.0075 * (14.4/Y) + F$$

where:

- STD = allowable NO<sub>x</sub> emissions (percent by volume at 15 percent oxygen and 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 peak load for the facility; and  
F = NO<sub>x</sub> emission allowance for fuel-bound nitrogen as defined in paragraph (a)(3) of 40 CFR 60.332.

Exemptions:

- (a) Pursuant to 40 CFR 60.332(f), stationary gas turbines using water or steam injection for control of NO<sub>x</sub> emissions are exempt from the nitrogen oxide standard when ice fog is deemed a traffic hazard by the Permittee.
- (b) Pursuant to 40 CFR 60.332(i), exemptions from the nitrogen oxide standard may be granted on a case-by-case basis in specific geographical areas where mandatory water restrictions are required by governmental agencies because of drought conditions. These exemptions will be allowed only while the mandatory water restrictions are in effect.

#### D.1.3 Nitrogen Oxide Emission Limitation [326 IAC 2-2]

Pursuant to CP 167-2610-00021 (Issued May 27, 1993), the nitrogen oxides (NO<sub>x</sub>) emissions from the gas turbine shall not exceed 25 ppmdv at 15 percent oxygen for syngas or natural gas combustion.

#### D.1.4 NSPS Standard for Sulfur Dioxide [326 IAC 12][40 CFR 60.333]

Pursuant to 40 CFR 60.333, the Permittee shall comply with one of the two following requirements:

- (a) The Permittee shall not discharge into the atmosphere from any stationary gas turbine any gases which contain sulfur dioxide in excess of 0.015 percent by volume at 15% oxygen and on a dry basis; OR
- (b) The Permittee shall not burn any fuel which contains sulfur in excess of 0.8 percent by weight.

**D.1.5 Carbon Monoxide BACT [326 IAC 2-2-3][40 CFR 52.21]**

Pursuant to CP 167-2610-00021 (Issued May 27, 1993, as amended in 2001), 326 IAC 2-2, and 40 CFR 52.21, the best available control technology (BACT) for carbon monoxide shall be good combustion practices. CO emissions shall not exceed 15 ppm when burning syngas or natural gas corrected to 15% oxygen at 75% or greater load. The practice and instrumentation plan shall be submitted to the VCAPC along with the methods and parameters which are based on test results to ensure continued compliance.

**D.1.6 Sulfuric Acid Mist BACT [326 IAC 2-2-3][40 CFR 52.21]**

Pursuant to CP 167-2610-00021 (Issued May 27, 1993), 326 IAC 2-2, and 40 CFR 52.21, the best available control technology (BACT) for sulfuric acid mist shall be: a) 0.01 lb of sulfuric acid (H<sub>2</sub>SO<sub>4</sub>) mist per million BTU by limiting the sulfur content of the syngas to 360 ppm or less as measured by a gas chromatograph, and b) design exit gas temperature from the Heat Recovery Steam Generator (HRSG) to be at least 264 °F.

**D.1.7 Opacity Limitations**

Pursuant to CP 167-2610-00021 (Issued May 27, 1993), the opacity from Unit 1A (exhausting to stack 1A) shall be limited to 20 percent. PSI Energy may request a special exemption pursuant to 326 IAC 5-1-3(d) if proper operation of the turbine justifies such a request. Compliance shall be determined by continuous opacity monitoring in accordance with 40 CFR 75.14. Per 40 CFR 75.14(c), opacity monitoring is not required for when the turbine is operated in simple cycle mode using natural gas only and exhausting through stack 1D.

**D.1.8 Particulate Matter [326 IAC 6-1-2]**

Pursuant to 326 IAC 6-1-2(a), the PM emissions from the combustion turbine stack shall not exceed 0.03 grains per dry standard cubic foot.

**D.1.9 Preventive Maintenance Plan [326 IAC 2-7-5(13)]**

A Preventive Maintenance Plan (PMP), in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for this emissions unit and its control device.

**D.1.10 Unit 1 Removal [326 IAC 2-2]**

Pursuant to CP 167-2610-00021 (Issued May 27, 1993), coal-fired boiler No. 1 (Unit 1) at the Wabash Generating Station shall remain permanently inoperable. (This boiler was removed from service on December 31, 1994.)

**Compliance Determination Requirements**

**D.1.11 NSPS Test Methods and Procedures [326 IAC 12][40 CFR 60.335]**

- (a) Pursuant to 40 CFR 60.335(a), the Permittee shall use analytical methods and procedures that are accurate to within 5 percent and are approved by the IDEM, OAQ and VCAPC to determine the nitrogen content of the fuel being fired.
- (b) Pursuant to 40 CFR 60.335(b), the Permittee, in conducting the performance tests required in 40 CFR 60.8, shall use as reference methods and procedures the test methods in appendix A of this part or other methods and procedures as specified in this section, except as provided for in 40 CFR 60.8(b). Acceptable alternative methods and procedures are given in paragraph (f) of this Condition.
- (c) Pursuant to 40 CFR 60.335(c), the Permittee shall determine compliance with the nitrogen oxides and sulfur dioxide standards in Condition D.1.2 and Condition D.1.4 as follows:

- (1) The nitrogen oxides emission rate ( $\text{NO}_x$ ) shall be computed for each run using the following equation:

$$\text{NO}_x = (\text{NO}_{x0})(P_r/P_o)^{0.5} e^{19(H_o-0.00633)}(288K/T_a)1.53$$

where:  $\text{NO}_x$ = emission rate of  $\text{NO}_x$  at 15 percent  $\text{O}_2$  and ISO standard conditions, volume percent;

$\text{NO}_{x0}$ = observed  $\text{NO}_x$  concentration, ppm by volume;

$P_r$ = reference combustor inlet absolute pressure at 101.3 kilopascals ambient pressure, mm Hg;

$P_o$ = observed combustor inlet absolute pressure at test, mm Hg;

$H_o$ = observed humidity of ambient air, g  $\text{H}_2\text{O}$ /g air;

$e$ = transcendental constant, 2.718; and

$T_a$ = ambient temperature,  $^{\circ}\text{K}$ .

- (2) The monitoring device of Condition D.1.12 shall be used to determine the fuel consumption and the water-to-fuel ratio necessary to comply with Condition D.1.2 at 30, 50, 75, and 100 percent of peak load or at four points in the normal operating range of the gas turbine, including the minimum point in the range and peak load. All loads shall be corrected to ISO conditions using the appropriate equations supplied by the manufacturer.
- (3) Method 20 shall be used to determine the nitrogen oxides, sulfur dioxide, and oxygen concentrations. The span values shall be 300 ppm of nitrogen oxide and 21 percent oxygen. The  $\text{NO}_x$  emissions shall be determined at each of the load conditions specified in paragraph (c)(2) of this Condition.
- (d) Pursuant to 40 CFR 60.335(d), the owner or operator shall determine compliance with the sulfur content standard in Condition D.1.4 as follows: ASTM D 2880-71 shall be used to determine the sulfur content of liquid fuels and ASTM D 1072-80, D 3031-81, D 4084-82, or D 3246-81 shall be used for the sulfur content of gaseous fuels (incorporated by reference - see 40 CFR 60.17). The applicable ranges of some ASTM methods mentioned above are not adequate to measure the levels of sulfur in some fuel gases. Dilution of samples before analysis (with verification of the dilution ratio) may be used, subject to the approval of the IDEM, OAQ and VCAPC.
- (e) Pursuant to 40 CFR 60.335(e), to meet the requirements of Condition D.1.13, the Permittee shall use the methods specified in paragraphs (a) and (b) of this Condition to determine the nitrogen and sulfur contents of the fuel being burned. The analysis may be performed by the Permittee, a service contractor retained by the Permittee, the fuel vendor, or any other qualified agency.
- (f) Pursuant to 40 CFR 60.335(f) the Permittee may use the following alternatives to the reference methods and procedures specified in this condition: Instead of using the equation in paragraph (c)(1) of this Condition, manufacturers may develop ambient condition correction factors to adjust the nitrogen oxides emission level measured by the performance test as provided in 40 CFR 60.8 to ISO standard day conditions. These factors are developed for each gas turbine model they manufacturer in terms of combustion inlet pressure, ambient air pressure, ambient air humidity, and ambient air temperature. They shall be substantiated with data and must be approved for use by the IDEM, OAQ and VCAPC before the initial performance test required by 40 CFR 60.8. Notices of approval of custom ambient condition correction factors will be published in the Federal Register.

#### D.1.12 Nitrogen Oxide Controls

Pursuant to CP 167-2610-00021 (Issued May 27, 1993) and SSM 167-11328-00021 (issued January 27, 2000), the steam injection shall be used to control nitrogen oxide emissions to the levels required in Condition D.1.2 and D.1.3. The proper steam injection ratios at various levels was determined during initial compliance testing (pursuant to 40 CFR 60.335) and an injection schedule (based on the fuel being used) was established and programed into the control system.

The steam injection system shall be in service and operating at the appropriate rate whenever the turbine is in operation, except for the time specified for start-up and shutdown period.

**D.1.13 NSPS Monitoring of Emissions [326 IAC 12][40 CFR 60.334]**

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- (a) The Permittee shall install and operate a continuous monitoring system to monitor and record the fuel consumption and the ratio of water (steam) to fuel being fired in the turbine. This system shall be accurate to within 5.0 percent and shall be approved by IDEM, OAQ and VCAPC.
- (b) The Permittee shall monitor sulfur content and nitrogen content of the fuel being fired in the turbine. The custom schedule for the combustion turbine shall be as follows:
  - (1) Monitor the natural gas combusted through the analysis of pipeline gas from the natural gas supplier. Gas samples shall be taken once a calendar quarter at the closest proximity to the site of the turbine. In the event of less than 30 days of the 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. Quarterly sampling and analysis of the gas shall be performed according to ASTM methods in 40 CFR 60.335(a) and 60.335(d).
- (c) Periods of excess emissions that shall be reported are defined as follows:
  - (1) Nitrogen oxides. Any one-hour period 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.1.2 by the performance test required in 40 CFR 60.8 or 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 performance test required in 40 CFR 60.8. Each report shall include 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 § 60.335(a).
  - (2) Sulfur dioxide. Any daily period during which the sulfur content of the fuel being fired in the gas turbine exceeds 0.8 percent.
  - (3) Ice fog. Each period during which an exemption provided in Condition D.1.2 is in effect shall be reported in writing to the Administrator quarterly. For each period the ambient conditions existing during the period, the date and time the air pollution control system was deactivated, and the date and time the air pollution control system was reactivated shall be reported. All quarterly reports shall be postmarked by the 30<sup>th</sup> day following the end of each calendar quarter.

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

**D.1.14 Record Keeping Requirements**

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- (a) To document compliance with Conditions D.1.2, D.1.3, and D.1.4 the Permittee shall maintain all records generated in accordance with Conditions D.1.11 and D.1.12.
- (b) To document compliance with Conditions D.1.5 and D.1.6 the Permittee shall maintain records containing the information necessary. The information shall, as a minimum, contain the following information:
  - (1) The date, fuel, and times for all periods of turbine operation;
  - (2) The maximum load and corresponding steam to fuel ratio for each period of operation (including a comparison to the demonstrated proper injection rate for the specific fuel);
  - (3) The fuel type, consumption and actual ratio of steam to fuel during all periods of the turbine operation;
  - (4) The sulfur content of the fuel;
  - (5) The nitrogen content of each fuel being combusted (in percent by weight); and
  - (6) Records of NOx and SO2 CEM data.
- (c) To document compliance with Section C - Opacity and Condition D.1.7, the Permittee shall maintain records in accordance with (1) through (3) below. Records shall be complete and

sufficient to establish compliance with the limits established in Section C - Opacity and Condition D.1.7.

- (1) Data and results from the most recent stack test.
  - (2) All continuous opacity monitoring data, pursuant to 326 IAC 3-5 and 40 CFR 75.14.
  - (3) The results of all visible emission (VE) notations and Method 9 visible emission readings taken during any periods of COM downtime.
- (d) To document compliance with Condition D.1.9, the Permittee shall maintain records of any additional inspections prescribed by the Preventive Maintenance Plan.
- (e) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

#### D.1.15 Reporting Requirements

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- (a) The Permittee shall submit the following information on a quarterly basis:
- (1) Records of excess NO<sub>x</sub> emissions (defined in 326 IAC 3-5-7 and 40 CFR Part 60.7) from the continuous emissions monitoring system. These reports shall be submitted within thirty (30) calendar days following the end of each calendar quarter and in accordance with Section C - General Reporting Requirements of this permit.
  - (2) A quarterly excess emissions report shall be submitted, based on any continuous opacity monitor (COM) required by this section, pursuant to 326 IAC 3-5-7. These reports shall be submitted within thirty (30) calendar days following the end of each calendar quarter and in accordance with Section C - General Reporting Requirements, of this permit.

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

- (b) The Permittee shall submit the following information pursuant to 40 CFR 60.334 and 40 CFR 60.7:
- To document compliance with Conditions D.1.2 and D.1.4, pursuant to 40 CFR 60.334, excess emissions and monitoring system performance (MSP) reports shall be submitted to the in accordance with Section C – General Reporting Requirements semi-annually for each six month period in the calendar year. All semi-annual reports shall be postmarked by the 30<sup>th</sup> day following the end of each six-month period. For the purpose of reports under 40 CFR 60.7(c), periods of excess emissions that shall be reported are defined as follows:
- (1) For nitrogen oxides: Any period 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 performance test required in 40 CFR 60.8.
  - (2) For sulfur dioxide: Any daily period which the sulfur content of the fuel being fired in the gas turbine exceeds 0.8 percent.

## SECTION D.2 FACILITY OPERATION CONDITIONS

### Facility Description [326 IAC 2-7-5(15)]

Repowering Auxiliary Boiler fired on natural gas only, identified as Unit 1B, constructed in 1995, with a nominal rated capacity of 144 million BTU per hour, using low NOx burners as NOx control, and exhausting to Stack 1B with continuous emission monitors for NOx and CO<sub>2</sub>.

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

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

#### D.2.1 General Provisions Relating to NSPS [326 IAC 12][40 CFR 60, Subpart A]

The provisions of 40 CFR Part 60, Subpart A - General Provisions, which are incorporated under 326 IAC 12, apply to the boiler (Unit 1B) except when otherwise specified in 40 CFR Part 60, Subpart Db.

#### D.2.2 New Source Performance Standard (NSPS) [326 IAC 12][40 CFR 60, Subpart Db]

Pursuant to 326 IAC 12 and 40 CFR 60, Subpart Db (Standards of Performance for Industrial-Commercial-Institutional Steam Generating Units) and Construction Permit CP 167-2610-00021, issued on May 27, 1993, the nitrogen content of the fuel shall not exceed 0.30 weight percent.

#### D.2.3 Particulate Matter [326 IAC 6-1-2]

Pursuant to 326 IAC 6-1-2(b)(3) all gaseous fuel-fired steam generators (Unit 1B) shall not emit a particulate matter content greater than 0.01 grain per dry standard cubic foot.

#### D.2.4 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 this facility and its emission control devices.

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

#### D.2.5 Record Keeping Requirements

- (a) To document compliance with Condition D.2.2, the Permittee shall maintain records in accordance with 40 CFR 60.49b.
- (b) To document compliance with Condition D.2.4, 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.3 FACILITY OPERATION CONDITIONS

### Facility Description [326 IAC 2-7-5(15)]

1. Natural gas fired boiler, identified as Unit 1C, constructed in 2001, with a nominal rated capacity of 397.8 million BTU per hour, using low NO<sub>x</sub> burners with flue gas recirculation as NO<sub>x</sub> control, and exhausting to stack 1C with continuous emission monitors for NO<sub>x</sub>, CO<sub>2</sub>, and CO.
2. Fuel preheater, identified as Unit 1E, constructed in 2001, with a nominal rated capacity of 7.13 million BTU per hour, utilizing natural gas for fuel, using a low emission rate burner for NO<sub>x</sub> control, and exhausting to stack 1E.

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

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

#### D.3.1 General Provisions Relating to NSPS [326 IAC 12][40 CFR 60, Subpart A]

The provisions of 40 CFR Part 60, Subpart A - General Provisions, which are incorporated under 326 IAC 12, apply to the boiler (Unit 1C) except when otherwise specified in 40 CFR Part 60, Subpart Da.

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

Pursuant to 326 IAC 12 and 40 CFR 60, Subpart Da (Standards of Performance for Electric Utility Steam Generating Units for Which Construction is Commenced After September 18, 1978), emissions from Unit 1C shall not exceed the following:

- (a) for particulate matter:
  - (1) Three-hundredths (0.03) pound PM per million Btu (MMBtu) heat input when combusting gaseous fuel. [40 CFR 60.42a(a)(1)]
  - (2) Twenty percent (20%) opacity (six-minute average), except for one six-minute period per hour of not more than twenty-seven percent (27%) opacity. [40 CFR 60.42a(b)]
- (b) for sulfur dioxide: (While combusting liquid or gaseous fuels):
  - (1) Eight-tenths (0.80) pound SO<sub>2</sub> per million Btu (MMBtu) heat input and ninety percent (90%) reduction, or
  - (2) Less than two-tenths (0.20) pound SO<sub>2</sub> per million Btu (MMBtu) heat input and zero percent (0%) reduction (while combusting gaseous fuels). [40 CFR 60.43a(b)(1) and (2)]
- (c) for nitrogen oxides:
  - (1) Two-tenths (0.20) pound NO<sub>x</sub> per million Btu (MMBtu) heat input and twenty-five (25%) reduction while combusting gaseous fuels. [40 CFR 60.44a(a)(1) and (2)]

#### D.3.3 CO Emission Limitations [326 IAC 2-2]

Pursuant to SSM 167-11328-00021 issued on January 27, 2000, the combined emissions of CO from the boiler (Unit 1C) and the fuel preheater (Unit 1E) shall be less than one hundred (100) tons per 12 consecutive month period with compliance demonstrated at the end of each month. Compliance with this limit makes 326 IAC 2-2 (Prevention of Significant Deterioration (PSD)) not applicable.

#### D.3.4 Particulate Matter [326 IAC 6-1-2]

Pursuant to 326 IAC 6-1-2(b)(3) the gaseous fuel-fired steam generators (Unit 1E) must not emit a particulate matter content greater than 0.01 grain per dry standard cubic foot.

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

A Preventive Maintenance Plan (PMP), in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for these facilities and any emission control devices.

**Compliance Determination Requirements**

D.3.6 NSPS Compliance Provisions [326 IAC 12][40 CFR 60, Subpart Da]

- (a) Compliance with the pound per million Btu (MMBtu) PM emission limitation in Condition D.3.2 constitutes compliance with the percent reduction requirements for PM in Condition D.3.2. [40 CFR 60.46a(a)]
- (b) Compliance with the pound per million Btu (MMBtu) NO<sub>x</sub> emission limitations in Condition D.3.2 constitutes compliance with the percent reduction requirements for NO<sub>x</sub> in Condition D.3.2. [40 CFR 60.46a(b)]
- (c) The PM and NO<sub>x</sub> emission limitations in Condition D.3.2 apply at all times except during periods of startup, shutdown, or malfunction. [40 CFR 60.46a(c)]
- (d) The SO<sub>2</sub> emission limitations in Condition D.3.2 apply at all times except during periods of startup, shutdown, or when emergency conditions exist and the procedures under 40 CFR 40.46a(d) are implemented. [40 CFR 60.46a(c)]
- (e) Compliance with the SO<sub>2</sub> and NO<sub>x</sub> emission limitations and SO<sub>2</sub> percent reductions requirements in Condition D.3.2 shall be based on a thirty (30) day rolling average. Compliance is determined by calculating the arithmetic average of all hourly emission rates for SO<sub>2</sub> and NO<sub>x</sub> for the 30 successive boiler operating days, except for data obtained during startup, shutdown, malfunction (NO<sub>x</sub> only), or emergency conditions (SO<sub>2</sub> only).
- (f) Compliance with the visible emission limitation in Condition D.3.2 shall be determined by 40 CFR 60, Appendix A, Method 9 and 40 CFR 60.11.
- (g) If the Permittee has not obtained the minimum quantity of emission data (specified under 40 CFR 60.47a), compliance may be determined by following the procedures in section 7 of 40 CFR 60, Appendix A, Method 19.

D.3.7 NSPS Compliance Determination Procedures and Methods [326 IAC 12][40 CFR 60.48a]

Pursuant to 40 CFR 60.48a, the Permittee shall use methods and procedures in Appendix A of 40 CFR 60 in order to properly conduct the performance tests required under 40 CFR 60.8. (Section 60.8(f) does not apply for SO<sub>2</sub> and NO<sub>x</sub> in this case). The procedures, along with acceptable alternative methods are as follows:

- (a) The Permittee shall determine compliance with the particulate matter standards under Condition D.3.2 and the opacity standards under Condition D.3.2 as follows:
  - (1) The dry basis F factor (O<sub>2</sub>) procedures in Method 19 shall be used to compute the emission rate of particulate matter.
  - (2) For the particulate matter concentration, Method 5 shall be used at affected facilities without wet FGD systems and Method 5B shall be used after wet FGD systems.
    - (i) The sampling time and sample volume for each run shall be at least 120 minutes and 1.70 dscm (60 dscf). The probe and filter holder heating system in the sampling train may be set to provide an average gas temperature of no greater than 160±14 EC (320±25 EF).
    - (ii) For each particulate run, the emission rate correction factor, integrated or grab sampling and analysis procedures of Method 3B shall be used to determine the O<sub>2</sub> concentration. The O<sub>2</sub> sample shall be obtained simultaneously with, and at the same traverse points as, the particulate run. If the particulate run has more than 12 traverse points, the O<sub>2</sub> traverse points may be reduced to 12 provided

that Method 1 is used to locate the 12 O<sub>2</sub> traverse points. If the grab sampling procedure is used, the O<sub>2</sub> concentration for the run shall be the arithmetic mean of all the individual O<sub>2</sub> concentrations at each traverse point.

- (3) Method 9 and the procedures in § 60.11 shall be used to determine opacity.
- (b) The Permittee shall determine compliance with the sulfur dioxide standard in Condition D.3.2 as follows:
  - (1) The appropriate procedures from Method 19 shall be used to determine the emission rate.
- (c) The Permittee shall determine compliance with the nitrogen oxides standard in Condition D.3.2 as follows:
  - (1) The appropriate procedures in Method 19 shall be used to determine the emission rate of NO<sub>x</sub>.
  - (2) The continuous monitoring system in § 60.47a (c) and (d) shall be used to determine the concentrations of NO<sub>x</sub> and CO<sub>2</sub> or O<sub>2</sub>.
- (d) The Permittee may use the following alternative methods and procedures, as applicable:
  - (1) For Method 5 or 5B, Method 17 may be used at facilities with or without wet FGD systems if the stack temperature at the sampling location does not exceed an average temperature of 160 EC (320 EF). The procedures of §§ 2.1 and 2.3 of Method 5B may be used in Method 17 only if it is used after wet FGD systems. Method 17 shall not be used after wet FGD systems if the effluent is saturated or laden with water droplets.
  - (2) The Fc factor (CO<sub>2</sub>) procedures in Method 19 may be used to compute the emission rate of particulate matter under the stipulations of § 60.46(d)(1). The CO<sub>2</sub> shall be determined in the same manner as the O<sub>2</sub> concentration.

#### D.3.8 Continuous Emissions Monitoring [326 IAC 3-5] [326 IAC 12] [40 CFR 60, Subpart Da]

Pursuant to 326 IAC 3-5 (Continuous Monitoring of Emissions) and CFR 60, Subpart Da, continuous emission monitoring systems for Unit 1C shall be calibrated, maintained, and operated for measuring NO<sub>x</sub>, O<sub>2</sub> or CO<sub>2</sub> and CO, which meet the performance specifications of 326 IAC 3-5-2 and 40 CFR 60.47a.

#### D.3.9 NSPS Emission Monitoring [326 IAC 12][40 CFR 60.47a]

- (a) Pursuant to 40 CFR 60.47a(c), the Permittee shall calibrate, maintain, and operate a continuous monitoring system for measuring nitrogen oxide emissions discharged to the atmosphere. The output of this monitoring system shall be recorded.
- (b) Pursuant to 40 CFR 60.47a(d), the Permittee shall, at the location where the nitrogen oxide monitor is, calibrate, maintain, and operate a continuous oxygen or carbon dioxide continuous monitoring system. The output of this monitoring system shall be recorded.
- (c) Pursuant to 40 CFR 60.47a(e), the monitoring systems specified above shall be operated (and data recorded) at all times, including periods of startup, shutdown, malfunction, or emergency conditions, except for continuous monitoring system breakdowns, repairs, calibration checks, and zero and span adjustments.
- (d) Pursuant to 40 CFR 60.47a(f), the Permittee shall obtain emission data for at least 18 hours in at least 22 out of 30 successive boiler operating days. If this minimum data requirements is not met with a continuous emission monitoring system, the Permittee shall supplement emission data with other monitoring systems approved by IDEM, OAQ and VCAPC or the reference methods below.
  - (1) Pursuant to 40 CFR 60.47a(h), when it become necessary to supplement continuous monitoring system data to meet the minimum data requirements, the Permittee shall use the following reference methods:

- (A) Method 7 shall be used to determine the NO<sub>x</sub> concentration at the same location as the NO<sub>x</sub> monitor. Samples shall be taken at 30-minute intervals. The arithmetic average of two consecutive samples represents a 1-hour average.
  - (B) The emission rate correction factor, integrated bag sampling and analysis procedure of Method 3B shall be used to determine the O<sub>2</sub> or CO<sub>2</sub> concentration at the same location as the O<sub>2</sub> or CO<sub>2</sub> monitor. Samples shall be taken for at least 30 minutes in each hour. Each sample represents a 1-hour average.
  - (C) The procedure in Method 19 shall be used to compute each 1-hour average concentration in ng/J (lb/million BTU) heat input.
- (2) Pursuant to 40 CFR 60.47a(j), the following alternatives to the reference methods and procedures may be used:
- (A) For Method 7, Method 7A, 7C, 7D, or 7E may be used. If Method 7C, 7D, or 7E is used, the sampling time for each run shall be 1-hour.
  - (B) For Method 3, Method 3A or 3B may be used if the sampling time is 1 hour.
  - (C) For Method 3B, Method 3A may be used.
- (e) Pursuant to 40 CFR 60.47a(g), the 1-hour averages are used to calculate average emission rates under the Compliance Provisions section above. The 1-hour averages are calculated using the data points required under 40 CFR 60.13(b). At least two data points must be used to calculate the 1-hour averages.
- (f) Pursuant to 40 CFR 60.47a(i) the Permittee shall use the following methods and procedures to conduct monitoring system performance evaluations under 40 CFR 60.13(c) and calibration checks under 40 CFR 60.13(d). Acceptable alternative methods and procedures are given in paragraph (d)(2) of this Condition.
- (1) Methods 6, 7, and 3B, as applicable, shall be used to determine O<sub>2</sub>, SO<sub>2</sub>, and NO<sub>x</sub> concentrations.
  - (2) SO<sub>2</sub> or NO<sub>x</sub> (NO), as applicable, shall be used for preparing the calibration gas mixtures (in N<sub>2</sub>, as applicable) under Performance Specification 2 of Appendix B of this part.
  - (3) The span value for a continuous monitoring system measuring nitrogen oxides is 500 ppm.

#### D.3.10 Continuous Emission Monitoring System (CEMS) [326 IAC 3-5]

- (a) Pursuant to 326 IAC 3-5-1(d)(1), the Permittee with an emission limitation or permit requirement established under 326 IAC 2-1-3(i)(8) shall be required to calibrate, certify, operate and maintain a continuous monitoring system for measuring emissions rates (for CO in this case) in pounds per hour from stack 1C in accordance with 326 IAC 3-5-2 and 326 IAC 3-5-3.
- (b) The emissions from the fuel preheater (Unit 1E) shall be estimated by utilizing the potential emissions (determined using the manufacturer's maximum emission rate)
- (c) The Permittee shall submit to IDEM, OAQ and VCAPC, within ninety (90) days after monitor installation, a complete written continuous monitoring standard operating procedure (SOP), in accordance with the requirements of 326 IAC 3-5-4. This SOP was submitted on April 16, 2001.
- (d) The Permittee shall record the output of the system and shall perform the required record keeping, pursuant to 326 IAC 3-5-6, and reporting, pursuant to 326 IAC 3-5-7.
- (e) In instances of downtime, the Permittee shall use the manufacturer's specification of maximum emission rate to demonstrate compliance with the limits established in Condition D.3.3 if the emission unit (1C) is in operation at the time.
- (f) After twelve (12) consecutive months of operation, the Permittee may submit to IDEM, OAQ and VCAPC alternative emission factors and their corresponding operating parameters to use in lieu of the manufacturer's emission rates in instances of downtime. The alternative emissions factors must be approved by IDEM, OAQ and VCAPC prior to use in calculating emissions for the limitations established in this permit. The alternative emission factors shall be based upon

collected monitoring and/or approved performance tests. In the event that the information submitted does not contain sufficient data to establish appropriate emission factors, the Permittee shall continue to collect data until appropriate emission factors can be established. During this period of time, the Permittee shall continue to use the manufacturer's maximum emission rates in periods of downtime.

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

#### **D.3.11 Record Keeping Requirements**

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- (a) To document compliance with Condition D.3.3 and D.3.10, the Permittee shall maintain records in accordance with (1) through (3) below. Records shall be complete and sufficient to establish compliance with the limits established in Condition D.3.3 and D.3.10.
  - (1) All continuous CO monitoring data, pursuant to 326 IAC 3-5.
  - (2) Records of the type and amount of fuel used in each unit (Unit 1C and Unit 1E).
  - (3) Measured and calculated emission summaries.
- (b) To document compliance with Conditions D.3.2, D.3.6, and D.3.7, the Permittee shall maintain records to comply with the NSPS Reporting Requirements outlined in Condition D.3.12 of this section. Records shall be complete and sufficient to establish compliance with the limit established in Condition D.3.2, D.3.6, and D.3.7.
- (c) To document compliance with Condition D.3.5, the Permittee shall maintain records of any additional inspections prescribed by the Preventive Maintenance Plan.
- (d) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

#### **D.3.12 NSPS Reporting Requirements [326 IAC 12][40 CFR 60.49a]**

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Pursuant to 40 CFR 60.49a, the Permittee shall report the following quarterly:

- (a) For sulfur dioxide and nitrogen oxides the following information is reported to the IDEM, OAQ and VCAPC for each 24-hour period.
  - (1) Calendar Date;
  - (2) The average sulfur dioxide and nitrogen oxide emission rates (ng/J or lb/million BTU) for each 30 successive boiler operating days, ending with the last 30-day period in the quarter; reasons for non-compliance with the emission standards; and, description of corrective actions taken;
  - (3) Identification of the boiler operating days for which pollutant or diluent data have not been obtained for at least 18 hours of operation of the facility; justification for not obtaining sufficient data; and description of corrective actions taken;
  - (4) Identification of the times when emissions data have been excluded from the calculation of average emission rates because of startup, shutdown, malfunction (NO<sub>x</sub> only), emergency conditions (SO<sub>2</sub> only), or other reasons, and justification for excluding data for reasons other than startup, shutdown, malfunction, or emergency conditions;
  - (5) Identification of "F" factor used for calculations, method of determination, and type of fuel combusted;
  - (6) Identification of times when hourly averages have been obtained based on manual sampling methods;
  - (7) Identification of the times when the pollutant concentration exceeded full span of the continuous monitoring system; and
  - (8) Description of any modifications to the continuous monitoring system which could affect the ability of the continuous monitoring system to comply with Performance Specifications 2 or 3.
- (b) If the minimum quantity of emission data as required by Condition D.3.9(d) is not obtained for any 30 successive boiler operating days, the following information obtained under the requirements of D.3.9(e) is reported to the IDEM, OAQ and VCAPC for that 30-day period:

- (1) The number of hourly averages available for outlet emission rates ( $n_o$ );
  - (2) The standard deviation of hourly averages for outlet emission rates ( $s_o$ );
  - (3) The applicable potential combustion concentration; and
  - (4) The ratio of the upper confidence limit for the mean outlet emission rate ( $E_o^*$ ) and the allowable emission rate ( $E_{std}$ ) as applicable.
- (c) For any periods for which nitrogen oxides emissions data is not available, the owner or operator of the affected facility shall submit a signed statement indicating if any changes were made in operation of the emission control system during the period of data unavailability. Operations of the control system and affected facility during periods of data unavailability are to be compared with operation of the control system and affected facility before and following the period of data unavailability.
- (d) The Permittee shall submit a signed statement indicating whether:
- (1) The required continuous monitoring system calibration, span, and drift checks or other periodic audits have or have not been performed as specified.
  - (2) The data used to show compliance was or was not obtained in accordance with approved methods and procedures of this part and is representative of plant performance.
  - (3) The minimum data requirements have or have not been met; or, the minimum data requirements have not been met for errors that were unavoidable.
  - (4) Compliance with the standards has or has not been achieved during the reporting period.
- (e) The Permittee shall submit the written reports required under this section and 40 CFR 60, subpart A to the IDEM, OAQ and VCAPC for every calendar quarter. All quarterly reports shall be postmarked by the 30<sup>th</sup> day following the end of each calendar quarter.

#### D.3.13 Reporting Requirements

- (a) The Permittee shall submit a quarterly excess emissions report, if applicable, based on the continuous emissions monitor (CEM) data for CO, pursuant to 326 IAC 3-5-7. These reports shall be submitted within thirty (30) calendar days following the end of each calendar quarter and in accordance with Section C - General Reporting Requirements of this permit. 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 summary of the information to document compliance with the emission limitation in Condition D.3.3 shall be submitted within thirty (30) calendar days following the end of each calendar quarter and in accordance with Section C - General Reporting. This report shall include the following information: monthly CO emissions from Unit 1C (tons); monthly CO emissions from Unit 1E (tons); combined monthly CO emissions from the two (2) Units (Unit 1C and 1E) (tons); total prior eleven (11) consecutive months CO emissions (tons) from the two (2) Units combined; and the total twelve (12) consecutive month CO emissions (tons) from the two (2) Units combined. 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)]

1. Wall fired coal electric utility boiler (pulverized - dry bottom), identified as Unit 2, constructed in 1953, using #2 fuel oil as ignition fuel, with a nominal rated heat input capacity of 913.8 million BTU per hour, using modified burner design (low NOx) for NOx control and electrostatic precipitator (ESP) for particulate control, exhausting to Stack A. Stack A is equipped with a continuous opacity monitor (COM) to monitor opacity as well as continuous emission monitors for NOx, CO<sub>2</sub>, SO<sub>2</sub>, and volumetric flow rate.
2. Wall fired coal electric utility boiler (pulverized - dry bottom), identified as Unit 3, constructed in 1954, using #2 fuel oil as ignition fuel, with a nominal rated heat input capacity of 922.9 million BTU per hour, using modified burner design (low NOx) for NOx control and electrostatic precipitator (ESP) for particulate control, exhausting to Stack A. Stack A is equipped with a continuous opacity monitor (COM) to monitor opacity as well as continuous emission monitors for NOx, CO<sub>2</sub>, SO<sub>2</sub>, and volumetric flow rate.
3. Wall fired coal electric utility boiler (pulverized - dry bottom), identified as Unit 4, constructed in 1955, using #2 fuel oil as ignition fuel, with a nominal rated heat input capacity of 922.9 million BTU per hour, using modified burner design (low NOx) for NOx control and electrostatic precipitator (ESP) for particulate control, exhausting to Stack A. Stack A is equipped with a continuous opacity monitor (COM) to monitor opacity as well as continuous emission monitors for NOx, CO<sub>2</sub>, SO<sub>2</sub>, and volumetric flow rate.
4. Wall fired coal electric utility boiler (pulverized - dry bottom), identified as Unit 5, constructed in 1956, using #2 fuel oil as ignition fuel, with a nominal rated heat input capacity of 1096.2 million BTU per hour, using modified burner design (low NOx) for NOx control and electrostatic precipitator (ESP) for particulate control, exhausting to Stack A. Stack A is equipped with a continuous opacity monitor (COM) to monitor opacity as well as continuous emission monitors for NOx, CO<sub>2</sub>, SO<sub>2</sub>, and volumetric flow rate.
5. Tangential fired coal electric utility boiler (pulverized - dry bottom, tangential), identified as Unit 6, constructed in 1968, using #2 fuel oil as ignition fuel, with a nominal rated heat input capacity of 2999.0 million BTU per hour, using modified burner design (low NOx) for NOx control and electrostatic precipitator (ESP) for particulate control, exhausting to Stack A. Stack A is equipped with a continuous opacity monitor (COM) to monitor opacity as well as continuous emission monitors for NOx, CO<sub>2</sub>, SO<sub>2</sub>, and volumetric flow rate.

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

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

#### D.4.1 Particulate Matter (PM) [326 IAC 6-1-13]

Pursuant to 326 IAC 6-1-13 (Particulate limits - Vigo County) the particulate emissions from boilers (Units 2, 3, 4, 5, and 6) shall not exceed 0.1338 pounds of particulate matter per million BTU.

#### D.4.2 Sulfur Dioxide (SO<sub>2</sub>) [326 IAC 7-4-3]

Pursuant to 326 IAC 7-4-3 (Vigo County Sulfur Dioxide emission limitations) the sulfur dioxide emissions from boilers (Units 2, 3, 4, 5, and 6) shall not exceed 4.04 pounds of sulfur dioxide per MM BTU.

#### D.4.3 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) During boiler startups, an exemption from the forty percent (40%) opacity limit is allowed for up to two (2) hours (twenty (20) six (6) minute averaging periods) or until the flue gas temperature reaches two hundred forty (240) degrees Fahrenheit, whichever occurs first. In addition, an exemption of up to five (5) hours (fifty (50) six (6) minute averaged periods) is allowed for one (1) unit startup each calendar year.

- (2) During boiler shutdowns, an exemption from the forty percent (40%) opacity limit is allowed for up to two (2) hours (twenty (20) six (6) minute averaged periods).
- (3) 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. [326 IAC 5-1-3(b)]
- (c) If a facility cannot meet the opacity limitations in (b) of this condition, the Permittee may submit a written request to IDEM, OAQ and VCAPC, for a temporary alternative opacity limitation in accordance with 326 IAC 5-1-3(d). The Permittee must demonstrate that the alternative limit is needed and justifiable.

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

- (a) All coal burned, including coal treated with any additive, shall meet the ASTM definition of coal.
- (b) The burning of hazardous waste, as defined by 40 CFR 261, is prohibited in these facilities (Units 2, 3, 4, 5, and 6). Any boiler or condenser tube chemical cleaning waste liquids evaporated in the boiler, and any, 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 evaporated in the boiler shall only contain the cleaning solution and two full volume boiler or condenser rinses.

D.4.5 Hourly Particulate Matter and SO<sub>2</sub> Emission Limitations [326 IAC 7-4-3][326 IAC 6-1-13]

In accordance with the modeling analysis required for the approval of 326 IAC 7-4-3 and 326 IAC 6-1-13, as well as 40 CFR 52.770(c)(66)(i)(A), the hourly particulate matter and sulfur dioxide emissions shall not exceed the following:

- (a) The combined particulate matter emissions from Units 2, 3, 4, 5, and 6 shall not exceed a total of 848.4 pounds per hour (lbs/hr), with compliance demonstrated using a 3-hour average.
- (b) The combined sulfur dioxide (SO<sub>2</sub>) emissions from Units 2, 3, 4, 5, and 6 shall not exceed a total of 25,618 pounds per hour (lbs/hr), with compliance demonstrated using a three hour block average (three hour block periods ending at 03:00, 06:00, 09:00, 12:00, 15:00, 18:00, 21:00, and 24:00).

D.4.6 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

- (a) A Preventive Maintenance Plan (PMP), in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for these facilities and their 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 two (2) years;
  - (2) ESP TR set components, performed whenever there is an outage of any nature lasting more than three (3) days, unless such inspections have been performed within the last six (6) months. At a minimum the following inspections shall be performed:
    - (A) Internal inspection of shell for corrosion (including but not limited to doors, hatches, insulator housings, and roof area).

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

### Compliance Determination Requirements

#### D.4.7 Testing Requirements [326 IAC 2-7-6(1),(6)] [326 IAC 2-1.1-11]

- (a) Within the two (2) calendar years following the most recent stack test, compliance with the PM limitation in Condition D.4.1 for each Unit (Units 2, 3, 4, 5, and 6) 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. Tests may be conducted individually in the unit duct work, or in Stack A in any combination of units, so long as all units are included in at least one test every two (2) calendar years. Testing shall be conducted in accordance with Section C- Performance Testing.
- (b) The most recent test from (a) above shall be used to establish a correlation between heat input and pounds of particulate matter emission per million BTU of heat input (for each individual unit) to determine compliance with the hourly particulate limitation in Condition D.4.5.

#### D.4.8 Operation of Electrostatic Precipitator [326 IAC 2-7-6(6)]

Except as otherwise provided by statute or rule or in this permit, the electrostatic precipitators (ESPs) shall be in operation at all times that the boilers vented to the ESPs are in operation and combusting coal, except during periods of startup, shutdown, or emergency as described in Condition D.4.3 and Section B - Emergency Provisions.

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

Pursuant to 326 IAC 3-5 (Continuous Monitoring of Emissions), continuous emission monitoring systems for the combined Unit 2, Unit 3, Unit 4, Unit 5, and Unit 6 stack (Stack A) shall be calibrated, maintained, and operated for measuring opacity, which meet the performance specifications of 326 IAC 3-5-2. Continuous monitoring of opacity is not required during periods in which the boilers are not operating and combusting fuel.

#### D.4.10 Sulfur Dioxide Emissions and Sulfur Content [326 IAC 7-2] [326 IAC 7-4-3]

- (a) Pursuant to 326 IAC 7-2-1(c), the Permittee shall demonstrate that the sulfur dioxide emissions do not exceed the equivalent of 4.04 pounds per million BTU 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 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 3-7-3 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 shall not apply. [326 IAC 7-2-1(g)]

**D.4.11 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 or condenser chemical cleaning wastes that will be evaporated, to determine compliance with the Operation Standards condition in this D section.

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

**D.4.12 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 90 percent (90%). T-R set failure resulting in less than 90 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.

**D.4.13 Opacity Readings [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]**

- (a) In the event of opacity exceeding thirty percent (30%) average opacity for three (3) consecutive six (6) minute averaging periods, appropriate response steps shall be taken in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports such that the cause(s) of the excursion are identified and corrected and opacity levels are brought back below thirty percent. Examples of expected response steps include, but are not limited to, boiler loads being reduced, adjustment of flue gas conditioning rate, and ESP T-R sets being returned to service.
- (b) Opacity readings in excess of thirty percent (30%) 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.

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

#### D.4.14 Record Keeping Requirements

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- (a) To document compliance with Section C - Opacity and Conditions D.4.1, D.4.3, and D.4.5, the Permittee shall maintain records in accordance with (1) through (4) below. Records shall be complete and sufficient to establish compliance with the limits established in Section C - Opacity and in Conditions D.4.1 and D.4.3.
- (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; and
  - (4) All ESP parametric monitoring readings.
- (b) To document compliance with Conditions D.4.2 and D.4.5, the Permittee shall maintain records in accordance with (1) through (2) below during coal combustion. Records maintained for (1) through (2) shall be sufficient to demonstrate compliance using a thirty (30) day rolling weighted average and shall be complete and sufficient to establish compliance with the SO<sub>2</sub> limit established in Condition D.4.2.
- (1) All fuel sampling and analysis data, pursuant to 326 IAC 7-2; and
  - (2) Actual fuel usage since last compliance period.
- (c) To document compliance with Condition D.4.5, the Permittee shall maintain records of the 3-hour block average SO<sub>2</sub> and 3-hour average Particulate Matter emissions from Stack A (Units 2, 3, 4, 5, and 6 combined). The particulate matter emission rate shall be developed using actual heat input rate for each unit in conjunction with the respective correlation between heat input and pounds of particulate matter emissions per million BTU heat input from the latest stack test. The SO<sub>2</sub> rate shall be developed using the current coal sulfur analysis and the heat input rates.
- (d) To document compliance with Condition D.4.6, the Permittee shall maintain records of the results of all boiler and emission control equipment inspections, including any additional inspections prescribed by the Preventive Maintenance Plan.
- (e) To document compliance with Condition D.4.12, the Permittee shall maintain records of boiler operation, and the operational status of each T-R set.
- (f) To document compliance with the provisions of 40 CFR 75, the Permittee shall maintain records of all SO<sub>2</sub> and NO<sub>x</sub> CEM data.
- (g) 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 and VCAPC.
- (h) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

#### D.4.15 Reporting Requirements

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- (a) A quarterly summary of opacity exceedances shall be submitted to the addresses 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) A quarterly summary of hourly SO<sub>2</sub> or Particulate Matter exceedances shall be submitted to the addresses 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).
  - (d) 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 reports separately, shall include the following:
    - (1) Date of downtime
    - (2) Time of commencement.
    - (3) Duration of each downtime.
    - (4) Reasons for each downtime.
    - (5) Nature of system repairs and adjustments.

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

## SECTION D.5 FACILITY OPERATION CONDITIONS

### Facility Description [326 IAC 2-7-5(15)]

1. Coal pile maintenance, identified as F-1.
2. Coal handling, identified as F-2.
3. Coal pile wind erosion [326 IAC 6-1-2][326 IAC 6-4]
4. Lime silo: 1388 cubic feet [326 IAC 6-1-2]
5. Lime day bin: 87 cubic feet [326 IAC 6-1-2]
6. Unit 6 hydroveyor [326 IAC 6-1-2]
7. Ash hydroveyor separator Units 1&2 [326 IAC 6-1-2]
8. Ash hydroveyor separator Units 3&4 [326 IAC 6-1-2]
9. Ash hydroveyor separator Unit 5 [326 IAC 6-1-2]
10. Ash pond: 216 acres [326 IAC 6-1-2][326 IAC 6-4]
11. Ash pond management and maintenance [326 IAC 6-1-2]

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

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

#### D.5.1 Particulate Matter (PM) Emissions [326 IAC 6-1-2(a)]

Pursuant to 326 IAC 6-1-2(a), each of these emission units shall not emit greater than 0.03 grain per dry standard cubic foot.

#### D.5.2 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

A Preventive Maintenance Plan (PMP), in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for these facilities and their emission control devices.

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

#### D.5.3 Visible Emissions Notations [326 IAC 2-7-6(1)][326 IAC 2-7-5(1)]

- (a) Visible emission notations of any coal handling unloading and transfer points shall be performed once per shift during normal daylight operations when handling coal. A trained employee shall record whether emissions are normal or abnormal.
- (b) Visible emission notations of any ash handling exhaust point shall be performed once per shift during normal daylight operations when handling ash. A trained employee shall record whether emissions are normal or abnormal.
- (c) Visible emission notations of the ash storage pond shall be performed once per shift during normal daylight operations. A trained employee shall record whether emissions are normal or abnormal.
- (d) If visible emissions are observed crossing the property line or boundaries of the property, right-of-way, or easement on which the source is located, the Permittee shall take reasonable response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation,

Records, and Reports. Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports, shall be considered a violation of this permit.

- (e) If abnormal emissions are observed at an unloading or transfer point, 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.
- (f) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation.
- (g) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.
- (h) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.

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

##### **D.5.4 Record Keeping Requirements**

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- (a) To document compliance with Section C - Opacity and Condition D.5.3, the Permittee shall maintain records of the visible emission notations and all response steps taken and the outcome for each.
- (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)]

1. Diesel Generator, identified as 7A, constructed in 1967, combusting #2 fuel oil, with a nominal rated capacity of 28.6 million BTU per hour, used for intermittent and emergency duty, using no control, and exhausting to stack 7A.
2. Diesel Generator, identified as 7B, constructed in 1967, combusting #2 fuel oil, with a nominal rated capacity of 28.6 million BTU per hour, used for intermittent and emergency duty, using no control, and exhausting to stack 7B.
3. Diesel Generator, identified as 7C, constructed in 1967, combusting #2 fuel oil, with a nominal rated capacity of 28.6 million BTU per hour, used for intermittent and emergency duty, using no control, and exhausting to stack 7C.

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

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

#### D.6.1 Sulfur Dioxide (SO<sub>2</sub>) [326 IAC 7-1.1-2]

Pursuant to 326 IAC 7-1.1-2 (Sulfur Dioxide Emission Limitations), the SO<sub>2</sub> emissions from Units 7A, 7B, and 7C shall not exceed 0.5 pounds per million BTU.

#### D.6.2 Particulate Matter Emission Limitations [326 IAC 6-1-2]

Pursuant to 326 IAC 6-1-2(a), particulate matter emissions from the diesel fired generators (7A, 7B, and 7C) shall not exceed 0.03 grain per dry standard cubic foot.

#### D.6.3 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.6.4 Sulfur Dioxide Emissions and Sulfur Content [326 IAC 7-1.1-2][326 IAC 7-2]

Pursuant to 326 IAC 3-7-4, 326 IAC 7-1.1-2, and 326 IAC 7-2, the Permittee shall demonstrate that the sulfur dioxide emissions do not exceed 0.5 pounds per million BTU, demonstrated on a calendar month average, by:

- (a) Providing vendor analysis of fuel delivered, accompanied by a vendor certification; or
- (b) Providing analysis of fuel oil samples collected and analyzed using the ASTM methods cited in 326 IAC 3-7-4(a).
  - (1) Oil samples shall be collected from the tanker truck load prior to transferring fuel to the storage tank; or
  - (2) Oil samples shall be collected from the storage tank immediately after each addition of fuel to the tank.

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

#### D.6.5 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 (1) month and has been trained in the appearance and characteristics of normal visible emissions for the generators.

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

#### **D.6.6 Record Keeping Requirements**

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- (a) To document compliance with Conditions D.6.1 and D.6.4, the Permittee shall maintain records in accordance with (1) through (5) below. Records maintained shall be complete and sufficient to establish compliance with the SO<sub>2</sub> limit as required in Conditions D.6.1 and D.6.4.
  - (1) Calendar dates covered in the compliance period.
  - (2) Monthly weighted average sulfur content.
  - (3) Fuel heat content.
  - (4) Fuel consumption.
  - (5) Monthly weighted average sulfur dioxide emission rate in pounds per million BTU.
- (b) To document compliance with Condition D.6.5, the Permittee shall maintain records of visible emission notations of the generators' stack exhausts.
- (c) To document compliance with Condition D.6.3, the Permittee shall maintain records of any additional inspections prescribed by the Preventive Maintenance Plan.
- (d) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

#### **D.6.7 Reporting Requirements**

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A summary of the information to document compliance with Condition D.6.1 shall be submitted to the addresses 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.7 FACILITY OPERATION CONDITIONS

### Facility Description [326 IAC 2-7-5(15)]:

1. Thaw pit fuel oil tank: 20,000 gallon (constructed 1990)[326 IAC 12][40 CFR 60, Subpart Kb]
2. Degreaser (maintenance shop): 30 gallon (constructed about 1980) [326 IAC 8-3]
3. Parts cleaner (electric shop): 30 gallon (constructed about 1980) [326 IAC 8-3]
4. Parts cleaner (main floor storage area): 30 gallon (constructed about 1980) [326 IAC 8-3]
5. Two (2) Repowering fuel oil storage tank: 99,500 gallon each (constructed in 1993) [326 IAC 12][40 CFR 60, Subpart Kb]
6. Fuel oil tank: 50,000 gallons (constructed in 1986) [326 IAC 12][40 CFR 60, Subpart Kb]

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

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

#### D.7.1 General Provisions Relating to NSPS [326 IAC 12][60 CFR 60, Subpart A]

The provisions of 40 CFR Part 60, Subpart A - General Provisions, which are incorporated under 326 IAC 12, apply to the fuel oil storage tanks (Thaw pit, two (2) Repowering, and Fuel oil tank) except when otherwise specified in 40 CFR Part 60, Subpart Kb.

#### D.7.2 Volatile Organic Compounds (VOC) [326 IAC 8-3-2]

Pursuant to 326 IAC 8-3-2 (Cold Cleaner Operations), for cold cleaning operations constructed after January 1, 1980 (Maintenance shop, electric shop, and main floor storage area), the Permittee 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.

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

#### D.7.3 NSPS Recordkeeping Requirements [40 CFR 60, Subpart Kb]

All records of each storage vessel (Thaw pit, two (2) Repowering, and Fuel oil tank), as specified in 60.110b(a), shall be kept and made readily accessible for the life of the source. The records shall include the dimension and an analysis showing the capacity of the storage vessel.

**SECTION E**

**TITLE IV CONDITIONS**

Facility Description [326 IAC 2-7-5(15)]

1. Combustion Turbine, identified as Unit 1A, constructed in 1995, with a nominal rated capacity of 1709.1 million BTU per hour (192 megawatt), utilizing syngas or natural gas in combined cycle mode and natural gas in simple cycle mode, utilizing steam injection for NO<sub>x</sub> control, and exhausting to stack 1A (combined cycle mode) or 1D (simple cycle mode). Stack 1A (combined cycle) has continuous emission monitors for SO<sub>2</sub>, NO<sub>x</sub>, CO<sub>2</sub>, and volumetric flow rate as well as a continuous opacity monitor (COM). Stack 1D (bypass) has continuous emission monitors for NO<sub>x</sub> and CO<sub>2</sub>.
2. Wall fired coal electric utility boiler (pulverized - dry bottom), identified as Unit 2, constructed in 1953, using #2 fuel oil as ignition fuel, with a nominal rated heat input capacity of 913.8 million BTU per hour, using modified burner design (low NO<sub>x</sub>) for NO<sub>x</sub> control and electrostatic precipitator (ESP) for particulate control, exhausting to Stack A. Stack A is equipped with a continuous opacity monitor (COM) to monitor opacity as well as continuous emission monitors for NO<sub>x</sub>, CO<sub>2</sub>, SO<sub>2</sub>, and volumetric flow rate.
3. Wall fired coal electric utility boiler (pulverized - dry bottom), identified as Unit 3, constructed in 1954, using #2 fuel oil as ignition fuel, with a nominal rated heat input capacity of 922.9 million BTU per hour, using modified burner design (low NO<sub>x</sub>) for NO<sub>x</sub> control and electrostatic precipitator (ESP) for particulate control, exhausting to Stack A. Stack A is equipped with a continuous opacity monitor (COM) to monitor opacity as well as continuous emission monitors for NO<sub>x</sub>, CO<sub>2</sub>, SO<sub>2</sub>, and volumetric flow rate.
4. Wall fired coal electric utility boiler (pulverized - dry bottom), identified as Unit 4, constructed in 1955, using #2 fuel oil as ignition fuel, with a nominal rated heat input capacity of 922.9 million BTU per hour, using modified burner design (low NO<sub>x</sub>) for NO<sub>x</sub> control and electrostatic precipitator (ESP) for particulate control, exhausting to Stack A. Stack A is equipped with a continuous opacity monitor (COM) to monitor opacity as well as continuous emission monitors for NO<sub>x</sub>, CO<sub>2</sub>, SO<sub>2</sub>, and volumetric flow rate.
5. Wall fired coal electric utility boiler (pulverized - dry bottom), identified as Unit 5, constructed in 1956, using #2 fuel oil as ignition fuel, with a nominal rated heat input capacity of 1096.2 million BTU per hour, using modified burner design (low NO<sub>x</sub>) for NO<sub>x</sub> control and electrostatic precipitator (ESP) for particulate control, exhausting to Stack A. Stack A is equipped with a continuous opacity monitor (COM) to monitor opacity as well as continuous emission monitors for NO<sub>x</sub>, CO<sub>2</sub>, SO<sub>2</sub>, and volumetric flow rate.
6. Tangential fired coal electric utility boiler (pulverized - dry bottom, tangential), identified as Unit 6, constructed in 1968, using #2 fuel oil as ignition fuel, with a nominal rated heat input capacity of 2999.0 million BTU per hour, using modified burner design (low NO<sub>x</sub>) for NO<sub>x</sub> control and electrostatic precipitator (ESP) for particulate control, exhausting to Stack A. Stack A is equipped with a continuous opacity monitor (COM) to monitor opacity as well as continuous emission monitors for NO<sub>x</sub>, CO<sub>2</sub>, SO<sub>2</sub>, and volumetric flow rate.

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

**Acid Rain Program**

**E.1 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.

**SECTION F Nitrogen Oxides Budget Trading Program - NO<sub>x</sub> Budget Permit for NO<sub>x</sub> Budget Units Under 326 IAC 10-4-1(a)**

**ORIS Code:** 1010

**NO<sub>x</sub> Budget Source [326 IAC 2-7-5(15)]**

1. Combustion Turbine, identified as Unit 1A, constructed in 1995, with a nominal rated capacity of 1709.1 million BTU per hour (192 megawatt), utilizing syngas or natural gas in combined cycle mode and natural gas in simple cycle mode, utilizing steam injection for NO<sub>x</sub> control, and exhausting to stack 1A (combined cycle mode) or 1D (simple cycle mode). Stack 1A (combined cycle) has continuous emission monitors for SO<sub>2</sub>, NO<sub>x</sub>, CO<sub>2</sub>, and volumetric flow rate as well as a continuous opacity monitor (COM). Stack 1D (bypass) has continuous emission monitors for NO<sub>x</sub> and CO<sub>2</sub>.
2. Natural gas fired boiler, identified as Unit 1C, constructed in 2001, with a nominal rated capacity of 397.8 million BTU per hour, using low NO<sub>x</sub> burners with flue gas recirculation as NO<sub>x</sub> control, and exhausting to stack 1C with continuous emission monitors for NO<sub>x</sub>, CO<sub>2</sub>, and CO.
3. Wall fired coal electric utility boiler (pulverized - dry bottom), identified as Unit 2, constructed in 1953, using #2 fuel oil as ignition fuel, with a nominal rated heat input capacity of 913.8 million BTU per hour, using modified burner design (low NO<sub>x</sub>) for NO<sub>x</sub> control and electrostatic precipitator (ESP) for particulate control, exhausting to Stack A. Stack A is equipped with a continuous opacity monitor (COM) to monitor opacity as well as continuous emission monitors for NO<sub>x</sub>, CO<sub>2</sub>, SO<sub>2</sub>, and volumetric flow rate.
4. Wall fired coal electric utility boiler (pulverized - dry bottom), identified as Unit 3, constructed in 1954, using #2 fuel oil as ignition fuel, with a nominal rated heat input capacity of 922.9 million BTU per hour, using modified burner design (low NO<sub>x</sub>) for NO<sub>x</sub> control and electrostatic precipitator (ESP) for particulate control, exhausting to Stack A. Stack A is equipped with a continuous opacity monitor (COM) to monitor opacity as well as continuous emission monitors for NO<sub>x</sub>, CO<sub>2</sub>, SO<sub>2</sub>, and volumetric flow rate.
5. Wall fired coal electric utility boiler (pulverized - dry bottom), identified as Unit 4, constructed in 1955, using #2 fuel oil as ignition fuel, with a nominal rated heat input capacity of 922.9 million BTU per hour, using modified burner design (low NO<sub>x</sub>) for NO<sub>x</sub> control and electrostatic precipitator (ESP) for particulate control, exhausting to Stack A. Stack A is equipped with a continuous opacity monitor (COM) to monitor opacity as well as continuous emission monitors for NO<sub>x</sub>, CO<sub>2</sub>, SO<sub>2</sub>, and volumetric flow rate.
6. Wall fired coal electric utility boiler (pulverized - dry bottom), identified as Unit 5, constructed in 1956, using #2 fuel oil as ignition fuel, with a nominal rated heat input capacity of 1096.2 million BTU per hour, using modified burner design (low NO<sub>x</sub>) for NO<sub>x</sub> control and electrostatic precipitator (ESP) for particulate control, exhausting to Stack A. Stack A is equipped with a continuous opacity monitor (COM) to monitor opacity as well as continuous emission monitors for NO<sub>x</sub>, CO<sub>2</sub>, SO<sub>2</sub>, and volumetric flow rate.
7. Tangential fired coal electric utility boiler (pulverized - dry bottom, tangential), identified as Unit 6, constructed in 1968, using #2 fuel oil as ignition fuel, with a nominal rated heat input capacity of 2999.0 million BTU per hour, using modified burner design (low NO<sub>x</sub>) for NO<sub>x</sub> control and electrostatic precipitator (ESP) for particulate control, exhausting to Stack A. Stack A is equipped with a continuous opacity monitor (COM) to monitor opacity as well as continuous emission monitors for NO<sub>x</sub>, CO<sub>2</sub>, SO<sub>2</sub>, and volumetric flow rate.

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

**F.1 Automatic Incorporation of Definitions [326 IAC 10-4-7(e)]**

This NO<sub>x</sub> budget permit is deemed to incorporate automatically the definitions of terms under 326 IAC 10-4-2.

**F.2 Standard Permit Requirements [326 IAC 10-4-4(a)]**

- 
- (a) The owners and operators of the NO<sub>x</sub> budget source and each NO<sub>x</sub> budget unit shall operate each unit in compliance with this NO<sub>x</sub> budget permit.
  - (b) The NO<sub>x</sub> budget units subject to this NO<sub>x</sub> budget permit are Unit 1A, Unit 1C, Unit 2, Unit 3, Unit 4, Unit 5, and Unit 6.

**F.3 Monitoring Requirements [326 IAC 10-4-4(b)]**

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- (a) The owners and operators and, to the extent applicable, the NO<sub>x</sub> authorized account representative of the NO<sub>x</sub> budget source and each NO<sub>x</sub> budget unit at the source shall comply with the monitoring requirements of 40 CFR 75 and 326 IAC 10-4-12.
- (b) The emissions measurements recorded and reported in accordance with 40 CFR 75 and 326 IAC 10-4-12 shall be used to determine compliance by each unit with the NO<sub>x</sub> budget emissions limitation under 326 IAC 10-4-4(c) and Condition F.4, Nitrogen Oxides Requirements.

**F.4 Nitrogen Oxides Requirements [326 IAC 10-4-4(c)]**

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- (a) The owners and operators of the NO<sub>x</sub> budget source and each NO<sub>x</sub> budget unit at the source shall hold NO<sub>x</sub> allowances available for compliance deductions under 326 IAC 10-4-10(j), as of the NO<sub>x</sub> allowance transfer deadline, in each unit's compliance account and the source's overdraft account in an amount:
  - (1) Not less than the total NO<sub>x</sub> emissions for the ozone control period from the unit, as determined in accordance with 40 CFR 75 and 326 IAC 10-4-12;
  - (2) To account for excess emissions for a prior ozone control period under 326 IAC 10-4-10(k)(5); or
  - (3) To account for withdrawal from the NO<sub>x</sub> budget trading program, or a change in regulatory status of a NO<sub>x</sub> budget opt-in unit.
- (b) Each ton of NO<sub>x</sub> emitted in excess of the NO<sub>x</sub> budget emissions limitation shall constitute a separate violation of the Clean Air Act (CAA) and 326 IAC 10-4.
- (c) Each NO<sub>x</sub> budget unit shall be subject to the requirements under (a) above and 326 IAC 10-4-4(c)(1) starting on May 31, 2004.
- (d) NO<sub>x</sub> allowances shall be held in, deducted from, or transferred among NO<sub>x</sub> allowance tracking system accounts in accordance with 326 IAC 10-4-9 through 11, 326 IAC 10-4-13, and 326 IAC 10-4-14.
- (e) A NO<sub>x</sub> allowance shall not be deducted, in order to comply with the requirements under (a) above and 326 IAC 10-4-4(c)(1), for an ozone control period in a year prior to the year for which the NO<sub>x</sub> allowance was allocated.
- (f) A NO<sub>x</sub> allowance allocated under the NO<sub>x</sub> budget trading program is a limited authorization to emit one (1) ton of NO<sub>x</sub> in accordance with the NO<sub>x</sub> budget trading program. No provision of the NO<sub>x</sub> budget trading program, the NO<sub>x</sub> budget permit application, the NO<sub>x</sub> budget permit, or an exemption under 326 IAC 10-4-3 and no provision of law shall be construed to limit the authority of the U.S. EPA or IDEM, OAQ to terminate or limit the authorization.
- (g) A NO<sub>x</sub> allowance allocated under the NO<sub>x</sub> budget trading program does not constitute a property right.
- (h) Upon recordation by the U.S. EPA under 326 IAC 10-4-10, 326 IAC 10-4-11, or 326 IAC 10-4-13, every allocation, transfer, or deduction of a NO<sub>x</sub> allowance to or from each NO<sub>x</sub> budget unit's compliance account or the overdraft account of the source where the unit is located is deemed to

amend automatically, and become a part of, this NO<sub>x</sub> budget permit of the NO<sub>x</sub> budget unit by operation of law without any further review.

F.5 Excess Emissions Requirements [326 IAC 10-4-4(d)]

The owners and operators of each NO<sub>x</sub> budget unit that has excess emissions in any ozone control period shall do the following:

- (a) Surrender the NO<sub>x</sub> allowances required for deduction under 326 IAC 10-4-10(k)(5).
- (b) Pay any fine, penalty, or assessment or comply with any other remedy imposed under 326 IAC 10-4-10(k)(7).

F.6 Record Keeping Requirements [326 IAC 10-4-4(e)] [326 IAC 2-7-5(3)]

Unless otherwise provided, the owners and operators of the NO<sub>x</sub> budget source and each NO<sub>x</sub> budget unit at the source shall keep, either on site at the source or at a central location within Indiana for those owners or operators with unattended sources, each of the following documents for a period of five (5) years:

- (a) The account certificate of representation for the NO<sub>x</sub> authorized account representative for the source and each NO<sub>x</sub> budget unit at the source and all documents that demonstrate the truth of the statements in the account certificate of representation, in accordance with 326 IAC 10-4-6(h). The certificate and documents shall be retained either on site at the source or at a central location within Indiana for those owners or operators with unattended sources beyond the five (5) year period until the documents are superseded because of the submission of a new account certificate of representation changing the NO<sub>x</sub> authorized account representative.
- (b) All emissions monitoring information, in accordance with 40 CFR 75 and 326 IAC 10-4-12, provided that to the extent that 40 CFR 75 and 326 IAC 10-4-12 provide for a three (3) year period for record keeping, the three (3) year period shall apply.
- (c) Copies of all reports, compliance certifications, and other submissions and all records made or required under the NO<sub>x</sub> budget trading program.
- (d) Copies of all documents used to complete a NO<sub>x</sub> budget permit application and any other submission under the NO<sub>x</sub> budget trading program or to demonstrate compliance with the requirements of the NO<sub>x</sub> budget trading program.

This period may be extended for cause, at any time prior to the end of five (5) years, in writing by IDEM, OAQ, Vigo County Air Pollution Control (VCAPC) or the U.S. EPA. Records retained at a central location within Indiana shall be available immediately at the location and submitted to IDEM, OAQ, VCAPC, or U.S. EPA within three (3) business days following receipt of a written request. Nothing in 326 IAC 10-4-4(e) shall alter the record retention requirements for a source under 40 CFR 75. Unless otherwise provided, all records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

F.7 Reporting Requirements [326 IAC 10-4-4(e)]

- (a) The NO<sub>x</sub> authorized account representative of the NO<sub>x</sub> budget source and each NO<sub>x</sub> budget unit at the source shall submit the reports and compliance certifications required under the NO<sub>x</sub> budget trading program, including those under 326 IAC 10-4-8, 326 IAC 10-4-12, or 326 IAC 10-4-13.
- (b) Pursuant to 326 IAC 10-4-4(e) and 326 IAC 10-4-6(e)(1), each submission shall include the following certification statement by the NO<sub>x</sub> authorized account representative: "I am authorized to make this submission on behalf of the owners and operators of the NO<sub>x</sub> budget sources or NO<sub>x</sub> budget units for which the submission is made. I certify under penalty of law that I have personally examined, and am familiar with, the statements and information submitted in this document and all its attachments. Based on my inquiry of those individuals with primary

responsibility for obtaining the information, I certify that the statements and information are to the best of my knowledge and belief true, accurate, and complete. I am aware that there are significant penalties for submitting false statements and information or omitting required statements and information, including the possibility of fine or imprisonment."

- (c) Where 326 IAC 10-4 requires a submission to IDEM, OAQ, the NO<sub>x</sub> authorized account representative shall submit required information to:

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

And

Vigo County Air Pollution Control  
103 South 3<sup>rd</sup> Street  
Terre Haute, Indiana 47807

- (d) Where 326 IAC 10-4 requires a submission to U.S. EPA, the NO<sub>x</sub> authorized account representative shall submit required information to:

U.S. Environmental Protection Agency  
Clean Air Markets Division  
1200 Pennsylvania Avenue, NW  
Mail Code 6204N  
Washington, DC 20460

F.8 Liability [326 IAC 10-4-4(f)]

The owners and operators of each NO<sub>x</sub> budget source shall be liable as follows:

- (a) Any person who knowingly violates any requirement or prohibition of the NO<sub>x</sub> budget trading program, a NO<sub>x</sub> budget permit, or an exemption under 326 IAC 10-4-3 shall be subject to enforcement pursuant to applicable state or federal law.
- (b) Any person who knowingly makes a false material statement in any record, submission, or report under the NO<sub>x</sub> budget trading program shall be subject to criminal enforcement pursuant to the applicable state or federal law.
- (c) No permit revision shall excuse any violation of the requirements of the NO<sub>x</sub> budget trading program that occurs prior to the date that the revision takes effect.
- (d) Each NO<sub>x</sub> budget source and each NO<sub>x</sub> budget unit shall meet the requirements of the NO<sub>x</sub> budget trading program.
- (e) Any provision of the NO<sub>x</sub> budget trading program that applies to a NO<sub>x</sub> budget source, including a provision applicable to the NO<sub>x</sub> authorized account representative of a NO<sub>x</sub> budget source, shall also apply to the owners and operators of the source and of the NO<sub>x</sub> budget units at the source.
- (f) Any provision of the NO<sub>x</sub> budget trading program that applies to a NO<sub>x</sub> budget unit, including a provision applicable to the NO<sub>x</sub> authorized account representative of a NO<sub>x</sub> budget unit, shall also apply to the owners and operators of the unit. Except with regard to the requirements applicable to units with a common stack under 40 CFR 75 and 326 IAC 10-4-12, the owners and operators and the NO<sub>x</sub> authorized account representative of one (1) NO<sub>x</sub> budget unit shall not be liable for any violation by any other NO<sub>x</sub> budget unit of which they are not owners or operators or the NO<sub>x</sub> authorized account representative and that is located at a source of which they are not owners or operators or the NO<sub>x</sub> authorized account representative.

F.9 Effect on Other Authorities [326 IAC 10-4-4(g)]

No provision of the NO<sub>x</sub> budget trading program, a NO<sub>x</sub> budget permit application, a NO<sub>x</sub> budget permit, or an exemption under 326 IAC 10-4-3 shall be construed as exempting or excluding the owners and operators and, to the extent applicable, the NO<sub>x</sub> authorized account representative of a NO<sub>x</sub> budget source or NO<sub>x</sub> budget unit from compliance with any other provision of the applicable, approved state implementation plan, a federally enforceable permit, or the CAA.

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT  
OFFICE OF AIR QUALITY  
and  
VIGO COUNTY AIR POLLUTION CONTROL**

**PART 70 OPERATING PERMIT  
CERTIFICATION**

Source Name: PSI Energy Inc. - Wabash River Generating Station  
Source Address: 450 Bolton Road, West Terre Haute, Indiana 47885  
Source Name: PSI Energy Inc. - Wabash River Repowering  
Source Address: 445 Bolton Road, West Terre Haute, Indiana 47885  
Mailing Address: c/o Steven L. Pearl, 1000 East Main Street, Plainfield, Indiana 46168  
Part 70 Permit No.: 167-7176-00021

**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**

and

**VIGO COUNTY AIR POLLUTION CONTROL**

**103 South 3<sup>rd</sup> Street  
Terre Haute, Indiana 47807  
Phone: 812-462-3433  
Fax: 812-462-3447**

**PART 70 OPERATING PERMIT  
EMERGENCY OCCURRENCE REPORT**

Source Name: PSI Energy Inc. - Wabash River Generating Station  
Source Address: 450 Bolton Road, West Terre Haute, Indiana 47885  
Source Name: PSI Energy Inc. - Wabash River Repowering  
Source Address: 445 Bolton Road, West Terre Haute, Indiana 47885  
Mailing Address: c/o Steven L. Pearl, 1000 East Main Street, Plainfield, Indiana 46168  
Part 70 Permit No.: 167-7176-00021

**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) and Vigo County Air Pollution Control (VCAPC), within four (4) daytime business hours (OAQ: 1-800-451-6027 or 317-233-5674, ask for Compliance Section and VCAPC: 812-462-3433); and
  - C** The Permittee must submit notice in writing or by facsimile within two (2) working days (IDEM Facsimile Number: 317-233-5967 and VCAPC Facsimile Number: 812-462-3447), 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: \_\_\_\_\_

Telephone: \_\_\_\_\_

A certification is not required for this report.

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT  
 OFFICE OF AIR QUALITY  
 COMPLIANCE DATA SECTION  
 and  
 VIGO COUNTY AIR POLLUTION CONTROL**

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

Source Name: PSI Energy Inc. - Wabash River Generating Station  
 Source Address: 450 Bolton Road, West Terre Haute, Indiana 47885  
 Source Name: PSI Energy Inc. - Wabash River Repowering  
 Source Address: 445 Bolton Road, West Terre Haute, Indiana 47885  
 Mailing Address: c/o Steven L. Pearl, 1000 East Main Street, Plainfield, Indiana 46168  
 Part 70 Permit No.: 167-7176-00021

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

This report shall be submitted quarterly based on a calendar year. For the purpose of this permit, "calendar year" means the twelve (12) month period from January 1 to December 31 inclusive. Any deviation from the requirements, the date(s) of each deviation, the probable cause of the deviation, and the response steps taken must be reported. Deviations that are required to be reported by an applicable requirement shall be reported according to the schedule stated in the applicable requirement and do not need to be included in this report. Additional pages may be attached if necessary. If no deviations occurred, please specify in the box marked "No deviations occurred this reporting period".	
<input checked="" type="radio"/> NO DEVIATIONS OCCURRED THIS REPORTING PERIOD.	
<input 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: \_\_\_\_\_

Telephone: \_\_\_\_\_

Attach a signed certification to complete this report.

**Indiana Department of Environmental Management  
Office of Air Quality  
and  
Vigo County Air Pollution Control**

**Technical Support Document (TSD) for a Part 70 Operating Permit**

**Source Background and Description**

**Source Name:** PSI Energy Inc. - Wabash River Generating Station  
**Source Location:** 450 Bolton Road, West Terre Haute, Indiana 47885  
**County:** Vigo County  
**SIC Code:** 4911  
**Operation Permit No.:** T167-7176-00021  
**Permit Reviewer:** Rob Harmon

Vigo County Air Pollution Control (VCAPC) and the Office of Air Quality (OAQ) have reviewed a Part 70 permit application from PSI Energy, Inc. relating to the operation of an electric utility generating station.

**Source Definition**

This power plant with gasification operations consists of a source with an on-site contractor:

- (1) Cinergy (PSI Energy) - Wabash River, the primary operation, is located at 450 Bolton Road, West Terre Haute, Indiana; and
- (2) Wabash River Energy, the supporting operation, is located at 444 West Sandford Road, West Terre Haute, Indiana.

IDEM and VCAPC have determined that Cinergy - Wabash River, and Wabash River Energy are under the common control of Cinergy - Wabash River. These two plants are considered one source due to contractual control. Therefore, the term "source" in the Part 70 documents refers to both Cinergy - Wabash River and Wabash River Energy as one source.

Separate Part 70 permits will be issued to Cinergy - Wabash River and Wabash River Energy solely for administrative purposes. The initial Part 70 Permit for Wabash River Energy has already been issued (T167-7353-00091, issued December 31, 1998, with a renewal application submitted on February 18, 2003).

**Permitted Emission Units and Pollution Control Equipment**

The source consists of the following permitted emission units and pollution control devices:

1. Combustion Turbine, identified as Unit 1A, constructed in 1995, with a nominal rated capacity of 1709.1 million BTU per hour (192 megawatt), utilizing syngas or natural gas for fuel, utilizing steam injection for NO<sub>x</sub> control, and exhausting to stack 1A (combined cycle mode) or 1D (simple cycle mode). Stack 1A (combined cycle) has continuous emission monitors for SO<sub>2</sub>, NO<sub>x</sub>, CO<sub>2</sub>, and volumetric flow rate as well as a continuous opacity monitor (COM). Stack 1D (bypass) has continuous emission monitors for NO<sub>x</sub> and CO<sub>2</sub>.
2. Repowering Auxiliary Boiler fired on natural gas only, identified as Unit 1B, constructed in 1995, with a nominal rated capacity of 144 million BTU per hour, using low NO<sub>x</sub> burners as NO<sub>x</sub> control, and exhausting to Stack 1B with continuous emission monitors for NO<sub>x</sub> and CO<sub>2</sub>.
3. Natural gas fired boiler, identified as Unit 1C, constructed in 2001, with a nominal rated capacity of

- 397.8 million BTU per hour, using low NO<sub>x</sub> burners with flue gas recirculation as NO<sub>x</sub> control, and exhausting to stack 1C with continuous emission monitors for NO<sub>x</sub>, O<sub>2</sub> or CO<sub>2</sub>, and CO.
4. Fuel preheater, identified as Unit 1E, constructed in 2001, with a nominal rated capacity of 7.13 million BTU per hour, utilizing natural gas for fuel, using a low emission rate burner for NO<sub>x</sub> control, and exhausting to stack 1E.
  5. Wall fired coal electric utility boiler (pulverized - dry bottom), identified as Unit 2, constructed in 1953, using #2 fuel oil as ignition fuel, with a nominal rated heat input capacity of 913.8 million BTU per hour (99 megawatt), using modified burner design (low NO<sub>x</sub>) for NO<sub>x</sub> control and electrostatic precipitator (ESP) for particulate control, exhausting to Stack A. Unit 2 is equipped with continuous emission monitors for NO<sub>x</sub> and CO<sub>2</sub>. Stack A is equipped with a continuous opacity monitor (COM) to monitor opacity as well as continuous emission monitors for NO<sub>x</sub>, CO<sub>2</sub>, SO<sub>2</sub>, and volumetric flow rate.
  6. Wall fired coal electric utility boiler (pulverized - dry bottom), identified as Unit 3, constructed in 1954, using #2 fuel oil as ignition fuel, with a nominal rated heat input capacity of 922.9 million BTU per hour (99 megawatt), using modified burner design (low NO<sub>x</sub>) for NO<sub>x</sub> control and electrostatic precipitator (ESP) for particulate control, exhausting to Stack A. Unit 3 is equipped with continuous emission monitors for NO<sub>x</sub> and CO<sub>2</sub>. Stack A is equipped with a continuous opacity monitor (COM) to monitor opacity as well as continuous emission monitors for NO<sub>x</sub>, CO<sub>2</sub>, SO<sub>2</sub>, and volumetric flow rate.
  7. Wall fired coal electric utility boiler (pulverized - dry bottom), identified as Unit 4, constructed in 1955, using #2 fuel oil as ignition fuel, with a nominal rated heat input capacity of 922.9 million BTU per hour (99 megawatt), using modified burner design (low NO<sub>x</sub>) for NO<sub>x</sub> control and electrostatic precipitator (ESP) for particulate control, exhausting to Stack A. Unit 4 is equipped with continuous emission monitors for NO<sub>x</sub>, CO<sub>2</sub>, SO<sub>2</sub> and volumetric flow rate. Stack A is equipped with a continuous opacity monitor (COM) to monitor opacity as well as continuous emission monitors for NO<sub>x</sub>, CO<sub>2</sub>, SO<sub>2</sub>, and volumetric flow rate.
  8. Wall fired coal electric utility boiler (pulverized - dry bottom), identified as Unit 5, constructed in 1956, using #2 fuel oil as ignition fuel, with a nominal rated heat input capacity of 1096.2 million BTU per hour (121 megawatt), using modified burner design (low NO<sub>x</sub>) for NO<sub>x</sub> control and electrostatic precipitator (ESP) for particulate control, exhausting to Stack A. Unit 5 is equipped with continuous emission monitors for NO<sub>x</sub> and CO<sub>2</sub>. Stack A is equipped with a continuous opacity monitor (COM) to monitor opacity as well as continuous emission monitors for NO<sub>x</sub>, CO<sub>2</sub>, SO<sub>2</sub>, and volumetric flow rate.
  9. Tangential fired coal electric utility boiler (pulverized - dry bottom, tangential), identified as Unit 6, constructed in 1968, using #2 fuel oil as ignition fuel, with a nominal rated heat input capacity of 2999.0 million BTU per hour (354 megawatt), using modified burner design (low NO<sub>x</sub>) for NO<sub>x</sub> control and electrostatic precipitator (ESP) for particulate control, exhausting to Stack A. Unit 6 is equipped with continuous emission monitors for NO<sub>x</sub> and CO<sub>2</sub>. Stack A is equipped with a continuous opacity monitor (COM) to monitor opacity as well as continuous emission monitors for NO<sub>x</sub>, CO<sub>2</sub>, SO<sub>2</sub>, and volumetric flow rate.
  10. Coal pile maintenance, identified as F-1.
  11. Coal handling, identified as F-2.
  12. Plant roads, identified as F-4.

### Unpermitted Emission Units and Pollution Control Equipment

The source also consists of the following unpermitted facilities/units:

1. Black Start Diesel Generator, identified as 7A, constructed in 1967, combusting #2 fuel oil, with a

- nominal rated capacity of 2.75 megawatts of electricity (28.6 million BTU per hour), used for intermittent and emergency duty, using no control, and exhausting to stack 7A.
2. Black Start Diesel Generator, identified as 7B, constructed in 1967, combusting #2 fuel oil, with a nominal rated capacity of 2.75 megawatts of electricity (28.6 million BTU per hour), used for intermittent and emergency duty, using no control, and exhausting to stack 7B.
  3. Black Start Diesel Generator, identified as 7C, constructed in 1967, combusting #2 fuel oil, with a nominal rated capacity of 2.75 megawatts of electricity (28.6 million BTU per hour), used for intermittent and emergency duty, using no control, and exhausting to stack 7C.

### 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, automobile, 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 of 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 throughputs 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 mmHg; or 0.3 psi measured at 38 degrees C (100 degrees F) or;
  - b) having a vapor pressure equal to or less than 0.7 kPa; 5 mm Hg; or 1 psi measured at 20 degrees C (68 degrees F);the use of which for all cleaners and solvents combined does not exceed 145 gallons per 12 months.
8. The following equipment related to manufacturing activities not resulting in the emission of HAPs: brazing equipment, cutting torches, soldering equipment, welding equipment.
9. Closed loop heating and cooling systems.
10. Any of the following structural steel and bridge fabrication activities:
  - a) Cutting 200.00 linear feet or less of one inch (1") plate or equivalent.
  - b) Using 80 tons or less of welding consumables.
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 associate 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. Replacement or repair of electrostatic precipitators, bags in baghouses and filters in other air filtration equipment.
  16. Heat exchanger cleaning and repair.
  17. Process vessel degassing and cleaning to prepare for internal repairs.
  18. Stockpiled soils from soil remediation activities that are covered and waiting transport for disposal.
  19. Paved and unpaved roads and parking lots with public access.
  20. Conveyers as follows:
    - a) Covered conveyors for coal or coke conveying of less than or equal to 360 tons per day;
    - b) Covered conveyors for limestone conveying of less than or equal to 7,200 tons per day for sources other than mineral processing plants constructed after August 31, 1983.
    - c) Underground conveyors.
  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 routine 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 condition 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. Other emergency equipment as follows: Stationary fire pumps.
  30. Filter or coalescer media changeout.
  31. Vents from ash transport systems not operated at positive pressure.
  32. A laboratory as defined in 326 IAC 2-7-1(21)(D).
  33. Other activities or categories not previously identified (with emissions equal to or less than the insignificant activity threshold):

- a) Fuel oil tank for Units 1-6: 100,000 gallon (constructed December 1979).
- b) Thaw pit Fuel oil tank: 20,000 gallon (constructed 1990) [326 IAC 12][40 CFR 60, Subpart Kb]
- c) Coal pile wind erosion [326 IAC 6-1-2][326 IAC 6-4]
- d) Lime silo: 1388 cubic feet [326 IAC 6-1-2]
- e) Lime day bin: 87 cubic feet [326 IAC 6-1-2]
- f) Unit 6 hydrovevor [326 IAC 6-1-2]
- g) Diesel fuel oil tank for fire pump: 500 gallon
- h) Degreaser (tractor shed): 30 gallon [326 IAC 8-3]
- i) Betz inhibitor tank (corrosion inhibitor): 500 gallon
- j) Betz inhibitor tank: 500 gallon
- k) Degreaser (maintenance shop): 30 gallon (constructed about 1980) [326 IAC 8-3]
- l) Ash hydrovevor separator Units 1&2 [326 IAC 6-1-2]
- m) Ash hydrovevor separator Units 3&4 [326 IAC 6-1-2]
- n) Ash hydrovevor separator Unit 5 [326 IAC 6-1-2]
- o) Parts cleaner (electric shop): 30 gallon (constructed about 1980) [326 IAC 8-3]
- p) Parts cleaner (main floor storage area): 30 gallon (constructed about 1980) [326 IAC 8-3]
- q) Ash pond: 216 acres [326 IAC 6-1-2][326 IAC 6-4]
- r) Ash pond management and maintenance [326 IAC 6-1-2]
- s) Boiler/condenser cleaning solution incineration/evaporation
- t) Two (2) Repowering fuel oil storage tank: 99,500 gallon each (constructed in 1993) [326 IAC 12][40 CFR 60, Subpart Kb]
- u) Fuel oil tank: 50,000 gallons (constructed in 1986) [326 IAC 12][40 CFR 60, Subpart Kb]
- v) Diesel fuel oil tank for repowering fire pump: 275 gallon
- w) Coal yard shed heater: coal fired 'pot belly' stove.
- x) Diesel air compressors (occasionally rented)
- y) Diesel welders: (occasionally rented)
- z) Sodium Hydrochloride tank: 10,000 gallon

### Existing Approvals

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

1. Construction Permit 167-2610-00021, issued on May 27, 1993.;
2. Operating Permit 21-4911-01-94, issued on March 23, 1994 (amended April 13, 1994, and June 15, 1999);
3. Operating Permit 21-4911-02-94, issued on March 25, 1994 (amended April 13, 1994, and June 15, 1999);
4. Operating Permit 21-4911-03-94, issued on March 25, 1994 (amended April 13, 1994, and June 15, 1999);
5. Operating Permit 21-4911-04-94, issued on March 25, 1994 (amended April 13, 1994, and June 15, 1999);
6. Operating Permit 21-4911-05-94, issued on March 25, 1994 (amended April 13, 1994, and June 15, 1999);
7. Operating Permit 21-4911-06-94, issued on March 25, 1994 (amended April 13, 1994, and June 15, 1999);
8. Phase I Acid Rain Permit published in the Federal Register September 22, 1994;
9. Phase II Acid Rain Permit AR 167-5210-00021, issued December 31, 1997;
10. Phase II Acid Rain Permit (Administrative Amendment) AAR 167-10335-00021;

11. Significant Source Modification 167-11328-00021, issued on January 27, 2000;

All conditions from previous approvals were incorporated into this Part 70 permit, except:

1. SSM 167-11328 had a requirement from 326 IAC 6-2. This should have been from 326 IAC 6-1 and is corrected in this approval.
2. Operating Permit 21-4911-02-94, issued on March 23, 1994 (amended April 13, 1994, June 15, 1999)

Special Conditions and Timetables No. 3.

A special temporary exemption per 326 IAC 5-1 Section 3(d) is hereby granted

- (a) During unit startup, the plume opacity may exceed 40% for a period of up to 5 hours or until the flue gas temperature at the electrostatic precipitator inlet reaches 240 oF, at which time the precipitator shall be activated.
- (b) During unit shutdown, the plume opacity may exceed 40% for a period of up to 5 hours.
- (c) All periods exempted by (a) or (b) above shall be logged and records made available to VCAPCD upon request.

Reason not incorporated:

The temporary alternate opacity limitation granted under 326 IAC 5-1 was re-applied for when that rule was revised in October of 1998. As a result new TAOL limits have been imposed in this Part 70 based on the review of the TAOL Request by IDEM, OAQ and VCAPC.

Emission Limitation Conditon B:

After the initial operation of the Gasification Project, the following emission limitations shall apply to Boiler #2 and the rest of the station:

Station MMBTU/HR – 6854.8

Reason not incorporated:

This limitation was developed in order to comply with the SO<sub>2</sub> and particulate matter SIP as incorporated under 326 IAC 6-1-13 and 326 IAC 7-4-3. Therefore, even though they are specifically spelled out in those rules, the heat input capacity limits, or equivalent maximum emission limits, must remain in effect. However, there appears to be a calculation error in the prior operating permits. The specific particulate limitation of 0.1338 pounds per million BTU and the SO<sub>2</sub> limitation of 4.04 pounds per million BTU were combined with the derated capacity of each Unit to establish the appropriate Station emission limitations. Those are: 848.4 pounds of particulate per hour and 25,618 pounds of SO<sub>2</sub> per hour. The way the prior operating permits were written, each individual Unit could operate over its derated capacity so long as those station wide limits were not exceeded, therefore the enforceable limitations are the Station Wide ones. In order to preserve the historic record, Unit 2 was derated to 829.5 million BTU per hour; Unit 3 was derated to 839 million BTU per hour, Unit 4 was derated to 839 million BTU per hour, Unit 5 was derated to 933.6 million BTU per hour, and Unit 6 was derated to 2900 million BTU per hour. This is equivalent to a combined station derated capacity of 6341.1 million BTU per hour.

Special Conditions and Timetables No. 1.

Prior to initial operation of the Gasification Project the total station heat input shall not exceed 7,768.6 MM BTU/Hr. After the initial operation of the Gasification Project the remaining boilers (units 2-6) are limited to 6854.8 MM BTU/Hr heat input.

Reason not incorporated:

Same reason as stated above in response to Emission Limitation Condition B.

**Special Conditions and Timetables No.2**

This boiler may operate above the specified derated capacity up to the specified full capacity so long as the station stack Lbs./Hr. limits are not exceeded. Records are to be kept on the station Lbs/Hr. using the most recent stack test Lbs/MMBTU ratings for TSP and the current coal sulfur analysis for SO<sub>2</sub> to verify the Lbs/Hr. stack emissions have not been exceeded and these data are submitted to this office quarterly.

Reason not Incorporated:

Same reason as stated above in response to Emission Limitation Condition B.

**Special Conditions and Timetables No. 5:**

The megawatt limitation on this unit may be exceeded for purpose of testing or under emergency load conditions, and all such excursion should be reported to this agency within four (4) business hours of occurrence.

Reason not incorporated:

Same reason as stated above in response to Emission Limitation Condition B.

- 3 Operating Permit 21-4911-03-94, issued on March 25, 1994 (amended April 13, 1994, June 15, 1999)  
  
Emission Limitation Condition B and Special Conditions 1, 2, 3 and 5 will not be incorporated for the same reasons as stated above.
- 4 Operating Permit 21-4911-04-94, issued on March 25, 1994 (amended April 13, 1994, June 15, 1999)  
  
Emission Limitation Condition B and Special Conditions 1, 2, 3 and 5 will not be incorporated for the same reasons as stated above.
- 5 Operating Permit 21-4911-05-94, issued on March 25, 1994 (amended April 13, 1994, June 15, 1999)  
  
Emission Limitation Condition B and Special Conditions 1, 2, 3 and 5 will not be incorporated for the same reasons as stated above.
- 6 Operating Permit 21-4911-06-94, issued on March 25, 1994 (amended April 13, 1994, June 15, 1999)  
  
Emission Limitation Condition B and Special Conditions 1, 2, 3 and 5 will not be incorporated for the same reasons as stated above.

**Enforcement Issue**

There are no enforcement actions pending.

**Recommendation**

The staff recommends to the Commissioner that the Part 70 permit be approved. This recommendation is based on the following facts and conditions:

Unless otherwise stated, information used in this review was derived from the application and additional information submitted by the applicant.

An administratively complete Part 70 permit application for the purposes of this review was received on November 14, 1996. Additional information was received on November 26, 1997 and August 19, 1999.

Notice of completeness letter was mailed to the source on January 10, 1997.

**Potential To Emit**

Pursuant to 326 IAC 2-1.1-1(16), Potential to Emit is defined as “the maximum capacity of a stationary source to emit any air pollutant under its physical and operational design. Any physical or operational limitation on the capacity of a source to emit an air pollutant, including air pollution control equipment and restrictions on hours of operation or type or amount of material combusted, stored, or processed shall be treated as part of its design if the limitation is enforceable by the U. S. EPA.”

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	less 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)
Chlorine	greater than 10
Flourine	greater than 10
Selenium	less than 10
Nickle	less than 10
Other HAP (each below 1 tpy)	less than 10
TOTAL	greater than 25

- (a) The potential to emit (as defined in 326 IAC 2-1.1-1(16)) of PM10, SO2, NOx, and CO 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 chlorine and flourine is equal to or greater than ten (10) tons per year and the potential to emit (as defined in 326 IAC 2-7-1(29)) 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 and VCAPC emission data.

Pollutant	Actual Emissions (tons/year)
PM	1,226
PM-10	307
SO <sub>2</sub>	52,778
VOC	65
CO	531
NO <sub>x</sub>	10,834
HAP (specify)	Not Available

### County Attainment Status

The source is located in Vigo County.

Pollutant	Status
PM-10	attainment
SO <sub>2</sub>	maintenance attainment
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. Vigo 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.
- (b) Vigo County has been classified as attainment or unclassifiable for all criteria pollutants. Therefore, these emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2.
- (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.

### Part 70 Permit Conditions

This source is subject to the requirements of 326 IAC 2-7, pursuant to which the source has to meet the following:

- (a) Emission limitations and standards, including those operational requirements and limitations that assure compliance with all applicable requirements at the time of issuance of Part 70 permits.
- (b) Monitoring and related record keeping requirements which assume that all reasonable information is provided to evaluate continuous compliance with the applicable requirements.

### Federal Rule Applicability

- (a) The five (5) large coal fired boilers (Unit 2, Unit 3, Unit 4, Unit 5, and Unit 6) are not subject to the requirements of the New Source Performance Standard, 326 IAC 12, (40 CFR 60, Subpart D), because construction of these units commenced before August 17, 1971.
- (b) The five (5) large coal fired boilers (Unit 2, Unit 3, Unit 4, Unit 5, and Unit 6) are not subject to the requirements of the New Source Performance Standard, 326 IAC 12, (40 CFR 60, Subpart Da), because construction of these units commenced before September 18, 1978. See (f) below for applicable unit.

- (c) The five (5) large coal fired boilers (Unit 2, Unit 3, Unit 4, Unit 5, and Unit 6) are not subject to the requirements of the New Source Performance Standard, 326 IAC 12, (40 CFR 60, Subpart Db), because construction of these units commenced before June 19, 1984. See (h) below for applicable unit.
- (d) The coal transfer and processing facilities are not subject to the New Source Performance Standard (NSPS), 326 IAC 12, (40 CFR 60.252, Subpart Y, Standards of Performance for Coal Preparation Plants), because the coal handling facilities were constructed before October 24, 1974.
- (e) The fuel oil (and diesel) storage tanks (100,000 gallon fuel oil tank for Units 1-6; 20,000 gallon thaw pit fuel oil tank; two (2) 99,500 gallon repowering fuel oil storage tanks; and the 50,000 gallon fuel oil tank) are not subject to the requirements of the New Source Performance Standard, 326 IAC 12, 40 CFR 60 Subpart K (Standards of Performance for Storage Vessels for Petroleum Liquids for which Construction, Reconstruction, or Modification Commenced After June 11, 1973, and Prior to May 19, 1978) or Subpart Ka (Standards of Performance for Storage Vessels for Petroleum Liquids for which Construction, Reconstruction, or Modification Commenced After May 18, 1978, and Prior to July 23, 1984) because in both K and Ka #2 through #6 fuel oils are specifically exempted from the definition of Petroleum Liquids.
- (f) Unit 1C is subject to the New Source Performance Standard, 326 IAC 12, (40 CFR 60.40a, Subpart Da) - Standards of Performance for Electric Utility Steam Generating Units for Which Construction is Commenced After September 18, 1978. This also triggers the requirements of 40 CFR 60, Subpart A - General Provisions except when otherwise specified in Subpart Da.

**§ 60.40a Applicability and designation of affected facility**

- (a)(1) Indicates the minimum size for this Subpart is 250 million BTU per hour, and
- (a)(2) Indicates construction has to commence after September 18, 1978.

Since the capacity of Unit 1C is greater than 250 million BTU per hour, and it was constructed in 2001, both criteria are met. Therefore, requirements of 40 CFR 60, Subpart Da are applicable.

**§ 60.42a Standard for particulate matter.**

- (a)(1) On and after the date on which the performance test required to be completed under § 60.8 is completed, no owner or operator subject to the provisions of this subpart shall cause to be discharged into the atmosphere from any affected facility any gases which contain in excess of: 13 ng/J (0.03 lb/million BTU) heat input derived from the combustion of solid, liquid, or gaseous fuel.
- (b) On and after the date the particulate matter performance test required to be conducted under § 60.8 is completed, no owner or operator subject to the provisions of this subpart shall cause to be discharged into the atmosphere from any affected facility any gases which exhibit greater than 20 percent opacity (6-minute average), except for one 6-minute period per hour of not more than 27 percent opacity.

**§ 60.43a Standard for sulfur dioxide.**

- (b) On and after the date on which the initial performance test required to be conducted under § 60.8 is completed, no owner or operator subject to the provisions of this subpart shall cause to be discharged into the atmosphere from any affected facility which combusts liquid or gaseous fuels, any gases which contain sulfur dioxide in excess of:
  - (b)(1) 340ng/J (0.80 lb/million BTU) heat input and 10 percent of the potential combustion concentration (90 percent reduction), or

- (b)(2) 100 percent of the potential combustion concentration (zero percent reduction) when emissions are less than 86 ng/J (0.20 lb/million BTU) heat input.
- (g) Compliance with the emission limitation and percent reduction requirements under this section are both determined on a 30-day rolling average basis except as provided under paragraph (c) of this section.

**§ 60.44a Standard for nitrogen oxides.**

- (a) On and after the date on which the initial performance test required to be conducted under § 60.8 is completed, no owner or operator subject to the provisions of this subpart shall cause to be discharged into the atmosphere from any affected facility, except as provided under paragraph (b) of this section, any gases which contain nitrogen oxides in excess of the following emission limits, based on a 30-day rolling average.
  - (a)(1) NO<sub>x</sub> emission limits. (From the table contained in 40 CFR 60.44a(a)(1), using Gaseous Fuels & All Other Fuels) 86 ng/J or 0.20 lb/million BTU is the applicable limitation.
  - (a)(2) NO<sub>x</sub> reduction requirement. (From the table contained in 40 CFR 60.44a(a)(2), Gaseous Fuels) 25 percent reduction of potential combustion concentration.

**§ 60.46a Compliance provisions.**

- (a) Compliance with the particulate matter emission limitation under § 60.42a(a)(1) constitutes compliance with the percent reduction requirements for particulate matter under § 60.42a(a)(2) and (3).
- (b) Compliance with the nitrogen oxides emission limitation under § 60.44a(a) constitutes compliance with the percent reduction requirements under § 60.44a(a)(2).
- (c) The particulate matter emission standards under § 60.42a and the nitrogen oxides emission standards under § 60.44a apply at all times except during periods of startup, shutdown or malfunction. The sulfur dioxide emission standards under § 60.43a apply at all times except during periods of startup, shutdown, or when both emergency conditions exist and the procedures under paragraph (d) of this section are implemented.
- (e) After the initial performance test required under § 60.8, compliance with the sulfur dioxide emission limitations and percentage reduction requirements under § 60.43a and the nitrogen oxides emission limitations under § 60.44a is based on the average emission rate for 30 successive boiler operating days. A separate performance test is completed at the end of each boiler operating day after the initial performance test, and a new 30 day average emission rate for both sulfur dioxide and nitrogen oxides and a new percent reduction for sulfur dioxide are calculated to show compliance with the standards.
- (f) For the initial performance test required under § 60.8, compliance with the sulfur dioxide emission limitations and percent reduction requirements under § 60.43a and the nitrogen oxides emission limitation under § 60.44a is based on the average emission rates for the first 30 successive boiler operating days. The initial performance test is the only test in which at least 30 days prior notice is required unless otherwise specified by the administrator. The initial performance test is to be scheduled so that the first boiler operating day of the 30 successive boiler operating days is completed within 60 days after achieving the maximum production rate at which the affected facility will be operated, but not later than 180 days after initial startup of the facility.
- (g) Compliance is determined by calculating the arithmetic average of all hourly emission rates for SO<sub>2</sub> and NO<sub>x</sub> for the 30 successive boiler operating days, except for data obtained during startup, shutdown, malfunction (NO<sub>x</sub> only), or emergency conditions (SO<sub>2</sub> only). Compliance with the percentage reduction requirement for SO<sub>2</sub> is determined

based on the average inlet and average outlet SO<sub>2</sub> emission rates for the 30 successive boiler operating days.

- (h) If an owner or operator has not obtained the minimum quantity of emission data as required under § 60.47a of this subpart, compliance of the affected facility with the emission requirements under §§ 60.43a and 60.44a of this subpart for the day on which the 30-day period ends may be determined by the Administrator by following the procedures in section 7 of Method 19.

§ 60.47a **Emission Monitoring.**

- (c) The owner or operator of an affected facility shall install, calibrate, maintain, and operate a continuous monitoring system, and record the output of the system, for measuring nitrogen oxides emissions discharged to the atmosphere.
- (d) The owner or operator of an affected facility shall install, calibrate, maintain, and operate a continuous monitoring system, and record the output of the system, for measuring the oxygen or carbon dioxide content of the flue gases at each location where nitrogen oxides emissions are monitored.
- (e) The continuous monitoring systems under paragraphs (c), and (d) of this section are operated and data recorded during all periods of operation of the affected facility including periods of startup, shutdown, malfunction or emergency conditions, except for continuous monitoring system breakdowns, repairs, calibration checks, and zero and span adjustments.
- (f) The owner or operator shall obtain emission data for at least 18 hours in at least 22 out of 30 successive boiler operating days. If this minimum data requirement cannot be met with a continuous monitoring system, the owner or operator shall supplement emission data with other monitoring systems approved by the Administrator or the reference methods and procedures as described in paragraph (h) of this section.
- (g) The 1-hour averages required under paragraph § 60.13(h) are expressed in ng/J (lbs/million BTU) heat input and used to calculate the average emission rates under § 60.46a. The 1-hour averages are calculated using the data points required under § 60.13(b). At least two data points must be used to calculate the 1-hour averages.
- (h) When it becomes necessary to supplement continuous monitoring system data to meet the minimum data requirements in paragraph (f) of this section, the owner or operator shall use the reference methods and procedures as specified in this paragraph. Acceptable alternative methods and procedures are given in paragraph (j) of this section.
- (h)(2) Method 7 shall be used to determine the NO<sub>x</sub> concentration at the same location as the NO<sub>x</sub> monitor. Samples shall be taken at 30-minute intervals. The arithmetic average of two consecutive samples represents a 1-hour average.
- (h)(3) The emission rate correction factor, integrated bag sampling and analysis procedure of Method 3B shall be used to determine the O<sub>2</sub> or CO<sub>2</sub> concentration at the same location as the O<sub>2</sub> or CO<sub>2</sub> monitor. Samples shall be taken for at least 309 minutes in each hour. Each sample represents a 1-hour average.
- (h)(4) The procedure in Method 19 shall be used to compute each 1-hour average concentration in ng/J (lb/million BTU) heat input.
- (i) The owner or operator shall use methods and procedures in this paragraph to conduct monitoring system performance evaluations under § 60.13(c) and calibration checks under § 60.13(d). Acceptable alternative methods and procedures are given in paragraph (j) of this section.
- (i)(1) Methods 6, 7, and 3B, as applicable, shall be used to determine O<sub>2</sub>, SO<sub>2</sub>, and NO<sub>x</sub> concentrations.

- (i)(2) NO<sub>x</sub> (NO), shall be used for preparing the calibration gas mixtures (in N<sub>2</sub>, as applicable) under Performance Specification 2 of Appendix B of this part.
- (i)(3) For affected facilities burning only fossil fuel, the span value for a continuous monitoring system for measuring opacity is between 60 and 80 percent and for a continuous monitoring system measuring nitrogen oxides is determined as follows: (from table, gas) 500 ppm.
- (j) The owner or operator may use the following as alternatives to the reference methods and procedures specified in this section.
  - (j)(2) For Method 7, Method 7A, 7C, 7D, or 7E may be used. If Method 7C, 7D, or 7E is used, the sampling time for each run shall be 1-hour.
  - (j)(3) For Method 3, Method 3A or 3B may be used if the sampling time is 1 hour.
  - (j)(4) For Method 3B, Method 3A may be used.

§ 60.48a **Compliance determination procedures and methods.**

- (a) In conducting the performance tests required in § 60.8, the owner or operator shall use as reference methods and procedures the methods in Appendix A of this part or the methods and procedures specified in this section, except as provided in § 60.8(b). Section 60.8(f) does not apply to this section for SO<sub>2</sub> and NO<sub>x</sub>. Acceptable alternative methods are given in paragraph (e) of this section.
- (b) The owner or operator shall determine compliance with the particulate matter standards in § 60.42a as follows:
  - (b)(1) The dry basis F factor (O<sub>2</sub>) procedures in Method 19 shall be used to compute the emission rate of particulate matter.
  - (b)(2) For the particulate matter concentration, Method 5 shall be used at affected facilities without wet FGD systems.
    - (b)(2)(i) The sampling time and sample volume for each run shall be at least 120 minutes and 1.70 dscm (60 dscf). The probe and filter holder heating system in the sampling train may be set to provide an average gas temperature of no greater than 160±14 EC (320±25 EF).
    - (b)(2)(ii) For each particulate run, the emission rate correction factor, integrated or grab sampling and analysis procedures of Method 3B shall be used to determine the O<sub>2</sub> concentration. The O<sub>2</sub> sample shall be obtained simultaneously with, and at the same traverse points as, the particulate run. If the particulate run has more than 12 traverse points, the O<sub>2</sub> traverse points may be reduced to 12 provided that Method 1 is used to locate the 12 O<sub>2</sub> traverse points. If the grab sampling procedure is used, the O<sub>2</sub> concentration for the run shall be the arithmetic mean of all the individual O<sub>2</sub> concentrations at each traverse point.
  - (b)(3) Method 9 and the procedures in § 60.11 shall be used to determine opacity.
- (c) The owner or operator shall determine compliance with the SO<sub>2</sub> standards in § 60.43a as follows:
  - (c)(4) The appropriate procedures from Method 19 shall be used to determine the emission rate.
- (d) The owner or operator shall determine compliance with the NO<sub>x</sub> standard in § 60.44a as follows:
  - (d)(1) The appropriate procedures in Method 19 shall be used to determine the emission rate of NO<sub>x</sub>.
  - (d)(2) The continuous monitoring system in § 60.47a (c) and (d) shall be used to determine the concentrations of NO<sub>x</sub> and CO<sub>2</sub> or O<sub>2</sub>.
- (e) the owner or operator may use the following as alternatives to the reference methods and procedures specified in this section:
  - (e)(1) For Method 5 or 5B, Method 17 may be used at facilities with or without wet FGD systems if the stack temperature at the sampling location does not exceed an average

temperature of 160 EC (320 EF). The procedures of §§ 2.1 and 2.3 of Method 5B may be used in Method 17 only if it is used after wet FGD systems. Method 17 shall not be used after wet FGD systems if the effluent is saturated or laden with water droplets.

- (e)(2) The Fc factor (CO<sub>2</sub>) procedures in Method 19 may be used to compute the emission rate of particulate matter under the stipulations of § 60.46(d)(1). The CO<sub>2</sub> shall be determined in the same manner as the O<sub>2</sub> concentration.

**§ 60.49a Reporting requirements.**

- (a) For sulfur dioxide, nitrogen oxides, and particulate matter emissions, the performance test data from the initial performance test and from the performance evaluation of the continuous monitors (including the transmissometer) are submitted to the Administrator.
- (b) For sulfur dioxide and nitrogen oxides the following information is reported to the Administrator for each 24-hour period.
- (b)(1) The calendar date of the period.
- (b)(2) The average sulfur dioxide and nitrogen oxide emission rates (ng/J or lb/million BTU) for each 30 successive boiler operating days, ending with the last 30-day period in the quarter; reasons for non-compliance with the emission standards; and, description of corrective actions taken.
- (b)(3) Percent reduction of the potential combustion concentration of sulfur dioxide for each 30 successive boiler operating days, ending with the last 30-day period in the quarter; reasons for non-compliance with the standard; and, description of corrective actions taken.
- (b)(4) Identification of the boiler operating days for which pollutant or diluent data have not been obtained for at least 18 hours of operation of the facility; justification for not obtaining sufficient data; and description of corrective actions taken.
- (b)(5) Identification of the times when emissions data have been excluded from the calculation of average emission rates because of startup, shutdown, malfunction (NO<sub>x</sub> only), emergency conditions (SO<sub>2</sub> only), or other reasons, and justification for excluding data for reasons other than startup, shutdown, malfunction, or emergency conditions.
- (b)(6) Identification of "F" factor used for calculations, method of determination, and type of fuel combusted.
- (b)(7) Identification of times when hourly averages have been obtained based on manual sampling methods.
- (b)(8) Identification of the times when the pollutant concentration exceeded full span of the continuous monitoring system.
- (b)(9) Description of any modifications to the continuous monitoring system which could affect the ability of the continuous monitoring system to comply with Performance Specifications 2 or 3.
- (c) If the minimum quantity of emission data as required by § 60.47a is not obtained for any 30 successive boiler operating days, the following information obtained under the requirements of § 60.46a(h) is reported to the Administrator for that 30-day period:
- (c)(1) The number of hourly averages available for outlet emission rates (n<sub>o</sub>) and inlet emission rates (n<sub>i</sub>) as applicable.
- (c)(2) The standard deviation of hourly averages for outlet emission rates (s<sub>o</sub>) and inlet emission rates (s<sub>i</sub>) as applicable.
- (c)(3) The lower confidence limit for the mean outlet emission rates (E<sub>o</sub><sup>\*</sup>) and the upper confidence limit for the mean inlet emission rate (E<sub>i</sub><sup>\*</sup>) as applicable.
- (c)(4) The applicable potential combustion concentration (as defined in the regulation).
- (c)(5) The ratio of the upper confidence limit for the mean outlet emission rate (E<sub>o</sub><sup>\*</sup>) and the allowable emission rate (E<sub>std</sub>) as applicable.
- (d) For any periods for which opacity, sulfur dioxide or nitrogen oxides emissions data are not available, the owner or operator of the affected facility shall submit a signed statement indicating if any changes were made in operation of the emission control

system during the period of data unavailability. Operations of the control system and affected facility during periods of data unavailability are to be compared with operation of the control system and affected facility before and following the period of data unavailability.

- (e) The owner or operator of the affected facility shall submit a signed statement indicating whether:
- (g)(1) The required continuous monitoring system calibration, span, and drift checks or other periodic audits have or have not been performed as specified.
- (g)(2) The data used to show compliance was or was not obtained in accordance with approved methods and procedures of this part and is representative of plant performance.
- (g)(3) The minimum data requirements have or have not been met; or, the minimum data requirements have not been met for errors that were unavoidable.
- (g)(4) Compliance with the standards has or has not been achieved during the reporting period.
- (f) For the purposes of the reports required under § 60.7, periods of excess emissions are defined as all 6-minute periods during which the average opacity exceeds the applicable opacity standards under § 60.42a(b). Opacity levels in excess of the applicable opacity standard and the date of such excesses are to be submitted to the Administrator each calendar quarter.
- (g) The owner or operator of an affected facility shall submit the written reports required under this section and subpart A to the Administrator for every calendar quarter. All quarterly reports shall be postmarked by the 30<sup>th</sup> day following the end of each calendar quarter.
- (g) Unit 1A is subject to the New Source Performance Standard, 326 IAC 12, (40 CFR 60.330, Subpart GG) - Standards of Performance for Stationary Gas Turbines. This also triggers the requirements of 40 CFR 60, Subpart A - General Provisions except when otherwise specified in Subpart GG.

**§ 60.330 Applicability and designation of affected facility.**

- (a) The provisions of this subpart are applicable to the following affected facilities: All stationary gas turbines with a heat input at peak load equal to or greater than 10.7 gigajoules per hour, based on the lower heating value of the fuel fired. Unit 1A is a stationary gas turbine.
- (b) Any facility under paragraph (a) of this section which commences construction, modification, or reconstruction after October 3, 1977, is subject to the requirements of this part except as provided in paragraphs (e) and (j) of § 60.332. Unit 1A was not constructed until 1995.

Since both criteria were met, the applicability determination is valid.

**§ 60.331 Definitions** (only selected definitions which appear to affect this determination are included, the word(s) being defined appear in *Italics*)

*Stationary gas turbine* means any simple cycle gas turbine, regenerative cycle gas turbine or any gas turbine portion of a combined cycle steam/electric generating system that is not self propelled. It may, however, be mounted on a vehicle for portability.

*Simple cycle gas turbine* means any stationary gas turbine which does not recover heat from the gas turbine exhaust gases to preheat the inlet combustion air to the gas turbine, or which does not recover heat from the gas turbine exhaust gases to heat water or generate steam.

*Combined cycle gas turbine* means any stationary gas turbine which recovers heat from the gas turbine exhaust gases to heat water or generate steam.

*Ice Fog* means an atmospheric suspension of highly reflective ice crystals.

*Peak load* means 100 percent of the manufacturer's design capacity of the gas turbine at ISO standard day conditions.

*Base load* means the load level at which a gas turbine is normally operated.

*Electric utility stationary gas turbine* means any stationary gas turbine constructed for the purpose of supplying more than one-third of its potential electric output capacity to any utility power distribution system for sale.

**§ 60.332 Standard for nitrogen oxides.**

- (a) On and after the date of the performance test required by § 60.8 is completed, every owner or operator subject to the provisions of this subpart as specified in paragraphs (b), (c), and (d) of this section shall comply with one of the following, except as provided in paragraphs (e), (f), (g), (h), (i), (j), (k), and (l) of this section.
- (a)(1) No owner or operator subject to the provisions of this subpart shall cause to be discharged into the atmosphere from any stationary gas turbine, any gases which contain nitrogen oxides in excess of:  $STD = 0.0075 * (14.4) / Y + F$  where: STD= allowable NO<sub>x</sub> emissions (percent by volume at 15 percent oxygen and 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 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 this section.
- (a)(3) Table outlining the fuel bound nitrogen allowance (F value in the calculation above).

Pursuant to CP 167-2610-00021 (Issued May 27, 1993), the nitrogen oxides (NO<sub>x</sub>) emissions from the gas turbine shall not exceed 25 ppm<sub>dv</sub> at 15 percent oxygen for syngas or natural gas combustion. This limit will satisfy the NSPS standard above.

- (b) Electric utility stationary gas turbines with a heat input at peak load greater than 107.2 gigajoules per hour (100 million BTU/hour) based on the lower heating value of the fuel fired shall comply with the provisions of paragraph (a)(1) of this section (This CT has a heat input rate of 1709.1 million BTU per hour, therefore this is the applicable provision).
- (f) Stationary gas turbines using water or steam injection for control of NO<sub>x</sub> emissions are exempt from paragraph (a) when ice fog is deemed a traffic hazard by the owner or operator of the gas turbine.
- (i) Exemptions from the requirements of paragraph (a) of this section will be granted on a case-by-case basis as determined by the Administrator in specific geographical areas where mandatory water restrictions are required by governmental agencies because of drought conditions. These exemptions will be allowed only while the mandatory water restrictions are in effect.

**§ 60.333 Standard for sulfur dioxide.**

On and after the date on which the performance test required to be completed by § 60.8 is completed, every owner or operator subject to the provision of this subpart shall comply with one or the other of the following conditions:

- (a) No owner or operator subject to the provisions of this subpart shall cause to be discharged into the atmosphere from any stationary gas turbine any gases which contain sulfur dioxide in excess of 0.015 percent by volume at 15% oxygen and on a dry basis.
- (b) No owner or operator subject to the provisions of this subpart shall burn in any stationary gas turbine any fuel which contains sulfur in excess of 0.8 percent by weight.

**§ 60.334 Monitoring of operations.**

- (a) The owner or operator of any stationary gas turbine subject to the provisions of this subpart and using water injection to control NO<sub>x</sub> emissions shall install and operate a continuous monitoring system to monitor and record the fuel consumption and the ratio of water to fuel being fired in the turbine. This system shall be accurate to within ±5.0 percent and shall be approved by the Administrator.
- (b) The owner or operator of any stationary gas turbine subject to the provisions of this subpart shall monitor sulfur content and nitrogen content of the fuel being fired in the turbine. The frequency of determination of these values shall be as follows:
  - (b)(1) 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)(2) 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 paragraph (b) of this section.
- (c) For the purpose of reports required under § 60.7(c), periods of excess emissions that shall be reported are defined as follows:
  - (c)(1) Nitrogen oxides. Any one-hour period 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 § 60.332 by the performance test required in § 60.8 or 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 performance test required in § 60.8. Each report shall include 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 § 60.335(a).
  - (c)(2) Sulfur dioxide. Any daily period during which the sulfur content of the fuel being fired in the gas turbine exceeds 0.8 percent.
  - (c)(3) Ice fog. Each period during which an exemption provided in § 60.332(g) is in effect shall be reported in writing to the Administrator quarterly. For each period the ambient conditions existing during the period, the date and time the air pollution control system was deactivated, and the date and time the air pollution control system was reactivated shall be reported. All quarterly reports shall be postmarked by the 30<sup>th</sup> day following the end of each calendar quarter.

**§ 60.335 Test methods and procedures.**

- (a) To compute the nitrogen oxides emissions, the owner or operator shall use analytical methods and procedures that are accurate to within 5 percent and are approved by the Administrator to determine the nitrogen content of the fuel being fired.
- (b) In conducting the performance tests required in § 60.8, the owner or operator shall use as reference methods and procedures the test methods in appendix A of this part or

other methods and procedures as specified in this section, except as provided for in § 60.8(b). Acceptable alternative methods and procedures are given in paragraph (f) of this section.

- (c) The owner or operator shall determine compliance with the nitrogen oxides and sulfur dioxide standards in §§ 60.332 and 60.333(a) as follows:
  - (c)(1) The nitrogen oxides emission rate ( $\text{NO}_x$ ) shall be computed for each run using the following equation:  $\text{NO}_x = (\text{NO}_{x0})(P_r/P_o)^{0.5} e^{19(H_o-0.00633)}(288\text{K}/T_a)1.53$  where:  $\text{NO}_x$ = emission rate of  $\text{NO}_x$  at 15 percent  $\text{O}_2$  and ISO standard conditions, volume percent;  $\text{NO}_{x0}$ = observed  $\text{NO}_x$  concentration, ppm by volume;  $P_r$ = reference combustor inlet absolute pressure at 101.3 kilopascals ambient pressure, mm Hg;  $P_o$ = observed combustor inlet absolute pressure at test, mm Hg;  $H_o$ = observed humidity of ambient air, g  $\text{H}_2\text{O}/\text{g}$  air;  $e$ = transcendental constant, 2.718;  $T_a$ = ambient temperature,  $^{\circ}\text{K}$ .
  - (c)(2) The monitoring device of § 60.334(a) shall be used to determine the fuel consumption and the water-to-fuel ratio necessary to comply with § 60.332 at 30, 50, 75, and 100 percent of peak load or at four points in the normal operating range of the gas turbine, including the minimum point in the range and peak load. All loads shall be corrected to ISO conditions using the appropriate equations supplied by the manufacturer.
  - (c)(3) Method 20 shall be used to determine the nitrogen oxides, sulfur dioxide, and oxygen concentrations. The span values shall be 300 ppm of nitrogen oxide and 21 percent oxygen. The  $\text{NO}_x$  emissions shall be determined at each of the load conditions specified in paragraph (c)(2) of this section.
- (d) The owner or operator shall determine compliance with the sulfur content standard in § 60.333(b) as follows: ASTM D 2880-71 shall be used to determine the sulfur content of liquid fuels and ASTM D 1072-80, D 3031-81, D 4084-82, or D 3246-81 shall be used for the sulfur content of gaseous fuels (incorporated by reference - see § 60.17). The applicable ranges of some ASTM methods mentioned above are not adequate to measure the levels of sulfur in some fuel gases. Dilution of samples before analysis (with verification of the dilution ratio) may be used, subject to the approval of the Administrator.
- (e) To meet the requirements of § 60.334(b), the owner or operator shall use the methods specified in paragraphs (a) and (b) of this section to determine the nitrogen and sulfur contents of the fuel being burned. The analysis may be performed by the owner or operator, a service contractor retained by the owner or operator, the fuel vendor, or any other qualified agency.
- (f) The owner or operator may use the following as alternatives to the reference methods and procedures specified in this section:
  - (f)(1) Instead of using the equation in paragraph (b)(1) of this section, manufacturers may develop ambient condition correction factors to adjust the nitrogen oxides emission level measured by the performance test as provided in § 60.8 to ISO standard day conditions. These factors are developed for each gas turbine model they manufacturer in terms of combustion inlet pressure, ambient air pressure, ambient air humidity, and ambient air temperature. They shall be substantiated with data and must be approved for use by the Administrator before the initial performance test required by § 60.8. Notices of approval of custom ambient condition correction factors will be published in the Federal Register.
- (h) Unit 1B is subject to the New Source Performance Standard, 326 IAC 12, (40 CFR 60.40b, Subpart Db) - Standards of Performance for Industrial-Commercial-Institutional Steam Generating Units. This also triggers the requirements of 40 CFR 60, Subpart A - General Provisions except when otherwise specified in Subpart Db.

**§ 60.40b Applicability and designation of affected facility**

- (a) Affected units that commence construction, reconstruction or modification after June 19, 1984 and have a minimum heat input capacity of 29 megawatts (100 million BTU per hour). This boiler meets both of those criteria, therefore the rule is applicable.

**§ 60.44b Standard for Nitrogen oxides.**

(a)(1)(ii) establishes a limitation of 0.20 pounds per million BTU for units firing natural gas only and being characterized as having a high heat release rate. {High release rate boilers have greater than 70,000 BTU/hr - ft<sup>3</sup>. This boiler has a design heat input rate of 144 MMBTU per hour and a furnace volume of 1,979 cubic feet which yields a ratio of 72,764 BTU/hr-ft<sup>3</sup>. Therefore classification of this boiler as 'high release rate' is appropriate}

(h) The nitrogen oxide standards under this section apply at all times including periods of startup, shutdown, or malfunction.

(i) Compliance with the emission limit is determined on a 30-day rolling average basis.

(j) and (k) combined specifically exempt certain units from the Nitrogen Oxide standard. Those units have to be smaller than 250 MMBTU per hour, combust natural gas, distillate oil, or residual oil with a nitrogen content less than 0.30 weight percent; and have a federally enforceable limit on the nitrogen content at or below 0.30 weight percent. This exemption fits Unit 1B, as such the limit on fuel nitrogen transfers to the permit, but not the other nitrogen standards.

**§ 60.46b Compliance and performance test methods and procedures for particulate matter and nitrogen oxides.**

(a) The nitrogen oxide emission standards under 60.44b apply at all times.

(c) Compliance with the nitrogen oxide emission standards under 60.44b shall be determined through performance testing under paragraph (e) or (f), or under paragraphs (g) and (h) of this section.

**§ 60.48b Emission monitoring for particulate matter and nitrogen oxides.**

(i) states that affected facilities described in 60.44b(j) or 60.44b(k) are not required to install a CEMs unit for nitrogen oxide emissions.

- (i) Some of the fuel oil (or diesel) storage tanks (the 20,000 gallon thaw pit tank; the two (2) 99,500 gallon RePowering fuel oil storage tanks; and the 50,000 gallon fuel oil tank formerly used for <50 ppm PCB oil) are subject to the New Source Performance Standard, 326 IAC 12, (40 CFR 60.40c, Subpart Kb) because they are larger than 40 cubic meters (10,567 gallons) in volume and were installed after July 23, 1984.

These four (4) storage tanks are subject to the Subpart. However, #2 fuel oil has a VOL vapor pressure less than 3.5 kPa, and is therefore (pursuant to 40 CFR 60.110b(c)) exempt from all the provisions except for 40 CFR 60.116b(a) and (b). Furthermore, it is also specifically exempted from the General Requirements in 40 CFR 60, Subpart A.

**40 CFR 60.116b(a)**

The permittee shall keep copies of all records required for at least 2 years, except for the record required in 40 CFR 116b(b), which shall be kept for the life of the source.

**40 CFR 60.116b(b)**

The permittee shall keep readily accessible records showing the dimension of the storage vessels and an analysis showing the capacity of the storage vessels.

- (j) The requirements of Section 112(j) of the Clean Air Act (40 CFR Part 63.50 through 63.56) are applicable to this source because the source is a major source of HAPs (i.e., the source has the potential to emit 10 tons per year or greater of a single HAP or 25 tons per year or greater of a combination of HAPs) and the source includes one or more units that belong to one or more source categories affected by the Section 112(j) Maximum Achievable Control Technology (MACT) Hammer date of May 15, 2002.
1. This rule requires the source to:
    - a. Submit a Part 1 MACT Application by May 15, 2002; and
    - b. Submit a Part 2 MACT Application within twenty-four (24) months after the Permittee submitted a Part 1 MACT Application.
  2. The Permittee submitted a Part 1 MACT Application on May 13, 2002. Therefore, the Permittee is required to submit the Part 2 MACT Application on or before May 13, 2004. Note that on April 25, 2002, Earthjustice filed a lawsuit against US EPA regarding the April 5, 2002 revisions to the rules implementing Section 112(j) of the Clean Air Act. In particular, Earthjustice is challenging the US EPA's 24-month period between the Part 1 and Part 2 MACT Application due dates. Therefore, the Part 2 MACT Application due date may be changed as a result of this suit. Based on a proposed settlement published in the August 26, 2002 *Federal Register*, it appears that US EPA intends to revise the rule so that the due date of the Part 2 MACT Application will be within twelve (12) months after the Permittee submitted the Part 1 MACT application.
  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 a 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 and VCAPC receive 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 and VCAPC will notify the source that IDEM, OAQ and VCAPC 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.
- (k) The five (5) large coal fired boilers (Unit 2, Unit 3, Unit 4, Unit 5, and Unit 6) would not be subject to the requirements of the National Emission Standards for Hazardous Air Pollutants (NESHAPs), Subpart DDDDD (Boiler MACT) as currently proposed due to the exemption for electric utility steam generating units provided in 40 CFR 63.7490(b)(3). However, they will be subject to the Utility MACT. These requirements will be added once finalized.

- (l) Units 1B and 1C would be subject to the National Emission Standards for Hazardous Air Pollutants, (40 CFR 63.7480, Subpart DDDDD - Boiler MACT) as currently proposed. These requirements will be added once the rule is finalized. The provisions of 40 CFR 63 Subpart A - General Provisions, which are incorporated as 326 IAC 20-1-1, will apply to these facilities except when otherwise specified in 40 CFR 63 Subpart DDDDD.
- (m) Unit 1A is not subject to the National Emission Standards for Hazardous Air Pollutants for Stationary Gas Turbines, 40 CFR 63, Subpart YYYY. This turbine meets the criteria of an "existing stationary combustion turbine" in 40 CFR 63.6090(a)(1) because construction was commenced on Unit 1A prior to January 14, 2003. Pursuant to 40 CFR 63.6090(b)(4), existing stationary combustion turbines do not have to meet the requirements of 40 CFR 63, Subpart YYYY and of 40 CFR 63, Subpart A. This determination is based on the version of the final rule that was signed on August 29, 2003 by the U.S. EPA Administrator. A copy of the signed version of the NESHAP is currently available on the U.S. EPA website, <http://www.epa.gov/ttn/oarpg/t3pfpr.html>, and will be published in the Federal Register.
- (n) 40 CFR 72 through 40 CFR 78 (Acid Rain Program)
  - 1. The acid rain permit for this source, is incorporated by reference into this Part 70 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.
  - 2. Where an applicable requirement of the Clean Air Act is more stringent than an applicable requirement of regulations promulgated under Title IV of the Act, both provisions shall apply.

Note: The Acid Rain permit for this source is included as an Appendix to the Title V permit.

#### Title IV Emissions Allowances

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

- 1. No revision of this permit shall be required for increases in emissions that are authorized by allowances acquired under the Title IV Acid Rain Program, provided that such increases do not require a permit revision under any other applicable requirement.
- 2. No limit shall be placed on the number of allowances held by the Permittee. The permittee may not use allowances as a defense to noncompliance with any other applicable requirement.
- 3. Any such allowance shall be accounted for according to the procedures established in regulations promulgated under Title IV of the Clean Air Act.

### State Rule Applicability - Entire Source

#### 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 PM10, NOx, SO2, and CO. 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 5-1 (Opacity Limitations)

Since the emission units are not located in the small area of Vigo County identified in 326 IAC 5-1-1(c)(8), the appropriate limitation is in 326 IAC 5-1-2(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%) 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.

Pursuant to CP 167-2610-00021 (Issued May 27, 1993), the opacity from the combustion turbine peaking unit shall be limited to 20 percent.

- (a) PSI Energy may request a special exemption pursuant to 326 IAC 5-1-3(d) if proper operation of the turbine justifies such a request.
- (b) Compliance shall be determined by a continuous opacity monitor in accordance with 40 CFR 75.14.
- (c) Per 40 CFR 75.14(c), opacity monitoring is not required for simple cycle, natural gas only operation exhausting through stack 1D. This exemption has no impact on the combined cycle operation of the turbine.
- (d) Compliance data shall be submitted to the Vigo County Air Pollution Control Department (VCAPC) and Indiana Department of Environmental Management (IDEM).

#### 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 7-3 (Ambient Monitoring)

Pursuant to 326 IAC 7-3:

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

### **State Rule Applicability - Individual Facilities**

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

The PSD applicability date is August 7, 1977. 326 IAC 2-2 and 40 CFR 52.21(i)(4)(i) exempt sources and modifications which commenced construction prior to August 7, 1977. Most of the emission units operated by PSI Energy, Inc. - Wabash River were constructed prior to that applicability date.

PSI Energy, Inc. - Wabash River Generating Station is 1 of the 28 listed source categories (under 326 IAC 2-2-1(y)) which have a lower major source threshold (100 tpy instead of 250 tpy). The potential to emit from the source's operations that were existing prior to the applicability date exceed one hundred (100) tons per year, therefore the source is considered an existing major PSD source as of August 7,

1977. Changes after that date would then be compared to the appropriate pollutant specific significant modification threshold to determine PSD applicability.

Unit #2, Unit #3, Unit #4, Unit #5, Unit #6, F-1, F-2, F-4, 7A, 7B, 7C, and M-1 were all constructed and in operation prior to the trigger date.

On May 27, 1993 a Construction Permit was issued to PSI Energy, Inc. for emission units 1A, 1B and other auxiliary equipment (such as: a heat recovery steam generator to power existing Unit 1 steam turbine; a handling system to convey coal to Wabash River Energy; and a handling system to convey wet slag from Wabash River Energy) that were all part of the repowering project. This project included the removal from service the coal fired Unit 1, and as a result used those emission credits for netting. The project was significant (with regards to the PSD program) for CO and Sulfuric Acid Mist emissions only. Therefore, Units 1A, 1B, and the other auxiliary equipment were reviewed with regard to the PSD program.

Pursuant to CP 167-2610-00021 (Issued May 27, 1993, amended in 2001 when natural gas replaced fuel oil as the startup and backup fuel), 326 IAC 2-2, and 40 CFR 52.21, the best available control technology (BACT) for carbon monoxide shall be good combustion practices. CO emissions shall not exceed 15 ppm when burning syngas and natural gas corrected to 15% oxygen at 75% or greater load. The practice and instrumentation plan shall be submitted to the VCAPC along with the methods and parameters which are based on test results to ensure continued compliance.

Pursuant to CP 167-2610-00021 (Issued May 27, 1993), 326 IAC 2-2, and 40 CFR 52.21, the best available control technology (BACT) for sulfuric acid mist shall be: a) 0.01 lb of sulfuric acid ( $H_2SO_4$ ) mist per million BTU by limiting the sulfur content of the syngas to 360 ppm or less as measured by a gas chromatograph, and b) design exit gas temperature from the Heat Recovery Steam Generator (HRSG) to be at least 264 °F.

Pursuant to CP 167-2610-00021 (Issued May 27, 1993), the nitrogen oxides ( $NO_x$ ) emissions from the gas turbine shall not exceed 25 ppm<sub>dv</sub> at 15 percent oxygen for syngas or natural gas combustion.

Pursuant to CP 167-2610-00021 (Issued May 27, 1993), coal-fired boiler No. 1 (Unit 1) at the Wabash Generating Station shall be removed from service permanently by being physically dismantled or made inoperative by other means. This boiler was removed from service on December 31, 1994.

On January 27, 2000 a Significant Source Modification (SSM 167-11328-00021) was issued to PSI Energy, Inc. for emission units 1C, 1E, and a modification to the requirements of 1A. A detailed analysis was performed with regard to the significant modification thresholds at that time, and it was determined this modification would not trigger a PSD review. A limitation (less than 100 tons of CO emitted per 12-consecutive month period) was placed on combined CO emissions from Unit 1C (gas boiler) and Unit 1E (fuel preheater). The source has a CEM system for Unit 1C to show compliance with the CO limit when combined with calculated emissions from Unit 1E (see 326 IAC 3-5 discussion below).

#### 326 IAC 3-5 (Continuous Monitoring of Emissions):

Pursuant to 326 IAC 3-5, Units 2, 3, 4, 5, and 6 shall be continuously monitored for opacity emissions.

Pursuant to SSM 167-11328-00021 (issued on January 27, 2000), Units 1C and 1E combined have a CO emission limit that requires monitoring to demonstrate compliance. This monitoring system is subject to the following requirements:

- (a) Pursuant to 326 IAC 3-5-1(d)(1), the Permittee with an emission limitation or permit requirement established under 326 IAC 2 shall be required to install, calibrate, certify, operate

and maintain a continuous monitoring system for measuring emissions rates (for CO in this case) in pounds per hour from stack 1C in accordance with 326 IAC 3-5-2 and 326 IAC 3-5-3.

- (b) The Permittee shall submit to IDEM, OAQ and VCAPC, within ninety (90) days after monitor installation, a complete written continuous monitoring standard operating procedure (SOP), in accordance with the requirements of 326 IAC 3-5-4.
- (c) The Permittee shall record the output of the system and shall perform the required record keeping, pursuant to 326 IAC 3-5-6, and reporting, pursuant to 326 IAC 3-5-7.
- (d) In instances of downtime, the Permittee shall use the manufacturer's specification of maximum emission rate to demonstrate compliance with the limits established in the construction permit.
- (e) After twelve (12) consecutive months of operation, the Permittee may submit to OAQ and VCAPC alternative emission factors and their corresponding operating parameters to use in lieu of the manufacturer's specification of emission rates in instances of downtime. The alternative emissions factors must be approved by OAQ and VCAPC prior to use in calculating emissions for the limitations established in this construction permit. The alternative emission factors shall be based upon collected monitoring and/or approved performance tests. In the event that the information submitted does not contain sufficient data to establish appropriate emission factors, the Permittee shall continue to collect data until appropriate emission factors can be established. During this period of time, the Permittee shall continue to use the manufacturer's specification of maximum emission rates in periods of downtime.

This condition shall determine continuous compliance with the CO emission limits established in SSM 167-11328-00021 which made the requirements of 326 IAC 2-2 not applicable.

#### 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) During boiler startups, an exemption from the forty percent (40%) opacity limit is allowed for up to two (2) hours (twenty (20) six (6) minute averaging periods) or until the flue gas temperature reaches two hundred forty (240) degrees Fahrenheit, whichever occurs first. In addition, an exemption of up to five (5) hours (fifty (50) six (6) minute averaged periods) is allowed for one (1) unit startup each calendar year.
  - (2) During boiler shutdowns, an exemption from the forty percent (40%) opacity limit is allowed for up to two (2) hours (twenty (20) six (6) minute averaged periods).
  - (3) 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 5-1-3(b)]

#### 326 IAC 6-1-2

Pursuant to SSM 167-11328-00021 (issued January 27, 2000), Unit 1C was reviewed with regard to 326 IAC 6-2-4. However, this was incorrect. Since Vigo County is listed in 326 IAC 6-1-7, this boiler should have been reviewed under 326 IAC 6-1.

326 IAC 6-1-2 establishes emission limits for fuel combustion steam generators.

Pursuant to 326 IAC 6-1-2(b)(3) all gaseous fuel-fired steam generators (Unit 1A, Unit 1B, Unit 1C, and Unit 1E) must not emit a particulate matter content greater than 0.01 grain per dry standard cubic foot.

For Unit 1C, compliance with the NSPS Subpart Da particulate matter limitation (0.03 lb/million BTU) shall also demonstrate compliance with this 326 IAC 6-1-2 limitation as well.

326 IAC 6-1-2 establishes emission limits for general particulate emission facilities (all lime handling operations, all ash handling operations, all coal handling operations, and the three (3) Black Start Diesel Generators (7A, 7B, and 7C)). Pursuant to 326 IAC 6-1-2(a) emissions from these facilities shall not exceed 0.03 grain per dry standard cubic foot.

326 IAC 6-1-13 Particulate limits - Vigo County

Pursuant to 326 IAC 6-1-13, Units 2, 3, 4, 5, and 6 have previously established particulate matter limitations. Those units shall not exceed 0.1338 pounds of particulate per MM BTU nor 4102.3 tons per year combined.

326 IAC 7-1.1-2 Sulfur Dioxide emission limits

Pursuant to 326 IAC 7-1.1-2 (Sulfur Dioxide Emission Limitations), the SO<sub>2</sub> emissions from Units 7A, 7B, and 7C shall not exceed 0.5 pounds per million BTU for distillate oil combustion.

Pursuant to 326 IAC 7-1.1-2 (Sulfur Dioxide Emission Limitations), the natural gas only fired units (1A, 1B, 1C, and 1E) are not subject to sulfur dioxide emission limits.

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 7-4-3 Vigo County Sulfur Dioxide emission limitations

Pursuant to 326 IAC 7-4-3, Units 2, 3, 4, 5, and 6 have previously established sulfur dioxide limitations. These units shall not exceed 4.04 pounds of sulfur dioxide per MM BTU.

326 IAC 8-3 (Volatile Organic Compounds)

Pursuant to 326 IAC 8-3 the degreasing operations (degreaser (tractor shed); degreaser (maintenance shop); parts cleaner (electric shop); and parts cleaner (main floor storage area) are all subject to the requirements under both 326 IAC 8-3-2 and 326 IAC 8-3-5.

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.

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 of carbon adsorption. Such systems shall be submitted to the U.S. EPA as a SIP revision.

Pursuant to 326 IAC 8-3-5(b) (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) 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 10-4 NOx Budget Trading Program

Pursuant to 326 IAC 10-4-2(16), Unit 1A, Unit 2, Unit 3, Unit 4, Unit 5, and Unit 6 are each considered an "electricity generating unit (EGU)" because each commenced operation before January 1, 1997 and served as 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. Unit 1C is an "EGU" because it commenced operation after January 1, 1999, serves a generator that has a nameplate capacity greater than twenty-five (25) megawatts and produces electricity for sale. Pursuant to 326 IAC 10-4-1(a)(1), an "EGU" is a NOx budget unit. Because this source meets the criteria of

having one (1) or more NOx budget units, it is a NOx budget source. The Permittee shall be subject to the requirements of this rule. The NOx budget permit is in section F of the Part 70 permit. The Technical Support Document for the NOx budget permit is provided as Appendix A to this Technical Support Document.

Units 1B is not subject to 326 IAC 10-4. Unit 1B does not meet the definition of an "electricity generating unit" or "large affected unit" because it is an auxiliary boiler that does not serve a generator that has a nameplate capacity greater than twenty-five (25) megawatts, and it does not have a maximum design heat input greater than two hundred fifty (250,000,000) Btus per hour.

## Testing Requirements

Within a two calendar (2) year period from the most recent stack test, compliance with the PM limitation in Condition D.4.1 for each Unit (Units 2, 3, 4, 5, and 6) shall be determined by a performance stack test conducted 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) calendar years from the date of this valid compliance demonstration. Testing shall be conducted in accordance with Section C- Performance Testing. [326 IAC 2-7-6(1),(6)] [326 IAC 2-1.1-11]

## Compliance Requirements

Permits issued under 326 IAC 2-7 are required to ensure that sources can demonstrate compliance with applicable state and federal rules on a more or less continuous basis. All state and federal rules contain compliance provisions, however, these provisions do not always fulfill the requirement for a more or less continuous demonstration. When this occurs IDEM, OAQ, in conjunction with the source, must develop specific conditions to satisfy 326 IAC 2-7-5. As a result, compliance requirements are divided into two sections: Compliance Determination Requirements and Compliance Monitoring Requirements.

Compliance Determination Requirements in Section D of the permit are those conditions that are found more or less directly within state and federal rules and the violation of which serves as grounds for enforcement action. If these conditions are not sufficient to demonstrate continuous compliance, they will be supplemented with Compliance Monitoring Requirements, also Section D of the permit. Unlike Compliance Determination Requirements, failure to meet Compliance Monitoring conditions would serve as a trigger for corrective actions and not grounds for enforcement action. However, a violation in relation to a compliance monitoring condition will arise through a source's failure to take the appropriate corrective actions within a specific time period.

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

1. The natural gas fired boiler (Unit 1C) has applicable compliance monitoring conditions as specified below:
  - (a) The Permittee shall conduct continuous emission monitoring of NOx emissions from Unit 1C stack following all the applicable procedures in 326 IAC 12 and 40 CFR 60.47a.
  - (b) Pursuant to SSM 167-11328-00021, the Permittee shall conduct continuous emission monitoring of CO emissions from the Unit 1C stack. This monitoring shall be conducted in accordance with the requirements of 326 IAC 3-5.

The NOx monitoring system is required by 326 IAC 12 and 40 CFR 60, Subpart Da.

The CO monitoring system ensures compliance with a CO emission limitation. That limitation made the requirements of 326 IAC 2-2 (PSD) not applicable.

2. The combustion turbine (Unit 1A) has applicable compliance monitoring conditions as specified below:
  - (a) Pursuant to CP 167-2610-00021 and SSM 11328-00021, the Permittee shall monitor the steam injection system which is utilized for NOx control. Through testing the Permittee was required to develop a steam injection schedule of the proper injection ratios for both syngas and natural gas fired operation. These schedules shall be programmed into the control systems for the combustion turbine.
  - (b) The Permittee shall also conduct the monitoring of the injection system as required by 326 IAC 12 and 40 CFR 60.334.

The NOx steam injection monitoring system is required by 40 CFR 60, Subpart GG. The system also ensures compliance with the applicable NOx emission limitation.

3. The five (5) coal fired boilers (Unit 2, Unit 3, Unit 4, Unit 5, and Unit 6) and their associated control systems have applicable compliance monitoring conditions as specified below:

Preventive Inspections: Electrostatic Precipitator [326 IAC 2-7-6(1)][326 IAC 2-7-5(1)]

- (a) The following inspections shall be performed according to the indicated schedules, in accordance with the Preventive Maintenance Plan prepared in accordance with Section B - Preventive Maintenance Plan:
  - (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 (6) months. At a minimum, the following inspections shall be performed:
    - (A) Internal inspection of shell for corrosion (including but not limited to doors, hatches, insulator housings, and roof area).
    - (B) Effectiveness of rapping (including but not limited to buildup of dust on discharge electrodes and plates).
    - (C) Gas distribution (including but not limited to buildup of dust on distribution plates and turning vanes).
    - (D) Dust accumulation (including but not limited to buildup of dust on shell and support members that could result in grounds or promote advanced corrosion).
    - (E) Major misalignment of plates (including but not limited to a visual check of plate alignment).
    - (F) Rapper, vibrator and TR set control cabinets (including but not limited to motors and lubrication).
    - (G) Rapper assembly (including but not limited to loose bolts, ground wires, water in air lines, and solenoids).
    - (H) Vibrator and rapper seals (including but not limited to air in-leakage, wear, and deterioration).
    - (I) TR set controllers (including but not limited to low voltage trip point, over current trip point, and spark rate).
    - (J) Vibrator air pressure settings.
  - (3) Air and water infiltration, once per month. The recommended method for this inspection is for audible checks around ash hoppers/hatches, duct expansion joints, and areas of corrosion.

- (4) Flue gas conditioning system (FGCS) components, performed whenever there is an outage of any nature lasting more than three days, unless such inspections have been performed within the last six months.

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 90%. T-R set failure resulting in less than 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 thirty percent (30%) for three (3) consecutive six (6) minute averaging periods. In the event of opacity exceeding thirty percent, 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 percent. 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 thirty percent (30%) 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.
- (c) The combined stack for these 5 units shall be equipped with a COM.

Note:

The OAQ and VCAPC used all recent stack test data and associated COM data and recent inspection findings to make a reasoned determination of what the Opacity Reading "trigger level" should be for each unit. The trigger level is one of the surrogate tools used to demonstrate continuous compliance with a PM limit, in lieu of continuous emissions monitoring for particulate. The other surrogate used for boilers to indicate compliance with a PM limit is ESP performance data.

4. The material handling operations have an applicable compliance monitoring condition as specified below:

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

- (a) Visible emission notations of any coal handling exhaust point shall be performed once per shift during normal daylight operations when handling coal. A trained employee shall record whether emissions are normal or abnormal.
- (b) Visible emission notations of any ash handling exhaust point shall be performed once per shift during normal daylight operations when handling ash. A trained employee shall record whether emissions are normal or abnormal.
- (c) Visible emission notations of the ash storage pond shall be performed once per shift during normal daylight operations. A trained employee shall record whether emissions are normal or abnormal.

- (d) If visible emissions are observed crossing the property line or boundaries of the property, right-of-way, or easement on which the source is located, the Permittee shall take reasonable response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports. Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports, shall be considered a violation of this permit.
- (e) If abnormal emissions are observed at a transfer point 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.
- (f) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation.
- (g) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.
- (h) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.

#### **Conclusion**

The operation of this electric utility generating station shall be subject to the conditions of the attached proposed **Part 70 Permit No. T167-7176-00021**.

**Indiana Department of Environmental Management  
Office of Air Quality  
and  
Vigo County Air Pollution Control**

Addendum to the  
Technical Support Document for Part 70 Operating Permit

<b>Source Name</b>	<b>PSI Energy, Inc. – Wabash River Generating Station</b>
<b>Source Location:</b>	<b>450 Bolton Road, West Terre Haute, Indiana 47885</b>
<b>County:</b>	<b>Vigo County</b>
<b>SIC Code:</b>	<b>4911</b>
<b>Operation Permit No.:</b>	<b>T167-7176-00021</b>
<b>Permit Reviewer:</b>	<b>Rob Harmon</b>

On January 21, 2004, Vigo County Air Pollution Control (VCAPC) had a notice published in the Terre Haute Tribune-Star, Terre Haute, Indiana, stating that PSI Energy, Inc. -- Wabash River Generating Station had applied for a Part 70 Operating Permit to operate a stationary electric utility generating station. The notice also stated that VCAPC 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 February 27, 2004, PSI Energy, Inc. submitted comments on the proposed Part 70 permit. The summary of the comments is as follows:

**Comment 1**

Revise Source Name and Address as follows:

*“PSI Energy, Inc. – Wabash River Generating Station  
450~~5~~ Bolton Road  
West Terre Haute, Indiana 47885  
**PSI Energy, Inc. – Wabash River Repowering**  
**445 Bolton Road**  
**West Terre Haute, Indiana 47885***

**Response to Comment 1**

The cover page has been changed to reflect the different PSI operations on this site. The Source part of the cover page now reads:

PSI Energy, Inc. - Wabash River Generating Station  
455 **450** Bolton Road  
West Terre Haute, Indiana 47885  
**And**  
**PSI Energy, Inc. – Wabash River Repowering**  
**445 Bolton Road**  
**West Terre Haute, Indiana 47885**

**Comment 2**

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 2

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 3

Revise the Table of contents consistent with the permit mark up. The revisions to the Table of Contents are consistent with the comments to follow.

### Response to Comment 3

Any change made to the Part 70 Permit affecting the Table of Contents was also addressed in the Table of Contents.

### Comment 4

Section A.1, General Information: Revise Responsible Official from “*Wabash River Station Manager / Wabash River Repowering Manager*” to “**Manager of the Wabash River Station / Manager of the Wabash River Repowering**”.

### Response to Comment 4

The requested change was made. The Responsible Official is now identified in Condition A.1 as:

Responsible Official: **Manager of the Wabash River Station Manager / Manager of the Wabash River Repowering Manager**

### Comment 5

Section A.1, General Information: Wabash River Generating Station and Wabash River Repowering have separate source addresses. Revise the source address as follows (but retain the common mailing address):

“Source Address: **Wabash River Station – 450 Bolton Rd., W. Terre Haute, IN., 47885**  
**Wabash River Repowering – 445 Bolton Rd., W. Terre Haute, IN. 47885**  
Mailing Address: *c/o Steven L. Pearl, 1000 E. Main St., Plainfield, IN. 46168*”

### Response to Comment 5

The requested change was made. Both addresses are now included in the Source Address section. The Source Address Section of Condition A.1 now reads:

Source Address: **Wabash River Station - 450 Bolton Road, West Terre Haute, Indiana 47885**  
**Wabash River Repowering – 445 Bolton Road, West Terre Haute, Indiana 47885**

The addition of a second Source Address has also been carried through to the Part 70 Operating Permit Certification Form, the Emergency Occurrence Report Form, and the Part 70 Quarterly Deviation and Compliance Monitoring Report.

### Comment 6

Section A.2, Part 70 Source Definition: PSI does not question the aggregation of the PSI facilities and Wabash River Energy, LLC (WREL) facilities for Part 70 applicability purposes. PSI disagrees, however, with the statement that PSI and WREL are under common control of PSI, and that PSI has contractual control over WREL, to the extent that such statement may be construed as implying that PSI has

responsibility for WREL compliance. While IDEM has previously determined that the facilities are a single source for permit applicability purposes, separate permits have been issued to PSI and WREL, with each permittee being responsible for complying with the terms of its individual permit. In order to avoid any confusion as to compliance responsibilities, PSI contends that Section A.2 should be revised as follows:

**“This source consists of an electric utility generating station ~~and with an on-site producer and supplier of synthetic gas (“Syngas”) derived from petroleum products contractor:~~**

(a) *PSI Energy, Inc. (**PSI**) – Wabash River Generation Station (167-00021), the primary operation, is located at 450 Bolton Road, West Terre Haute, Indiana 47885; and*

(b) *Wabash River Energy, ~~Ltd., LC~~ (167-00091), **PSI’s lessee and Syngas producer** ~~the supporting operation,~~ is located at 444 West Sandford Ave., West Terre Haute, Indiana 47885.*

~~IDEM and VCAPC have determined that PSI Energy, Inc. – Wabash River Generating Station and Wabash River Energy, **Ltd., LC** are under the common control of PSI Energy, Inc. These two plants are considered one source due to contractual control for Part 70 applicability purposes only. Therefore, the term “source” in the Part 70 documents refers to both PSI Energy, Inc. and Wabash River Energy as one source.~~

~~Separate Part 70 permits will be issued to PSI Energy, Inc. with Permit No.: 167-7176-00021 and Wabash River Energy, **Ltd.**, with Permit No.: 167-7353-00091 (issued on December 31, 1998) solely for administrative purposes. **PSI Energy, Inc. and Wabash River Energy will have different Responsible Officials, and each will be solely responsible for its own compliance.**~~”

#### **Response to Comment 6**

On September 24, 1996, IDEM adopted the nonrule policy document “Title V Permitting Issues: On-Site Contractors” (Air-006-NPD) regarding on-site contractors and the definition of major source (326 IAC 2-7-1 (22)). IDEM and VCAPC presume that an on-site contractor is part of the primary source located on the property if the contractor provides a majority of its goods or services to the primary source. A primary source or on-site contractor can rebut this presumption by establishing that the on-site contractor does not provide the majority of its goods or services to the primary source. In this case WREL is required by the PSD Permit authorizing construction to provide syngas to PSI Energy only.

Recognizing that on-site contractors may find one Title V permit encompassing the entire major source cumbersome to use, IDEM and VCAPC are issuing separate Title V permits for the on-site contractors and the primary source. The permits are issued based on a logical division of operations, with the operations of the on-site contractors segregated from the operations of the primary source.

Consistent with current enforcement practice, the on-site contractor is responsible for complying with all applicable regulations. If an on-site contractor violates a provision of its Title V permit, IDEM and VCAPC will attempt to resolve the issue with the on-site contractor. If IDEM and VCAPC are unable to reach a settlement with the on-site contractor, IDEM and VCAPC may include the primary source in the enforcement proceeding in an attempt to resolve the issues. IDEM and VCAPC anticipate that in most cases, negotiations between the on-site contractor, IDEM, and VCAPC will successfully resolve the issues.

Some of the requested descriptive changes have been made. Condition A.2 – Source Definition now reads:

**This source consists of an electric utility generating station with an on-site contractor that produces and supplies synthetic gas (“syngas”) derived from petroleum products :**

(a) PSI Energy, Inc. - Wabash River Generating Station (167-00021), the primary operation, is located at 450 Bolton Road, West Terre Haute, Indiana 47885; and

(b) **PSI Energy, Inc. – Wabash River Repowering (167-00021), a co-located but independent operation, is located at 445 Bolton Road, West Terre Haute, Indiana 47885, and**

(b) (c) **Wabash River Energy, LLC (167-00091), the supporting operation to Wabash River Repowering, is located at 444 West Sandford Ave., West Terre Haute, Indiana 47885.**

IDEM and VCAPC have determined that PSI Energy, Inc. - Wabash River Generating Station and Wabash River Energy, LLC are under the common control of PSI Energy, Inc. These two plants are considered one source due to contractual control. Therefore, the term "source" in the Part 70 documents refers to both PSI Energy, Inc. and Wabash River Energy as one source.

Separate Part 70 permits will be issued to PSI Energy, Inc. with Permit No.: 167-7176-00021 and Wabash River Energy with Permit No.: 167-7353-00091 (issued on December 31, 1998) solely for administrative purposes.

#### Comment 7

Section A.3 1., Emission Units and Pollution Control Equipment Summary: Eliminate megawatt rating in the description and specify that combined cycle operation may be fueled by syngas or natural gas, and simple cycle operation will be fueled by natural gas. Modify the Unit 1A description to read: "*Combustion Turbine, identified as Unit 1A, constructed in 1995, with a nominal rated capacity of 1709.1 million BTU per hour (~~192 megawatt~~), utilizing syngas or natural gas **in combined cycle mode and natural gas in simple cycle mode**, utilizing...*".

#### Response to Comment 7

The description of Unit 1A was changed as follows. The megawatt rating was not removed because the combustion and power generation occur in the same equipment. Also startup is defined as a percentage of full load, so the full load needs to be listed. It now reads:

- (1) Combustion Turbine, identified as Unit 1A, constructed in 1995, with a nominal rated capacity of 1709.1 million BTU per hour (192 megawatt), utilizing syngas or natural gas **in combined cycle mode and natural gas in simple cycle mode** for fuel, utilizing steam injection for NO<sub>x</sub> control, and exhausting to stack 1A (combined cycle mode) or 1D (simple cycle mode). Stack 1A (combined cycle) has continuous emission monitors for SO<sub>2</sub>, NO<sub>x</sub>, CO<sub>2</sub>, and volumetric flow rate as well as a continuous opacity monitor (COM). Stack 1D (bypass) has continuous emission monitors for NO<sub>x</sub> and CO<sub>2</sub>.

The same description has been used in Section D.1, Section E, and Section F.

#### Comment 8

Section A.3 3., Emission Units and Pollution Control Equipment Summary: Continuous Emission monitors on Unit 1C include CO<sub>2</sub> and not O<sub>2</sub>, and thus the reference to O<sub>2</sub> should be removed. Change end of last sentence to read: "*...with continuous emission monitors for NO<sub>x</sub>, ~~O<sub>2</sub>~~ or CO<sub>2</sub> and CO.*"

#### Response to Comment 8

The description of Unit 1C was changed as requested. It now reads:

- (3) Natural gas fired boiler, identified as Unit 1C, constructed in 2001, with a nominal rated capacity of 397.8 million BTU per hour, using low NO<sub>x</sub> burners with flue gas recirculation as NO<sub>x</sub> control, and exhausting to stack 1C with continuous emission monitors for NO<sub>x</sub>, ~~O<sub>2</sub>~~ or CO<sub>2</sub>, and CO.

The same description has been used in Section D.3 and Section F.

#### Comment 9

Section A.3 5., Emission Units and Pollution Control Equipment Summary: Eliminate the parenthetical megawatt rating from the description of the Unit 2 boiler, and rely on the heat input description (the boiler

itself does not generate megawatts). Additionally, NOx and CO2 are now monitored in the common Stack A, and the individual unit monitors are no longer certified, therefore the second sentence should be deleted as follows: ~~“Unit 2 is equipped with continuous emission monitors for NOx and CO2.”~~

#### **Response to Comment 9**

The description of Unit 2 was changed as requested. It now reads:

- (5) Wall fired coal electric utility boiler (pulverized - dry bottom), identified as Unit 2, constructed in 1953, using #2 fuel oil as ignition fuel, with a nominal rated heat input capacity of 913.8 million BTU per hour (99 megawatt), using modified burner design (low NOx) for NOx control and electrostatic precipitator (ESP) for particulate control, exhausting to Stack A. ~~Unit 2 is equipped with continuous emission monitors for NOx and CO2.~~ Stack A is equipped with a continuous opacity monitor (COM) to monitor opacity as well as continuous emission monitors for NOx, CO<sub>2</sub>, SO<sub>2</sub>, and volumetric flow rate.

The same description has been used in Section D.4, Section E and Section F.

#### **Comment 10**

Section A.3 6., Emission Units and Pollution Control Equipment Summary: Eliminate the parenthetical megawatt rating from the description of the Unit 3 boiler, and rely on the heat input description (the boiler itself does not generate megawatts). Additionally, NOx and CO2 are now monitored in the common Stack A, and the individual unit monitors are no longer certified, therefore the second sentence should be deleted as follows: ~~“Unit 3 is equipped with continuous emission monitors for NOx and CO2.”~~

#### **Response to Comment 10**

The description of Unit 3 was changed as requested. It now reads:

- (6) Wall fired coal electric utility boiler (pulverized - dry bottom), identified as Unit 3, constructed in 1954, using #2 fuel oil as ignition fuel, with a nominal rated heat input capacity of 922.9 million BTU per hour (99 megawatt), using modified burner design (low NOx) for NOx control and electrostatic precipitator (ESP) for particulate control, exhausting to Stack A. ~~Unit 3 is equipped with continuous emission monitors for NOx and CO2.~~ Stack A is equipped with a continuous opacity monitor (COM) to monitor opacity as well as continuous emission monitors for NOx, CO<sub>2</sub>, SO<sub>2</sub>, and volumetric flow rate.

The same description has been used in Section D.4, Section E and Section F.

#### **Comment 11**

Section A.3 7., Emission Units and Pollution Control Equipment Summary: Eliminate the parenthetical megawatt rating from the description of the Unit 4 boiler, and rely on the heat input description (the boiler itself does not generate megawatts). Additionally, NOx and CO2 are now monitored in the common Stack A, and the individual unit monitors are no longer certified. The SO2 and volumetric flow rate was required during Phase I, and with completion of Phase I these monitors as well, are no longer certified. The second sentence should be deleted as follows: ~~“Unit 4 is equipped with continuous emission monitors for NOx, CO2, SO2 and volumetric flow rate.”~~

#### **Response to Comment 11**

The description of Unit 4 was changed as requested. It now reads:

- (7) Wall fired coal electric utility boiler (pulverized - dry bottom), identified as Unit 4, constructed in 1955, using #2 fuel oil as ignition fuel, with a nominal rated heat input capacity of 922.9 million BTU per hour (99 megawatt), using modified burner design (low NOx) for NOx control and electrostatic precipitator (ESP) for particulate control, exhausting to Stack A. ~~Unit 4 is equipped with continuous emission monitors for NOx, CO2, SO2 and volumetric flow rate.~~ Stack A is equipped with a continuous opacity

monitor (COM) to monitor opacity as well as continuous emission monitors for NO<sub>x</sub>, CO<sub>2</sub>, SO<sub>2</sub>, and volumetric flow rate.

The same description has been used in Section D.4, Section E and Section F.

#### **Comment 12**

Section A.3 8., Emission Units and Pollution Control Equipment Summary: Eliminate the parenthetical megawatt rating from the description of the Unit 5 boiler, and rely on the heat input description (the boiler itself does not generate megawatts). Additionally, NO<sub>x</sub> and CO<sub>2</sub> are now monitored in the common Stack A, and the individual unit monitors are no longer certified, therefore the second sentence should be deleted as follows: ~~“Unit 5 is equipped with continuous emission monitors for NO<sub>x</sub> and CO<sub>2</sub>.”~~

#### **Response to Comment 12**

The description of Unit 5 was changed as requested. It now reads:

- (8) Wall fired coal electric utility boiler (pulverized - dry bottom), identified as Unit 5, constructed in 1956, using #2 fuel oil as ignition fuel, with a nominal rated heat input capacity of 1096.2 million BTU per hour (~~121 megawatt~~), using modified burner design (low NO<sub>x</sub>) for NO<sub>x</sub> control and electrostatic precipitator (ESP) for particulate control, exhausting to Stack A. ~~Unit 5 is equipped with continuous emission monitors for NO<sub>x</sub> and CO<sub>2</sub>.~~ Stack A is equipped with a continuous opacity monitor (COM) to monitor opacity as well as continuous emission monitors for NO<sub>x</sub>, CO<sub>2</sub>, SO<sub>2</sub>, and volumetric flow rate.

The same description has been used in Section D.4, Section E and Section F.

#### **Comment 13**

Section A.3 9., Emission Units and Pollution Control Equipment Summary: Eliminate the parenthetical megawatt rating from the description of the Unit 6 boiler, and rely on the heat input description (the boiler itself does not generate megawatts). Additionally, NO<sub>x</sub> and CO<sub>2</sub> are now monitored in the common Stack A, and the individual unit monitors are no longer certified, therefore the second sentence should be deleted as follows: ~~“Unit 6 is equipped with continuous emission monitors for NO<sub>x</sub> and CO<sub>2</sub>.”~~

#### **Response to Comment 13**

The description of Unit 6 was changed as requested. It now reads:

- (9) Tangential fired coal electric utility boiler (pulverized - dry bottom, tangential), identified as Unit 6, constructed in 1968, using #2 fuel oil as ignition fuel, with a nominal rated heat input capacity of 2999.0 million BTU per hour (~~354 megawatt~~), using modified burner design (low NO<sub>x</sub>) for NO<sub>x</sub> control and electrostatic precipitator (ESP) for particulate control, exhausting to Stack A. ~~Unit 6 is equipped with continuous emission monitors for NO<sub>x</sub> and CO<sub>2</sub>.~~ Stack A is equipped with a continuous opacity monitor (COM) to monitor opacity as well as continuous emission monitors for NO<sub>x</sub>, CO<sub>2</sub>, SO<sub>2</sub>, and volumetric flow rate.

The same description has been used in Section D.4, Section E and Section F.

#### **Comment 14**

Section A.3 13., Emission Units and Pollution Control Equipment Summary: (1) Eliminate phrase “Black Start”, the diesel generators are used for more than black start, and this description may be misleading. (2) Revise the Unit 7A description to rely on the nominal heat input description and eliminate the megawatt description: ~~“Black Start Diesel Generator, identified as 7A, constructed in 1967, combusting #2 fuel oil, with a nominal rated capacity of 2.75 megawatts of electricity (28.6 million BTU per hour), used for intermittent and emergency duty, using no control, and exhausting to stack 7A.”~~

#### **Response to Comment 14**

The description of Unit 7A was changed as requested. It now reads:

- (13) ~~Black Start~~ Diesel Generator, identified as 7A, constructed in 1967, combusting #2 fuel oil, with a nominal rated capacity of ~~2.75 megawatts of electricity~~ (28.6 million BTU per hour), used for intermittent and emergency duty, using no control, and exhausting to stack 7A.

The same description has been used in Section D.6.

#### **Comment 15**

Section A.3 14., Emission Units and Pollution Control Equipment Summary: (1) Eliminate phrase “*Black Start*”, the diesel generators are used for more than black start, and this description may be misleading. (2) Revise the Unit 7B description to rely on the nominal heat input description and eliminate the megawatt description: “~~Black Start Diesel Generator, identified as 7B, constructed in 1967, combusting #2 fuel oil, with a nominal rated capacity of 2.75 megawatts of electricity~~ (28.6 million BTU per hour), used for intermittent and emergency duty, using no control, and exhausting to stack 7B.”

#### **Response to Comment 15**

The description of Unit 7B was changed as requested. It now reads:

- (14) ~~Black Start~~ Diesel Generator, identified as 7B, constructed in 1967, combusting #2 fuel oil, with a nominal rated capacity of ~~2.75 megawatts of electricity~~ (28.6 million BTU per hour), used for intermittent and emergency duty, using no control, and exhausting to stack 7B.

The same description has been used in Section D.6.

#### **Comment 16**

Section A.3 15., Emission Units and Pollution Control Equipment Summary: (1) Eliminate phrase “*Black Start*”, the diesel generators are used for more than black start, and this description may be misleading. (2) Revise the Unit 7C description to rely on the nominal heat input description and eliminate the megawatt description: “~~Black Start Diesel Generator, identified as 7C, constructed in 1967, combusting #2 fuel oil, with a nominal rated capacity of 2.75 megawatts of electricity~~ (28.6 million BTU per hour), used for intermittent and emergency duty, using no control, and exhausting to stack 7C.”

#### **Response to Comment 16**

The description of Unit 7C was changed as requested. It now reads:

- (15) ~~Black Start~~ Diesel Generator, identified as 7C, constructed in 1967, combusting #2 fuel oil, with a nominal rated capacity of ~~2.75 megawatts of electricity~~ (28.6 million BTU per hour), used for intermittent and emergency duty, using no control, and exhausting to stack 7C.

The same description has been used in Section D.6.

#### **Comment 17**

Section A.4 6., Specifically Regulated Insignificant Activities: Delete insignificant activity number 6, the “~~Degreaser (tractor shed): 30 gallon~~”. This parts cleaner no longer exists.

#### **Response to Comment 17**

Item 6 under Condition A.4 has been removed with the rest of the items renumbered. The change was as follows:

6. ~~Degreaser (tractor shed): 30 gallon [326 IAC 8-3]~~

### Comment 18

Condition B.8(a), Certification: In the first sentence, delete the phrase “*or required by an applicable requirement*”. If a certification is not required by the Part 70 permit, it should not be a violation of the permit to omit the certification.

### Response to Comment 18

The Responsible Official is required by 326 IAC 2-7-4(f) to certify any application form, report, or compliance certification submitted under 326 IAC 2-7. The following revision to Condition B.8(a) was made to clarify the requirement:

- (a) Where specifically designated by this permit or required by an applicable requirement, any application form, report, or compliance certification submitted **under this permit or 326 IAC 2-7** 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.

### Comment 19

Condition B.8(b), Certification: Modify 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 19

The change was made as requested. Condition B.8(b) now reads:

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 20

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).

### Response to Comment 20

The Condition B.10 in its present form does not require the Permittee to prepare multiple preventive maintenance plans; therefore, IDEM and VCAPC do 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. Therefore, no change was made in response to this comment.

### Comment 21

Condition B.10(a), Preventive Maintenance Plan: In first sentence, change: “*...ninety (90) days after issuance of this permit...*” to “***...ninety (90) days after effectiveness of this permit condition...***”. This revision will allow for any delays or stays of effectiveness.

### Response to Comment 21

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”. Therefore, no change was made in response to this comment.

### Comment 22

Condition B.10(a)(1), Preventive Maintenance Plan: Revise to read: “*Identification ~~of the individual(s)~~ **by title of those** responsible for inspecting, maintaining, and repairing emission control devices;”.* This

wording will allow identification of responsibility without mandating a revision to the PMP with each personnel change.

### Response to Comment 22

This Condition has been revised to allow for identification by title or classification. Condition B.10(a)(1) now reads:

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

### Comment 23

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

### Response to Comment 23

IDEM and VCAPC do 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 and VCAPC agree to delete “or potential to emit” from paragraph (b). Condition B.10(b) now reads:

The Permittee shall implement the PMPs, including any required record keeping, as necessary to ensure that failure to implement a PMP does not cause or contribute to an exceedance of any limitation on emissions ~~or potential to emit.~~

### Comment 24

Condition B.10(c), Preventive Maintenance Plan: Delete *“and approval”* and the final phrase of paragraph so it will read: *“A copy of the PMPs shall be submitted to IDEM, OAQ ~~and or~~ VCAPC, upon request and within a reasonable time, and shall be subject to review ~~and approval~~ by IDEM, OAQ ~~and or~~ VCAPC. IDEM, OAQ may require the Permittee to revise its PMPs whenever lack of proper maintenance causes or is the primary contributor to an exceedance of any limitation on emissions ~~or potential to emit.~~”*

### Response to Comment 24

The PMP has to be able to adequately maintain the equipment in such a manner that emissions are minimized. IDEM and VCAPC need to be able to verify that the PMP as designed will in fact effectively keep the equipment in proper working order. Therefore, no change in the approval language of Condition B.10(c) has been made as a result of this comment.

Since any limitation on emissions is the same as a limit on potential to emit, IDEM and VCAPC agree to delete “or potential to emit” from paragraph (b). Condition B.10(c) now reads:

A copy of the PMPs shall be submitted to IDEM, OAQ and VCAPC, upon request and within a reasonable time, and shall be subject to review and approval by IDEM, OAQ and VCAPC. IDEM, OAQ and VCAPC, may require the Permittee to revise its PMPs whenever lack of proper maintenance causes or is the primary contributor to an exceedance of any limitation on emissions ~~or potential to emit.~~

### Comment 25

Condition B.11(a), Emergency Provisions: The language in this condition should be changed to match the regulation by adding a phrase to the end of condition which states *“...**except as provided in 326 IAC 2-7-16 or this condition**”*.

### Response to Comment 25

The language was added to match this condition with the existing rule. The opening paragraph of Condition B.11(a) now reads:

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 **except as provided in 326 IAC 2-7-16 or this condition.**

### Comment 26

Condition B.11(b)(4), Emergency Provisions: Delete “*IDEM, OAQ*” from the text and the telephone numbers for IDEM, OAQ (or as an alternative, delete references to VCAPC). PSI does not believe it should be required to notify both agencies individually of each emergency. In the past, notification of VCAPC has been sufficient and acceptable.

### Response to Comment 26

Both agencies (IDEM and VCAPC) have compliance and tracking responsibilities as a result of the Part 70 Program. The dual reporting allows both to complete those obligations. Requiring the Permittee to make an extra copy of a submittal that is already being prepared and submitting it directly to the other agency is not unreasonable. Therefore, no change has been made as a result of this comment.

### Comment 27

Condition B.11(b)(5), Emergency Provisions: Delete “*Indiana Department of Environmental Management*” and its address from the requirement (or as an alternative, delete references to Vigo County Air Pollution Control and its address). PSI does not believe it should be required to notify both agencies individually of each emergency. In the past, notification of VCAPC has been sufficient and acceptable.

### Response to Comment 27

See Response to Comment 26. No change has been made as a result of this comment.

### Comment 28

Condition B.11(b)(5), Emergency Provisions: Revise sentence following address to read: “*within two (2) working **business** days of the time...*”.

### Response to Comment 28

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 or VCAPC’s working days.

### Comment 29

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

### Response to Comment 29

IDEM and VCAPC do 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.

### Comment 30

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), or included in an excess emissions report should not need to be reiterated again in the quarterly report.

### Response to Comment 30

Paragraph (b)(5) of Condition B.11 pertains to the reporting of emergencies lasting at least one hour; these emergencies must be reported in an Emergency Occurrence Report Form within two days of the emergency and do not have to be certified by the Responsible Official. Paragraph (h) of Condition B.11 was intended to address the reporting of other types of emergencies that are not required to be reported pursuant to paragraph (b)(5) and to provide the Responsible Official's certification of previously reported emergencies. In order to clarify this paragraph, IDEM and VCAPC have revised the language as follows:

Condition B.11(h) now reads:

- (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 31

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, 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 31

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 32

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 32

IDEM and VCAPC have explained in response to comment 30 that the Permittee needs to comply with the certification requirements for reporting deviations; therefore no change is needed to any permit condition.

### Comment 33

Condition B.15(a), Permit Modification, Reopening, Revocation and Reissuance, or Termination: Delete the last sentence requiring certification. This provision itself is not requiring any particular submittal from the source, thus it does not make sense that the provision impose a certification requirement.

### Response to Comment 33

This was included to remind the Permittee that 326 IAC 2-7-4(f) requires that all applications are required to be certified by the Responsible Official. The statement has been removed. Condition B.15(a) now reads as:

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).~~

### Comment 34

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 34

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 and VCAPC believe 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 and VCAPC 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 35

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.

### Response to Comment 35

IDEM and VCAPC agree that records can be electronically accessible from the site, and has revised the permit condition accordingly. Condition B.20(a)(5) now reads:

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 36

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 36

Condition B.20(c) does not apply to the Acid Rain Program or to the NO<sub>x</sub> Budget Trading Program. These trades do not require notice or modification as stated in Conditions E.2 and F.4. Therefore, no change has been made to Condition B.20(c) as a result of this comment.

### Comment 37

Condition B.20(e), Operational Flexibility: Revise the second sentence to read “*Therefore, the ~~notification~~ requirements of part (a) of this condition do not apply.*” This provision states that backup fuel switches are not alternative operating scenarios, thus none of the requirements of part (a) apply.

### Response to Comment 37

The change was made as requested. Condition B.20(e) now reads:

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.

#### **Comment 38**

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 ...*”.

#### **Response to Comment 38**

IDEM and VCAPC 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 and VCAPC do 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. No change was made as a result of this comment.

#### **Comment 39**

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 overly broad, and may be interpreted to include central office facilities, this provision must be limited to the locations where the Part 70 emission source is located. Replacing “kept” with “made accessible” will allow for electronic storage accessible from the site even if the server is at another location.

#### **Response to Comment 39**

IDEM and VCAPC do not agree that the language is overly broad. Inspections need to be able to cover any emission related activity. Therefore, that change has not been made as a result of this comment.

IDEM and VCAPC agree that the records may be electronically accessible from the site, and has revised the condition accordingly. Condition B.21(a) now reads:

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 40**

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 40**

IDEM and VCAPC do 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.

#### **Comment 41**

Condition B.22(b), Transfer of Ownership or Operational Control: Revise to read “*Any application requesting **a permit revision that allows for** a change in the ownership or operational control...*”. This revision makes clear that IDEM approves only the change in the permit term and not the change in ownership itself.

#### **Response to Comment 41**

The clarification has been made, except this would need a permit modification, not a revision. The first paragraph of Condition B.22(b) now reads:

Any application requesting a **permit modification that allows for** 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:

#### **Comment 42**

Condition B.23(a) , Annual Fee Payment: Revise to read: *“The Permittee shall pay **applicable** annual fees to IDEM, OAQ within thirty (30) calendar days of receipt of a billing.”*

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

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 43**

Condition B.23(b), Annual Fee Payment: Delete the phrase *“or revocation of this permit”*. The fee provisions of 326 IAC 2-7-19 do not provide for permit revocation for non-payment of fees, and including an explicit permit term with such an extraordinary response to nonpayment of fees, as opposed to traditional enforcement, is unwarranted.

#### **Response to Comment 43**

The provisions of 326 IAC 2-1.1-7 grant the authority to revoke the permit in such circumstances. Therefore, no change has been made in response to this comment.

#### **Comment 44**

Condition C.2, Open Burning: If open burning is to be regulated by this permit, the permit should also provide for the routine exceptions such as the annual fire training. Rather than require the source to make an annual application for the routine variance, approval for annual fire training conducted at the station should be added to the permit. Add the following language, which is consistent with language routinely used in annual approvals:

**“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, powerlines, fuel storage areas or pipelines.**
- (8) Vigo County Air Pollution Control, the Vigo County Health Department, and the local fire department shall be notified at least twenty four (24) hours in advance of the date and time of the burning.”**

#### **Response to Comment 44**

VCAPC grants variances to sources for this type of activity. These approvals are available 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 thirty (30) days while the term of this permit is five (5) years.

#### **Comment 45**

Condition C.3, 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.**”* This language is in conjunction with the Operation Standards contained in conditions D.1.4, D.2.4, D.3.4 and D.4.4.

#### **Response to Comment 45**

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 46**

Condition C.5, Fugitive Particulate Matter Emission Limitations: Modify this condition to allow for revision of the fugitive dust control plan as follows: *“Pursuant to 326 IAC 6-5 (Fugitive Particulate Matter Emission Limitations), fugitive particulate matter emissions shall be controlled according to the plan submitted on November 14, 1996 **or as revised.**”*

#### **Response to Comment 46**

The public has the legal authority under the Clean Air Act to know if a source is subject to a particular requirement and how the owner or operator of that source chooses to comply with that requirement. The owner or operator is granted a permit shield under 326 IAC 2-7-15 that provides that compliance with the conditions of the permit shall be deemed compliance with any applicable requirements as of the date of permit issuance, provided that the applicable requirements are included and specifically identified in the permit. Therefore, in order to satisfy the requirements of the Part 70 rules and the needs of all the permit stakeholders, it is necessary to incorporate the requirements of the FDCP with as much detail as is needed to identify the portions of the rule that apply and how the owner or operator will comply with the requirements.

If the source were allowed to modify the FDCP without a permit modification, neither of those requirements would be met. The public would not know what the current method of compliance is. Also, the permit shield would no longer cover this operation because the applicable requirements were no longer specifically identified in the permit. Therefore, no change was made as a result of this comment.

#### **Comment 47**

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 third party testing contractor should not require the additional certification of the Responsible Official.

#### **Response to Comment 47**

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). Condition D.9(c) now reads:

Pursuant to 326 IAC 3-6-4(b), all test reports must be received by IDEM, OAQ and VCAPC not later than forty-five (45) days after the completion of the testing. An extension may be granted by IDEM, OAQ and VCAPC, if the Permittee submits to IDEM, OAQ and VCAPC, 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 48

Condition C.11, Compliance Monitoring: Change first sentence beginning in 2<sup>nd</sup> line: “...shall be implemented within ninety (90) days of the effectiveness of the applicable permit conditions issuance.” This change will allow for any delays or stays of effectiveness of the applicable permit conditions.

#### Response to Comment 48

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 49

Condition C.11, Compliance Monitoring: Revise 3<sup>rd</sup> sentence to read: “If due to circumstances beyond its reasonable control, ~~that~~ equipment cannot be installed and operated or monitoring related activities cannot be implemented within 90 days...”.

#### Response to Comment 49

The addition of word 'reasonable' adds an element of subjectivity in this condition where a sound determination of reasonableness is dependent upon the individual's perspective. This change is unnecessary since the department has always worked closely with Permittees in order to understand any situations and conditions beyond Permittees' control that may cause delay in any such implementation.

The department does not intend to grant a blanket exemption for not complying with the 90 days deadline.

#### Comment 50

- a. Condition C.12(a), Maintenance of Continuous Opacity Monitoring Equipment: Revise first sentence to read: “The Permittee shall calibrate, maintain and operate all ~~necessary~~ continuous opacity monitoring systems (COMs) and related equipment required by this permit.”
- b. Condition C.12(d), Maintenance of Continuous Opacity Monitoring Equipment: As a general matter, PSI does not agree that the authority exist for the requirements of this condition, and 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.
- c. Condition C.12(d), Maintenance of Continuous Opacity Monitoring Equipment: 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 within one hour.
- d. Condition C.12(d)(1), Maintenance of Continuous Opacity Monitoring Equipment: Revise second sentence to read: “~~A trained~~ An employee shall record whether emissions...”. The employee qualifications are contained in condition C.12(d)(1)(A).
- e. Condition C.12(d)(1)(A), 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 these revisions to C.12(d)(1) and C.12(d)(1)(A), PSI would accept the replacement of the word “trained” with the word “qualified”, along with the deletion of the phrase “has been trained”.

- f. Condition C.12(d)(3), Maintenance of Continuous Opacity Monitoring Equipment: 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, the facility should be allowed to continue visible emission notations for an additional 24 hours in lieu of visible emission observations. Add C.12(d)(3): **“For unscheduled COM shutdowns or malfunctions, if a certified Visible Emissions (VE) reader is not reasonably 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, or until such time as a certified VE reader becomes reasonably available.”**
- g. Condition C.12(d)(4), Maintenance of Continuous Opacity Monitoring Equipment: Similar to that described in C.12(d)(3), it may not always 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, a provision should be added to provide for the use of a previously certified VE reader (a reader which has been certified in the past but is not currently certified). 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, or until such time as a certified VE reader becomes reasonably available.”**
- h. Condition C.12(e), Maintenance of Continuous Opacity Monitoring Equipment: 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 that 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. Thus, 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 50**

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 start notations if the monitor is down for 1 hour is reasonable since the monitoring it is intended to supplement is continuous. The notation itself is not a time consuming task, and the Permittee can begin to schedule someone to prepare to do it as soon as an outage occurs.

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. 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 51**

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 51

IDEM and VCAPC have made the requested change as shown below.

#### 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.

### Comment 52

Condition C.14, Pressure Gauge and Other Instrument Specifications: Delete this condition; it is not necessary and not authorized. Further, it is not applicable to any equipment at this source.

### Response to Comment 52

IDEM and VCAPC believe the temperature monitoring in the ESPs is important for determining the proper time to activate them. In order to accurately measure the temperature, adequate measurement devices must be used. This same logic applies to the voltages and current readings on the T-R sets. 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. However, the pressure drop related references can be removed from that condition since the permit does not require any pressure drop monitoring. Condition C.14 now reads:

- ~~(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)~~(a) 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)~~(b) The Permittee may request the IDEM, OAQ approve the use of a pressure gauge or an 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 operating parameters.

### Comment 53

- a. 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.
- b. Condition C.17(a), Compliance Response Plan: First, delete the first sentence which requires a CRP for each compliance monitoring condition of the permit, PSI does not concede that a Compliance Response Plan is required in the first Part 70 permit nor is it necessary for each compliance monitoring provision. Second, revise the last sentence, regarding 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...". This will allow for any delays or stays of effectiveness of this condition.
- c. Condition C.17(a)(1), Compliance Response Plan: Delete the last portion of the condition "~~and an expected timeframe for taking reasonable response steps~~". The timeframe for taking response steps will depend on several factors including operating conditions, electricity demand, proximity to outages, etc. Compliance response steps will be taken as soon as practicable,

however, PSI objects to relating a timeframe for response to this permit in such a manner which is a set-up for a deviation.

- d. Condition C.17(a)(2), Compliance Response Plan: Delete this provision. PSI does not agree that each unique problem encountered and appropriate response should be added to the CRP or OMM. Any CRP should concentrate on the most likely and common problems encountered and quick response, and should be flexible enough to allow for the unique situations. 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.
- e. Condition C.17(b), Compliance Response Plan: Modify to read: “~~For each compliance monitoring condition of permit~~ Reasonable response steps shall be taken when indicated by the provisions of that compliance monitoring condition as follows:”
- f. Condition C.17(b)(2), Compliance Response Plan: Modify to read: “... the Permittee shall devise and implement additional response steps **as necessary and appropriate** 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.~~” As previously stated, PSI objects to conditions that will require the addition of each unique response action to the CRP. This will eventually create a large and unmanageable document that will be counter productive to the intent.
- g. Condition C.17(b)(3), Compliance Response Plan: 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.
- h. Condition C.17(b)(4), Compliance Response Plan: 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.”
- i. Condition C.17(c)(4), Compliance Response Plan: The final phrase is self evident and redundant, the condition should be revised to read: “The process has already returned or is returning to operating within “normal” parameters ~~and no response steps are required.~~”
- j. Condition C.17(e), Compliance Response Plan: Revise 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 53

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.

The requested change to paragraph (e) can not be made. The response steps are not specifically identified in Section D, just the requirement to follow the CRP procedure. The language “in accordance with Section D” would include those response steps in the CRP, but changing it to “required in Section D” would change both the application and intent of the condition. No change was made as a result of this comment.

#### **Comment 54**

Condition C.18, Actions Related to Noncompliance Demonstrated by a Stack Test: Add new condition (c) (change current condition (c) to (d)) which will read: **“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 flexibility in resolving any noncompliant situations.

#### **Response to Comment 54**

The condition as currently written provides sufficient flexibility for IDEM, OAQ, VCAPC, 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 and VCAPC that retesting in 120 days is not practicable, IDEM, OAQ and VCAPC may extend the retesting deadline. No change to the condition is necessary.

#### **Comment 55**

Condition C.19(a)(2), Emission Statement: Delete (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 55

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 56

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...*”.

### Response to Comment 56

IDEM and VCAPC do not agree to the suggested change for paragraph (a) of the condition. 326 IAC 2-7-5(6)(E) requires the permit to contain a provision stating that the Permittee shall provide “...any information that the commissioner may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating the Part 70 permit or to determine compliance with the Part 70 permit.” 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 and VCAPC would consider to be unreasonable.

### Comment 57

Condition C.20(b), General Record Keeping Requirements: In first sentence, change “*permit issuance*” to “***the effective date of the applicable permit condition***”. This will allow for any delays or stays of effectiveness in the applicable permit conditions.

### Response to Comment 57

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 58

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) which IDEM has previously agreed to, and is appropriate in this permit as well.

### Response to Comment 58

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.

### Comment 59

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

### Response to Comment 59

IDEM and VCAPC do 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.

### Comment 60

Condition C.21(e), General Reporting Requirements: In first sentence, change “*issuance*” to “***effectiveness***”. This will allow for any delays or stays of effectiveness in the applicable permit conditions.

### Response to Comment 60

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 61

Condition C.21(f), General Reporting Requirements: The reporting requirement condition should include all reports required by the permit. If additional reports are required, or are required in other permit conditions, they should be consolidated into these conditions. Accordingly, 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 61

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

### Comment 62

Section D.1, Facility Description: Eliminate megawatt rating in description and specify that combined cycle operation may be fueled by syngas or natural gas, and simple cycle operation will be fueled by natural gas. Modify the Unit 1A description to read: **“Combustion Turbine, identified as Unit 1A, constructed in 1995, with a nominal rated capacity of 1709.1 million BTU per hour (~~492 megawatt~~), utilizing syngas or natural gas in combined cycle mode and natural gas in simple cycle mode, utilizing...”**

### Response to Comment 62

The change was made as requested. See Response to Comment 7.

### Comment 63

Condition D.1.2, NSPS Nitrogen Oxide Standard: Add parenthetical translation of %NOx to ppm at 15% O2 as follows: **“...the Permittee shall not allow to be discharged into the atmosphere, any gases which contain nitrogen oxides in excess of 0.0075 percent (%) (75 ppm @ 15% oxygen).”**

### Response to Comment 63

The requested change has been made, however in order to be complete the term “dry basis” was included as well. The first paragraph of Condition D.1.2 now reads:

Pursuant to 40 CFR 60.332(a)(1) and 40 CFR 60.332(b) the Permittee shall not allow to be discharged into the atmosphere, any gases which contain nitrogen oxides in excess of 0.0075 percent (%) **(75 ppm @ 15% oxygen, dry basis)**. This is based on the following equation:

### Comment 64

Condition D.1.3, Nitrogen Oxide Emission Limitation: The NOx limitation contained in this condition D.1.3 is more stringent than the NSPS limitation contained in D.1.2, and thereby the condition D.1.3 limit is controlling. Add statement to D.1.3 which states: **“Compliance with this limitation will satisfy the NSPS standard in Condition D.1.2 above.”**

### Response to Comment 64

IDEM and VCAPC do not agree to add the requested language. In order for IDEM and VCAPC 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).

### Comment 65

Condition D.1.5, Carbon Monoxide BACT: Delete last sentence: *“The practice and instrumentation plan shall be submitted to the VCAPC along with the methods and parameters which are based on test results to ensure continued compliance”.*

### Response to Comment 65

This requirement appeared in the PSD Construction Permit for the emission unit, and therefore needs to remain in effect. In addition, there is no reason given in the comment providing the basis for such deletion. Therefore, no change was made as a result of this comment.

### Comment 66

Condition D.1.8, Particulate Matter: Delete condition D.1.8. 326 IAC 6-1-2(b)(3), is not applicable. Unit 1A is a combustion turbine, and not a gaseous fuel fired steam generator. No fuel is combusted in the Heat Recovery Steam Generator, which is the steam generator portion of the unit. As established in 40 CFR 60.40a(b), combustion in the combustion turbine is distinct and regulated differently than combustion in the steam generator. In this case there is no combustion in the steam generator, thereby this regulation does not apply.

### Response to Comment 66

IDEM and VCAPC agree this requirement should not have been included on the Combustion Turbine. However, since Vigo County is listed under 326 IAC 6-1-7, and this emission unit has sufficient particulate emissions to trigger the requirements of 326 IAC 6-1-2(a). Therefore, the erroneous citation has been replaced with the correct one as follows:

D.1.8 Particulate Matter [326 IAC 6-1-2]

~~Pursuant to 326 IAC 6-1-2(b)(3) all gaseous fuel-fired steam generators (Unit 1A) must not emit a particulate matter content greater than 0.01 grain per dry standard cubic foot.~~ Pursuant to **326 IAC 6-1-2(a), the PM emissions from the combustion turbine stack shall not exceed 0.03 grains per dry standard cubic foot.**

### Comment 67

Condition D.1.9, Preventive Maintenance Plan: Revise D.1.9 as follows: *“A Preventive Maintenance Plan (PMP), in accordance with Section ~~C~~ **B** – Preventive Maintenance Plan, of this permit, is required for this facility’s ~~emissions unit and its~~ control device.”*

This comment also affects Conditions D.2.4, D.3.5, D.4.6(a), D.5.2, and D.6.3.

### Response to Comment 67

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

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

It is clear from the structure of the wording in 326 IAC 1-6-3 that the PMP requirement affects the entirety of the applicable facilities. Only 326 IAC 1-6-3(a)(1) is limited, in that it requires identification of the personnel in charge of only the emission control equipment, and not any other facility equipment. 326 IAC

1-6-3(b) provides that "...as deemed necessary by the commissioner, any person operating a facility shall comply with the requirements of subsection (a) of this section."

Many types of facilities require maintenance in order to prevent excess emissions. For example, if coal or oil fired boilers are not maintained, smoking and increased PM emissions will eventually result. Therefore, as a result of this comment, Conditions D.2.4, D.3.5, D.4.6(a), D.5.2, and D.6.3 will remain unchanged.

The incorrect reference to the Section containing the Preventive Maintenance Plan Condition has been changed. Condition D.1.9 now reads:

A Preventive Maintenance Plan (PMP), in accordance with Section B G - Preventive Maintenance Plan, of this permit, is required for this emissions unit and its control device.

#### **Comment 68**

Condition D.1.10, Unit 1 Removal: Delete this condition. Unit 1 was removed from service over nine years ago, and therefore this condition no longer serves any useful purpose in the permit. The Unit 1 removal should be noted in the TSD and this condition should be removed from the permit.

#### **Response to Comment 68**

IDEM and VCAPC agree since the action has been completed there is no need to have the shutdown condition in the permit. All that is necessary is to have a condition that states the boiler shall remain permanently inoperable. Condition D.1.9 now reads:

Pursuant to CP 167-2610-00021 (Issued May 27, 1993), coal-fired boiler No. 1 (Unit 1) at the Wabash Generating Station shall ~~be removed from service permanently by being physically dismantled or made inoperative by other means~~ **remain permanently inoperable.** (This boiler was removed from service on December 31, 1994.)

#### **Comment 69**

Condition D.1.14(b), Record Keeping Requirements: Delete phrase "~~as a minimum~~". This condition should specifically state the records which are required to be kept to be in compliance with the permit.

#### **Response to Comment 69**

There could be other information PSI uses to verify compliance. If so those records should be kept as well. No change was made as a result of this comment.

#### **Comment 70**

Condition D.1.15, Reporting Requirements: 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. Add statement to condition which reads: "**Submittal of the following reports shall fulfill all reporting requirements for this emission unit.**"

This comment also affects Conditions D.3.13, D.4.15, and D.6.7.

#### **Response to Comment 70**

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

### Comment 71

Condition D.1.15(b), Reporting Requirements: In second paragraph of (b), delete the phrase “to the administrator”. All report submittal addresses are defined in Section C.

### Response to Comment 71

IDEM and VCAPC agree with this request. The second paragraph of Condition D.1.15(b) now reads:

To document compliance with Conditions D.1.2 and D.1.4, pursuant to 40 CFR 60.334, excess emissions and monitoring system performance (MSP) reports shall be submitted to the administrator in accordance with Section C – General Reporting Requirements semi-annually for each six month period in the calendar year. All semi-annual reports shall be postmarked by the 30<sup>th</sup> day following the end of each six-month period. For the purpose of reports under 40 CFR 60.7(c), periods of excess emissions that shall be reported are defined as follows:

### Comment 72

Condition D.3.7, NSPS Compliance Determination Procedures and Methods: Re-letter and re-number the paragraphs as appropriate.

### Response to Comment 72

Condition D.3.7 now reads:

Pursuant to 40 CFR 60.48a, the Permittee shall use methods and procedures in Appendix A of 40 CFR 60 in order to properly conduct the performance tests required under 40 CFR 60.8. (Section 60.8(f) does not apply for SO<sub>2</sub> and NO<sub>x</sub> in this case). The procedures, along with acceptable alternative methods are as follows:

- (a) The Permittee shall determine compliance with the particulate matter standards under Condition D.3.2 and the opacity standards under Condition D.3.2 as follows:
  - (1) The dry basis F factor (O<sub>2</sub>) procedures in Method 19 shall be used to compute the emission rate of particulate matter.
  - (2) For the particulate matter concentration, Method 5 shall be used at affected facilities without wet FGD systems and Method 5B shall be used after wet FGD systems.
    - (i) The sampling time and sample volume for each run shall be at least 120 minutes and 1.70 dscm (60 dscf). The probe and filter holder heating system in the sampling train may be set to provide an average gas temperature of no greater than 160±14 EC (320±25 EF).
    - (ii) For each particulate run, the emission rate correction factor, integrated or grab sampling and analysis procedures of Method 3B shall be used to determine the O<sub>2</sub> concentration. The O<sub>2</sub> sample shall be obtained simultaneously with, and at the same traverse points as, the particulate run. If the particulate run has more than 12 traverse points, the O<sub>2</sub> traverse points may be reduced to 12 provided that Method 1 is used to locate the 12 O<sub>2</sub> traverse points. If the grab sampling procedure is used, the O<sub>2</sub> concentration for the run shall be the arithmetic mean of all the individual O<sub>2</sub> concentrations at each traverse point.
  - (3) Method 9 and the procedures in § 60.11 shall be used to determine opacity.
- ~~(2)(b)~~ The Permittee shall determine compliance with the sulfur dioxide standard in Condition D.3.2 as follows:
  - (1) The appropriate procedures from Method 19 shall be used to determine the emission rate.

- (3)(c) The Permittee shall determine compliance with the nitrogen oxides standard in Condition D.3.2 as follows:
- (1) The appropriate procedures in Method 19 shall be used to determine the emission rate of NO<sub>x</sub>.
  - (2) The continuous monitoring system in § 60.47a (c) and (d) shall be used to determine the concentrations of NO<sub>x</sub> and CO<sub>2</sub> or O<sub>2</sub>.
- (4)(d) The Permittee may use the following alternative methods and procedures, as applicable:
- (1) For Method 5 or 5B, Method 17 may be used at facilities with or without wet FGD systems if the stack temperature at the sampling location does not exceed an average temperature of 160 EC (320 EF). The procedures of §§ 2.1 and 2.3 of Method 5B may be used in Method 17 only if it is used after wet FGD systems. Method 17 shall not be used after wet FGD systems if the effluent is saturated or laden with water droplets.
  - (2) The Fc factor (CO<sub>2</sub>) procedures in Method 19 may be used to compute the emission rate of particulate matter under the stipulations of § 60.46(d)(1). The CO<sub>2</sub> shall be determined in the same manner as the O<sub>2</sub> concentration.

### Comment 73

Condition D.3.9(b), NSPS Emission Monitoring: Remove the word “install”, the monitor has already been installed. “...the Permittee shall, at the location where the nitrogen oxide monitor is, ~~install~~, calibrate, maintain, and operate a continuous oxygen or carbon dioxide continuous monitoring system.”

### Comment 74

Condition D.3.10(a), Continuous Emission Monitoring System: Remove the word “install”, the monitor has already been installed. “...the Permittee with an emission limitation or permit requirement established under 326 IAC 2-1-3(i)(8) shall be required to ~~install~~, calibrate, certify, operate and maintain a continuous monitoring system for measuring emissions rates (for CO in this case) in pounds per hour from stack 1C in accordance with 326 IAC 3-5-2 and 326 IAC 3-5-3.”

### Response to Comments 73 and 74

The changes were made as requested.

Condition D.3.9(b) now reads:

Pursuant to 40 CFR 60.47a(d), the Permittee shall, at the location where the nitrogen oxide monitor is, ~~install~~, calibrate, maintain, and operate a continuous oxygen or carbon dioxide continuous monitoring system. The output of this monitoring system shall be recorded.

Condition D.3.10(a) now reads:

Pursuant to 326 IAC 3-5-1(d)(1), the Permittee with an emission limitation or permit requirement established under 326 IAC 2-1-3(i)(8) shall be required to ~~install~~, calibrate, certify, operate and maintain a continuous monitoring system for measuring emissions rates (for CO in this case) in pounds per hour from stack 1C in accordance with 326 IAC 3-5-2 and 326 IAC 3-5-3.

### Comment 75

Condition D.4.x(a), Opacity: Add condition 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 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 one 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.

#### Response to Comment 75

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 and VCAPC do not agree to add the requested language.

#### Comment 76

Condition D.4.x(b), Opacity: Add enforcement discretion language: **“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 will still provide IDEM, OAQ with enforcement discretion over such excess opacity readings.

#### Response to Comment 76

326 IAC 5-1 does not allow exemptions from the opacity limit up to three percent (3%) of the boiler operating time; therefore, IDEM and VCAPC cannot simply create such an exemption where one does not exist in the rule. IDEM and VCAPC 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 77

- a. Condition D.4.3(a)(1), Temporary Alternative Opacity Limitations: Revise to read: *“During boiler startups, and exemption from the forty percent (40%) opacity limit is allowed for up to ~~two (2) hours (twenty (20) five (5) hours (fifty (50) six (6) minute averaging periods)~~, or until the flue gas temperature reaches two hundred forty (240) degrees Fahrenheit, whichever occurs first.”* This change is consistent with PSI’s 2000 TAOL request and is consistent with 326 IAC 5-1-3(e).
- b. Condition D.4.3(a)(1), Temporary Alternative Opacity Limitations: As an alternative to the comment above, PSI would accept a revision to last sentence of D.4.3(a)(1) to read: *“In addition, an exemption of up to five (5) hours (fifty (50) six (6) minute averaged periods) is allowed for ~~one (1) each of five (5) unit startups~~ **s per each boiler (boilers 2, 3, 4, 5 and 6)** each calendar year.”*
- c. Condition D.4.3(a)(2), Temporary Alternative Opacity Limitations: Revise to read: *“During boiler shutdowns, an exemption from the forty percent (40%) opacity limit is allowed for up to ~~two (2) hours (twenty (20) four (4) hours (forty (40) six (6) minute averaged periods)~~.”* This change is consistent with PSI’s 2000 TAOL request and is consistent with 326 IAC 5-1-3(e).
- d. Condition D.4.3(a)(3), Temporary Alternative Opacity Limitations: Revise to second paragraph to read: *“Operation of the electrostatic precipitator is not required during these times ~~unless necessary to comply with those 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.

#### Response to Comment 77

IDEM and VCAPC used the historical data from the Permittee’s continuous opacity monitoring systems to determine what level of opacity resulted from various startups and shutdowns over the past several years. The data indicates that, with rare exceptions, the boilers can comply with the temporary alternative opacity limitations listed in the draft permit. These rare exceptions do not support revising the temporary alternative opacity limitations that would apply to all startups and shutdowns. Additionally, the limitations are set up based on rules and regulations, and can not be ignored based upon ESP operation. That is why the language about the existing limits must remain in place. The requested changes have not been made to Conditions D.4.3(a)(1) and (2). Condition D.4.3(a)(3) has been changed as requested, and now reads as follows:

- (3) Operation of the electrostatic precipitator is not required during these time ~~unless necessary to comply with these limits.~~

#### Comment 78

Condition D.4.4(c), Operation Standards: Revise as follows: “Any boiler or condenser tube chemical cleaning waste liquids evaporated in the boiler shall only contain the cleaning solution and two full volume boiler or condenser rinses.”

#### Response to Comment 78

The change was made as requested. Condition D.4.4(c) now reads:

Any boiler or condenser tube chemical cleaning waste liquids evaporated in the boiler shall only contain the cleaning solution and two full volume boiler **or condenser** rinses.

#### Comment 79

Condition D.4.5(a), Operation Standards: Revise to specify a 3 hour block average as follows: “The combined particulate matter emissions from Units 2, 3, 4, 5 and 6 shall not exceed a total of 848.4 pounds per hour (lbs/hr), with compliance demonstrated using a 3 hour **block** average **(three hour block periods ending at 03:00, 06:00, 09:00, 12:00, 15:00, 18:00, 21:00 and 24:00)**.” This is consistent with the precedent set by other monitoring rules, such as 326 IAC 3-5-7.

#### Response to Comment 79

The monitoring rules under 326 IAC 3-5-7 only allow 3 hour block averages for gaseous emissions. Even for gaseous emissions it is not automatically granted, just is an option. This kind of limitation on particulate matter would not be appropriate, therefore no change was made as a result of this comment.

#### Comment 80

Condition D.4.5(b), Operation Standards: Revise to specify a 3 hour block average as follows: “The combined sulfur dioxide (SO<sub>2</sub>) emissions from Units 2, 3, 4, 5 and 6 shall not exceed a total of 25,618 pounds per hour (lbs/hr), with compliance demonstrated using a 3 hour **block** average **(three hour block periods ending at 03:00, 06:00, 09:00, 12:00, 15:00, 18:00, 21:00 and 24:00)**.” This is consistent with the precedent set by other monitoring rules, such as 326 IAC 3-5-7.

#### Response to Comment 80

The change was made as requested. Condition D.4.5(b) now reads:

The combined sulfur dioxide (SO<sub>2</sub>) emissions from Units 2, 3, 4, 5, and 6 shall not exceed a total of 25,618 pounds per hour (lbs/hr), with compliance demonstrated using a ~~3-hour average~~. **three hour block average (three hour block periods ending at 03:00, 06:00, 09:00, 12:00, 15:00, 18:00, 21:00, and 24:00)**.

#### Comment 81

Condition D.4.6(b), Preventative Maintenance Plan: Condition D.4.6(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.

#### Response to Comment 81

326 IAC 2-7-5(1) and 326 IAC 2-7-6(1) provide IDEM and VCAPC 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 and VCAPC believe 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 82

- a. Condition D.4.12, 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.4.12 in its entirety. However, PSI will accept this condition if the changes recommended in the following comments (pertaining to Condition D.4.12) are made.
- b. Condition D.4.12(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 unnecessarily burdensome, is an attempt to micro-manage facility operation, and provides no useful data for compliance monitoring beyond the number of T-R sets in service. 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.*”
- c. Condition D.4.12(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.

### Response to Comment 82

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 and VCAPC have included permit conditions requiring the Permittee to monitor the performance of the ESPs by monitoring certain ESP operating parameters once per shift. IDEM and VCAPC have 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 deviation from 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 and VCAPC do not agree to change the condition to allow only 75% of the T-R sets to be in service.

### **Comment 83**

Condition D.4.13, Opacity Readings: As stated in the comment to D.4.12, 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.

### **Response to Comment 83**

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 independent 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 thirty percent (the level actually specified in D.4.13), as evidenced by the results of IDEM approved stack testing. Since the stack testing demonstrated compliance with the PM emissions when opacity levels were well below the opacity limits, it is appropriate for PSI to take response steps when the observed opacity is significantly above the levels demonstrated during a compliant stack test.

The Condition D.4.13 does not establish an opacity limit that is more stringent than the opacity limits established by 326 IAC 5-1. Rather, the condition requires the Permittee to take response steps when the opacity is above the level indicative of normal operating conditions. An opacity reading that is in compliance with 326 IAC 5-1, but above the level of normal operating conditions and requires a response step is not considered a violation. It is only a violation if the Permittee fails to take any response steps. IDEM and VCAPC have 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 84**

Condition D.4.14(a), Record Keeping Requirements: Delete D.4.14(a)(4) pertaining to “*All ESP parametric monitoring readings*”.

### **Response to Comment 84**

As explained in Response to Comment 92, IDEM and VCAPC do not agree to delete the parametric monitoring requirements. As a result, the record keeping conditions associated with this requirement has been retained in the permit.

### **Comment 85**

Condition D.4.14(c), Record Keeping Requirements: Consistent with comment regarding D.4.5, modify to read: “...the Permittee shall maintain records of the 3 hour **block** average SO<sub>2</sub> and Particulate Matter emissions from Stack A...” .

### Response to Comment 85

IDEM and VCAPC do not agree with the change to block averages for particulate matter, but do agree with the change on SO<sub>2</sub>. Therefore, Condition D.4.14(c) now reads:

To document compliance with Condition D.4.5, the Permittee shall maintain records of the 3-hour **block** average SO<sub>2</sub> and **3-hour average** Particulate Matter emissions from Stack A (Units 2, 3, 4, 5, and 6 combined). The particulate matter emission rate shall be developed using actual heat input rate for each unit in conjunction with the respective correlation between heat input and pounds of particulate matter emissions per million BTU heat input from the latest stack test. The SO<sub>2</sub> rate shall be developed using the current coal sulfur analysis and the heat input rates.

### Comment 86

Condition D.4.14(d), Record Keeping Requirements: Modify to read: “...*the Permittee shall maintain records of the ~~results of all boiler and~~ emission control equipment inspections,...*”. IDEM has no authority to require or regulate inspections of the boiler.

### Response to Comment 86

As explained in Response to Comment 90, IDEM and VCAPC do not agree that the PMP does not apply to the boiler. As a result, the record keeping condition associated with this requirement has been retained in the permit.

### Comment 87

- a. Condition D.5.3(a), Visible Emissions Notations: Revise to read: “Visible emissions ~~notations of~~ **from** the coal handling unloading and transfer points shall be ~~performed once per shift~~ **monitored once per day** during normal daylight operations. ~~A trained by an~~ employee shall ~~record~~ **instructed to observe** whether any emissions are observed.”
- b. Condition D.5.3(b), Visible Emissions Notations: Revise to read: “Visible emissions ~~notations of~~ **from** any ash handling exhaust point shall be ~~performed once per shift~~ **monitored once per day** during normal daylight operations when handling ash. ~~A trained by an~~ employee shall ~~record~~ **instructed to observe** whether any **abnormal** emissions are ~~observed~~ **are present**.”
- c. Condition D.5.3(c), Visible Emissions Notations: Revise to read: “Visible emissions ~~notations of~~ **from** any the ash storage pond shall be ~~performed once per shift~~ **monitored once per day** during normal daylight operations. ~~A trained by an~~ employee shall ~~record~~ **instructed to observe** whether **any abnormal** emissions are ~~observed~~ **present normal or abnormal**.”
- d. Condition D.5.3(e), Visible Emissions Notations: Revise last sentence: “Failure to take response steps...**in conjunction with a violation of an applicable opacity limitation** shall be considered a deviation from this permit.”
- e. Condition D.5.3(h), Visible Emissions Notations: Revise to read: “~~A trained employee is an employee who has~~ **The employee must have** worked at the plant **or similar facility** for at least one (1) month and ~~has been trained~~ **be familiar** in the appearance and characteristics of normal visible emissions for that specific process.” As an alternate to the elimination of the word “trained” in D.5.4(e), PSI would accept the replacement of the word “trained” with the word “**qualified**” along with the deletion of the phrase “has been trained”.

### Response to Comment 87

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 and VCAPC do 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 and VCAPC believe 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 88**

Condition D.5.4(a), Record Keeping Requirements: The records required for such frequent monitoring of all the potential emission sources are overly burdensome, and PSI objects to this needless requirement. However, PSI will agree to maintaining records of those instances where abnormal emissions are noted. Revise to read: "...~~the Permittee shall maintain records of the visible emission notations~~ **any abnormal emissions observed**...".

#### **Response to Comment 88**

As explained in Response to Comment 99, IDEM and VCAPC do not agree to change the visible emission notations condition referenced in the record keeping conditions; therefore, there is no change to the record keeping condition.

#### **Comment 89**

Condition D.6.4, Sulfur Dioxide Emissions and Sulfur Content: Revise last sentence to read: "...~~demonstrated on a thirty (30) day rolling weighted average~~ **calendar month average by:**" Per 326 IAC 7-2-1, this compliance determination should be a calendar month rather than a 30 day rolling weighted average.

#### **Response to Comment 89**

Pursuant to 326 IAC 7-2-1(c)(3) these oil fired units can report based on calendar month averages. Therefore, the change has been made as requested. The first paragraph of Condition D.6.4 now reads:

Pursuant to 326 IAC 3-7-4, 326 IAC 7-1.1-2, and 326 IAC 7-2, the Permittee shall demonstrate that the sulfur dioxide emissions do not exceed 0.5 pounds per million BTU, demonstrated on a ~~thirty (30) day rolling weighted average~~ **calendar month average**, by:

#### **Comment 90**

Condition D.6.4(b)(3), Sulfur Dioxide Emissions and Sulfur Content: Due to the infrequent operation of the generators, it would be more representative of emissions to sample the oil at the time it is combusted rather than as it is added to the tank. To this end, add (b)(3) "**Oil samples may be collected prior to combustion (as burned) on each day oil is combusted.**" Additionally, add "**or**" to the end of (b)(2).

#### **Response to Comment 90**

IDEM and VCAPC do not agree with this request. Even though the anticipated usage is rare, the combined capacity of these 3 units is too high to relax the current sampling requirements. Therefore, no change was made as a result of this comment.

#### **Comment 91**

a. Condition D.6.5(a), Visible Emissions Notations: Revise to read: "*Visible emission notations of the generators' stack exhausts shall be performed once per ~~shift~~ **day** during normal daylight operations while combusting oil. ~~An trained~~ **employee** shall record whether emissions are normal or abnormal."*

- b. Condition D.6.5(b), Visible Emissions Notations: Revise last sentence: “*Failure to take response steps...**in conjunction with a violation of an applicable opacity limitation** shall be considered a deviation from this permit.*”
- c. Condition D.6.5(d), Visible Emissions Notations: Revise to read: “~~A trained employee is an employee who has~~ **The employee must have** worked at the plant **or similar facility** for at least one (1) month and ~~has been trained~~ **be familiar** in the appearance and characteristics of normal visible emissions for the generators.” As an alternate to the elimination of the word “trained” in D.6.6(f), PSI would accept the replacement of the word “trained” with the word “**qualified**” along with the deletion of the phrase “has been trained”.

### Response to Comment 91

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 and VCAPC do 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 and VCAPC believe that all shifts should be in tune with the work practices necessary to ensure continual compliance with permit requirements. These work practices should include an understanding and awareness of plant emissions during normal operations. This knowledge and awareness during all shifts can minimize lag time in addressing control failure.

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

### Comment 92

Condition D.6.7, Record Keeping and Reporting Requirements: Change “D.4.1” to D.6.1.”

### Response to Comment 92

The change was made as requested. Condition D.6.7 now reads:

A summary of the information to document compliance with Condition **D.6.1** ~~D.4.1~~ shall be submitted to the addresses 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).

### Comment 93

Part 70 Operating Permit Certification form: Revise Source Name and Address as follows (retain common mailing address):

“Source Name: *PSI Energy Inc. – Wabash River Generating Station*  
Source Address: *450 Bolton Road, West Terre Haute, Indiana 47885*  
**Source Name: PSI Energy, Inc. – Wabash River Repowering**  
**Source Address: 445 Bolton Road, West Terre Haute, Indiana 47885**  
Mailing Address: *c/o Steven L. Pearl, 1000 East Main St., Plainfield, IN. 46168”*

### Response to Comment 93

The requested change was made as requested. The Source Identification portion of this form now reads:

Source Name: PSI Energy Inc. - Wabash River Generating Station  
Source Address: 450 Bolton Road, West Terre Haute, Indiana 47885  
**Source Name: PSI Energy, Inc. – Wabash River Repowering**  
**Source Address: 445 Bolton Road, West Terre Haute, Indiana 47885**

The other applicable Forms were updated as well.

#### Comment 94

Emergency Occurrence Report form: Revise Source Name and Address as follows (retain common mailing address):

*“Source Name: PSI Energy Inc. – Wabash River Generating Station  
Source Address: 450 Bolton Road, West Terre Haute, Indiana 47885  
**Source Name: PSI Energy, Inc. – Wabash River Repowering**  
**Source Address: 445 Bolton Road, West Terre Haute, Indiana 47885**  
Mailing Address: c/o Steven L. Pearl, 1000 East Main St., Plainfield, IN. 46168”*

#### Response to Comment 94

The change was made as requested. See Response to Comment 149.

#### Comment 95

Emergency Occurrence Report form: Make the following revision: (1) In the first information submittal box, first bullet, modify statement to read: “*The Permittee must notify the ~~Office of Air Quality (OAQ) and Vigo County Air Pollution Control~~, within four (4) **daytime** business hours...*” This change is consistent with the Emergency provision and comment contained in section B.11(b)(4). And (2) In the first information submittal box, second bullet, modify statement to read: “*The Permittee must submit notice in writing or by facsimile within two (2) working **business** days...*”.

#### Response to Comment 95

Both agencies (IDEM and VCAPC) have compliance and tracking responsibilities as a result of the Part 70 Program. The dual reporting allows both to complete those obligations. IDEM and VCAPC do not feel requiring the Permittee to make an extra copy of a submittal that is already being prepared and submitting it directly to the other agency is an unreasonable burden.

IDEM and VCAPC agree to change the form to state “four (4) **daytime** business hours...”

IDEM and VCAPC do not agree to change the form to state “...within two (2) working business days...”  
See Response to Comment 28.

#### Comment 96

Part 70 Quarterly Deviation and Compliance Monitoring Report: Revise Source Name and Address as follows (retain common mailing address):

*“Source Name: PSI Energy Inc. – Wabash River Generating Station  
Source Address: 450 Bolton Road, West Terre Haute, Indiana 47885  
**Source Name: PSI Energy, Inc. – Wabash River Repowering**  
**Source Address: 445 Bolton Road, West Terre Haute, Indiana 47885**  
Mailing Address: c/o Steven L. Pearl, 1000 East Main St., Plainfield, IN. 46168”*

#### Response to Comment 96

The change was made as requested. See Response to Comment 149.

#### Comment 97

Part 70 Quarterly Deviation and Compliance Monitoring Report: Revise first two sentences in description box to read: “*This report shall be submitted **on a quarterly basis**. ~~Based on a calendar year. For the purpose of this permit, calendar year means the twelve (12) month period from January 1 to December~~*”

~~31 inclusive~~—The description as written is confusing. The quarterly report should cover only the three months in the respective quarter.

#### **Response to Comment 97**

The language as written is intended to specify the basis for the quarters being reported. It does not require the report cover more than a single quarter at a time. No change was made as a response to this comment.

#### **Comment 98**

Modify the TSD consistent with permit comments.

#### **Response to Comment 98**

The OAQ and VCAPC prefer the technical support document reflect the permit that was on public notice. Changes to the permit or technical support material that occur after the public notice are documented in this Addendum to the Technical Support Document. This accomplishes the desired result of ensuring that these types of concerns are documented and part of the record regarding this permit decision.

Upon further review IDEM and VCAPC have determined the following changes were necessary.

Conditions which contain references to failure to take response steps being a violation have been changed to identify that as a deviation from the permit instead. Specifically Conditions D.4.12(b) and D.4.13(b) have been changed.

Condition D.4.12(b) now reads:

- (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 90 percent (90%). T-R set failure resulting in less than 90 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~~ **deviation from** this permit.

Condition D.4.13(b) now reads:

- (b) Opacity readings in excess of thirty percent (30%) 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.

The various record keeping conditions did not contain a reference to show compliance with the Preventive Maintenance Plan condition. This provision has been added to each condition (with any following provisions being renumbered).

Condition D.1.14(d) was added as follows:

- (d) **To document compliance with Condition D.1.9, the Permittee shall maintain records of any additional inspections prescribed by the Preventive Maintenance Plan.**

Condition D.2.5(b) was added as follows:

- (b) **To document compliance with Condition D.2.4, the Permittee shall maintain records of any additional inspections prescribed by the Preventive Maintenance Plan.**

Condition D.3.11(c) was added as follows:

- (c) **To document compliance with Condition D.3.5, the Permittee shall maintain records of any additional inspections prescribed by the Preventive Maintenance Plan.**

Condition D.5.4(b) was added as follows:

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

And Condition D.6.6(c) was added as follows:

- (c) **To document compliance with Condition D.6.3, the Permittee shall maintain records of any additional inspections prescribed by the Preventive Maintenance Plan.**

Several of the specifically regulated insignificant activities were erroneously left out of the D Sections. Section D.7 was created as follows to correct that oversight.

## **SECTION D.7 FACILITY OPERATION CONDITIONS**

### **Facility Description [326 IAC 2-7-5(15)]:**

1. **Thaw pit fuel oil tank: 20,000 gallon (constructed 1990)[326 IAC 12][40 CFR 60, Subpart Kb]**
2. **Degreaser (maintenance shop): 30 gallon (constructed about 1980) [326 IAC 8-3]**
3. **Parts cleaner (electric shop): 30 gallon (constructed about 1980) [326 IAC 8-3]**
4. **Parts cleaner (main floor storage area): 30 gallon (constructed about 1980) [326 IAC 8-3]**
5. **Two (2) Repowering fuel oil storage tank: 99,500 gallon each (constructed in 1993) [326 IAC 12][40 CFR 60, Subpart Kb]**
6. **Fuel oil tank: 50,000 gallons (constructed in 1986) [326 IAC 12][40 CFR 60, Subpart Kb]**

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

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

#### **D.7.1 General Provisions Relating to NSPS [326 IAC 12][60 CFR 60, Subpart A]**

The provisions of 40 CFR Part 60, Subpart A – General Provisions, which are incorporated under 326 IAC 12, apply to the fuel oil storage tanks (Thaw pit, two (2) Repowering, and Fuel oil tank) except when otherwise specified in 40 CFR Part 60, Subpart Kb.

#### **D.7.2 Volatile Organic Compounds (VOC) [326 IAC 8-3-2]**

Pursuant to 326 IAC 8-3-2 (Cold Cleaner Operations), for cold cleaning operations constructed after January 1, 1980 (Maintenance shop, electric shop, and main floor storage area), the Permittee 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.**

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

### D.7.3 NSPS Recordkeeping Requirements [40 CFR 60, Subpart Kb]

**All records of each storage vessel (Thaw pit, two (2) Repowering, and Fuel oil tank), as specified in 60.110b(a), shall be kept and made readily accessible for the life of the source. The records shall include the dimension and an analysis showing the capacity of the storage vessel.**

In accordance with the credible evidence rule (62 Fed. Reg. 8314, Feb 24, 1997); Section 113(a) of the Clean Air Act, 42 U.S. C. § 7413 (a); and a letter from the United States Environmental Protection Agency (USEPA) to IDEM, OAQ dated May 18, 2004, all permits must address the use of credible evidence; otherwise, USEPA will object to the permits. The following language will be incorporated into the permit to address credible evidence:

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

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

On April 15, 2004, the United States Environmental Protection Agency (U.S. EPA) named 23 Indiana counties and one partial county nonattainment for the new 8-hour ozone standard. The designations became effective on June 15, 2004. Vigo County has been designated as nonattainment for the 8-hour ozone standard. The following has been added to A.1 General Information:

### A.1 General Information [326 IAC 2-7-4(c)] [326 IAC 2-7-5(15)] [326 IAC 2-7-1(22)]

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

Responsible Official: Manager of the Wabash River Station / Manager of the Wabash River Repowering  
Source Address: Wabash River Station - 450 Bolton Road, West Terre Haute, Indiana 47885  
Wabash River Repowering - 445 Bolton Road, West Terre Haute, Indiana 47885  
Mailing Address: c/o Steven L. Pearl, 1000 East Main Street, Plainfield, Indiana 46168  
Source Telephone: (812) 535-2329  
SIC Code: 4911  
County Location: Vigo County  
Source Location Status: Maintenance Attainment for Sulfur Dioxide  
**Nonattainment for ozone under the 8-hour standard**  
Attainment for all other criteria pollutants  
Source Status: Part 70 Permit Program  
Major Source, under PSD Rules;  
Major Source, under Nonattainment NSR  
Major Source, Section 112 of the Clean Air Act  
1 of 28 Source Categories

Although the TSD itself will not be revised as it is a historical document and the TSD was correct at the time of public notice, the following is being provided to show how the county attainment status has been affected as a result of the 8-hour ozone standard designations. The county attainment status regarding other pollutants remain unchanged; therefore will not be shown below other than in the table.

### County Attainment Status

The source is located in Vigo County.

Pollutant	Status
PM-10	Attainment
SO <sub>2</sub>	Maintenance Attainment
NO <sub>2</sub>	Attainment
<b>1-hour Ozone</b>	Attainment
<b>8-hour Ozone</b>	<b>Basic Nonattainment</b>
CO	Attainment
Lead	Attainment

~~(a) Volatile Organic Compounds (VOC) are precursors for the formation of ozone. Therefore VOC emissions are considered when evaluating rule applicability relating to the ozone standards. Vigo County has been designated as attainment or unclassifiable for the ozone standards. Therefore, VOC emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2. See the State Rule Applicability for the source section.~~

(a) **Volative organic compounds (VOC) and Nitrogen Oxides (NOx) are regulated under the Clean Air Act (CAA) for the purposes of attaining and maintaining the National Ambient Air Quality Standards (NAAQS) for ozone. Therefore, VOC and NOx emissions are considered when evaluating the rule applicability relating to the ozone standards. Vigo County has been designated as nonattainment for the 8-hour ozone standard. Therefore, VOC and NOx emissions were reviewed pursuant to the requirements for Nonattainment New Source Review.**

The following paragraph has been added to the Federal Rule Applicability Section of the TSD in order to clarify the intent of those nonapplicability determinations. This clarification has been made at the request of US EPA.

The applicability of state and federal rules presented in the Technical Support Document is based on the information provided in the Part 70 application and contained in IDEM and VCAPC's files. This information was not comprehensive enough to provide on a nonapplicability determination in the TSD or to provide a permit shield in the Part 70 Permit itself.

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT**  
**Office of Air Quality**  
**and Vigo County Air Pollution Control**

Appendix A to Technical Support Document (TSD):  
Technical Support Document for the NO<sub>x</sub> Budget Permit

**Source Background and Description**

**Source Name:** PSI Energy, Inc. - Wabash River Generating Station  
**Source Location:** 450 Bolton Road, West Terre Haute, Indiana 47885  
**Operated By:** PSI Energy, Inc.  
**Owned By:** PSI Energy, Inc.  
**ORIS Code:** 1010  
**Operation Permit No.:** T167-7176-00021  
**Permit Reviewer for NO<sub>x</sub> Budget Permit:** Rebecca Mason

**NO<sub>x</sub> Budget Permit Application and Rule Applicability**

A complete Nitrogen Oxides (NO<sub>x</sub>) Budget Permit Application for this NO<sub>x</sub> budget source was received on February 25, 2002. The Office of Air Quality (OAQ) has reviewed a NO<sub>x</sub> budget permit application from PSI Energy, Inc. - Wabash River Generating Station under 326 IAC 10-4-7 for the operation of the NO<sub>x</sub> budget source. The NO<sub>x</sub> budget source includes all NO<sub>x</sub> Budget Units at the source, including opt-in units, if applicable. The following units at the source are NO<sub>x</sub> Budget Units:

1. Combustion Turbine, identified as Unit 1A, constructed in 1995, with a nominal rated capacity of 1709.1 million BTU per hour (192 megawatt), utilizing syngas or natural gas for fuel, utilizing steam injection for control, and exhausting to stack 1A (combined cycle mode) or 1D (simple cycle mode). Stack 1A (combined cycle) has continuous emission monitors for SO<sub>2</sub>, NO<sub>x</sub>, CO<sub>2</sub>, and volumetric flow rate as well as a continuous opacity monitor (COM). Stack 1D (bypass) has continuous emission monitors for NO<sub>x</sub> and CO<sub>2</sub>.
2. Natural gas fired boiler, identified as Unit 1C, constructed in 2001, with a nominal rated capacity of 397.8 million BTU per hour, using low NO<sub>x</sub> burners with flue gas recirculation as NO<sub>x</sub> control, and exhausting to stack 1C with continuous emission monitors for NO<sub>x</sub>, O<sub>2</sub> or CO<sub>2</sub>, and CO.
3. Wall fired coal electric utility boiler (pulverized - dry bottom), identified as Unit 2, constructed in 1953, using #2 fuel oil as ignition fuel, with a nominal rated heat input capacity of 913.8 million BTU per hour (99 megawatt), using modified burner design (low NO<sub>x</sub>) for NO<sub>x</sub> control and electrostatic precipitator (ESP) for particulate control, exhausting to Stack A. Unit 2 is equipped with continuous emission monitors for NO<sub>x</sub> and CO<sub>2</sub>. Stack A is equipped with a continuous opacity monitor (COM) to monitor opacity as well as continuous emission monitors for NO<sub>x</sub>, CO<sub>2</sub>, SO<sub>2</sub>, and volumetric flow rate.
4. Wall fired coal electric utility boiler (pulverized - dry bottom), identified as Unit 3, constructed in

1954, using #2 fuel oil as ignition fuel, with a nominal rated heat input capacity of 922.9 million BTU per hour (99 megawatt), using modified burner design (low NO<sub>x</sub>) for NO<sub>x</sub> control and electrostatic precipitator (ESP) for particulate control, exhausting to Stack A. Unit 3 is equipped with continuous emission monitors for NO<sub>x</sub> and CO<sub>2</sub>. Stack A is equipped with a continuous opacity monitor (COM) to monitor opacity as well as continuous emission monitors for NO<sub>x</sub>, CO<sub>2</sub>, SO<sub>2</sub>, and volumetric flow rate.

5. Wall fired coal electric utility boiler (pulverized - dry bottom), identified as Unit 4, constructed in 1955, using #2 fuel oil as ignition fuel, with a nominal rated heat input capacity of 922.9 million BTU per hour (99 megawatt), using modified burner design (low NO<sub>x</sub>) for NO<sub>x</sub> control and electrostatic precipitator (ESP) for particulate control, exhausting to Stack A. Unit 4 is equipped with continuous emission monitors for NO<sub>x</sub>, CO<sub>2</sub>, SO<sub>2</sub> and volumetric flow rate. Stack A is equipped with a continuous opacity monitor (COM) to monitor opacity as well as continuous emission monitors for NO<sub>x</sub>, CO<sub>2</sub>, SO<sub>2</sub>, and volumetric flow rate.
6. Wall fired coal electric utility boiler (pulverized - dry bottom), identified as Unit 5, constructed in 1956, using #2 fuel oil as ignition fuel, with a nominal rated heat input capacity of 1096.2 million BTU per hour (121 megawatt), using modified burner design (low NO<sub>x</sub>) for NO<sub>x</sub> control and electrostatic precipitator (ESP) for particulate control, exhausting to Stack A. Unit 5 is equipped with continuous emission monitors for NO<sub>x</sub> and CO<sub>2</sub>. Stack A is equipped with a continuous opacity monitor (COM) to monitor opacity as well as continuous emission monitors for NO<sub>x</sub>, CO<sub>2</sub>, SO<sub>2</sub>, and volumetric flow rate.
7. Tangential fired coal electric utility boiler (pulverized - dry bottom, tangential), identified as Unit 6, constructed in 1968, using #2 fuel oil as ignition fuel, with a nominal rated heat input capacity of 2999.0 million BTU per hour (354 megawatt), using modified burner design (low NO<sub>x</sub>) for NO<sub>x</sub> control and electrostatic precipitator (ESP) for particulate control, exhausting to Stack A. Unit 6 is equipped with continuous emission monitors for NO<sub>x</sub> and CO<sub>2</sub>. Stack A is equipped with a continuous opacity monitor (COM) to monitor opacity as well as continuous emission monitors for NO<sub>x</sub>, CO<sub>2</sub>, SO<sub>2</sub>, and volumetric flow rate.

Pursuant to 326 IAC 10-4-7, the NO<sub>x</sub> budget permit shall be a complete and segregable portion of the Part 70 permit and the NO<sub>x</sub> budget portion of the Part 70 permit shall be administered in accordance with 326 IAC 2-7, except as provided otherwise by 326 IAC 10-4-7.

## Program Description

On October 27, 1998, the U.S. EPA promulgated final federal rules requiring 22 states and the District of Columbia to submit state implementation plan (SIP) revisions to reduce the regional transport of ozone. The federal rule focused on reducing NO<sub>x</sub> emissions in the affected states. In the federal rule, the U.S. EPA established a NO<sub>x</sub> emission "budget" for each of the affected states and the District of Columbia. The "budget" represents a reduction from emissions in the year 2007 that the U.S. EPA believes will reduce the transport of NO<sub>x</sub> emissions and will assist downwind areas in meeting ozone air quality standards. The states must demonstrate compliance with the "budget" by implementing control measures to reduce NO<sub>x</sub> emissions beginning May 31, 2004. While the rule does not mandate which sources will have to reduce emissions, the rule did provide options that would result in a 65% reduction of NO<sub>x</sub> emissions from utility boilers and a 60% reduction from large industrial (non-utility) boilers and turbines. IDEM developed the NO<sub>x</sub> Budget Trading Program in 326 IAC 10-4 in response to this mandate. The NO<sub>x</sub> reductions that will be achieved by this rule will result in significant air quality improvements throughout the state of Indiana, and will be especially important in those areas of the state where ozone levels exceed or regularly approach state and federal air quality health standards.

The Nitrogen Oxides Budget Trading Program is a regional cap and trade program among all the states subject to the NO<sub>x</sub> SIP call. Electricity generating units (EGUs) and non-electricity

generating units (non-EGUs) are allocated allowances for tons of NO<sub>x</sub> that they are allowed to emit during the ozone season. IDEM allocates NO<sub>x</sub> allowances for the affected units, and owners or operators of these units are able to buy, sell, or trade allowances, as necessary, to demonstrate compliance with the unit's NO<sub>x</sub> emissions cap. Because this program is a regional program administered by U.S. EPA, sources are able to buy, sell or trade allowances across state boundaries and between different types of units and sources. More information about the NO<sub>x</sub> SIP Call can be found at: <http://www.epa.gov/airmarkets/fednox/index.html> and <http://www.in.gov/idem/air/standard/Sip/index.html>.

### **326 IAC 10-4 (NO<sub>x</sub> Budget Trading Program) Requirements**

- (a) Pursuant to 326 IAC 10-4-4(b), the owners and operators and, to the extent applicable, the NO<sub>x</sub> authorized account representative of the NO<sub>x</sub> budget source and each NO<sub>x</sub> budget unit at the source shall comply with the monitoring requirements of 40 CFR 75 and 326 IAC 10-4-12. The emissions measurements recorded and reported in accordance with 40 CFR 75 and 326 IAC 10-4-12 shall be used to determine compliance by each unit with the NO<sub>x</sub> budget emissions limitation under 326 IAC 10-4-4(c).
- (b) Pursuant to 326 IAC 10-4-4(c), the owners and operators of the NO<sub>x</sub> budget source and each NO<sub>x</sub> budget unit at the source shall hold NO<sub>x</sub> allowances available for compliance deductions under 326 IAC 10-4-10(j), as of the NO<sub>x</sub> allowance transfer deadline, in each unit's compliance account and the source's overdraft account in an amount:
  - (1) Not less than the total NO<sub>x</sub> emissions for the ozone control period from the unit, as determined in accordance with 40 CFR 75 and 326 IAC 10-4-12;
  - (2) To account for excess emissions for a prior ozone control period under 326 IAC 10-4-10(k)(5); or
  - (3) To account for withdrawal from the NO<sub>x</sub> budget trading program, or a change in regulatory status of a NO<sub>x</sub> budget opt-in unit.

The NO<sub>x</sub> budget units shall be subject to the requirements under 326 IAC 10-4-4(c)(1) starting on May 31, 2004.

- (c) Pursuant to 326 IAC 10-4-4(d), the owners and operators of each NO<sub>x</sub> budget unit that has excess emissions in any ozone control period shall do the following:
  - (1) Surrender the NO<sub>x</sub> allowances required for deduction under 326 IAC 10-4-10(k)(5).
  - (2) Pay any fine, penalty, or assessment or comply with any other remedy imposed under 326 IAC 10-4-10(k)(7).
- (d) Pursuant to 326 IAC 10-4-4(e)(1), unless otherwise provided, the owners and operators of the NO<sub>x</sub> budget source and each NO<sub>x</sub> budget unit at the source shall keep either on site at the source or at a central location within Indiana for those owners or operators with unattended sources, each of the following documents for a period of five (5) years:
  - (1) The account certificate of representation for the NO<sub>x</sub> authorized account representative for the source and each NO<sub>x</sub> budget unit at the source and all documents that demonstrate the truth of the statements in the account certificate

of representation, in accordance with 326 IAC 10-4-6(h). The certificate and documents shall be retained either on site at the source or at a central location within Indiana for those owners or operators with unattended sources beyond the five (5) year period until the documents are superseded because of the submission of a new account certificate of representation changing the NO<sub>x</sub> authorized account representative.

- (2) All emissions monitoring information, in accordance with 40 CFR 75 and 326 IAC 10-4-12, provided that to the extent that 40 CFR 75 and 326 IAC 10-4-12 provide for a three (3) year period for record keeping, the three (3) year period shall apply.
- (3) Copies of all reports, compliance certifications, and other submissions and all records made or required under the NO<sub>x</sub> budget trading program.
- (4) Copies of all documents used to complete a NO<sub>x</sub> budget permit application and any other submission under the NO<sub>x</sub> budget trading program or to demonstrate compliance with the requirements of the NO<sub>x</sub> budget trading program.

This period may be extended for cause, at any time prior to the end of five (5) years, in writing by IDEM, OAQ, Vigo County Air Pollution Control (VCAPC) or the U.S. EPA. Records retained at a central location within Indiana shall be available immediately at the location and submitted to IDEM, OAQ, VCAPC, or U.S. EPA within three (3) business days following receipt of a written request. Nothing in 326 IAC 10-4-4(e) shall alter the record retention requirements for a source under 40 CFR 75. Unless otherwise provided, all records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

- (e) Pursuant to 326 IAC 10-4-4(e)(2), the NO<sub>x</sub> authorized account representative of the NO<sub>x</sub> budget source and each NO<sub>x</sub> budget unit at the source shall submit the reports and compliance certifications required under the NO<sub>x</sub> budget trading program, including those under 326 IAC 10-4-8, 326 IAC 10-4-12, or 326 IAC 10-4-13.

## Monitoring

The NO<sub>x</sub> Budget Trading Program references monitoring and reporting requirements from the Acid Rain program at 40 CFR Part 75. These provisions require, for most sources, the use of continuous emissions monitors (CEMs). A CEM is a system composed of various equipment that continuously measures the amount of nitrogen oxides emitted into the atmosphere in exhaust gases from the NO<sub>x</sub> budget unit's stack.

## NO<sub>x</sub> Emissions Allocations

- (a) Pursuant to 326 IAC 10-4-7(e), this NO<sub>x</sub> budget permit is deemed to incorporate automatically, upon recordation by the U.S. EPA under 326 IAC 10-4-10, 326 IAC 10-4-11, or 326 IAC 10-4-13, every allocation, transfer, or deduction of a NO<sub>x</sub> allowance to or from the compliance accounts of the NO<sub>x</sub> budget units or the overdraft account of the NO<sub>x</sub> budget source covered by this permit. The allocations for each ozone season and transaction information can be found at: <http://www.epa.gov/airmarkets/tracking/factsheet.html>. In addition, IDEM, OAQ posts proposed allocations prior to submitting them to the U.S. EPA on the following web site: <http://www.in.gov/idem/air/standard/Sip/index.html>.

- (b) The following requirements from 326 IAC 10-4-4(c) apply to NO<sub>x</sub> allowances:
- (1) Each ton of NO<sub>x</sub> emitted in excess of the NO<sub>x</sub> budget emissions limitation shall constitute a separate violation of the Clean Air Act (CAA) and 326 IAC 10-4.
  - (2) NO<sub>x</sub> allowances shall be held in, deducted from, or transferred among NO<sub>x</sub> allowance tracking system accounts in accordance with 326 IAC 10-4-9 through 11, 326 IAC 10-4-13, and 326 IAC 10-4-14.
  - (3) A NO<sub>x</sub> allowance shall not be deducted, in order to comply with the requirements under 326 IAC 10-4-4(c)(1), for an ozone control period in a year prior to the year for which the NO<sub>x</sub> allowance was allocated.
  - (4) A NO<sub>x</sub> allowance allocated under the NO<sub>x</sub> budget trading program is a limited authorization to emit one (1) ton of NO<sub>x</sub> in accordance with the NO<sub>x</sub> budget trading program. No provision of the NO<sub>x</sub> budget trading program, the NO<sub>x</sub> budget permit application, the NO<sub>x</sub> budget permit, or an exemption under 326 IAC 10-4-3 and no provision of law shall be construed to limit the authority of the U.S. EPA or IDEM, OAQ to terminate or limit the authorization.
  - (5) A NO<sub>x</sub> allowance allocated under the NO<sub>x</sub> budget trading program does not constitute a property right.
  - (6) Upon recordation by the U.S. EPA under 326 IAC 10-4-10, 326 IAC 10-4-11, or 326 IAC 10-4-13, every allocation, transfer, or deduction of a NO<sub>x</sub> allowance to or from a NO<sub>x</sub> budget unit's compliance account or the overdraft account of the source where the unit is located is deemed to amend automatically, and become a part of, this NO<sub>x</sub> budget permit of the NO<sub>x</sub> budget unit by operation of law without any further review.

### **Other Record Keeping and Reporting Requirements**

Pursuant to 326 IAC 10-4-7(g), except as provided in 326 IAC 10-7-4(e), IDEM, OAQ shall revise the NO<sub>x</sub> budget permit, as necessary, in accordance with the permit modification and revision provisions under 326 IAC 2-7.

Pursuant to 326 IAC 10-4-7(b)(1)(C), for permit renewal, the NO<sub>x</sub> authorized account representative shall submit a complete NO<sub>x</sub> budget permit application covering the NO<sub>x</sub> budget units at the source in accordance with 326 IAC 2-7-4(a)(1)(D) with the Part 70 permit renewal.

### **Submissions**

The NO<sub>x</sub> authorized account representative for each NO<sub>x</sub> budget source on behalf of which a submission is made must sign and certify every report or other submission required by the NO<sub>x</sub> budget permit. The NO<sub>x</sub> authorized account representative must include the following certification statement in every submission: "I am authorized to make this submission on behalf of the owners and operators of the NO<sub>x</sub> budget sources or NO<sub>x</sub> budget units for which the submission is made. I certify under penalty of law that I have personally examined, and am familiar with, the statements and information submitted in this document and all its attachments. Based on my inquiry of those individuals with primary responsibility for obtaining the information, I certify that the statements and information are to the best of my knowledge and belief true, accurate, and complete. I am aware that there are significant penalties for submitting false

statements and information or omitting required statements and information, including the possibility of fine or imprisonment.”

### **Recommendation**

The staff recommends to the Commissioner that the NO<sub>x</sub> budget permit be approved.

Unless otherwise stated, information used in this review was derived from the application and additional information submitted by the applicant.

### **Additional Information**

Questions regarding the NO<sub>x</sub> budget permit can be directed to Rebecca Mason at the Indiana Department of Environmental Management (IDEM), Office of Air Quality (OAQ), 100 North Senate Avenue, P.O. Box 6015, Indianapolis, Indiana 46206-6015 or by telephone at (317) 233-9664 or toll free at 1-800-451-6027 extension 3-9664.

The source will be inspected by VCAPC compliance inspection staff. Persons seeking to obtain information regarding the source's compliance status or to report any potential violation of any permit condition should contact VCAPC by telephone at (812) 462-3433 or by mail at Vigo County Air Pollution Control, 103 South 3<sup>rd</sup> Street, Terre Haute, Indiana 47807.

Copies of the Code of Federal Regulations (CFR) referenced in the permit may be obtained from:

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

or

The Government Printing Office  
Washington, D.C. 20402

or

on the Government Printing Office web site at  
<http://www.access.gpo.gov/nara/cfr/index.html>