

# **PART 70 OPERATING PERMIT OFFICE OF AIR QUALITY**

**Peru Utilities, City of Peru  
301 East Canal Street  
Peru, Indiana 46970**

(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.

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

Operation Permit No.: T103-7371-00001	
Issued by: Original Signed by Janet McCabe Janet G. McCabe, Assistant Commissioner Office of Air Quality	Issuance Date: June 21, 2002 Expiration Date: June 21, 2007

## TABLE OF CONTENTS

### A SOURCE SUMMARY

- A.1 General Information [326 IAC 2-7-4(c)] [326 IAC 2-7-5(15)]
- A.2 Emission Units and Pollution Control Equipment Summary [326 IAC 2-7-4(c)(3)]
- A.3 Specifically Regulated Insignificant Activities [326 IAC 2-7-1(21)] [326 IAC 2-7-4(c)]
- A.4 Part 70 Permit Applicability [326 IAC 2-7-2]

### B GENERAL CONDITIONS

- B.1 Definitions [326 IAC 2-7-1]
- B.2 Permit Term [326 IAC 2-7-5(2)] [326 IAC 2-1.1-9.5]
- B.3 Enforceability [326 IAC 2-7-7]
- B.4 Termination of Right to Operate [326 IAC 2-7-10] [326 IAC 2-7-4(a)]
- B.5 Severability [326 IAC 2-7-5(5)]
- B.6 Property Rights or Exclusive Privilege [326 IAC 2-7-5(6)(D)]
- B.7 Duty to Supplement and Provide Information [326 IAC 2-7-4(b)] [326 IAC 2-7-5(6)(E)]
- B.8 Compliance with Permit Conditions [326 IAC 2-7-5(6)(A)] [326 IAC 2-7-5(6)(B)]
- B.9 Certification [326 IAC 2-7-4(f)] [326 IAC 2-7-6(1)] [326 IAC 2-7-5(3)(C)]
- B.10 Annual Compliance Certification [326 IAC 2-7-6(5)]
- B.11 Preventive Maintenance Plan [326 IAC 2-7-5(1),(3)and (13)][326 IAC 2-7-6(1)and(6)]
- B.12 Emergency Provisions [326 IAC 2-7-16]
- B.13 Permit Shield [326 IAC 2-7-15]
- B.14 Prior Permits Superseded [326 IAC 2-1.1-9.5]
- B.15 Deviations from Permit Requirements and Conditions [326 IAC 2-7-5(3)(C)(ii)]
- B.16 Permit Modification, Reopening, Revocation and Reissuance, or Termination
- B.17 Permit Renewal [326 IAC 2-7-4]
- B.18 Source Modification and Permit Amendment or Modification [326 IAC 2-7-10.5]
- B.19 Permit Amendment or Modification [326 IAC 2-7-11]
- B.20 Permit Revision Under Economic Incentives and Other Programs [326 IAC 2-7-5(8)]
- B.21 Operational Flexibility [326 IAC 2-7-20] [326 IAC 2-7-10.5]
- B.22 Inspection and Entry [326 IAC 2-7-6]
- B.23 Transfer of Ownership or Operation [326 IAC 2-7-11]
- B.24 Annual Fee Payment [326 IAC 2-7-19] [326 IAC 2-7-5(7)]

### C SOURCE OPERATION CONDITIONS

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

- C.1 Particulate Matter Emission Limitations For Processes with Process Weight Rates Less Than One Hundred (100) pounds per hour [326 IAC 6-3-2(c)]
- C.2 Opacity [326 IAC 5-1]
- C.3 Open Burning [326 IAC 4-1] [IC 13-17-9]
- C.4 Incineration [326 IAC 4-2] [326 IAC 9-1-2]
- C.5 Fugitive Dust Emissions [326 IAC 6-4]
- C.6 Stack Height [326 IAC 1-7]
- C.7 Asbestos Abatement Projects [326 IAC 14-10] [326 IAC 18] [40 CFR 61.140]

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

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

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

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

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

- C.10 Compliance Monitoring [326 IAC 2-7-5(3)] [326 IAC 2-7-6(1)]
- C.11 Maintenance of Opacity Monitoring Equipment [326 IAC 2-7-5(3)(A)(iii)]
- C.12 Monitoring Methods [326 IAC 3]
- C.13 Pressure Gauge and Other Instrument Specifications [326 IAC 2-1.1-11]  
[326 IAC 2-7-5(3)] [326 IAC 2-7-6(1)]

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

- C.14 Emergency Reduction Plans [326 IAC 1-5-2] [326 IAC 1-5-3]
- C.15 Risk Management Plan [326 IAC 2-7-5(12)] [40 CFR 68.215]
- C.16 Compliance Response Plan - Preparation, Implementation, Records and Reports  
[326 IAC 2-7-5]
- C.17 Actions Related to Noncompliance Demonstrated by a Stack Test [326 IAC 2-7-5]

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

- C.18 Emission Statement [326 IAC 2-7-5(3)(C)(iii)] [326 IAC 2-7-5(7)] [326 IAC 2-7-19(c)]
- C.19 General Record Keeping Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-6] [326 IAC 2-1.1-11]
- C.20 General Reporting Requirements [326 IAC 2-7-5(3)(C)] [326 IAC 2-1.1-11]

**Stratospheric Ozone Protection**

- C.21 Compliance with 40 CFR 82 and 326 IAC 22-1

**D.1 FACILITY OPERATION CONDITIONS - Boiler #2 and Boiler #5**

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

- D.1.1 Particulate Matter Emissions Limitations PM [326 IAC 6-2-3(d)]
- D.1.2 Temporary Alternative Opacity Exemption [326 IAC 5-1-3]
- D.1.3 Sulfur Dioxide (SO<sub>2</sub>) [326 IAC 7-1.1]
- D.1.4 Operation Standards
- D.1.5 Preventive Maintenance Plan

**Compliance Determination Requirements**

- D.1.6 Testing Requirements [326 IAC 2-7-6(1),(6)]
- D.1.7 Operation of Electrostatic Precipitator
- D.1.8 Sulfur Dioxide Emissions and Sulfur Content [326 IAC 2-7-5(A)] [326 IAC 2-7-6]
- D.1.9 Cleaning Waste Analysis

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

- D.1.10 Preventive Inspections
- D.1.11 Transformer-Rectifier (T-R) Sets
- D.1.12 Opacity Readings

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

- D.1.13 Record Keeping Requirements
- D.1.14 Reporting Requirements

**D.2 FACILITY OPERATION CONDITIONS - Coal and Ash Storage and Handling System**

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

- D.2.1 Particulate Matter (PM) [326 IAC 6-3-2]
- D.2.2 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

**Compliance Determination Requirements**

D.2.3 Particulate Matter (PM)

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

- D.2.4 Visible Emissions Notations
- D.2.5 Baghouse Parametric Monitoring
- D.2.6 Broken or Failed Bag Detection
- D.2.7 Baghouse Inspections

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

D.2.8 Record Keeping Requirements

**D.3 FACILITY OPERATION CONDITIONS - Diesel generator and fuel storage tank**

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

- D.3.1 PSD Minor Limit [326 IAC 2-2] [40 CFR 52.21]
- D.3.2 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

**Compliance Determination Requirements**

D.3.3 Visible Emissions Notations

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

- D.3.4 Record Keeping Requirements
- D.3.5 Reporting Requirements

**D.4 FACILITY OPERATION CONDITIONS - Oil fired boiler**

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

- D.4.1 Particulate Matter Emissions Limitations PM [326 IAC 6-2-4]
- D.4.2 Operation Standards
- D.4.3 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

**Compliance Determination Requirements**

D.4.4 Cleaning Waste Analysis

**D.5 FACILITY OPERATION CONDITIONS - Insignificant Activities**

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

D.5.1 Particulate Matter (PM) [326 IAC 6-3-2]

**Certification**  
**Emergency Occurrence Report**  
**Quarterly Deviation and Compliance Monitoring Report**  
**Quarterly Fuel Usage Report**  
**Quarterly SO2 Emission Rate Report**

## SECTION A SOURCE SUMMARY

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

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

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

Responsible Official:	Mr. Leonard Lawrence
Source Address:	301 East Canal Street, Peru, Indiana 46970
General Source Phone Number:	(317)473-4575
Mailing Address:	335 East Canal Street, P.O. Box 67, Peru, Indiana 46970
SIC Code:	4911
County Location:	Miami
Source Location Status:	Attainment for all criteria pollutants
Source Status:	Part 70 Permit Program Major Source, under PSD Rules; 1 of 28 Source Categories

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

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

- (1) A pulverized coal-fired boiler rated at 220,000 pounds per hour steam (276 mmBtu/hour), identified as Boiler #2 and constructed in 1959. Particulate matter emissions are controlled by an electrostatic precipitator, emissions are measured with a continuous opacity monitor.
- (2) A pulverized coal-fired boiler rated at 130,000 pounds per hour steam (180 mmBtu/hour), identified as Boiler #5 and constructed in 1948. Particulate matter emissions are controlled by an electrostatic precipitator, emissions are measured with a continuous opacity monitor.
- (3) Facilities associated with the coal and ash storage and handling system:
  - (1) One (1) 0.075 acre outdoor storage pile with a storage capacity of 2,100 tons. The method of handling is dumping through grate at grade, with a maximum annual throughput of 168,000 tons per year.
  - (2) One (1) ash storage silo with a storage capacity of 130 tons. The method of handling is ash conditioning (with water) and unloading, with a maximum annual throughput of 16,400 tons per year. Particulate emissions are controlled by a baghouse.
- (4) One (1) 1.99-MW diesel generator for emergency standby service and peak shaving for the water treatment plant and service complex.

- (5) One (1) No. 2 distillate fuel oil storage tank with a capacity of approximately 10,000 gallons.
- (6) One (1) No. 2 oil fired 3.5 mmBtu/hour steam boiler used for space heating used for space heating. This boiler was constructed in 1985.
- (7) Fugitive emissions from vehicle traffic. A combination of roads include paved and gravel roadways. The roads are traveled by general traffic, light duty four wheel vehicles, ½ ton to 6 ton maintenance vehicles.

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

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

- (1) Equipment related to manufacturing activities not resulting in the emission of HAPs: brazing equipment, cutting torches, soldering equipment, welding equipment.
- (2) Conveyors as follows:
  - (1) underground conveyors
- (3) Coal bunker and coal scale exhausts and associated dust collector vents.

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

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

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

## SECTION B

## GENERAL CONDITIONS

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

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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]

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This permit is issued for a fixed term of five (5) years from the original date, 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]

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

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

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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)]

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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)]

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

### B.7 Duty to Supplement and Provide Information [326 IAC 2-7-4(b)] [326 IAC 2-7-5(6)(E)] [326 IAC 2-7-6(6)]

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- (a) The Permittee, upon becoming aware that any relevant facts were omitted or incorrect information was submitted in the permit application, shall promptly submit such supplementary facts or corrected information to:

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

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

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

the U. S. EPA along with a claim of confidentiality. [326 IAC 2-7-5(6)(E)]

- (c) 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 Compliance with Permit Conditions [326 IAC 2-7-5(6)(A)] [326 IAC 2-7-5(6)(B)]**

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- (a) The Permittee must comply with all conditions of this permit. Noncompliance with any provisions of this permit is grounds for:
  - (1) Enforcement action;
  - (2) Permit termination, revocation and reissuance, or modification; or
  - (3) Denial of a permit renewal application.
- (b) Noncompliance with any provision of this permit, except any provision specifically designated as not federally enforceable, constitutes a violation of the Clean Air Act.
- (c) 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.
- (d) 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.

**B.9 Certification [326 IAC 2-7-4(f)] [326 IAC 2-7-6(1)] [326 IAC 2-7-5(3)(C)]**

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- (a) Where specifically designated by this permit or required by an applicable requirement, any application form, report, or compliance certification submitted shall contain certification by a responsible official of truth, accuracy, and completeness. This certification shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.
- (b) One (1) certification shall be included, using the attached Certification Form, 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.10 Annual Compliance Certification [326 IAC 2-7-6(5)]**

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

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

and

United States Environmental Protection Agency, Region V  
Air and Radiation Division, Air Enforcement Branch - Indiana (AE-17J)  
77 West Jackson Boulevard  
Chicago, Illinois 60604-3590

- (b) The annual compliance certification report required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ, on or before the date it is due.
- (c) The annual compliance certification report shall include the following:
- (1) The appropriate identification of each term or condition of this permit that is the basis of the certification;
  - (2) The compliance status;
  - (3) Whether compliance was continuous or intermittent; and
  - (4) The methods used for determining the compliance status of the source, currently and over the reporting period consistent with 326 IAC 2-7-5(3).

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

B.11 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) responsible for inspecting, maintaining, and repairing emission control devices;
  - (2) A description of the items or conditions that will be inspected and the inspection schedule for said items or conditions; and
  - (3) Identification and quantification of the replacement parts that will be maintained in inventory for quick replacement.

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

Indiana Department of Environmental Management  
Compliance Branch, Office of Air Quality

100 North Senate Avenue, P. O. Box 6015  
Indianapolis, Indiana 46206-6015

The PMP and the PMP extension notification do not require the certification by the “responsible official” as defined by 326 IAC 2-7-1(34).

- (b) The Permittee shall implement the PMPs as necessary to ensure that failure to implement a PMP does not cause or contribute to a violation of any limitation on emissions or potential to emit.
- (c) A copy of the PMPs shall be submitted to IDEM, OAQ, upon request and within a reasonable time, and shall be subject to review and approval by IDEM, OAQ. IDEM, OAQ, may require the Permittee to revise its PMPs whenever lack of proper maintenance causes or contributes to any violation. The submittal of the PMPs does not require the certification by the “responsible official” as defined by 326 IAC 2-7-1(34).
- (d) Records of preventive maintenance shall be retained for a period of at least five (5) years. These records shall be kept at the source location for a minimum of three (3) years. The records may be stored elsewhere for the remaining two (2) years as long as they are available upon request. If the Commissioner makes a request for records to the Permittee, the Permittee shall furnish the records to the Commissioner within a reasonable time.

B.12 Emergency Provisions [326 IAC 2-7-16]

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

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

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

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

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

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

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

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

- (6) The Permittee immediately took all reasonable steps to correct the emergency.
- (c) In any enforcement proceeding, the Permittee seeking to establish the occurrence of an emergency has the burden of proof.
  - (d) This emergency provision supersedes 326 IAC 1-6 (Malfunctions). This permit condition is in addition to any emergency or upset provision contained in any applicable requirement.
  - (e) IDEM, OAQ, may require that the Preventive Maintenance Plans required under 326 IAC 2-7-4-(c)(10) be revised in response to an emergency.
  - (f) Failure to notify IDEM, OAQ, by telephone or facsimile of an emergency lasting more than one (1) hour in accordance with (b)(4) and (5) of this condition shall constitute a violation of 326 IAC 2-7 and any other applicable rules.
  - (g) If the emergency situation causes a deviation from a technology-based limit, the Permittee may continue to operate the affected emitting facilities during the emergency provided the Permittee immediately takes all reasonable steps to correct the emergency and minimize emissions.

B.13 Permit Shield [326 IAC 2-7-15] [326 IAC 2-7-20] [326 IAC 2-7-12]

- (a) Pursuant to 326 IAC 2-7-15, the Permittee has been granted a permit shield. The permit shield provides that compliance with the conditions of this permit shall be deemed compliance with any applicable requirements as of the date of permit issuance, provided that either the applicable requirements are included and specifically identified in this permit or the permit contains an explicit determination or concise summary of a determination that other specifically identified requirements are not applicable. The Indiana statutes from IC 13 and rules from 326 IAC, referenced in conditions in this permit, are those applicable at the time the permit was issued. The issuance or

possession of this permit shall not alone constitute a defense against an alleged violation of any law, regulation or standard, except for the requirement to obtain a Part 70 permit under 326 IAC 2-7 or for applicable requirements for which a permit shield has been granted.

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

- (b) If, after issuance of this permit, it is determined that the permit is in nonconformance with an applicable requirement that applied to the source on the date of permit issuance, IDEM, OAQ, shall immediately take steps to reopen and revise this permit and issue a compliance order to the Permittee to ensure expeditious compliance with the applicable requirement until the permit is reissued. The permit shield shall continue in effect so long as the Permittee is in compliance with the compliance order.
- (c) No permit shield shall apply to any permit term or condition that is determined after issuance of this permit to have been based on erroneous information supplied in the permit application. Erroneous information means information that the Permittee knew to be false, or in the exercise of reasonable care should have been known to be false, at the time the information was submitted.
- (d) Nothing in 326 IAC 2-7-15 or in this permit shall alter or affect the following:
  - (1) The provisions of Section 303 of the Clean Air Act (emergency orders), including the authority of the U.S. EPA under Section 303 of the Clean Air Act;
  - (2) The liability of the Permittee for any violation of applicable requirements prior to or at the time of this permit's issuance;
  - (3) The applicable requirements of the acid rain program, consistent with Section 408(a) of the Clean Air Act; and
  - (4) The ability of U.S. EPA to obtain information from the Permittee under Section 114 of the Clean Air Act.
- (e) This permit shield is not applicable to any change made under 326 IAC 2-7-20(b)(2) (Sections 502(b)(10) of the Clean Air Act changes) and 326 IAC 2-7-20(c)(2) (trading based on State Implementation Plan (SIP) provisions).
- (f) This permit shield is not applicable to modifications eligible for group processing until after IDEM, OAQ, has issued the modifications. [326 IAC 2-7-12(c)(7)]
- (g) This permit shield is not applicable to minor Part 70 permit modifications until after IDEM, OAQ, has issued the modification. [326 IAC 2-7-12(b)(7)]

**B.14 Prior Permits Superseded [326 IAC 2-1.1-9.5]**

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- (a) All terms and conditions of previous permits issued pursuant to permitting programs approved into the state implementation plan have been either
  - (1) incorporated as originally stated,
  - (2) revised, or

(3) deleted

by this permit.

(b) All previous registrations and permits are superseded by this permit.

B.15 Deviations from Permit Requirements and Conditions [326 IAC 2-7-5(3)(C)(ii)]

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

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

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

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

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

(c) Emergencies shall be included in the Quarterly Deviation and Compliance Monitoring Report.

B.16 Permit Modification, Reopening, Revocation and Reissuance, or Termination  
[326 IAC 2-7-5(6)(C)] [326 IAC 2-7-8(a)] [326 IAC 2-7-9]

(a) This permit may be modified, reopened, revoked and reissued, or terminated for cause. The filing of a request by the Permittee for a Part 70 permit modification, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay any condition of this permit. [326 IAC 2-7-5(6)(C)] The notification by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

(b) This permit shall be reopened and revised under any of the circumstances listed in IC 13-15-7-2 or if IDEM, OAQ, determines any of the following:

(1) That this permit contains a material mistake.

(2) That inaccurate statements were made in establishing the emissions standards or other terms or conditions.

(3) That this permit must be revised or revoked to assure compliance with an applicable requirement. [326 IAC 2-7-9(a)(3)]

(c) Proceedings by IDEM, OAQ, to reopen and revise this permit shall follow the same procedures as apply to initial permit issuance and shall affect only those parts of this permit for which cause to reopen exists. Such reopening and revision shall be made as expeditiously as practicable. [326 IAC 2-7-9(b)]

- (d) The reopening and revision of this permit, under 326 IAC 2-7-9(a), shall not be initiated before notice of such intent is provided to the Permittee by IDEM, OAQ at least thirty (30) days in advance of the date this permit is to be reopened, except that IDEM, OAQ, may provide a shorter time period in the case of an emergency. [326 IAC 2-7-9(c)]

B.17 Permit Renewal [326 IAC 2-7-3] [326 IAC 2-7-4]

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

Request for renewal shall be submitted to:

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

- (b) Timely Submittal of Permit Renewal [326 IAC 2-7-4(a)(1)(D)]
  - (1) A timely renewal application is one that is:
    - (A) Submitted at least nine (9) months prior to the date of the expiration of this permit; and
    - (B) If the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ, on or before the date it is due.
  - (2) If IDEM, OAQ, upon receiving a timely and complete permit application, fails to issue or deny the permit renewal prior to the expiration date of this permit, this existing permit shall not expire and all terms and conditions shall continue in effect, including any permit shield provided in 326 IAC 2-7-15, until the renewal permit has been issued or denied.
- (c) Right to Operate After Application for Renewal [326 IAC 2-7-3] [326 IAC 2-7-4]

If the Permittee submits a timely and complete application for renewal of this permit, the source's failure to have a permit is not a violation of 326 IAC 2-7 until IDEM, OAQ, takes final action on the renewal application, except that this protection shall cease to apply if, subsequent to the completeness determination, the Permittee fails to submit by a reasonable deadline specified in writing by IDEM, OAQ, any additional information identified as being needed to process the application. [326 IAC 2-7-4(a)(2)(D) and (E)]
- (d) United States Environmental Protection Agency Authority [326 IAC 2-7-8(e)]

If IDEM, OAQ, fails to act in a timely way on a Part 70 permit renewal, the U.S. EPA may invoke its authority under Section 505(e) of the Clean Air Act to terminate or revoke and reissue a Part 70 permit.

B.18 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 OAQ prior to making any modification to the source. Pursuant to 326 IAC 1-2-42, "Modification" means one (1) or more of the following activities at an existing source:
- (1) A physical change or change in the method of operation of any existing emissions unit that increases the potential to emit any regulated pollutant that could be emitted from the emissions unit, or that results in emissions of any regulated pollutant not previously emitted.
  - (2) Construction of one (1) or more new emissions units that have the potential to emit regulated air pollutants.
  - (3) Reconstruction of one (1) or more existing emission units that increases the potential to emit of any regulated air pollutant.
- (b) Any application requesting a source modification shall be submitted to:
- Indiana Department of Environmental Management  
Permits Branch, Office of Air Quality  
100 North Senate Avenue, P.O. Box 6015  
Indianapolis, Indiana 46206-6015
- Any such application shall be certified by the "responsible official" as defined by 326 IAC 2-7-1(34).
- (c) The Permittee shall also comply with the applicable provisions of 326 IAC 2-7-11 (Administrative Permit Amendments) or 326 IAC 2-7-12 (Permit Modification) prior to operating the approved modification.

B.19 Permit Amendment or Modification [326 IAC 2-7-11] [326 IAC 2-7-12] [40 CFR 72]

- (a) Permit amendments and modifications are governed by the requirements of 326 IAC 2-7-11 or 326 IAC 2-7-12 whenever the Permittee seeks to amend or modify this permit.
- (b) Pursuant to 326 IAC 2-7-11(b) and 326 IAC 2-7-12(a), administrative Part 70 permit amendments and permit modifications for purposes of the acid rain portion of a Part 70 permit shall be governed by regulations promulgated under Title IV of the Clean Air Act. [40 CFR 72]
- (c) Any application requesting an amendment or modification of this permit shall be submitted to:
- Indiana Department of Environmental Management  
Permits Branch, Office of Air Quality  
100 North Senate Avenue, P.O. Box 6015  
Indianapolis, Indiana 46206-6015
- Any such application shall be certified by the "responsible official" as defined by 326 IAC 2-7-1(34).
- (d) The Permittee may implement administrative amendment changes addressed in the request for an administrative amendment immediately upon submittal of the request. [326 IAC 2-7-11(c)(3)]

B.20 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)(D)(i) 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.21 Operational Flexibility [326 IAC 2-7-20] [326 IAC 2-7-10.5]

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- (a) The Permittee may make any change or changes at the source that are described in 326 IAC 2-7-20(b), (c), or (e), without a prior permit revision, if each of the following conditions is met:
  - (1) The changes are not modifications under any provision of Title I of the Clean Air Act;
  - (2) Any preconstruction approval required by 326 IAC 2-7-10.5 has been obtained;
  - (3) The changes do not result in emissions which exceed the emissions allowable under this permit (whether expressed herein as a rate of emissions or in terms of total emissions);
  - (4) The Permittee notifies the:  
  
Indiana Department of Environmental Management  
Permits Branch, Office of Air Quality  
100 North Senate Avenue, P. O. Box 6015  
Indianapolis, Indiana 46206-6015  
  
and  
  
United States Environmental Protection Agency, Region V  
Air and Radiation Division, Regulation Development Branch - Indiana (AR-18J)  
77 West Jackson Boulevard  
Chicago, Illinois 60604-3590  
  
in advance of the change by written notification at least ten (10) days in advance of the proposed change. The Permittee shall attach every such notice to the Permittee's copy of this permit; and
  - (5) The Permittee maintains records on-site which document, on a rolling five (5) year basis, all such changes and emissions trading that are subject to 326 IAC 2-7-20(b), (c), or (e) and makes such records available, upon reasonable request, for public review.

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

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

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

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

B.22 Inspection and Entry [326 IAC 2-7-6] [IAC 13-14-2-2]

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

- (a) Enter upon the Permittee's premises where a Part 70 source is located, or emissions related activity is conducted, or where records must be kept under the conditions of this permit;
- (b) Have access to and copy any records that must be kept under the conditions of this permit;
- (c) Inspect any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit;
- (d) Sample or monitor substances or parameters for the purpose of assuring compliance with this permit or applicable requirements; and
- (e) Utilize any photographic, recording, testing, monitoring, or other equipment for the purpose of assuring compliance with this permit or applicable requirements.

B.23 Transfer of Ownership or Operational Control [326 IAC 2-7-11]

- (a) The Permittee must comply with the requirements of 326 IAC 2-7-11 whenever the Permittee seeks to change the ownership or operational control of the source and no other change in the permit is necessary.
- (b) Any application requesting a change in the ownership or operational control of the source shall contain a written agreement containing a specific date for transfer of permit responsibility, coverage and liability between the current and new Permittee. The application shall be submitted to:

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

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

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

B.24 Annual Fee Payment [326 IAC 2-7-19] [326 IAC 2-7-5(7)]

- (a) The Permittee shall pay annual fees to IDEM, OAQ, within thirty (30) calendar days of receipt of a billing. Pursuant to 326 IAC 2-7-19(b), if the Permittee does not receive a bill from IDEM, OAQ, the applicable fee is due April 1 of each year.
- (b) Except as provided in 326 IAC 2-7-19(e), failure to pay may result in administrative enforcement action or revocation of this permit.
- (c) The Permittee may call the following telephone numbers: 1-800-451-6027 or 317-233-0425 (ask for OAQ, Technical Support and Modeling Section), to determine the appropriate permit fee.

## SECTION C

## SOURCE OPERATION CONDITIONS

Entire Source

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

- C.1 **Particulate Matter Emission Limitations For Processes with Process Weight Rates Less Than One Hundred (100) pounds per hour [326 IAC 6-3-2(c)]**  
Pursuant to 326 IAC 6-3-2(c), the allowable particulate matter emissions rate from any process not already regulated by 326 IAC 6-1 or any New Source Performance Standard, and which has a maximum process weight rate less than 100 pounds per hour shall not exceed 0.551 pounds per hour.
- C.2 **Opacity [326 IAC 5-1]**  
Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary Alternative Opacity Limitations), opacity shall meet the following, unless otherwise stated in this permit:
- (a) Opacity shall not exceed an average of forty percent (40%) in any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.
  - (b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.
- C.3 **Open Burning [326 IAC 4-1] [IC 13-17-9]**  
The Permittee shall not open burn any material except as provided in 326 IAC 4-1-3, 326 IAC 4-1-4 or 326 IAC 4-1-6. The previous sentence notwithstanding, the Permittee may open burn in accordance with an open burning approval issued by the Commissioner under 326 IAC 4-1-4.1. 326 IAC 4-1-3 (a)(2)(A) and (B) are not federally enforceable.
- C.4 **Incineration [326 IAC 4-2][326 IAC 9-1-2]**  
The Permittee shall not operate an incinerator or incinerate any waste or refuse except as provided in 326 IAC 4-2 and 326 IAC 9-1-2. 326 IAC 9-1-2 is not federally enforceable.
- C.5 **Fugitive Dust Emissions [326 IAC 6-4]**  
The Permittee shall not allow fugitive dust to escape beyond the property line or boundaries of the property, right-of-way, or easement on which the source is located, in a manner that would violate 326 IAC 6-4 (Fugitive Dust Emissions). 326 IAC 6-4-2(4) is not federally enforceable.
- C.6 **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 1-7-2, 326 IAC 1-7-3(c) and (d), 326 IAC 1-7-4(d), (e), and (f), and 326 IAC 1-7-5(d) are not federally enforceable.
- C.7 **Asbestos Abatement Projects [326 IAC 14-10] [326 IAC 18] [40 CFR 61, Subpart M]**  
(a) 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.8 Performance Testing [326 IAC 3-6]**

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

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

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

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

- (b) The Permittee shall notify IDEM, OAQ of the actual test date at least fourteen (14) days prior to the actual test date. The notification submitted by the Permittee does not require certification by the "responsible official" as defined by 326 IAC 2-7-1(34).
- (c) Pursuant to 326 IAC 3-6-4(b), all test reports must be received by IDEM, OAQ not later than forty-five (45) days after the completion of the testing. An extension may be granted by IDEM, OAQ, if the source submits to IDEM, OAQ, a reasonable written explanation not later than five (5) days prior to the end of the initial forty-five (45) day period.

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

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

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

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

#### **C.10 Compliance Monitoring [326 IAC 2-7-5(3)] [326 IAC 2-7-6(1)]**

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

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

in writing, prior to the end of the initial ninety (90) day compliance schedule, with full justification

of the reasons for the inability to meet this date.

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

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

C.11 Maintenance of Opacity Monitoring Equipment [326 IAC 2-7-5(3)(A)(iii)]

- (a) The Permittee shall install, calibrate, maintain, and operate all necessary opacity monitors and related equipment. In addition, prompt corrective action shall be initiated whenever indicated.
- (b) In the event that a breakdown of the continuous opacity monitoring equipment occurs, a record shall be made of the times and reasons of the breakdown and efforts made to correct the problem.
- (c) Whenever the continuous opacity monitor is malfunctioning or will be down for calibration, maintenance, or repairs for a period of four (4) hours or more, a calibrated backup COM shall be brought online within four (4) hours of shutdown of the primary COM, if possible. If this is not possible, visible emission readings shall be performed in accordance with 40 CFR 60, Appendix A, Method 9, for a minimum of one (1) hour beginning four (4) hours after the start of the malfunction or down time.
  - (1) If the reading period begins less than one hour before sunset, readings shall be performed until sunset. If the first required reading period would occur between sunset and sunrise, the first reading shall be performed as soon as there is sufficient daylight.
  - (2) Method 9 opacity readings shall be repeated for a minimum of one (1) hour at least once every four (4) hours during daylight operations, until such time that the continuous opacity monitor is back in operation.
  - (3) All of the opacity readings during this period shall be reported in the Quarterly Deviation and Compliance Monitoring Reports.
- (d) Nothing in this condition, or in Section D or this permit, shall excuse the Permittee from complying with the requirements to operate a continuous opacity monitor system pursuant to 326 IAC 3-5.

C.12 Monitoring Methods [326 IAC 3] [40 CFR 60] [40 CFR 63]

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

C.13 Pressure Gauge and Other Instrument Specifications [326 IAC 2-1.1-11] [326 IAC 2-7-5(3)] [326 IAC 2-7-6(1)]

- (a) Whenever a condition in this permit requires the measurement of pressure drop across any part of the unit or its control device, the gauge employed shall have a scale such that the expected normal reading shall be no less than twenty percent (20%) of full scale and be accurate within plus or minus two percent ( $\pm 2\%$ ) of full scale reading.

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

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

**C.14 Emergency Reduction Plans [326 IAC 1-5-2] [326 IAC 1-5-3]**

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

- (a) The Permittee shall prepare written emergency reduction plans (ERPs) consistent with safe operating procedures.
- (b) These ERPs shall be submitted for approval to:  
  
Indiana Department of Environmental Management  
Compliance Branch, Office of Air Quality  
100 North Senate Avenue, P.O. Box 6015  
Indianapolis, Indiana 46206-6015  
  
within ninety (90) days after the date of issuance of this permit.  
  
The ERP does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).
- (c) If the ERP is disapproved by IDEM, OAQ, the Permittee shall have an additional thirty (30) days to resolve the differences and submit an approvable ERP.
- (d) These ERPs shall state those actions that will be taken, when each episode level is declared, to reduce or eliminate emissions of the appropriate air pollutants.
- (e) Said ERPs shall also identify the sources of air pollutants, the approximate amount of reduction of the pollutants, and a brief description of the manner in which the reduction will be achieved.
- (f) Upon direct notification by IDEM, OAQ, that a specific air pollution episode level is in effect, the Permittee shall immediately put into effect the actions stipulated in the approved ERP for the appropriate episode level. [326 IAC 1-5-3]

**C.15 Risk Management Plan [326 IAC 2-7-5(12)] [40 CFR 68.215]**

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

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

C.16 Compliance Response Plan - Preparation, Implementation, Records and Reports  
~~[326 IAC 2-7-5] [326 IAC 2-7-6]~~

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- (a) The Permittee is required to prepare a Compliance Response Plan (CRP) for each compliance monitoring condition of this permit. A CRP shall be submitted to IDEM, OAQ upon request. The CRP shall be prepared within ninety (90) days after issuance of this permit by the Permittee, supplemented from time to time by the Permittee, maintained on site, and comprised of:
- (1) Reasonable response steps that may be implemented in the event 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 and the Permittee documents such response in accordance with subsection (e) below, the Permittee shall amend its Compliance Response Plan to include such response steps taken.
- (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
  - (2) If none of the reasonable response steps listed in the Compliance Response 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, the IDEM, OAQ shall be promptly notified of the expected date of the shut down, the status of the applicable compliance monitoring parameter with respect to normal, and the results of the actions taken up to the time of notification.
  - (4) Failure to take reasonable response steps shall constitute a violation of 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 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.17 Actions Related to Noncompliance Demonstrated by a Stack Test [326 IAC 2-7-5]  
[326 IAC 2-7-6]

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

The 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.18 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 other regulated pollutants (as defined by 326 IAC 2-7-1) from the source, for purposes of Part 70 fee assessment.

- (b) The annual emission statement covers the twelve (12) consecutive month time period starting January 1 and ending December 31. The annual emission statement must be submitted to:

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

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

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

C.19 General Record Keeping Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-6]

- (a) Records of all required data, reports and support information 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 kept at the source location for a minimum of three (3) years. The records may be stored elsewhere for the remaining two (2) years as long as they are available upon request. If the Commissioner makes a request for records to the Permittee, the Permittee shall furnish the records to the Commissioner within a reasonable time.
- (b) Unless otherwise specified in this permit, all record keeping requirements not already legally required shall be implemented within ninety (90) days of permit issuance.

C.20 General Reporting Requirements [326 IAC 2-7-5(3)(C)] [326 IAC 2-1.1-11]

- (a) The source shall submit the attached Quarterly Deviation and Compliance Monitoring Report or its equivalent. Any deviation from permit requirements, the date(s) of each deviation, the cause of the deviation, and the response steps taken must be reported. This report shall be submitted within thirty (30) days of the end of the reporting period. The Quarterly Deviation and Compliance Monitoring Report shall include the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).
- (b) The report required in (a) of this condition and reports required by conditions in Section D of this permit shall be submitted to:
- Indiana Department of Environmental Management  
Compliance Data Section, Office of Air Quality  
100 North Senate Avenue, P. O. Box 6015  
Indianapolis, Indiana 46206-6015
- (c) Unless otherwise specified in this permit, any notice, report, or other submission required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ, on or before the date it is due.

- (d) Unless otherwise specified in this permit, all reports required in Section D of this permit shall be submitted within thirty (30) days of the end of the reporting period. All reports do require the certification by the “responsible official” as defined by 326 IAC 2-7-1(34).
- (e) The first report shall cover the period commencing on the date of issuance of this permit and ending on the last day of the reporting period. Reporting periods are based on calendar years.

### **Stratospheric Ozone Protection**

#### **C.21 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.

## SECTION D.1

## FACILITY OPERATION CONDITIONS

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

- (1) A pulverized coal-fired boiler rated at 220,000 pounds per hour steam (276 mmBtu/hour), identified as Boiler #2 and constructed in 1959. Particulate matter emissions are controlled by an electrostatic precipitator, emissions are measured with a continuous opacity monitor.
- (2) A pulverized coal-fired boiler rated at 130,000 pounds per hour steam (180 mmBtu/hour), identified as Boiler #5 and constructed in 1948. Particulate matter emissions are controlled by an electrostatic precipitator, emissions are measured with a continuous opacity monitor.

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

#### D.1.1 Particulate Matter Emissions Limitations PM [326 IAC 6-2-3(a)] [326 IAC 6-2-3(d)]

- (a) Pursuant to 326 IAC 6-2-3(a) (Particulate Matter Emissions for Sources of Indirect Heating), particulate matter emissions from Boiler #2 or Boiler #5 shall in no case exceed 0.62 lb/mmBtu. The limitation for Boilers #2 and #5 was calculated using the following equation:

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

Where C = 50 F/m<sup>3</sup>  
Q = total source capacity (mmBtu/hour)  
(456 mmBtu/hour)  
N = number of stacks  
a = 0.67  
h = average stack height (feet)  
Pt = pounds of particulate matter emitted  
per million Btu heat input  
(lb/mmBtu)

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

- (a) Pursuant to 326 IAC 5-1-3 (Temporary Alternative Opacity Limitations), the following applies:
- (1) When building a new fire in a boiler, or shutting down a boiler, opacity may exceed the applicable limit established in 326 IAC 5-1-2 and stated in Section C - Opacity. However, opacity levels shall not exceed sixty percent (60%) for any six (6)-minute averaging period. Opacity in excess of the applicable limit established in 326 IAC 5-1-2 shall not continue for more than two (2) six (6)-minute averaging periods in any twenty-four (24) hour period. [326 IAC 5-1-3(a)]
  - (2) When removing ashes from the fuel bed or furnace in a boiler or blowing tubes, opacity may exceed the applicable limit established in 326 IAC 5-1-2 and stated in Section C - Opacity. However, opacity levels shall not exceed sixty percent (60%) for any six (6)-minute averaging period and opacity in excess of the applicable limit shall not continue for more than one (1) six (6)-minute averaging period in any sixty (60) minute period. The averaging periods shall not be permitted for more than three (3) six (6)-minute averaging periods in a twelve (12) hour period. [326 IAC 5-1-3(a)]

- (3) Operation of the electrostatic precipitator is not required during these times unless necessary to comply with these limits.
- (b) If this facility cannot meet the opacity limitations in (a)(1) and (a)(2) of this condition, the Permittee may submit a written request to IDEM, OAQ, 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.1.3 Sulfur Dioxide (SO<sub>2</sub>) [326 IAC 7-1.1]**

Pursuant to 326 IAC 7-1.1 (Sulfur Dioxide Emission Limitations), the SO<sub>2</sub> emissions from each of the Boilers #2 and #5 shall not exceed 6.0 pounds per million Btu (lbs/MMBtu) when combusting coal.

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

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

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

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

**Compliance Determination Requirements**

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

Within a two (2) year period from the most recent stack test, compliance with the PM limitations in Condition D.1.1 shall be determined by a performance stack test. This test shall be repeated at least once every two (2) years from the date of this valid compliance demonstration. Testing shall be conducted in accordance with Section C- Performance Testing.

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

Except as otherwise provided by statute or rule or in this permit, the electrostatic precipitators (ESPs) shall be operated at all times that the boilers vented to the ESPs are in operation.

**D.1.8 Sulfur Dioxide Emissions and Sulfur Content [326 IAC 2-7-5(A)] [326 IAC 2-7-6] [326 IAC 3] [326 IAC 7]**

Pursuant to 326 IAC 7-2, the Permittee shall demonstrate that the sulfur dioxide emissions from either Boiler #2 or Boiler #5 do not exceed six (6.0) pounds per mmBtu. Compliance shall be determined utilizing one of the following options:

- (a) Coal sampling and analysis shall be performed using one of the following procedures:
  - (1) Minimum Coal Sampling Requirements and Analysis Methods [326 IAC 3-7-2(b)]:
    - (A) The coal sample acquisition point shall be at a location where representative samples of the total coal flow to be combusted by the facility or facilities may be obtained. A single as-bunkered sampling station may be used to represent the coal to be combusted by multiple

facilities using the same stockpile feed system.

- (B) Coal shall be sampled at least three (3) times per day and at least one (1) time per eight (8) hour period unless no coal is bunkered during the preceding eight (8) hour period;
  - (C) Minimum sample size shall be five hundred (500) grams;
  - (D) Samples shall be composited and analyzed at the end of each calendar month;
  - (E) Preparation of the coal sample, heat content analysis, and sulfur content analysis shall be determined pursuant to 326 IAC 3-7-2(c), (d) and (e).
- (2) Sample the coal pursuant to 326 IAC 3-7-2(a). Preparation of the coal sample, heat content analysis, and sulfur content analysis shall be determined pursuant to 326 IAC 3-7-2(c), (d) and (e);
  - (3) Sample and analyze the coal pursuant to 236 IAC 3-7-3; or
- (b) Compliance may also be determined by conducting a stack test for sulfur dioxide emissions from the boiler in accordance with 326 IAC 3-6, utilizing the procedures in 40 CFR 60, Appendix A, Method 6, 6A, 6C, or 8. [326 IAC 7-2-1(d)]

A determination of noncompliance pursuant to either of the methods specified in (a) or (b) above shall not be refuted by evidence of compliance pursuant to the other method.

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

**D.1.9 Cleaning Waste Analysis [326 IAC 2-1.1-5(a)(4)] [40 CFR 261]**

The Permittee shall use appropriate test methods as listed in 40 CFR Part 261 to analyze all boiler chemical cleaning wastes that will be burned, to determine the concentration of the compounds listed in the Operation Standards condition in this D section.

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

**D.1.10 Preventive Inspections: Electrostatic Precipitators [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 months. At a minimum, the following inspections shall be performed:

- (A) Internal inspection of shell for corrosion (i.e., doors, hatches, insulator housings, roof area).
  - (B) Effectiveness of rapping (i.e., buildup of dust on discharge electrodes and plates).
  - (C) Gas distribution (i.e., buildup of dust on distribution plates and turning vanes).
  - (D) Dust accumulation (i.e., buildup of dust on shell and support members that could result in grounds or promote advanced corrosion).
  - (E) Major misalignment of plates (i.e., visual check of plate alignment).
  - (F) Rapper, vibrator and TR set control cabinets (motors, lubrication, etc.)
  - (G) Rapper assembly (i.e., loose bolts, ground wires, water in air lines, solenoids, etc.)
  - (H) Vibrator and rapper seals (i.e., air in-leakage, wear, deterioration)
  - (I) TR set controllers (i.e., low voltage trip point, over current trip point, spark rate, etc.)
  - (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.
- (b) Reasonable response steps shall be taken in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports for any improper or abnormal conditions found during an inspection. Discovery of an abnormal or improper condition is not a deviation from this permit. Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports, shall be considered a violation of this permit.

D.1.11 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. T-R set failure resulting in less than 90 percent 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.1.12 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 20 percent for three (3) consecutive six (6) minute averaging periods. In the event of opacity exceeding 20 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 20 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 20 percent 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.1.13 Record Keeping Requirements**

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- (a) To document compliance with Condition D.1.3 and D.1.8, the Permittee shall maintain records in accordance with (1) through (4) below. Records maintained for (1) and (4) 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.1.3.
- (1) Calendar dates covered in the compliance determination period;
  - (2) Actual coal usage since last compliance determination period;
  - (3) Sulfur content and heat content;
  - (4) Sulfur dioxide emission rates.
- (b) 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.
- (c) To document compliance with Conditions D.1.1, D.1.2, D.1.5, D.1.6, D.1.7, D.1.9, D.1.10, D.1.11 and D.1.12 the Permittee shall maintain records in accordance with (1) through (6) below. Records shall be complete and sufficient to establish compliance with the limits established in Section C - Opacity and in Conditions D.1.1 and D.1.2.
- (1) Data and results from the most recent stack test;
  - (2) All continuous emissions monitoring data, pursuant to 326 IAC 3-5;
  - (3) All parametric monitoring readings;
  - (4) Records of the results of the ESP inspections;
  - (5) All preventive maintenance measures taken; and
  - (6) All response steps taken and the outcome for each.
- (d) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

### **D.1.14 Reporting Requirements**

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A quarterly summary of the information to document compliance with Condition D.1.3 shall be submitted to the address listed in Section C - General Reporting Requirements, of this permit, using the reporting forms located at the end of this permit, or their equivalent, within thirty (30) days after the end of the quarter being reported. The report submitted by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

## SECTION D.2 FACILITY OPERATION CONDITIONS

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

Facilities associated with the coal and ash storage and handling system:

- (1) One (1) 0.075 acre outdoor storage pile with a storage capacity of 2,100 tons. The method of handling is dumping through a grate at grade, with a maximum annual throughput of 168,000 tons per year.
- (2) One (1) ash storage silo with a storage capacity of 130 tons. The method of handling is ash conditioning (with water) and unloading, with a maximum annual throughput of 16,400 tons per year. Particulate emissions are controlled by a baghouse.

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

#### D.2.1 Particulate Matter (PM) [326 IAC 6-3-2]

Pursuant to 326 IAC 6-3-2, the allowable PM emission rate from the coal and ash handling and unloading processes shall not exceed 29.7 pounds per hour when operating at a process weight rate of 19.2 tons per hour.

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

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

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

#### D.2.2 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for this facility and its control device.

### Compliance Determination Requirements

#### D.2.3 Particulate Matter (PM)

The baghouse for PM control shall be in operation at all times when the ash handling operations are in operation and exhausting to the outside atmosphere.

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

#### D.2.4 Visible Emissions Notations [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]

- (a) Visible emission notations of the baghouse discharge stack exhaust shall be performed at least once per shift during normal daylight operations when exhausting to the outside atmosphere. A trained employee shall record whether emissions are normal or abnormal.
- (b) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation.

- (c) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.
- (d) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.
- (e) If 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.
- (f) If abnormal emissions are observed at any baghouse exhaust, the Permittee shall take reasonable response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports. Observation of an abnormal emission 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.2.5 Baghouse Parametric Monitoring [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]

- (a) The Permittee shall record the total static pressure drop across the baghouse used in conjunction with the ash handling at least once per shift when the ash handling is in operation when venting to the atmosphere. When for any one reading, the pressure drop across the baghouse is outside the normal range of 3.0 and 6.0 inches of water or a range established during the latest stack test, the Permittee shall take reasonable response steps in accordance with Section C- Compliance Response Plan - Preparation, Implementation, Records and Reports.
- (b) The instrument used for determining the pressure shall comply with Section C - Pressure Gauge and Other Instrument Specifications, and shall be calibrated at least once every six (6) months.

D.2.6 Broken or Failed Bag Detection

In the event that bag failure has been observed:

- (a) For multi-compartment units, the affected compartments will be shut down immediately until the failed units have been repaired or replaced. Operations may continue only if there are no visible emissions or if the event qualifies as an emergency and the Permittee satisfies the emergency provisions of this permit (Section B- Emergency Provisions). Within eight (8) business hours of the determination of failure, response steps according to the timetable described in the Compliance Response Plan shall be initiated. For any failure with corresponding response steps and timetable not described in the Compliance Response Plan, response steps shall be devised within eight (8) business hours of discovery of the failure and shall include a timetable for completion. Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records and Reports, shall be considered a violation of this permit.
- (b) For single compartment baghouses, failed units and the associated process will be shut down immediately until the failed units have been repaired or replaced. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions).

**D.2.7 Baghouse Inspections [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]**

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- (a) An inspection shall be performed each calendar quarter of all bags controlling the PM emissions from the ash handling operation when venting to the atmosphere. A baghouse inspection shall be performed within three months of redirecting vents to the atmosphere and every three months thereafter. Inspections are optional when venting to the indoors. All defective bags shall be replaced.
- (b) If an abnormal or improper condition is found during an inspection, the Permittee shall take reasonable response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports. Discovery of an abnormal or improper condition is not a deviation from this permit. Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports, shall be considered a violation of this permit.

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

**D.2.8 Record Keeping Requirements**

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- (a) To document compliance with Condition D.2.4, the Permittee shall maintain records of the visible emission notations of the baghouse stack exhausts.
- (b) To document compliance with Conditions D.2.5 and D.2.7, the Permittee shall maintain the following:
  - (1) Records of the differential pressure readings across the baghouses;
  - (2) Records of the results of the baghouse inspections; and
  - (3) Documentation of the dates that baghouse vents are redirected.
- (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)]: (The information describing the process contained in this facility description box is descriptive only and does not constitute enforceable conditions.)

- (1) One (1) 1.99-MW diesel generator for emergency standby service and peak shaving for the water treatment plant and service complex.
- (2) One (1) electrical No. 2 distillate fuel oil storage tank with a capacity of approximately 10,000 gallons.

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

##### **D.3.1 PSD Minor Limit [326 IAC 2-2] [40 CFR 52.21]**

This diesel generator shall use less than 228,380 gallons of diesel per 12 consecutive month period rolled on a monthly basis. This usage limit is required to limit the potential to emit of NOx to less than 40 tons per 12 consecutive month period. Compliance with this limit makes 326 IAC 2-2 (Prevention of Significant Deterioration) and 40 CFR 52.21 not applicable.

##### **D.3.2 Preventive Maintenance Plan [326 IAC 2-7-5(13)]**

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for these facilities.

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

##### **D.3.3 Visible Emissions Notations**

- (a) Visible emission notations of the exhaust from facilities listed in the description section exhaust shall be performed once per shift during normal daylight operations when exhausting to the atmosphere. A trained employee shall record whether emissions are normal or abnormal.
- (b) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.
- (c) In the case of batch or discontinuous operation, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.
- (d) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.
- (e) The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when an abnormal emission is observed. Failure to take response steps in accordance with Section C - Compliance Monitoring Plan - Preparation, Implementation, Records and Reports shall considered a violation of this permit.

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

### **D.3.4 Record Keeping Requirements**

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- (a) To document compliance with Condition D.3.1, the Permittee shall maintain monthly records of diesel fuel usage.
- (b) To document compliance with Condition 3.3, the Permittee shall maintain records of daily visible emission notations of the auxiliary boiler stack exhausts when the diesel generator is in operation.
- (c) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

### **D.3.5 Reporting Requirements**

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A quarterly summary of the information to document compliance with Condition D.3.1 in any quarter when #2 diesel fuel was combusted and #2 diesel fuel usage, shall be submitted to the address listed in Section C - General Reporting Requirements, using the reporting form currently being used or the reporting form located at the end 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).

## SECTION D.4 FACILITY OPERATION CONDITIONS

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

- (1) One (1) No. 2 oil-fired 3.5 mmBtu/hour boiler used for space heating. This boiler was constructed in 1985.

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

#### D.4.1 Particulate Matter Emission Limitations PM [326 IAC 6-2-4]

Pursuant to 326 IAC 6-2-4 (Particulate Matter Emissions for Sources of Indirect Heating), the PM emissions from the boiler shall not exceed 0.22 lb/mmBtu. This limitation was calculated using the following equation:

$$Pt = \frac{1.09}{Q^{0.26}}$$

Pt = Lbs. of PM emitted (lb/mmBtu)  
Q = total Source capacity (mmBtu/hr)  
(459.5 mmBtu/hr)

#### D.4.2 Operation Standards [326 IAC 2-1.1-5(a)(4)] [40 CFR 261] [40 CFR 279] [329 IAC 13]

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

#### D.4.3 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 this facility and any emission control devices.

### Compliance Determination Requirements

#### D.4.4 Cleaning Waste Analysis [326 IAC 2-1.1-5(a)(4)] [40 CFR 261]

The Permittee shall use appropriate test methods as listed in 40 CFR Part 261 to analyze all boiler chemical cleaning wastes that will be burned, to determine the concentration of the compounds listed in the Operation Standards condition in this D section.

## SECTION D.5

## FACILITY OPERATION CONDITIONS

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

- (1) Equipment related to manufacturing activities not resulting in the emission of HAPs: brazing equipment, cutting torches, soldering equipment, welding equipment.
- (2) Conveyors as follows:
  - (1) underground conveyors
- (3) Coal bunker and coal scale exhausts and associated dust collector vents.

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

#### D.5.1 Particulate Matter (PM) [326 IAC 6-3-2]

Pursuant to 326 IAC 6-3-2 (Process Operations), the allowable PM emission rate from the brazing equipment, cutting torches, soldering equipment, welding equipment and structural steel and bridge fabrication activities, coal conveyors, coal bunkers and the coal scale exhausts shall not exceed the allowable PM emission rate based on the following equation:

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

$$E = 4.10P^{0.67}$$

where E = rate of emission in pounds per hour;  
And P = process weight rate in tons per hour

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT  
OFFICE OF AIR QUALITY**

**PART 70 OPERATING PERMIT  
CERTIFICATION**

Source Name: Peru Utilities, City of Peru  
Source Address: 301 East Canal Street, Peru, Indiana 46970  
Mailing Address: 335 East Canal Street, P.O. Box 67, Peru, Indiana 46970  
Part 70 Permit No.: T103-7371-00001

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

Please check what document is being certified:

- 9 Annual Compliance Certification Letter
- 9 Test Result (specify) \_\_\_\_\_
- 9 Report (specify) \_\_\_\_\_
- 9 Notification (specify) \_\_\_\_\_
- 9 Affidavit (specify) \_\_\_\_\_
- 9 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 DATA SECTION  
P.O. Box 6015  
100 North Senate Avenue  
Indianapolis, Indiana 46206-6015  
Phone: 317-233-5674  
Fax: 317-233-5967**

**PART 70 OPERATING PERMIT  
EMERGENCY OCCURRENCE REPORT**

Source Name: Peru Utilities, City of Peru  
Source Address: 301 East Canal Street, Peru, Indiana 46970  
Mailing Address: 335 East Canal Street, P.O. Box 67, Peru, Indiana 46970  
Part 70 Permit No.: T103-7371-00001

**This form consists of 2 pages**

**Page 1 of 2**

Check either No. 1 or No.2	
9 1.	This is an emergency as defined in 326 IAC 2-7-1(12)
C	The Permittee must notify the Office of Air Quality (OAQ), within four (4) business hours (1-800-451-6027 or 317-233-5674, ask for Compliance Section); and
C	The Permittee must submit notice in writing or by facsimile within two (2) days (Facsimile Number: 317-233-5967), and follow the other requirements of 326 IAC 2-7-16

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

Facility/Equipment/Operation:
Control Equipment:
Permit Condition or Operation Limitation in Permit:
Description of the Emergency:
Describe the cause of the Emergency:

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

**Page 2 of 2**

Date/Time Emergency started:
Date/Time Emergency was corrected:
Was the facility being properly operated at the time of the emergency?    Y    N Describe:
Type of Pollutants Emitted: TSP, PM-10, SO <sub>2</sub> , VOC, NO <sub>x</sub> , CO, Pb, other:
Estimated amount of pollutant(s) emitted during emergency/deviation:
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: \_\_\_\_\_

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

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

Source Name: Peru Utilities, City of Peru  
Source Address: 301 East Canal Street, Peru, Indiana 46970  
Mailing Address: 335 East Canal Street, P.O. Box 67, Peru, Indiana 46970  
Part 70 Permit No.: T103-7371-00001

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

Page 1 of 2

<p>This report is an affirmation that the source has met all the requirements stated in this permit. This report shall be submitted quarterly based on a calendar year. Any deviation from the requirements, the date(s) of each deviation, the probable cause of the deviation, and the response steps taken must be reported. Deviations that are required to be reported by an applicable requirement shall be reported according to the schedule stated in the applicable requirement and do not need to be included in this report. Additional pages may be attached if necessary. If no deviations occurred, please specify in the box marked "No deviations occurred this reporting period".</p>	
<p><input type="checkbox"/> NO DEVIATIONS OCCURRED THIS REPORTING PERIOD.</p>	
<p><input type="checkbox"/> THE FOLLOWING DEVIATIONS OCCURRED THIS REPORTING PERIOD</p>	
<p><b>Permit Requirement</b> (specify permit condition #)</p>	
<p><b>Date of Deviation:</b></p>	<p><b>Duration of Deviation:</b></p>
<p><b>Number of Deviations:</b></p>	
<p><b>Probable Cause of Deviation:</b></p>	
<p><b>Response Steps Taken:</b></p>	
<p><b>Permit Requirement</b> (specify permit condition #)</p>	
<p><b>Date of Deviation:</b></p>	<p><b>Duration of Deviation:</b></p>
<p><b>Number of Deviations:</b></p>	
<p><b>Probable Cause of Deviation:</b></p>	
<p><b>Response Steps Taken:</b></p>	

<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  
COMPLIANCE DATA SECTION**

**Part 70 Quarterly Report**

Source Name: Peru Utilities  
Source Address: 335 East Canal Street, Peru, Indiana 46970  
Mailing Address: 335 East Canal Street, Peru, Indiana 46970  
Part 70 Permit: 103-7371-00001  
Facility: Diesel Generator  
Parameter: Fuel Usage  
Limit: 228,380 gallons per 12 consecutive month period

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

Month	Fuel Usage (gallons)	Fuel Usage (Gallons)
	This Month	Last 12 Month Total
Month 1		
Month 2		
Month 3		

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

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

Attach a signed certification to complete this report.

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

### Part 70 Quarterly Report

Source Name: Peru Utilities, City of Peru  
 Source Address: 301 East Canal Street, Peru, Indiana 46970  
 Mailing Address: 301 East Canal Street, P.O. Box 67, Peru, Indiana 46970  
 Part 70 Permit No.: T103-7371-00001  
 Facility: Boiler #2 and Boiler #5  
 Parameter: SO<sub>2</sub> Emission Rate  
 Limit: Boilers #2 and #5 shall not exceed 6.0 pounds per million Btu (lbs/mmBtu) when combusting coal.

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

Month	Column 1	Column 2	Column 3	Column 4	Column 5
	Coal Consumption	Sulfur Content	Coal Heat Content	Ash Content	SO <sub>2</sub> Emission Rate
Month 1					
Month 2					
Month 3					

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

Submitted by: \_\_\_\_\_

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

Signature: \_\_\_\_\_

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

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

Attach a signed certification to complete this report.

## Indiana Department of Environmental Management Office of Air Quality

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

Source Name: Peru Utilities  
 Source Location: 301 East Canal Street  
 County: Miami  
 SIC Code: 4911  
 Operation Permit No.: T103-7371-00001  
 Permit Reviewer: Laura M. Groom

On January 3, 2002, the Office of Air Quality (OAQ) had a notice published in the The Peru Tribune, Peru, Indiana, stating that Peru Utilities had applied for a Part 70 Operating Permit to operate an electric generating station. The notice also stated that OAQ proposed to issue a permit for this operation and provided information on how the public could review the proposed permit and other documentation. Finally, the notice informed interested parties that there was a period of thirty (30) days to provide comments on whether or not this permit should be issued as proposed.

Upon further review, the OAQ has decided to make the following revisions to the permit (bolded language has been added, the language with a line through it has been deleted). The Table Of Contents has been modified to reflect these changes.

Changes one (1) through six (6) below were made to incorporate the Article 2 rule revisions that were adopted on October 3, 2001 and became effective on January 19<sup>th</sup>, 2002. For more information about this rulemaking, refer to the October 2001 Air Pollution Control Board Packet which can be found on the internet at <http://www.state.in.us/idem/air/rules/apcb/packets/index.html>. The rule revisions were published in the February 1, 2002 Indiana Register which can be found on the internet at <http://www.IN.gov/legislative/register/index-25.html>.

(1) Section B.2 (Permit Term) has a new rule cite added.

**B.2 Permit Term [326 IAC 2-7-5(2)] ~~[326 IAC 2-1.1-9.5]~~**

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This permit is issued for a fixed term of five (5) years from the original date, 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).

(2) Condition B.12 (Emergency Provisions) (a) (b) and (g) have been revised to reflect rule changes to 326 IAC 2-7-16. This section of the rule is now consistent with 40 CFR 70.6(g) and provides an affirmative defense to an action brought for non-compliance with technology based emission limitations only.

**B.12 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.~~

- (b) An emergency, as defined in 326 IAC 2-7-1(12), constitutes an affirmative defense to an action brought for noncompliance with a ~~health-based~~ or 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:
- (g) ~~Operations may continue during an emergency only if the following conditions are met:~~
  - (1) 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.
  - (2) ~~If an emergency situation causes a deviation from a health-based limit, the Permittee may not continue to operate the affected emissions facilities unless:~~
    - (A) ~~The Permittee immediately takes all reasonable steps to correct the emergency situation and to minimize emissions; and~~
    - (B) ~~Continued operation of the facilities is 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.~~

~~Any operation shall continue no longer than the minimum time required to prevent the situations identified in (g)(2)(B) of this condition.~~

- (3) Condition B.14 (Multiple Exceedances) has been deleted, because 326 IAC 2-7-5(1)(E) has been repealed, because it conflicted with 40 CFR 70.6(a)(6).

~~B.14 Multiple Exceedances [326 IAC 2-7-5(1)(E)]~~

~~Any exceedance of a permit limitation or condition contained in this permit, which occurs contemporaneously with an exceedance of an associated surrogate or operating parameter established to detect or assure compliance with that limit or condition, both arising out of the same act or occurrence, shall constitute a single potential violation of this permit.~~

- (4) Condition B.14 (Prior Permits Superseded) was added to the permit to implement the intent of the new rule 326 IAC 2-1.1-9.5.

**B.14 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) **deleted****by this permit.**

(b) All previous registrations and permits are superseded by this permit.

(5) Removed (b) from B.13 Permit Shield. Since B.14 Prior Permits Superseded has been added to the permit, it is not necessary for this statement to be in this condition.

B.13 Permit Shield [326 IAC 2-7-15] [326 IAC 2-7-20] [326 IAC 2-7-12]

~~(b) This permit shall be used as the primary document for determining compliance with applicable requirements established by previously issued permits. All previously issued operating permits are superseded by this permit.~~

(6) C.16 Compliance Response Plan - Failure to Take Response Steps (c)(2) "administrative amendment" has been revised to "minor permit modification," because 326 IAC 2-7-11(a)(7) has been repealed. Requests that do not involve significant changes to monitoring, reporting, or recordkeeping requirements may now be approved as minor permit modifications.

C.16 Compliance Response Plan - ~~Failure to Take Response Steps~~ **Preparation, Implementation, Records, and Reports** [326 IAC 2-7-5] [326 IAC 2-7-6]

(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 ~~an administrative amendment~~ **a minor permit modification** to the permit, and such request has not been denied.

(7) The A.2 Section of the permit is being revised to add the word ash for clarification as shown below.

(3) Facilities associated with the coal and ash storage and handling system:

- (1) One (1) 0.075 acre outdoor storage pile with a storage capacity of 2,100 tons. The method of handling is dumping through grate at grade, with a maximum annual throughput of 168,000 tons per year.
- (2) One (1) **ash** storage silo with a storage capacity of 130 tons. The method of handling is ash conditioning (with water) and unloading, with a maximum annual throughput of 16,400 tons per year. Particulate emissions are controlled by a baghouse.

(8) Condition C.11 (Maintenance of Opacity Monitoring Equipment) has been revised to provide updated language, determined to more appropriate for Maintenance of Opacity Monitoring Equipment.

C.11 Maintenance of Opacity Monitoring Equipment [326 IAC 2-7-5(3)(A)(iii)]

---

- (c) Whenever the continuous opacity monitor is malfunctioning or will be down for **calibration, maintenance, or repairs or adjustments** for a period of four (4) hours or more, a calibrated backup COM shall be brought online within four (4) hours of shutdown of the primary COM, if possible. If this is not possible, visible emission readings shall be performed in accordance with 40 CFR 60, Appendix A, Method 9, for a minimum of one (1) hour beginning four (4) hours after the start of the malfunction or down time.
    - (3) All of the opacity readings during this period shall be reported in the ~~q~~**Quarterly** Deviation and Compliance Monitoring Reports.
  - (d) Nothing in this condition, **or in Section D of this permit**, shall excuse the Permittee from complying with the requirements to operate a continuous opacity monitor system pursuant to 326 IAC 3-5.
- (9) Condition D.1.1 (Particulate Matter Emissions Limitations) has been changed for clarification. The addition of Boiler #5 in the first sentence clarifies that emissions from either Boiler #2 or Boiler #5 shall not exceed 0.62 lb/mmBtu.

D.1.1 Particulate Matter Emissions Limitations PM [326 IAC 6-2-3(a)] [326 IAC 6-2-3(d)]

---

- (a) Pursuant to 326 IAC 6-2-3(a) (Particulate Matter Emissions for Sources of Indirect Heating), particulate matter emissions from Boiler #2 **or Boiler #5** shall in no case exceed 0.62 lb/mmBtu. The limitation for Boilers #2 and #5 was calculated using the following equation:
- (10) Condition D.1.4 (Operation Standards) has been revised to add rule cites.
- D.1.4 Operation Standards **[326 IAC 2-1.1-5(a)(4)] [40 CFR 261] [40 CFR 279] [329 IAC 13]**
- 
- (a) All coal burned, including coal treated with any additive, shall meet the ASTM definition of coal.
  - (b) The burning of hazardous waste, as defined by 40 CFR 261, is prohibited in these facilities. Any boiler tube chemical cleaning waste liquids, binding agent, or used oil combusted shall meet the toxicity characteristic requirements for non-hazardous waste.
  - (c) Any boiler tube chemical cleaning waste liquids fired in the boiler shall only contain the cleaning solution and two full volume boiler rinses.
- (11) Condition D.1.6 (Testing Requirements) has been revised as shown below. These revisions were made to delete references to specific methods of testing.

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

---

Within a two (2) year period from the most recent stack test, compliance with the PM limitations in Condition D.1.1 shall be determined by a performance stack test ~~conducted in accordance with Section C - Performance Testing. The Permittee shall perform PM testing utilizing Methods 5 or 17 (40 CFR 60, Appendix A), or other methods as approved by the Commissioner.~~ This test shall be repeated at least once every two (2) years from the date of this valid compliance demonstration. Testing shall be conducted in accordance with Section C- Performance Testing.

(12) Condition D.1.9 (Cleaning Waste Analysis) has been revised to add rule cites.

**D.1.9 Cleaning Waste Analysis [326 IAC 2-1.1-5(a)(4)] [40 CFR 261]**

The Permittee shall use appropriate test methods as listed in 40 CFR Part 261 to analyze all boiler chemical cleaning wastes that will be burned, to determine the concentration of the compounds listed in the Operation Standards condition in this D section.

(13) Condition D.1.10 (Preventive Inspections) has been revised to give more specific examples of the inspections that need to be done and to add rule cites.

**D.1.10 Preventive Inspections: Electrostatic Precipitators [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]**

(a) The following inspections shall be performed ~~at least once every two years~~ **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, ~~controller failure~~ performed whenever there is an outage of any nature lasting more than three days, unless such inspections have been performed within the last six months. At a minimum, the following inspections shall be performed:
  - (A) Internal inspection of shell for corrosion (i.e., doors, hatches, insulator housings, roof area).
  - (B) Effectiveness of rapping (i.e., buildup of dust on discharge electrodes and plates).
  - (C) Gas distribution (i.e., buildup of dust on distribution plates and turning vanes).
  - (D) Dust accumulation (i.e., buildup of dust on shell and support members that could result in grounds or promote advanced corrosion).
  - (E) Major misalignment of plates (i.e., visual check of plate alignment).
  - (F) Rapper, vibrator and TR set control cabinets (motors, lubrication, etc.)
  - (G) Rapper assembly (i.e., loose bolts, ground wires, water in air lines, solenoids, etc.)
  - (H) Vibrator and rapper seals (i.e., air in-leakage, wear, deterioration)
  - (I) TR set controllers (i.e., low voltage trip point, over current trip point, spark rate, etc.)
  - (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.**

~~(b) Plate and electrode alignment measurements shall be taken whenever there is an outage of any nature lasting more than three days unless such measurements have been taken within the past six months.~~

~~(c) All other inspections shall be made whenever there is an outage of any nature lasting more than three days unless such measurements have been taken within the past twelve months.~~

- (d) ~~Appropriate response steps for any discrepancies in the above list found during the inspection shall be taken in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records and Reports.~~
- (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. T-R set failure resulting in less than 90 percent 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.~~

**Reasonable response steps shall be taken in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports for any improper or abnormal conditions found during an inspection. Discovery of an abnormal or improper condition is not a deviation from this permit. Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports, shall be considered a violation of this permit.**

- (14) Condition D.1.11 (Transformer-Rectifier Sets) has been revised as shown below. These changes were made to provide updated language, determined to be more appropriate for Transformer-Rectifier (T-R) Sets.

**D.1.11 Transformer-Rectifier (T-R) Sets [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]**

~~The ESP shall be operated at all times when the boilers are in operation.~~

- (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) ~~Appropriate~~ **Reasonable** response steps shall be taken in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records and Reports ~~for any improper or abnormal conditions found during an inspection. Discovery of an abnormal or improper condition is not a deviation from this permit.~~ whenever the percentage of T-R sets in service falls below 90 percent. T-R set failure resulting in less than 90 percent 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.  
  
~~whenever the percentage of T-R sets in service falls below 90 percent. In the event of T-R set failure resulting in less than 90 percent availability, the Permittee shall take steps as detailed in the Compliance Response Plan for the unit.~~
- (c) ~~Available T-R sets shall be operated at voltage and current levels consistent with the ESP manufacturer's specifications.~~
- (d) ~~The instrument used for determining the T-R set voltage shall be subject to approval by IDEM, OAQ, and shall be calibrated at least once every six (6) months.~~

- (15) Condition D.1.12 (Opacity Readings Condition) has been revised as shown below. These changes were made to provide updated language, determined to be more appropriate for Opacity Readings.

**D.1.12 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 20 percent for three (3) consecutive six (6) minute averaging periods. In the event of opacity exceeding forty percent (40 %) in any one (1) six (6) minute averaging period, the boiler will be shut down, if necessary, so that T-R sets or the ESP can be repaired or the cause(s) leading to T-R set outages or ESP malfunction can be corrected. **20 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 20 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) ~~The instrument used for determining the T-R set voltage shall be subject to approval by IDEM, OAQ, and shall be calibrated at least once every six (6) months.~~ Opacity readings in excess of 20 percent 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.
- (16) Condition D.1.13 (Record Keeping Requirements) has been revised as shown below. These changes were made to provide updated language, determined to be more appropriate for Record Keeping Requirements.

**D.1.13 Record Keeping Requirements**

---

- (a) ~~To document compliance with Section C - Opacity Conditions and conditions D.1.4, D.1.5, D.1.6 and D.1.7 D.1.3 and D.1.8, the Permittee shall maintain records in accordance with (1) through (5) (4) below. Records maintained for (1) through and (4) below shall be sufficient to demonstrate compliance using a thirty (30) day rolling weighted average and (4) (1) and (5) shall be taken daily and shall be complete and sufficient to establish compliance with the opacity, PM, SO<sub>2</sub> limits established in Condition C - Opacity, D.1.1, D.1.2 and D.1.3.~~
- (1) ~~Data and results from the most recent stack test;~~
- (2) ~~All preventive maintenance measures taken;~~
- (3) ~~All response steps taken and the outcome for each;~~
- (4) ~~All coal sampling and analysis data, pursuant to 326 IAC 3-7 and 326 IAC 7-1.1;~~
- (5) ~~All parametric monitoring readings;~~
- (1) **Calendar dates covered in the compliance determination period;**
- (2) **Actual coal usage since last compliance determination period;**
- (3) **Sulfur content and heat content;**

- (4) Sulfur dioxide emission rates.**
  - (b) 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.
  - (c) To document compliance with Conditions D.1.1, D.1.2, D.1.5, D.1.6, D.1.7, D.1.9, D.1.10, D.1.11 and D.1.12 the Permittee shall maintain records in accordance with (1) through (6) below. Records shall be complete and sufficient to establish compliance with the limits established in Section C - Opacity and in Conditions D.1.1 and D.1.2.
    - (1) Data and results from the most recent stack test;
    - (2) All continuous emissions monitoring data, pursuant to 326 IAC 3-5.
    - (3) All parametric monitoring readings;
    - (4) Records of the results of the ESP inspections;
    - (5) All preventive maintenance measures taken; and
    - (6) All response steps taken and the outcome for each.
  - (b)(d) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.
- (17) The Section D.2 Facility Operation Conditions is being revised to add the word ash for clarification as shown below.

## **SECTION D.2 FACILITY OPERATION CONDITIONS**

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

Facilities associated with the coal and ash storage and handling system:

- (1) One (1) 0.075 acre outdoor storage pile with a storage capacity of 2,100 tons. The method of handling is dumping through a grate at grade, with a maximum annual throughput of 168,000 tons per year.
- (2) One (1) **ash** storage silo with a storage capacity of 130 tons. The method of handling is ash conditioning (with water) and unloading, with a maximum annual throughput of 16,400 tons per year. Particulate emissions are controlled by a baghouse.

- (18) Condition D.2.1 (Particulate Matter) has been changed. The word extrapolation has been deleted as shown below.

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

- (19) Condition D.2.4 (Visible Emissions Notations) has been revised as shown below to add rule cites and to specify the frequency of notations required and to change the language in portion (e) which was determined to be more appropriate for this condition.

D.2.4 Visible Emissions Notations [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]

- (a) Visible emission notations of the baghouse discharge stack exhaust shall be performed **at least once per shift** during normal daylight operations when exhausting to the outside atmosphere. A trained employee shall record whether emissions are normal or abnormal.
- (b) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation., ~~not counting startup or shut down time.~~
- (c) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.
- (d) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.
- (e) ~~The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when an abnormal emission is observed. Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records and Reports shall be considered a violation of this permit.~~  
If 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.
- (f) If abnormal emissions are observed at any baghouse exhaust, the Permittee shall take reasonable response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports. Observation of an abnormal emission 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.
- (20) Condition D.2.5 (Baghouse Parametric Monitoring) has been revised as shown below. These changes were made to add rule cites and to provide updated language determined to be more appropriate for Baghouse Parametric Monitoring.

D.2.5 Baghouse Parametric Monitoring [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]

- (a) The Permittee shall record the total static pressure drop across the baghouse used in

conjunction with the ~~coal crushing~~ **ash handling** at least once per shift when the **ash handling** ~~coal crusher~~ is in operation when venting to the atmosphere. When for any one reading, the pressure drop across the baghouse is outside the normal range of 3.0 and 6.0 inches of water or a range established during the latest stack test, the Permittee shall take reasonable response steps in accordance with Section C- Compliance Response Plan - Preparation, Implementation, Records and Reports.

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

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

~~The instrument used for determining the pressure shall comply with Section C - Pressure Gauge and Other Instrument Specifications, of this permit, shall be subject to approval by IDEM, OAQ, and shall be calibrated at least once every six (6) months.~~

- (21) Condition D.2.7 (Baghouse Inspections) has been revised as shown below. These changes were made to add rule cites and to provide updated language, determined to be more appropriate for Baghouse Inspections.

D.2.7 Baghouse Inspections [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]

- (a) An inspection shall be performed each calendar quarter of all bags controlling the **PM emissions from the** ash handling operation when venting to the atmosphere. A baghouse inspection shall be performed within three months of redirecting vents to the atmosphere and every three months thereafter. Inspections are optional when venting to the indoors. All defective bags shall be replaced.
- (b) **If an abnormal or improper condition is found during an inspection, the Permittee shall take reasonable response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports. Discovery of an abnormal or improper condition is not a deviation from this permit. Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports, shall be considered a violation of this permit.**

- (22) Condition D.4.2 (Operation Standards) has been revised to add rule cites.

D.4.2 Operation Standards [326 IAC 2-1.1-5(a)(4)] [40 CFR 261] [40 CFR 279] [329 IAC 13]

- (a) The burning of hazardous waste, as defined by 40 CFR 261, is prohibited in this facility. Any boiler tube chemical cleaning waste liquids, binding agent, or used oil combusted shall meet the toxicity characteristic requirements for non-hazardous waste.

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

(23) Condition D.4.4 (Cleaning Waste Analysis) has been revised to add rule cites.

**D.4.4 Cleaning Waste Analysis [326 IAC 2-1.1-5(a)(4)] [40 CFR 261]**

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The Permittee shall use appropriate test methods as listed in 40 CFR Part 261 to analyze all boiler chemical cleaning wastes that will be burned, to determine the concentration of the compounds listed in the Operation Standards condition in this D section.

(24) The Part 70 Quarterly Report has been changed to add the facilities and the limit that are required for this report.

## **Part 70 Quarterly Report**

Source Name: Peru Utilities, City of Peru  
Source Address: 301 East Canal Street, Peru, Indiana 46970  
Mailing Address: 301 East Canal Street, P.O. Box 67, Peru, Indiana 46970  
Part 70 Permit No.: T103-7371-00001  
**Facility:** **Boiler #2 and Boiler #5**  
Parameter: SO<sub>2</sub> Emission Rate  
**Limit:** **6.0 lbs/mmBtu**

## **Technical Support Document**

The Office of Air Quality prefers that 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. That accomplishes the desired result of ensuring that these types of concerns are documented and part of the record regarding this permit decision.

(25) Many of the compliance monitoring conditions have been revised to give the source more guidance. The changes have been documented in this addendum and the permit has been updated.

## Indiana Department of Environmental Management Office of Air Quality

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

#### Source Background and Description

**Source Name:** Peru Utilities  
**Source Location:** 301 East Canal Street, Peru, Indiana 46970  
**County:** Miami  
**SIC Code:** 4911  
**Operation Permit No.:** T103-7371-00001  
**Permit Reviewer:** Laura M. Groom

The Office of Air Quality (OAQ) has reviewed a Part 70 permit application from Peru Utilities relating to the operation of an electric generating station.

#### Permitted Emission Units and Pollution Control Equipment

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

- (1) A pulverized coal-fired boiler rated at 220,000 pounds per hour steam (276 mmBtu/hour), identified as Boiler #2 and constructed in 1959. Particulate matter emissions are controlled by an electrostatic precipitator, emissions are measured with a continuous opacity monitor.
- (2) A pulverized coal-fired standby boiler rated at 130,000 pounds per hour steam (180 mmBtu/hour), identified as Boiler #5 and constructed in 1948. Particulate matter emissions are controlled by an electrostatic precipitator, emissions are measured with a continuous opacity monitor.
- (3) Facilities associated with the coal and ash handling system:
  - (a) One (1) 0.075 acre outdoor storage pile with a storage capacity of 2,100 tons. The method of handling is dumping through grate at grade, with a maximum annual throughput of 168,000 tons per year.
  - (b) One (1) storage silo with a storage capacity of 130 tons. The method of handling is ash conditioning (with water) and unloading, with a maximum annual throughput of 16,400 tons per year. Particulate emissions are controlled by a baghouse.
- (4) One (1) 1.99-MW diesel generator for emergency standby service and peak shaving for the water treatment plant and service complex.
- (5) One (1) electrical No. 2 distillate fuel oil storage tank with a capacity of approximately 10,000 gallons.
- (6) One (1) No. 2 oil-fired 3.5 mmBtu/hour steam boiler used for space heating. This boiler was constructed in 1985.

- (7) Fugitive emissions from vehicle traffic. Highway traffic areas are paved and gravel is maintained on the remainder of the roadways.

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

There are no unpermitted facilities operating at this source.

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

There are no new facilities to be reviewed.

### **Insignificant Activities**

The source also consists of the following insignificant activities, as defined in 326 IAC 2-7-1(21):

- (1) Natural gas-fired combustion sources with heat input equal to or less than ten million (10,000,000) Btu per hour.
- (4) Propane or liquified petroleum gas, or butane-fired combustion sources with heat input equal to or less than six million (6,000,000) Btu per hour.
- (5) A gasoline fuel transfer and dispensing operation handling less than or equal to 1,300 gallons per day, such as filling of tanks, automobiles, locomotives, having a storage capacity less than or equal to 10,500 gallons.
- (6) Vessels storing lubricating oils, hydraulic oils, machining oils, and machining fluids.
- (7) Degreasing operations that do not exceed 145 gallons per 12 months, except if subject to 326 IAC 20-6.
- (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) Paved and unpaved roads and parking lots with public access.
- (11) Conveyors as follows:
  - (1) underground conveyors
- (12) Coal bunker and coal scale exhausts and associated dust collector vents.
- (13) Blowdown for any of the following: sight glass: boiler: compressors: pumps: and cooling tower
- (14) Diesel generators not exceeding 1600 horsepower.
- (15) Vents from ash transport systems not operated at positive pressure.
- (16) Activities with emissions equal to or less than thresholds:

Lead(Pb)=0.6 ton/year or 3.29 lbs/day  
Carbon Monoxide(CO)=25 lbs/day  
Sulfur Dioxide(SO2)=5 lbs/hour or 25 lbs/day  
Particulate matter(PM)=5 lbs/hour or 25 lbs/day  
Nitrogen Oxides (NOx)=5 lbs/hour or 25 lbs/day

Volatile Organic Compounds (VOC)=3 lbs/hour or 15 lbs/day

- (a) Emergency diesel driven air compressor with capacity of 50 horsepower.
- (b) Emergency diesel driven City water pump with capacity of 70 horsepower.
- (c) Acetylene torches and storage tanks. Two (2) 60 pound tanks on-site.
- (d) Lead free paint.
- (e) No.2 oil-fired steam boiler for space heating, with capacity of 3.5 mmBtu/hour.
- (f) No. 2 oil tanks with a capacity of 5000 gallons.
- (g) Mineral spirits with low vapor pressure. Use 400-500 gallons per year.

### Existing Approvals

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

- (1) OP 52-06-86-0101, issued on December 27, 1982; and
- (2) Exempt CP 103-4200-00001, issued on January 3, 1995.
- (3) Significant Source Modification 103-12946-00001, issued on May 9<sup>th</sup>, 2001

All conditions from previous approvals were incorporated into this Part 70 permit.

### 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 December 6, 1996.

A notice of completeness letter was mailed to the source on December 19, 1996.

### Emission Calculations

See Appendix A of this document for detailed emissions calculations.

### 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 Emissions (tons/year)
PM	8210
PM-10	1890
SO <sub>2</sub>	6845
VOC	8
CO	261
NO <sub>x</sub>	1100

Note: For the purpose of determining Title V applicability for particulates, PM-10, not PM, is the regulated pollutant in consideration.

HAP's	Potential Emissions (tons/year)
combined	less than 0.9
TOTAL	less than 0.9

- (a) The potential to emit (as defined in 326 IAC 2-1.1-1(16)) of PM10, SO<sub>2</sub>, CO and NO<sub>x</sub> are equal to or greater than 100 tons per year. Therefore, the source is subject to the provisions of 326 IAC 2-7.
- (b) The potential to emit (as defined in 326 IAC 2-1.1-1(16)) of any single HAP is less than ten (10) tons per year and/or the potential to emit (as defined in 326 IAC 2-7-1(29)) of a combination HAPs is less than or equal to twenty-five (25) tons per year.
- (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.

**Potential to Emit After Issuance**

The table below summarizes the potential to emit, reflecting all limits, of the significant emission units after controls. The control equipment is considered federally enforceable only after issuance of this Part 70 permit.

Process/facility	Potential to Emit (tons/year)						
	PM	PM-10	SO <sub>2</sub>	VOC	CO	NO <sub>x</sub>	HAPs
Pre - 1977 Equipment (Boiler 2, Boiler 5, Coal and Ash Handling)	greater than 100	greater than 100	greater than 100	less than 100	greater than 100	greater than 100	---
Diesel Generator	2.3	0.9	8.2	1.6	47.5	38.6	0.07
Storage Tank	--	--	--	--	--	--	0.004
Total	greater than 100	greater than 100	greater than 100	less than 100	greater than 100	greater than 100	0.074

**Actual Emissions**

The following table shows the actual emissions from the source. This information reflects the 1999 OAQ emission data.

Pollutant	Actual Emissions (tons/year)
PM	no data submitted
PM-10	57
SO <sub>2</sub>	100
VOC	0
CO	0
NO <sub>x</sub>	30
HAPs	no data submitted

**County Attainment Status**

The source is located in Miami County.

Pollutant	Status
PM-10	attainment
SO <sub>2</sub>	attainment
NO <sub>2</sub>	attainment
Ozone	attainment
CO	attainment
Lead	attainment

- (a) Volatile organic compounds (VOC) and oxides of nitrogen (Nox) are precursors for the formation of ozone. Therefore, VOC and NO<sub>x</sub> emissions are considered when evaluating the rule applicability relating to the ozone standards. Miami County has been designated as attainment or unclassifiable for ozone.

**Federal Rule Applicability**

- (a) There are no New Source Performance Standards (326 IAC 12)(40 CFR 60) applicable to this source.
- (b) The boilers are not subject to the requirements of the New Source Performance Standard, 326 IAC 12, (40 CFR 60, Subparts D, Da, Db, or Dc), due to the dates of construction.
- (c) There are no National Emission Standards for Hazardous Air Pollutants (NESHAPs)(40 CFR 63) applicable to this source. The solvent the Source uses for degreasing is not listed in 40 CFR 63, Subpart T (National Emission Standards for Halogenated Solvent Cleaning).
- (d) This source is not subject Title IV (Acid Deposition Control) of the Clean Air Act, as defined in 326 IAC 2-7-1(3). It is exempt because it does not as of November 15, 1990 serve a generator with a nameplate capacity of greater than 25 MWe.
- (e) This Source is not subject to Subpart Kb Storage Vessels, as defined in 40 CFR 60 Subpart Kb, because the capacity of the storage tank is less than 20,000 gallons.

### State Rule Applicability - Entire Source

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

Pursuant to 326 IAC 2-2 (Prevention of Significant Deterioration) and 40 CFR 52.21, this source is a major source. However, the boilers did not undergo PSD review based on the dates of construction, which were before August 1977, when PSD limits were established.

#### 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 100 tons/year of particulate matter less than ten (10) microns (PM10), sulfur dioxide (SO2) and nitrogen oxides (NOx). 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)

Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary Exemptions), 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 by 326 IAC 5-1-4,
- (b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.

#### 326 IAC 8-1-6 (New Facilities)

326 IAC 8-1-6 (New Facilities) does not apply to the diesel generator as it does not have the potential to emit more than 25 tons per year of VOC.

#### 326 IAC 8-1-6 (Major Sources of Hazardous Air Pollutants)

This rule is not applicable to the diesel generator and storage tank because the source does not emit greater than 10 tons per year of one HAP or 25 tons per year of multiple HAPs.

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

Pursuant to 326 IAC 6-4 (Fugitive Dust Emission Limitations), 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.

### State Rule Applicability - Boiler #2 and Boiler #5

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

Pursuant to 326 IAC 6-2-3 (Particulate Matter Emissions for Sources of Indirect Heating), the PM emissions from each of the Boilers shall not exceed 0.62 lb/mmBtu. Please see page 13 of this TSD for calculations. These limitations were calculated using the following equation:

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

Where C = 50 F/m<sup>3</sup>  
Q = total source capacity (456 mmBtu/hr)  
N = number of stacks  
a = 0.67  
h = average stack height (feet)

Pt = pounds of particulate matter emitted per million Btu/heat input

$$h = \frac{(H_1 \times pa_1 \times Q) + (H_2 \times pa_2 \times Q)}{(pa_1 \times Q) + (pa_2 \times Q)} \quad \text{Where } H = \text{height of stack (feet)}$$

pa = the actual controlled emission rate (lbs/mmBtu)  
Q = total source capacity (mmBtu/hr)

The electrostatic precipitators shall be in operation at all times the boilers are in operation, in order to comply with this limit. Please see page 13 of this TSD for calculations.

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

Boiler #2 and Boiler #5 are subject to 326 IAC 7-1.1-2 (Sulfur Dioxide Emission Limitations), because they have the potential to emit greater than twenty-five (25) tons per year of sulfur dioxide. Pursuant to 326 IAC 7-1.1-2 (Sulfur Dioxide Emission Limitations), the SO<sub>2</sub> emissions from either Boiler #2 or Boiler #5 shall not exceed 6.0 pounds per million Btu (lbs/mmBtu) when combusting coal.

The boilers are in compliance with this limit based on the capacities of the boilers. Please see page 15 of this TSD for conversions that show compliance.

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

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

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 and stated in Section C - Opacity. However, opacity levels shall not exceed sixty percent (60%) for any six (6)-minute averaging period and opacity in excess of the applicable limit shall not continue for more than one (1) six (6)-minute averaging period in any sixty (60) minute period. The averaging periods shall not be permitted for more than three (3) six (6)-minute averaging periods in a twelve (12) hour period.

If this facility cannot meet the opacity limitations in (a) and (b) of this condition, the Permittee may submit a written request to IDEM, OAQ 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.

### State Rule Applicability - Coal and Ash Handling

#### 326 IAC 6-3-2 (Particulate Matter Emissions Limitations)

Pursuant to 326 IAC 6-3-2, the allowable PM emission rate from the coal and ash handling and unloading processes shall not exceed 29.7 pounds per hour when operating at a process weight rate of 19.2 tons per hour.

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

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

$$E = 4.10 P^{0.67} \quad \text{where } E = \text{rate of emission in pounds per hour and}$$

P = process weight rate in tons per hour

The baghouse shall be in operation at all times the ash conveying and unloading processes are in operation.

**State Rule Applicability - One (1) 1.99-MW diesel generator and One (1) electrical No. 2 distillate fuel oil storage tank**

326 IAC 2-2 and 40 CFR 52.21 (PSD)

To make 326 IAC 2-2 and 40 CFR 52.21 not applicable the diesel generator shall use less than 228,380 gallons of diesel per 12 consecutive month period rolled on a monthly basis. This usage limit is required to limit the potential to emit of NOx to less than 40 tons per 12 consecutive month period. Compliance with this limit makes 326 IAC 2-2 (PSD) and 40 CFR 52.21 not applicable.

326 IAC 2-4.1-1(Major Sources of Hazardous Air Pollutants)

This rule is not applicable to the diesel generator and storage tank because the source does not emit greater than 10 tons per year of one HAP or 25 tons per year of multiple HAPs.

326 IAC 8-1-6 (New Facilities)

326 IAC 8-1-6 (New Facilities) does not apply to the diesel generator as it does not have the potential to emit more than 25 tons per year of VOC.

**State Rule Applicability - No. 2 oil-fired 3.5 mmBtu/hour boiler**

326 IAC 6-2-4 (Particulate Matter Emissions Limitations)

Pursuant to 326 IAC 6-2-4 (Particulate Matter Emissions for Sources of Indirect Heating), the PM emissions from the boiler shall not exceed 0.22 lb/mmBtu. Please see page 14 of this TSD for detailed calculations.

$$Pt = \frac{1.09}{Q^{0.26}}$$

Pt = Lbs. of PM emitted (lb/mmBtu)  
Q = total Source capacity (mmBtu/hr)  
(459.5 mmBtu/hr)

326 IAC 7-1.1-2 (Sulfur Dioxide Emissions Limitations)

326 IAC 7-1.1-2(a)(3) (Sulfur Dioxide Emission Limitations) is not applicable to this facility because the potential emissions from this unit are less than 25 tons per year.

**State Rule Applicability - Insignificant Activities: Brazing Equipment, Cutting Torches, Soldering Equipment, Welding Equipment, Structural Steel and Bridge Fabrication Activities.**

326 IAC 6-3-2 (Particulate Matter Emissions Limitations)

Pursuant to 326 IAC 6-3-2 (Process Operations), the allowable PM emission rate from the brazing equipment, cutting torches, soldering equipment, welding equipment and structural steel and bridge fabrication activities shall not exceed the allowable PM emission rate based on the following equation:

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

$$E = 4.10P^{0.67}$$

where E = rate of emission in pounds per hour;  
And P = process weight rate in tons per hour

**Testing Requirements**

Boiler #2 and Boiler #5 are required to stack test every two (2) years for PM.

## 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 two boilers (Boiler #2 and Boiler #5) have applicable compliance monitoring conditions as specified below:

- (A) Opacity Readings

Appropriate response steps shall be taken in accordance with Section C - Compliance Response Plan - Failure to Take Response Steps whenever the opacity exceeds 20 percent. In the event of opacity exceeding 40 percent (40%), the boiler will be shut down, if necessary, so that T-R sets or the ESP can be repaired or the cause(s) leading to T-R set outages or ESP malfunction can be corrected.

The instrument used for determining the T-R set voltage shall be subject to approval by IDEM, OAQ, and shall be calibrated at least once every six (6) months.

- (B) Preventive Inspections: Electrostatic Precipitators

- (a) The following inspections shall be performed at least once every two years in accordance with the Preventive Maintenance Plan prepared in accordance with Section B - Preventive Maintenance Plan:

- (1) Plate and electrode alignment;
- (2) ESP component/controller failure;
- (3) Air and water infiltration;

- (b) Plate and electrode alignment measurements shall be taken whenever there is an outage of any nature lasting more than three days unless such measurements have been taken within the past six months.

- (c) All other inspections shall be made whenever there is an outage of any nature lasting more than three days unless such measurements have been taken within the past twelve months.

(d) Appropriate response steps for any discrepancies in the above list found during the inspection shall be taken in accordance with Section C - Compliance Response Plan - Failure to Take Response Steps.

(C) Transformer-Rectifier (T-R) Sets

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. Appropriate response steps shall be taken in accordance with Section C - Compliance Response Plan - Failure to Take Response Steps whenever the percentage of T-R sets in service falls below 90 percent. In the event of T-R set failure resulting in less than 90 percent availability, the Permittee shall take steps as detailed in the Compliance Response Plan for the unit. Available T-R sets shall be operated at voltage and current levels consistent with the ESP manufacturer's specifications. The instrument used for determining the T-R set voltage shall be subject to approval by IDEM, OAQ, and shall be calibrated at least once every six (6) months.

(2) The ash handling operation has applicable compliance monitoring conditions as specified below:

(A) Visible Emissions Notations

Visible emissions notations of the baghouse exhaust shall be performed during normal daylight operations. A trained employee will record whether emissions are normal or abnormal. For processes operated continuously "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time. 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. 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. The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when an abnormal emission is observed. Failure to take response steps in accordance with Section C - Compliance Response Plan - Failure to Take Response Steps, shall be considered a violation of this permit.

(B) Baghouse Parametric Monitoring

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

(b) The Permittee shall record the total static pressure drop across the baghouses used in conjunction with the coal transfer drop points at least once weekly when the coal handling is in operation when venting to the atmosphere. When for any one reading, the pressure drop across the baghouse is outside the normal range of 3.0 and 6.0 inches of water or a range established during the latest stack test, the Permittee shall take

reasonable response steps in accordance with Section C- Compliance Response Plan - Failure to Take Response Steps.

A pressure reading that is outside the above mentioned range is not a deviation from this permit. Failure to take response steps in accordance with Section C - Compliance Response Plan - Failure to Take Response Steps, shall be considered a violation of this permit.

The instrument used for determining the pressure shall comply with Section C - Pressure Gauge and Other Instrument Specifications, of this permit, shall be subject to approval by IDEM, OAQ, and shall be calibrated at least once every six (6) months.

(C) Broken or Failed Bag Detection

In the event that bag failure has been observed:

- (a) For multi-compartment units, the affected compartments will be shut down immediately until the failed units have been repaired or replaced. Operations may continue only if there are no visible emissions or if the event qualifies as an emergency and the Permittee satisfies the emergency provisions of this permit (Section B- Emergency Provisions). Within eight (8) business hours of the determination of failure, response steps according to the timetable described in the Compliance Response Plan shall be initiated. For any failure with corresponding response steps and timetable not described in the Compliance Response Plan, response steps shall be devised within eight (8) business hours of discovery of the failure and shall include a timetable for completion. Failure to take response steps in accordance with Section C - Compliance Response Plan - Failure to Take Response Steps, shall be considered a violation of this permit.
- (b) For single compartment baghouses, failed units and the associated process will be shut down immediately until the failed units have been repaired or replaced. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions).

(D) Baghouse Inspections

An inspection shall be performed each calendar quarter of all bags controlling the ash handling operation when venting to the atmosphere. A baghouse inspection shall be performed within three months of redirecting vents to the atmosphere and every three months thereafter. Inspections are optional when venting to the indoors. All defective bags shall be replaced.

(3) The diesel generator has applicable compliance monitoring conditions as specified below:

(A) Visible Emissions Notations

Once per shift visible emissions notations of the exhaust from the diesel generator shall be performed during normal daylight operations when exhausting to the atmosphere. A trained employee shall record whether emissions are

normal or abnormal. For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty (80%) of the time the process is in operation, not counting startup or shut down time. 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. 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. The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when an abnormal emission is observed. Failure to take response steps in accordance with Section C - Compliance Response Plan - Failure to Take Response Steps, shall be considered a violation of this permit.

## **Conclusion**

The operation of this electric generating station shall be subject to the conditions of the attached proposed Part 70 Permit No. T103-7371-00001.

## Particulate Emission Limitation Calculations

**Boiler #2 = 276 mmBtu/hr (165 ft) (1959)**  
**Boiler #5 = 180 mmBtu/hr (165 ft) (1948)**  
**Heating Boiler = 3.5 mmBtu/hr (50 ft) (1985)**

### Conversions for Actual controlled emission rate in lb/mmBtu:

#### Boiler #2

4963 ton/year x (1-97) = 148.89 ton/year

148.89 ton/yr x 1 yr/8760 hr x 2000 lbs/1 ton x 1 hr/276 mmBtu = 0.12 lb/mmBtu

#### Boiler #5

3237 ton/year x (1-99) = 32.37 ton/year

32.37 ton/yr x 1 yr/8760 hr x 2000 lb/1 ton x 1 hr/180 mmBtu = 0.04 lb/mmBtu

#### Heating Boiler

0.2 ton/yr x 1 yr/8760 hr x 2000lbs/1 ton x 1 hr/3.5 mmBtu = 0.01 lb/mmBtu

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

Where C = 50 F/m<sup>3</sup>

Q = total source capacity (lbs/MMBTU)

N = number of stacks

a = 0.67

h = average stack height (feet)

Pt = pounds of particulate matter emitted per million Btu/heat input

$$h = \frac{(H_1 \times pa_1 \times Q) + (H_2 \times pa_2 \times Q)}{(pa_1 \times Q) + (pa_2 \times Q)}$$

Where H = height of stack (feet)

pa = the actual controlled emission rate (lb/mmBtu)

Q = total source capacity (lbs/mmBtu)

***Q includes both boilers #2 and #5 because they were all constructed before 1972.***

$$h = \frac{[(165 \text{ ft})(0.04)(456) + (165)(0.12)(456)]}{[(0.04)(456)] + [(0.12)(456)]}$$

$$h = \frac{[3009] + [9028]}{[18.24] + [59.72]}$$

h = 165

$$Pt = \frac{(50)(0.67)(165)}{(76.5)(456)^{0.75}(2)^{0.25}}$$

Pt = 0.62 lb/MMBtu

## ***Calculations for the 3.5 mmBtu/hr space heating boiler***

*Since this was constructed in 1985 it's subject to 326 IAC 6-2-4.*

$$Pt = \frac{1.09}{Q^{0.26}}$$

Pt = Lbs. of PM emitted (lb/mmBtu)  
Q = total Source capacity (mmBtu/hr)  
(459.5 mmBtu/hr)

$$Pt = 0.22 \text{ lb/mmBtu}$$

## Sulfur Dioxide Compliance

### Conversions from ton/year to lb/MMBtu to show compliance

#### **Boiler #2**

$4119 \text{ ton/year} \times 1 \text{ year}/8760 \text{ hour} \times 2000 \text{ lbs}/1 \text{ ton} = 940.4 \text{ lb/hour}$   
 $940.4 \text{ lb/hour} \times 1 \text{ hour}/276 \text{ MMBtu} = 3.4 \text{ lb/MMBtu}$

#### **Boiler #5**

$2686 \text{ ton/year} \times 1 \text{ year}/8760 \text{ hour} \times 2000/1 \text{ ton} = 613.2 \text{ lb/hour}$   
 $613.2 \text{ lb/hour} \times 1 \text{ hour}/180 \text{ MMBtu} = 3.4 \text{ lb/MMBtu}$

#### **Insignificant Boiler**

$4.3 \text{ ton year} \times 1 \text{ year}/8760 \text{ hour} \times 2000 \text{ lb}/1 \text{ ton} = 0.98 \text{ lb/hour}$   
 $0.98 \text{ lb/hour} \times 1 \text{ hour}/3.5 \text{ MMBtu} = 0.28 \text{ lb/MMBtu}$

**Appendix A: Emissions Calculations**  
**Coal Combustion: Bituminous Coal for Boilers (Pulverized Dry Bottom)**

**Company Name:** Peru Utilities  
**Address, City, IN, Zip:** 301 East Canal Street, Peru, Indiana 46970  
**Title V:** T103-7371-00001  
**Reviewer:** Laura M. Groom  
**Date:** April 2001

Heat Input Capacity MMBtu/hr		Heat Content of Coal Btu/lb of Coal	Potential Throughput tons/year	Weight % Sulfur in Fuel
276	#2	11,934	101,297	S = 2.1 %
180	#5	11,934	66,063	A= 9.8 %

Emission Factor in lb/ton	Pollutant					
	PM*	PM10*	SO2	NOx	VOC	CO
	98.0 (10A)	22.54 (2.3A)	81.3 (38S)	11.0	0.05	0.50
Potential Emission in tons/yr #2	4963.6	1141.6	4118.7	557.1	2.5	25.3
Potential Emission in tons/yr #5	3237.1	744.5	2686.1	363.3	1.7	16.5
<b>Potential Emission in tons/yr</b>	<b>8200.66</b>	<b>1886.15</b>	<b>6804.88</b>	<b>920.48</b>	<b>4.18</b>	<b>41.84</b>

**Methodology**

Emission Factors are from AP 42 (Update 9/98), Tables 1.1 - through 1.1-11(SCC 1-01-002-04/24, 1-02-002-04/24, 1-03-002-09/24)

Potential Throughput (tons/year) = Heat Input Capacity (MMBtu/hr) x 10<sup>6</sup> Btu/MMBtu / Heat Content of Coal (Btu/lb) / 2000 lb/ton x 8,760 hrs/yr

Heat Content of the Coal is taken from the application

Additional emission factors for commercial/institutional and electric generation boilers are available in AP-42, Chapter 1.1.

Several HAPs emission factors are also available in AP-42, Chapter 1.1, depending on the type of boiler.

Emission (tons/yr) = Throughput tons per year x Emission Factor (lb/ton) / 2,000 lb/ton

Emissions (lbs/MMBtu) = 10<sup>6</sup> Btu/MMBtu / Heat Content of Coal (Btu/lb) / 2000 lb/ton x Emission Factor (lb/ton)

Note: Check the applicable rules and test methods for PM and PM10 when using the above emission factors to confirm that the correct factor is used (i.e., condensable included/not included).

**Appendix A: Emissions Calculations**  
**Commercial/Institutional/Residential Combustors (< 100 mmBtu/hr)**  
**#1 and #2 Fuel Oil**

**Company Name:** Peru Utilities  
**Address, City IN Zip:** 301 East Canal Street  
**Title V:** T103-7371-00001  
**Reviewer:** Laura M. Groom  
**Date:** April 2001

Heat Input Capacity MMBtu/hr	Potential Throughput kgals/year	S = Weight % Sulfur <span style="border: 1px solid black; padding: 2px;">0.275</span>
<span style="border: 1px solid black; padding: 2px;">3.5</span>	219	

Emission Factor in lb/kgal	Pollutant				
	PM*	SO2	NOx	VOC	CO
	2.0	39.05 (142.0S)	20.0	0.34	5.0
Potential Emission in tons/yr	0.2	4.3	2.2	0.0	0.5

**Methodology**

1 gallon of No. 2 Fuel Oil has a heating value of 140,000 Btu

Potential Throughput (kgals/year) = Heat Input Capacity (MMBtu/hr) x 8,760 hrs/yr x 1kgal per 1000 gallon x 1 gal per 0.140 MM Btu

Emission Factors are from AP 42, Tables 1.3-1, 1.3-2, and 1.3-3 (SCC 1-03-005-01/02/03) Supplement E 9/98 (see erata file)

\*PM emission factor is filterable PM only. Condensable PM emission factor is 1.3 lb/kgal.

Emission (tons/yr) = Throughput (kgals/ yr) x Emission Factor (lb/kgal)/2,000 lb/ton

Note: Check the applicable rules and test methods for PM and PM10 when using the above emission factors to confirm that the correct factor is used (i.e., condensable included/not included).

See page 2 for HAPs emission calculations.

**Appendix A: Emissions Calculations**  
**Commercial/Institutional/Residential Combustors (< 100 mmBtu/hr)**  
**#1 and #2 Fuel Oil**  
**HAPs Emissions**

**Company Name:** Peru Utilities  
**Address, City IN Zip:** 301 East Canal Street, Peru, Indiana 46970  
**TV:** T103-7371-00001  
**Reviewer:** Laura M. Groom  
**Date:** November 26th, 2001

HAPs - Metals

	Arsenic	Beryllium	Cadmium	Chromium	Lead
Emission Factor in lb/mmBtu	4.0E-06	3.0E-06	3.0E-06	3.0E-06	9.0E-06
Potential Emission in tons/yr	6.13E-05	4.60E-05	4.60E-05	4.60E-05	1.38E-04

HAPs - Metals (continued)

	Mercury	Manganese	Nickel	Selenium
Emission Factor in lb/mmBtu	3.0E-06	6.0E-06	3.0E-06	1.5E-05
Potential Emission in tons/yr	4.60E-05	9.20E-05	4.60E-05	2.30E-04

Methodology

No data was available in AP-42 for organic HAPs.

Potential Emissions (tons/year) = Throughput (mmBtu/hr)\*Emission Factor (lb/mmBtu)\*8,760 hrs/yr / 2,000 lb/ton

**Appendix A: Emission Calculations  
Internal Combustion Engines - Diesel Fuel  
Turbine (>600 HP)**

**Company Name: Peru Utilities  
Address City IN Zip: Peru, IN 46970  
Title V: T103-7371-00001  
Reviewer: Laura M. Groom  
Date: 02/14/2001**

**PTE CALCULATIONS**

**A. HAP Emissions calculated based on heat input capacity (MMBtu/hr)**

Heat Input Capacity  
MM Btu/hr

S= 0.005

17.30

Pollutant	Emission Factor (lb/MMBTU)	Emissions (tpy)
Benzene		
Toluene	7.76E-04	0.0588
Xylenes	2.81E-04	0.0213
Propylene	1.93E-04	0.0146
Formaldehyde	2.79E-03	0.2114
Acetaldehyde	7.89E-05	0.0060
Acrolein	2.52E-05	0.0019
Naphthalene	7.88E-06	0.0006
Acenaphthylene	1.3E-04	0.0099
Acenaphthene	9.23E-06	0.0007
Fluorene	4.68E-06	0.0004
Phenanthrene	1.28E-05	0.0010
Anthracene	4.08E-05	0.0031
Fluoranthene	1.23E-06	0.0001
Pyrene	4.03E-06	0.0003
Benz(a)anthracene	3.71E-06	0.0003
Chrysene	6.22E-07	0.0000
Benzo(b)fluoranthene	1.53E-06	0.0001
Benzo(k)fluoranthene	1.11E-06	0.0001
Benzo(a)pyrene	2.18E-07	0.0000
Indeno(1,2,3-cd)pyrene	2.57E-07	0.0000
Dibenz(a,h)anthracene	4.14E-07	0.0000
Benzo(g,h,i)perylene	3.46E-07	0.0000
<b>TOTAL</b>	<b>5.56E-07</b>	<b>0.0000</b>
		<b>0.3306</b>

**Methodology**

Emission Factors are from AP 42 (Supplement B 10/96)Table 3.4-1-3.4-4.

Emission (tons/yr) = [Heat Input Capacity (MMBTU/yr) x Emission Factor (lb/MMBTU) x 8760 hrs/yr ] / (2,000 lb/ton )

**Company Name:** Peru Utilities  
**Address City IN Zip:** Peru, IN 46970  
**SSM#:** 103-12946-1  
**Pit ID:** 12946  
**Reviewer:** ERG/EG  
**Date:** 01/22/2001

**LIMITED PTE CALCULATIONS**

Heat Input Capacity  
MM Btu/hr

S= 0.005

3.80

**Methodology For Determining Limited Heat Input**

Emission Limits:

Number of Units: 39 tons NOx  
1

Calculate the limit on fuel usage necessary to ensure that NOx emissions are under 40 tons.

Emissions (tpy) = Heat Input (MMBtu/hr)\*Emission Factor (lb/MMBtu)\*8760 hrs/yr / 2000 lb/ton  
 Emissions (tpy) = Fuel Usage (gal/hr)\*Fuel Heating Value (Btu/gal)\*1E-6 MMBtu/Btu\*Emission Factor (lb/MMBtu)\*87  
 Fuel Usage (gal/hr) = Emissions (tpy)\*2000 lb/ton / (Fuel Heating Value (Btu/gal)\*1.0E-6 MMBtu/Btu\*Emission Fact

Fuel Usage (gal/hr) =  
 Fuel Usage (gal/hr) = 39 tpy \* 2000 / (145728 \* 1.0E-6 \* 2.35 \* 8760)  
 Fuel Usage (gal/yr) = 26.07  
 228380.01

Total Limited Fuel Usage (Mgal/yr)=  
 Total Limited Heat Input (MMBtu/hr)= 0.23  
 3.80

**A. HAP Emissions calculated based on limited heat input capacity (MMBtu/hr)**

Pollutant	Emission Factor (lb/MMBTU)	Emissions (tpy)
Benzene		
Toluene	7.76E-04	0.0129
Xylenes	2.81E-04	0.0047
Propylene	1.93E-04	0.0032
Formaldehyde	2.79E-03	0.0464
Acetaldehyde	7.89E-05	0.0013
Acrolein	2.52E-05	0.0004
Naphthalene	7.88E-06	0.0001
Acenaphthylene	1.3E-04	0.0022
Acenaphthene	9.23E-06	0.0002
Fluorene	4.68E-06	0.0001
Phenanthrene	1.28E-05	0.0002
Anthracene	4.08E-05	0.0007
Fluoranthene	1.23E-06	0.0000
Pyrene	4.03E-06	0.0001
Benz(a)anthracene	3.71E-06	0.0001
Chrysene	6.22E-07	0.0000
Benzo(b)fluoranthene	1.53E-06	0.0000
Benzo(k)fluoranthene	1.11E-06	0.0000
Benzo(a)pyrene	2.18E-07	0.0000
Indeno(1,2,3-cd)pyrene	2.57E-07	0.0000
Dibenz(a,h)anthracene	4.14E-07	0.0000
Benzo(g,h,i)perylene	3.46E-07	0.0000
<b>TOTAL</b>	5.56E-07	0.0000
		<b>0.0726</b>

Methodology

**Appendix A: Emission Calculations  
Internal Combustion Engines - Diesel Fuel  
Turbine (>600 HP)  
Calculation of PSD Minor Limit**

Company Name: Peru Utilities  
Address City IN Zip: Peru, IN 46970  
Title V: T103-7371-00001  
Reviewer: Laura M. Groom  
Date: 12/12/2001

**Methodology For Determining Emission Limit and Fuel Limitation**

Bold indicates data has been provided by the manufacturer.

NOx emission rate	<b>6.9 gm NOx</b> <b>hp - hr</b>	<b>2670 hp</b>	lb 453.6 gm	=	40.6 lb NOx/hr
Allowable hrs to be < PSD limits	40 ton NOx yr	2000 lb ton	hr 40.6 lb NOx	=	1970.4 hr/yr
Annual NOx emissions	1900 hr yr	40.6 lb NOx hr	ton 2000 lb	=	38.6 ton NOx/yr
Annual fuel limit to be <PSD limits	1900 hr yr	<b>120.2 gal fuel</b> <b>hr</b>		=	228380 gal fuel/yr
NOx emission rate	<b>6.9 gm NOx</b> <b>hp - hr</b>	<b>2670 hp</b>	lb 453.6 gm	hr 17.3 MMBtu	= 2.35 lb NOx/MMBtu
CO emission rate	<b>8.5 gm CO</b> <b>hp - hr</b>	<b>2670 hp</b>	lb 453.6 gm	hr 17.3 MMBtu	= 2.89 lb CO/MMBtu
PM emission rate	<b>0.4 gm PM</b> <b>hr - hr</b>	<b>2670 hp</b>	lb 453.6 gm	hr 17.3 MMBtu	= 0.14 lb PM/MMBtu
PM-10 AP-42 emission factor	0.0573 lb PM-10/MMBtu				
VOC AP-42 emission factor	0.1 lb VOC/MMBtu				
SO2 AP-42 emission factor	0.51 lb SO2/MMBtu				

**PTE Before Fuel Limitation**

NOx	2.35 lb NOx MMBtu	17.3 MMBtu hr	8760 hr yr	ton 2000 lb	=	178.1 tons/yr
CO	2.89 lb CO MMBtu	17.3 MMBtu hr	8760 hr yr	ton 2000 lb	=	219.0 tons/yr
PM	0.14 lb PM MMBtu	17.3 MMBtu hr	8760 hr yr	ton 2000 lb	=	10.6 tons/yr
PM-10	0.0573 lb PM-10 MMBtu	17.3 MMBtu hr	8760 hr yr	ton 2000 lb	=	4.3 tons/yr
VOC	0.1 lb VOC MMBtu	17.3 MMBtu hr	8760 hr yr	ton 2000 lb	=	7.6 tons/yr
SO2	0.5 lb SO2 MMBtu	17.3 MMBtu hr	8760 hr yr	ton 2000 lb	=	37.9 tons/yr

**PTE After Fuel Limitation**

NOx	2.35 lb NOx MMBtu	17.3 MMBtu hr	1900 hr yr	ton 2000 lb	=	38.6 tons/yr
CO	2.89 lb CO MMBtu	17.3 MMBtu hr	1900 hr yr	ton 2000 lb	=	47.5 tons/yr
PM	0.14 lb PM MMBtu	17.3 MMBtu hr	1900 hr yr	ton 2000 lb	=	2.3 tons/yr
PM-10	0.0573 lb PM-10 MMBtu	17.3 MMBtu hr	1900 hr yr	ton 2000 lb	=	0.9 tons/yr
VOC	0.1 lb VOC MMBtu	17.3 MMBtu hr	1900 hr yr	ton 2000 lb	=	1.6 tons/yr
SO2	0.5 lb SO2 MMBtu	17.3 MMBtu hr	1900 hr yr	ton 2000 lb	=	8.2 tons/yr