



# INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

*We Protect Hoosiers and Our Environment.*

*Mitchell E. Daniels Jr.*  
Governor

*Thomas W. Easterly*  
Commissioner

100 North Senate Avenue  
Indianapolis, Indiana 46204  
(317) 232-8603  
Toll Free (800) 451-6027  
[www.idem.IN.gov](http://www.idem.IN.gov)

TO: Interested Parties / Applicant

DATE: September 22, 2008

RE: NIPSCO - RM Schahfer Station / 073-26380-00008

FROM: Matthew Stuckey, Branch Chief  
Permits Branch  
Office of Air Quality

## Notice of Decision: Approval - Effective Immediately

Please be advised that on behalf of the Commissioner of the Department of Environmental Management, I have issued a decision regarding the enclosed matter. Pursuant to IC 13-15-5-3, this permit is effective immediately, unless a petition for stay of effectiveness is filed and granted according to IC 13-15-6-3, and may be revoked or modified in accordance with the provisions of IC 13-15-7-1.

If you wish to challenge this decision, IC 4-21.5-3 and IC 13-15-6-1 require that you file a petition for administrative review. This petition may include a request for stay of effectiveness and must be submitted to the Office of Environmental Adjudication, 100 North Senate Avenue, Government Center North, Suite N 501E, Indianapolis, IN 46204, **within eighteen (18) calendar days of the mailing of this notice**. The filing of a petition for administrative review is complete on the earliest of the following dates that apply to the filing:

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

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

- (1) the name and address of the person making the request;
- (2) the interest of the person making the request;
- (3) identification of any persons represented by the person making the request;
- (4) the reasons, with particularity, for the request;
- (5) the issues, with particularity, proposed for considerations at any hearing; and
- (6) identification of the terms and conditions which, in the judgment of the person making the request, would be appropriate in the case in question to satisfy the requirements of the law governing documents of the type issued by the Commissioner.

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

Enclosures  
FNPER.dot12/03/07



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Kelly R. Carmichael  
NIPSCO  
801 East 86<sup>th</sup> Avenue  
Merrillville, IN 46410

September 22, 2008

Re: 073-26380-00008  
Significant Source Modification to  
Part 70 Permit No.: T 073-6792-00008

Dear Mr. Carmichael:

NIPSCO – RM Schahfer Generating Station was issued a Part 70 Operating Permit on September 7, 2006 for a stationary electric utility generating station. A letter requesting changes to this permit was received on April 4, 2008.

NIPSCO is proposing to install new Low NO<sub>x</sub> Burners (LNB) in Unit 15 as a pollution control project in order to reduce NO<sub>x</sub> emissions to meet requirements of phase one of the CAIR (“LNB Project” or “Project”). The new LNB incorporate an improved over-fire air system with an improved capability to reduce NO<sub>x</sub> emissions. Pursuant to 326 IAC 2-7-10.5 the following emission units are approved for modification at the source:

One (1) dry bottom pulverized coal-fired boiler identified as Unit 15, with construction commenced in 1974 and commercial operation begun in 1979, with a design heat input capacity of 5,100 million Btu per hour (MMBtu/hr), with low NO<sub>x</sub> burners (replaced in 2008-2009), combusting No. 2 fuel oil and/or natural gas for ignition and as supplemental fuels, using an electrostatic precipitator (ESP) with a flue gas conditioning (FGC) system for control of particulate matter, and exhausting to stack 15. Unit 15 has continuous emissions monitoring systems (CEMS) for monitoring nitrogen oxides (NO<sub>x</sub>) and sulfur dioxide (SO<sub>2</sub>) and a continuous opacity monitoring (COM) system.

The following construction conditions are applicable to the proposed project:

#### General Construction Conditions

1. The data and information supplied with the application shall be considered part of this source modification approval. Prior to any proposed change in construction which may affect the potential to emit (PTE) of the proposed project, the change must be approved by the Office of Air Quality (OAQ).
2. This approval to construct does not relieve the permittee of the responsibility to comply with the provisions of the Indiana Environmental Management Law (IC 13-11 through 13-20; 13-22 through 13-25; and 13-30), the Air Pollution Control Law (IC 13-17) and the rules promulgated thereunder, as well as other applicable local, state, and federal requirements.
3. Effective Date of the Permit  
Pursuant to IC 13-15-5-3, this approval becomes effective upon its issuance.

4. Pursuant to 326 IAC 2-1.1-9 and 326 IAC 2-7-10.5(i), the Commissioner may revoke this approval if construction is not commenced within eighteen (18) months after receipt of this approval or if construction is suspended for a continuous period of one (1) year or more.
5. All requirements and conditions of this construction approval shall remain in effect unless modified in a manner consistent with procedures established pursuant to 326 IAC 2.
6. Pursuant to 326 IAC 2-7-10.5(l) the emission units constructed under this approval shall not be placed into operation prior to revision of the source's Part 70 Operating Permit to incorporate the required operation conditions.

This significant source modification authorizes modification of the existing emission unit. Operating conditions shall be incorporated into the Part 70 operating permit as a significant permit modification in accordance with 326 IAC 2-7-10.5(l)(2) and 326 IAC 2-7-12. Operation is not approved until the significant permit modification has been issued.

All other conditions of the permit shall remain unchanged and in effect. For your convenience, the entire Part 70 Operating Permit as modified will be provided at issuance.

This decision is subject to the Indiana Administrative Orders and Procedures Act – IC 4-21.5-3-5. If you have any questions on this matter, please contact Kimberly Cottrell, OAQ, 100 North Senate Avenue, MC 61-53, Room 1003, Indianapolis, Indiana, 46204-2251, or call at (800) 451-6027, and ask for Kimberly Cottrell or extension (3-0870), or dial (317) 233-0870.

Sincerely/Original Signed By:

Matthew Stuckey, Branch Chief  
Permits Branch  
Office of Air Quality

Attachments:  
Updated Permit  
Technical Support Document  
PTE Calculations

klc

cc: File – Jasper County  
Jasper County Health Department  
U.S. EPA, Region V  
Air Compliance Branch  
Compliance Data Section  
Permits Administration and Development

Jerome B. Weeden  
NIPSCO  
801 East 86<sup>th</sup> Avenue  
Merrillville, IN 46410

Gurinder Saini  
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Raleigh, NC 27609



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## PREVENTION OF SIGNIFICANT DETERIORATION AND PART 70 SIGNIFICANT SOURCE MODIFICATION OFFICE OF AIR QUALITY

**Northern Indiana Public Service Company (NIPSCO)  
R. M. Schahfer Generating Station  
2723 East, 1500 North  
Wheatfield, Indiana 46392**

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

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

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

Significant Source Modification No.: T 073-26380-00008	
Issued by/Original Signed By:  Matthew Stuckey, Branch Chief Permits Branch Office of Air Quality	Issuance Date: September 22, 2008

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## SECTION A

## SOURCE SUMMARY

This permit is based on information requested by the Indiana Department of Environmental Management (IDEM), Office of Air Quality (OAQ). 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(22)]

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

Source Address: Environmental, Health & Safety Department,  
2723 East, 1500 North, Wheatfield, Indiana, 46392  
Mailing Address: 801 E. 86th Avenue, Merrillville, Indiana, 46410  
Telephone Number: 219-647-5252  
SIC Code: 4911  
County Location: Jasper  
County Status: Attainment for all criteria pollutants  
Source Status: Part 70 Permit Program  
Major Source, under PSD Rules;  
Major Source, Section 112 of the Clean Air Act  
1 of 28 Source Categories

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

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

- (a) One (1) cyclone coal-fired boiler identified as Unit 14, with construction commenced in 1970 and commercial operation begun in 1976, with a design heat input capacity of 4,650 million Btu per hour (MMBtu/hr), combusting No. 2 fuel oil and/or natural gas for ignition and as supplemental fuels, using an electrostatic precipitator (ESP) for control of particulate matter and exhausting to stack 14. Unit 14 has a selective catalytic reduction (SCR) system, and has continuous emissions monitoring systems (CEMS) for monitoring nitrogen oxides (NO<sub>x</sub>) and sulfur dioxide (SO<sub>2</sub>) and a continuous opacity monitoring (COM) system.
- (b) One (1) dry bottom pulverized coal-fired boiler identified as Unit 15, with construction commenced in 1974 and commercial operation begun in 1979, with a design heat input capacity of 5,100 million Btu per hour (MMBtu/hr), with low NO<sub>x</sub> burners (replaced in 2008-2009), combusting No. 2 fuel oil and/or natural gas for ignition and as supplemental fuels, using an electrostatic precipitator (ESP) with a flue gas conditioning (FGC) system for control of particulate matter, and exhausting to stack 15. Unit 15 has continuous emissions monitoring systems (CEMS) for monitoring nitrogen oxides (NO<sub>x</sub>) and sulfur dioxide (SO<sub>2</sub>) and a continuous opacity monitoring (COM) system.

- (c) One (1) dry bottom pulverized coal-fired boiler identified as Unit 17, with construction started in 1980 and commercial operation begun in 1983, with a design heat input capacity of 3,967 million Btu per hour (MMBtu/hr) based on 30-day averages from coal sampling, with low NO<sub>x</sub> burners, combusting No. 2 fuel oil and/or natural gas for ignition and as supplemental fuels, using an electrostatic precipitator (ESP) for control of particulate matter, and exhausting through a limestone-based flue gas desulfurization system to stack 17. Unit 17 is equipped with continuous emissions monitoring systems (CEMS) for monitoring nitrogen oxides (NO<sub>x</sub>) and sulfur dioxide (SO<sub>2</sub>) and a continuous opacity monitoring (COM) system. Unit 17 has been approved to fire blends of coal and petroleum coke.
- (d) One (1) dry bottom pulverized coal-fired boiler identified as Unit 18, with construction started in 1980 and commercial operation begun in 1986, with a design heat input capacity of 3,967 million Btu per hour (MMBtu/hr) with low NO<sub>x</sub> burners, combusting No. 2 fuel oil and/or natural gas for ignition and as supplemental fuels, using an electrostatic precipitator (ESP) for control of particulate matter, and exhausting through a limestone-based flue gas desulfurization system to stack 18. Unit 18 has continuous emissions monitoring systems (CEMS) for monitoring nitrogen oxides (NO<sub>x</sub>) and sulfur dioxide (SO<sub>2</sub>) and a continuous opacity monitoring (COM) system. Unit 18 has been approved to fire blends of coal and petroleum coke.
- (e) Two (2) natural gas-fired combustion turbines, identified as 16A and 16B, constructed in 1979, each with a design heat input capacity of 1,450 million Btu per hour (MMBtu/hr), each using water injection as needed for NO<sub>x</sub> control, exhausting to stacks 16A and 16B, respectively. Units 16A and 16B have continuous emissions monitoring systems (CEMS) for monitoring nitrogen oxides (NO<sub>x</sub>) for use during the ozone control period, and continuous monitoring systems to measure the water to fuel ratio.
- (f) Coal storage and handling systems for Unit 14 and 15 boilers, constructed in 1972.
  - (1) Rail car unloading with wet suppression for PM control during unloading and enclosure for ancillary dust control.
  - (2) Coal pile unloading, coal storage pile(s), material handling equipment, and coal conveyors.
  - (3) Transfer House, with carryover wet suppression and enclosed transfer points within an enclosure for ancillary dust control, with an estimated throughput of 3,000 tons per hour.
  - (4) Crusher House, with carryover wet suppression for PM control and enclosed transfer points within an enclosure for ancillary dust control.
  - (5) Tripper House to tripper bays, with enclosed transfer points within an enclosure for dust control.
  - (6) Two (2) tripper bays with an estimated combined capacity of 3,000 tons per hour, with carryover wet suppression for PM control, each using an enclosure for ancillary dust control.
- (g) Fuel storage and handling systems for Unit 17 and 18 boilers.
  - (1) Rail car unloading of coal, with a multi-compartment baghouse for PM control and enclosure for ancillary dust control.
  - (2) Truck unloading of petroleum coke (petcoke).

- (3) Coal pile unloading, coal storage pile(s), petcoke pile unloading, petcoke storage pile(s), material handling equipment, and conveyors.
  - (4) Transfer House with an estimated throughput of 4,000 tons per hour, with enclosed transfer points within an enclosure for ancillary dust control, with a multi-compartment baghouse for PM control. To produce petcoke blends, coal and petcoke are combined in rotary plow during transfer to conveyor.
  - (5) Crusher House with a designated capacity of 3,000 tons per hour, with enclosed transfer points within an enclosure for dust control, with a multi-compartment baghouse for PM control.
  - (6) Transfer House to tripper with an estimated throughput of 3,000 tons per hour, with enclosed transfer points within an enclosure for ancillary dust control.
  - (7) Two (2) tripper conveyors with an estimated combined throughput of 3,000 tons per hour with enclosure for ancillary dust control, with a multi-compartment baghouse for PM control.
  - (8) Twelve (12) Fuel Silos (bunkers) with enclosure for dust control, with two (2) multi-compartment vent filters for PM control.
- (h) Material handling for the flue gas desulfurization systems for Unit 17 and 18 boilers, including the following:
- (1) One (1) limestone slurry preparation system with a maximum hourly throughput rate of 38,941 pounds of limestone per hour.
  - (2) Two (2) ground limestone pneumatic truck unloading systems connected to Unit 17 limestone silos, with baghouses for PM control.
  - (3) Two (2) ground limestone pneumatic truck unloading systems connected to Unit 18 limestone silos, with baghouses for PM control.
  - (4) One (1) gypsum conveying system, with a maximum design throughput of 150 tons per hour. All gypsum is handled wet.
- (i) Dry fly ash handling and disposal.
- (1) Pneumatic conveyance to storage silos, with a design capacity of 70 tons per hour of fly ash from Units 14 and 15 combined, and a design capacity of 63 tons per hour of fly ash from each of Units 17 and 18.
  - (2) Fly ash storage silos for Units 14, 15, 17, and 18, with cyclone separators, silo collector bag filters, and silo bin vent bag filters. Each silo has wet and dry unloaders, each with a design unloading capacity of 300+ tons per hour, with particulate emissions controlled by the use of a telescoping chute with a vacuum system and a bin vent filter when the ash is being loaded dry, and controlled by the use of water spray mixed with the ash when the ash is being loaded wet.
  - (3) Two (2) storage silos originally used for dual-alkali FGD system, currently used for storage of fly ash from Unit 15; with cyclone separators, silo collector bag filters, and bin vent bag filters; with telescoping chute unloaders with vacuum line to the silo for dry ash unloading to enclosed trucks.

- (4) Transportation by truck via in-plant haul roads; and onsite disposal area.
- (j) Wet process bottom ash handling, with sluicing lines conveying ash to storage ponds in the Waste Disposal Area.
- (k) Poned bottom ash handling/removal operations.

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

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

- (a) Conveyors as follows: [326 IAC 6-3]
  - (1) Covered conveyor for coal or coke conveying of less than or equal to 360 tons per day;
  - (2) Covered conveyors for limestone conveying of less than or equal to 7,200 tons per day for sources other than mineral processing plants constructed after August 31, 1983;
  - (3) Uncovered coal conveying of less than or equal to 120 tons per day; and
  - (4) Underground conveyors.
- (b) Coal bunker and coal scale exhausts and associated dust collector vents. [326 IAC 6-3]
- (c) The following equipment related to manufacturing activities not resulting in the emission of HAPs: brazing equipment, cutting torches, soldering equipment, welding equipment. [326 IAC 6-3]
- (d) Any of the following structural steel and bridge fabrication activities: [326 IAC 6-3]
  - (1) Cutting 200,000 linear feet or less of one inch (10) plate or equivalent.
  - (2) Using 80 tons or less of welding consumables.
- (e) Emergency generators as follows: Diesel generators not exceeding 1600 horsepower. [326 IAC 7]
- (f) Grinding and machining operations controlled with fabric filters, scrubbers, mist collectors, wet collectors and electrostatic precipitators with a design grain loading of less than or equal to 0.03 grains per actual cubic foot and a gas flow rate less than or equal to 4000 actual cubic feet per minute, including the following: deburring; buffing; polishing; abrasive blasting; pneumatic conveying; and woodworking operations. [326 IAC 6-3]
- (g) Other activities or categories not previously identified with potential, uncontrolled emissions equal to or less than thresholds require listing only: Pb 0.6 ton per year or 3.29 pounds per day, SO<sub>2</sub> 5 pounds per hour or 25 pounds per day, NO<sub>x</sub> 5 pounds per hour or 25 pounds per day, CO 25 pounds per day, PM 5 pounds per hour or 25 pounds per day, VOC 3 pounds per hour or 15 pounds per day:
  - (1) Evaporation of Boiler Chemical Cleaning wastes.
  - (2) Coal pile wind erosion. [326 IAC 6-4]

- (3) Wet handling of FGD sludge material collected from the FGD building sumps, sluiced to the Material Storage Runoff Pond. FGD material dredged from pond inlet area is dewatered on the pond bank with trucks conveying dewatered material to onsite landfill. [326 IAC 6-4]
- (4) Shot blasters. [326 IAC 6-3]
- (5) Gypsum stockpile. [326 IAC 6-3]

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

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

- (a) It is a major source, as defined in 326 IAC 2-7-1(22);
- (b) It is a source in a source category designated by the United States Environmental Protection Agency (U.S. EPA) under 40 CFR 70.3 (Part 70 - Applicability); and
- (c) It is an affected source under Title IV (Acid Deposition Control) of the Clean Air Act, as defined in 326 IAC 2-7-1(3).

## SECTION B

## GENERAL CONDITIONS

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

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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 2-1.1-9.5] [326 IAC 2-7-4(a)(1)(D)] [326 IAC 2-7-5(2)] [IC 15-13-6(a)]

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- (a) This permit, T 073-6792-00008, is issued for a fixed term of five (5) years from the issuance date of this permit, as determined in accordance with IC 4-21.5-3-5(f) and IC 13-15-5-3. Subsequent revisions, modifications, or amendments of this permit do not affect the expiration date of this permit or of permits issued pursuant to Title IV of the Clean Air Act and 326 IAC 21 (Acid Deposition Control).
- (b) If IDEM, OAQ, upon receiving a timely and complete renewal permit application, fails to issue or deny the permit renewal prior to the expiration date of this permit, this existing permit shall not expire and all terms and conditions shall continue in effect, including any permit shield provided in 326 IAC 2-7-15, until the renewal permit has been issued or denied.

### B.3 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 2-7-4(a)] [326 IAC 2-7-10]

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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 Provide Information [326 IAC 2-7-5(6)(E)]

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- (a) The Permittee shall furnish to IDEM, OAQ, within a reasonable time, any information that IDEM, OAQ, may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit, or to determine compliance with this permit. The submittal by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34). Upon request, the Permittee shall also furnish to IDEM, OAQ, copies of records required to be kept by this permit.
- (b) For information furnished by the Permittee to IDEM, OAQ, the Permittee may include a claim of confidentiality in accordance with 326 IAC 17.1. When furnishing copies of requested records directly to U. S. EPA, the Permittee may assert a claim of confidentiality in accordance with 40 CFR 2, Subpart B.

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

---

- (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 may cover multiple forms in one (1) submittal.
- (c) A responsible official is defined at 326 IAC 2-7-1(34).

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

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

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

and

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

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

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

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

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

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  
MC 61-53, IGCN 1003  
Indianapolis, Indiana 46204-2251

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

- (b) A copy of the PMPs shall be submitted to IDEM, OAQ, upon request and within a reasonable time, and shall be subject to review and approval by IDEM, OAQ. IDEM, OAQ, may require the Permittee to revise its PMPs whenever lack of proper maintenance causes or is the primary contributor to an exceedance of any limitation on emissions or potential to emit. The PMPs do not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).
- (c) To the extent the Permittee is required by 40 CFR Part 63 to have an Operation, Maintenance, and Monitoring (OMM) Plan for a unit, such Plan is deemed to satisfy the PMP requirements of 326 IAC 1-6-3 for that unit.

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

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- (a) An emergency, as defined in 326 IAC 2-7-1(12), is not an affirmative defense for an action brought for noncompliance with a federal or state health-based emission limitation.
- (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: 317-233-0178 (ask for Compliance Section)  
Facsimile Number: 317-233-6885.

- (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  
MC 61-53, IGCN 1003  
Indianapolis, Indiana 46204-2251

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

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

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

The notification which shall be submitted by the Permittee does not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(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) The Permittee seeking to establish the occurrence of an emergency shall make records available upon request to ensure that failure to implement a PMP did not cause or contribute to an exceedance of any limitations on emissions. However, IDEM, OAQ, may require that the Preventive Maintenance Plans required under 326 IAC 2-7-4-(c)(9) be revised in response to an emergency.
- (f) Failure to notify IDEM, OAQ, by telephone or facsimile of an emergency lasting more than one (1) hour in accordance with (b)(4) and (5) of this condition shall constitute a violation of 326 IAC 2-7 and any other applicable rules.

- (g) If the emergency situation causes a deviation from a technology-based limit, the Permittee may continue to operate the affected emitting facilities during the emergency provided the Permittee immediately takes all reasonable steps to correct the emergency and minimize emissions.
- (h) The Permittee shall include all emergencies in the Quarterly Deviation and Compliance Monitoring Report.

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

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

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

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

**B.13 Prior Permits Superseded [326 IAC 2-1.1-9.5] [326 IAC 2-7-10.5]**

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- (a) All terms and conditions of permits established prior to T 073-6792-00008 and issued pursuant to permitting programs approved into the state implementation plan have been either
  - (1) incorporated as originally stated,
  - (2) revised under 326 IAC 2-7-10.5, or
  - (3) deleted under 326 IAC 2-7-10.5.
- (b) All previous registrations and permits are superseded by part 70 operating permit T 073-6792-00008, except for permits issued pursuant to Title IV of the Clean Air Act and 326 IAC 21 (Acid Deposition Control).

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

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

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

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

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

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

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

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

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

B.16 Permit Renewal [326 IAC 2-7-3] [326 IAC 2-7-4] [326 IAC 2-7-8(e)]

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

Request for renewal shall be submitted to:

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

- (b) A timely renewal application is one that is:
- (1) Submitted at least nine (9) months prior to the date of the expiration of this permit; and
  - (2) If the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ, on or before the date it is due.
- (c) If the Permittee submits a timely and complete application for renewal of this permit, the source's failure to have a permit is not a violation of 326 IAC 2-7 until IDEM, OAQ, takes final action on the renewal application, except that this protection shall cease to apply if, subsequent to the completeness determination, the Permittee fails to submit by 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)]

B.17 Source Modification Requirements [326 IAC 1-2-42] [326 IAC 2-2-2] [326 IAC 2-3-2] [326 IAC 2-7-10.5]

- (a) The Permittee shall obtain approval as required by 326 IAC 2-7-10.5 from the IDEM, OAQ prior to making any modification to the source.

- (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  
MC 61-53, IGCN  
Indianapolis, Indiana 46204-2251

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.
- (d) Any modification at an existing major source is governed by the requirements of 326 IAC 2-2-2.

B.18 Permit Amendment or Modification [326 IAC 2-7-11] [326 IAC 2-7-12] [40 CFR 72]

- (a) Permit amendments and modifications are governed by the requirements of 326 IAC 2-7-11 or 326 IAC 2-7-12 whenever the Permittee seeks to amend or modify this permit.
- (b) Pursuant to 326 IAC 2-7-11(b) and 326 IAC 2-7-12(a), administrative Part 70 permit amendments and permit modifications for purposes of the acid rain portion of a Part 70 permit shall be governed by regulations promulgated under Title IV of the Clean Air Act. [40 CFR 72]
- (c) Any application requesting an amendment or modification of this permit shall be submitted to:
- Indiana Department of Environmental Management  
Permits Branch, Office of Air Quality  
100 North Senate Avenue  
MC 61-53, IGCN 1003  
Indianapolis, Indiana 46204-2251
- Any such application shall be certified by the "responsible official" as defined by 326 IAC 2-7-1(34).
- (d) The Permittee may implement administrative amendment changes addressed in the request for an administrative amendment immediately upon submittal of the request. [326 IAC 2-7-11(c)(3)]

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

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

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

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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 limitations provided in this permit (whether expressed herein as a rate of emissions or in terms of total emissions);
  - (4) The Permittee notifies the:  
  
Indiana Department of Environmental Management  
Permits Branch, Office of Air Quality  
100 North Senate Avenue  
MC 61-53, IGCN 1003  
Indianapolis, Indiana 46204-2251  
  
and  
  
United States Environmental Protection Agency, Region V  
Air and Radiation Division, Regulation Development Branch - Indiana (AR-18J)  
77 West Jackson Boulevard  
Chicago, Illinois 60604-3590  
  
in advance of the change by written notification at least ten (10) days in advance of the proposed change. The Permittee shall attach every such notice to the Permittee's copy of this permit; and
  - (5) The Permittee maintains records on-site, on a rolling five (5) year basis, which document all such changes and emission trades that are subject to 326 IAC 2-7-20(b), (c), or (e). The Permittee shall make such records available, upon reasonable request, for public review.  
  
Such records shall consist of all information required to be submitted to IDEM, OAQ, in the notices specified in 326 IAC 2-7-20(b)(1), (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 emissions increases and decreases at the source, where the applicable SIP provides for such emission trades without requiring a permit revision, subject to the constraints of Section (a) of this condition and those in 326 IAC 2-7-20(c).
- (d) Alternative Operating Scenarios [326 IAC 2-7-20(d)]  
The Permittee may make changes at the source within the range of alternative operating scenarios that are described in the terms and conditions of this permit in accordance with 326 IAC 2-7-5(9). No prior notification of IDEM, OAQ, or U.S. EPA is required.
- (e) Backup fuel switches specifically addressed in, and limited under, Section D of this permit shall not be considered alternative operating scenarios. Therefore, the notification requirements of part (a) of this condition do not apply.
- (f) This condition does not apply to emission trades of SO<sub>2</sub> or NO<sub>x</sub> under 326 IAC 21 or 326 IAC 10-4.

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

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

- (a) Enter upon the Permittee's premises where a Part 70 source is located, or emissions related activity is conducted, or where records must be kept under the conditions of this permit;
- (b) As authorized by the Clean Air Act, IC 13-14-2-2, IC 13-17-3-2, and IC 13-30-3-1, have access to and copy any records that must be kept under the conditions of this permit;
- (c) As authorized by the Clean Air Act, IC 13-14-2-2, IC 13-17-3-2, and IC 13-30-3-1, inspect any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit;
- (d) As authorized by the Clean Air Act, IC 13-14-2-2, IC 13-17-3-2, and IC 13-30-3-1, sample or monitor substances or parameters for the purpose of assuring compliance with this permit or applicable requirements; and
- (e) As authorized by the Clean Air Act, IC 13-14-2-2, IC 13-17-3-2, and IC 13-30-3-1, utilize any photographic, recording, testing, monitoring, or other equipment for the purpose of assuring compliance with this permit or applicable requirements.

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

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- (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  
MC 61-53, IGCN 1003  
Indianapolis, Indiana 46204-2251

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

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

B.23 Annual Fee Payment [326 IAC 2-1.1-7] [326 IAC 2-7-5(7)] [326 IAC 2-7-19]

- (a) The Permittee shall pay annual fees to IDEM, OAQ, within thirty (30) calendar days of receipt of a billing. Pursuant to 326 IAC 2-7-19(b), if the Permittee does not receive a bill from IDEM, OAQ the applicable fee is due April 1 of each year.
- (b) Except as provided in 326 IAC 2-7-19(e), failure to pay may result in administrative enforcement action or revocation of this permit.
- (c) The Permittee may call the following telephone numbers: 1-800-451-6027 or 317-233-4230 (ask for Billing, Licensing, and Training Section), to determine the appropriate permit fee.

B.24 Credible Evidence [326 IAC 1-1-6] [326 IAC 2-7-5(3)] [326 IAC 2-7-6] [62 FR 8314]

For the purpose of submitting compliance certifications or establishing whether or not the Permittee has violated or is in violation of any condition of this permit, nothing in this permit shall preclude the use, including the exclusive use, of any credible evidence or information relevant to whether the Permittee would have been in compliance with the condition of this permit if the appropriate performance or compliance test or procedure had been performed.

B.25 Term of Conditions [326 IAC 2-1.1-9.5]

Notwithstanding the permit term of a permit to construct, a permit to operate, or a permit modification, any condition established in a permit issued pursuant to a permitting program approved in the state implementation plan shall remain in effect until:

- (a) The condition is modified in a subsequent permit action pursuant to Title I of the Clean Air Act; or
- (b) The emission unit to which the condition pertains permanently ceases operation.

## SECTION C

## SOURCE OPERATION CONDITIONS

Entire Source

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

C.1 Particulate Emission Limitations for Processes with Process Weight Rates Less Than One Hundred (100) Pounds per Hour [326 IAC 6-3-2]

Pursuant to 326 IAC 6-3-2(e)(2), particulate emissions from any process not exempt under 326 IAC 6-3-1(b) or (c) which has a maximum process weight rate less than 100 pounds per hour and the methods in 326 IAC 6-3-2(b) through (d) do not apply shall not exceed 0.551 pounds per hour.

C.2 Opacity [326 IAC 5-1]

Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary Alternative Opacity Limitations) and except for Units 17 and 18 and Units 17 and 18 coal processing and conveying equipment, 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.

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

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

C.6 Motor Vehicle Fugitive Dust Sources [326 IAC 6-4-4]

Pursuant to 326 IAC 6-4-4, no vehicle, shall be driven or moved on any public street, road, alley, highway, or other thoroughfare, unless such vehicle is so constructed as to prevent its contents from dripping, sifting, leaking, or otherwise escaping therefrom so as to create conditions which result in fugitive dust. This section applies only to the cargo any vehicle may be conveying and mud tracked by the vehicle.

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

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

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

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

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

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

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(a) All required 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  
MC 61-53, IGCN 1003  
Indianapolis, Indiana 46204-2251

no later than thirty-five (35) days prior to the intended test date. The protocol submitted by the Permittee does not require certification by the "responsible official" as defined by 326 IAC 2-7-1(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 Permittee submits to IDEM, OAQ, a reasonable written explanation not later than five (5) days prior to the end of the initial forty-five (45) day period.

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

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

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

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

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

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

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

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

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

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

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

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- (a) The Permittee shall calibrate, maintain, and operate all necessary continuous opacity monitoring systems (COMS) and related equipment. For a boiler, the COMS shall be in operation at all times that the induced draft fan is in operation.
- (b) All COMS shall meet the performance specifications of 40 CFR 60, Appendix B, Performance Specification No. 1, and are subject to monitor system certification requirements pursuant to 326 IAC 3-5.
- (c) In the event that a breakdown of a COMS occurs, a record shall be made of the time and reason of the breakdown and efforts made to correct the problem.
- (d) Whenever a COMS is malfunctioning or is down for maintenance or repairs for a period of twenty-four (24) hours or more and a backup COMS is not online within twenty-four (24) hours of shutdown or malfunction of the primary COMS, the Permittee shall provide a certified opacity reader, who may be an employee of the Permittee or an independent contractor, to self-monitor the emissions from the emission unit stack when plume conditions allow.
  - (1) When plume conditions allow, visible emission readings shall be performed in accordance with 40 CFR 60, Appendix A, Method 9, for a minimum of five (5) consecutive six (6) minute averaging periods beginning not more than twenty-four (24) hours after the start of the malfunction or down time.
  - (2) When plume conditions allow method 9 opacity readings shall be repeated for a minimum of five (5) consecutive six (6) minute averaging periods at least twice per day during daylight operations with at least four (4) hours between each set of readings, until such time that a COMS is online.

- (3) Method 9 readings may be discontinued once a COMS is online.
- (4) Any opacity exceedances determined by Method 9 readings shall be reported with the Quarterly Opacity Exceedances Reports.
- (5) When plume conditions do not allow Method 9 visible emission readings, Permittee shall keep a record of the period during which such readings could not be taken and the reason why such readings could not be taken.
- (e) Nothing in this permit shall excuse the Permittee from complying with the requirements to operate a continuous opacity monitoring system pursuant to 326 IAC 3-5 and 40 CFR 60.

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

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

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

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- (a) When required by any condition of this permit, an analog instrument used to measure a parameter related to the operation of an air pollution control device shall have a scale such that the expected maximum reading for the normal range shall be no less than twenty percent (20%) of full scale.
- (b) The Permittee may request that the IDEM, OAQ approve the use of an instrument that does not meet the above specifications provided the Permittee can demonstrate that an alternative instrument specification will adequately ensure compliance with permit conditions requiring the measurement of the parameters.

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

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

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

- (a) The Permittee prepared and submitted written emergency reduction plans (ERPs) consistent with safe operating procedures on December 28, 1979.
- (b) Upon direct notification by IDEM, OAQ, that a specific air pollution episode level is in effect, the Permittee shall immediately put into effect the actions stipulated in the approved ERP for the appropriate episode level. [326 IAC 1-5-3]

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

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

**C.17 Response to Excursions or Exceedances [326 IAC 2-7-5] [326 IAC 2-7-6]**

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- (a) Upon detecting an excursion or exceedance, the Permittee shall restore operation of the emissions unit(s) (including any control device and associated capture system) to its normal or usual manner of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions.
- (b) The response shall include minimizing the period of any startup, shutdown or malfunction and taking any necessary corrective actions to restore normal operation and prevent the likely recurrence of the cause of an excursion or exceedance (other than those caused by excused startup or shutdown conditions). Corrective actions may include, but are not limited to, the following:

- (1) initial inspection and evaluation;
  - (2) recording that operations returned to normal without operator action (such as through response by a computerized distribution control system); or
  - (3) any necessary follow-up actions to return operation to within the indicator range, designated condition, or below the applicable emission limitation or standard, as applicable.
- (c) A determination of whether the Permittee has used acceptable procedures in response to an excursion or exceedance will be based on information available, which may include, but is not limited to, the following:
- (1) monitoring results;
  - (2) review of operation and maintenance procedures and records; and
  - (3) inspection of the control device, associated capture system, and the process.
- (d) Failure to take reasonable response steps shall be considered a deviation from the permit.
- (e) The Permittee shall maintain the following records:
- (1) monitoring data;
  - (2) monitor performance data, if applicable; and
  - (3) corrective actions taken.

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

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

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

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

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

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

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

The statement must be submitted to:

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

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

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

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

- (a) Records of all required monitoring data, reports and support information required by this permit shall be retained for a period of at least five (5) years from the date of monitoring sample, measurement, report, or application. These records shall be physically present or electronically accessible at the source location for a minimum of three (3) years. The records may be stored elsewhere for the remaining two (2) years as long as they are available upon request. If the Commissioner makes a request for records to the Permittee, the Permittee shall furnish the records to the Commissioner within a reasonable time.
- (b) Unless otherwise specified in this permit, all record keeping requirements not already legally required shall be implemented within ninety (90) days of permit issuance.
- (c) If there is a reasonable possibility (as defined in 40 CFR 51.165 (a)(6)(vi)(A), 40 CFR 51.165 (a)(6)(vi)(B), 40 CFR 51.166 (r)(6)(vi)(a), and/or 40 CFR 51.166 (r)(6)(vi)(b)) that a "project" (as defined in 326 IAC 2-2-1(qq) and/or 326 IAC 2-3-1(II)) at an existing emissions unit, other than projects at a source with a Plantwide Applicability Limitation (PAL), which is not part of a "major modification" (as defined in 326 IAC 2-2-1(ee) and/or 326 IAC 2-3-1(z)) may result in significant emissions increase and the Permittee elects to utilize the "projected actual emissions" (as defined in 326 IAC 2-2-1(rr) and/or 326 IAC 2-3-1(mm)), the Permittee shall comply with the following:

- (1) Before beginning actual construction of the "project" (as defined in 326 IAC 2-2-1(qq) and/or 326 IAC 2-3-1(II)) at an existing emissions unit, document and maintain the following records:
  - (A) A description of the project.
  - (B) Identification of any emissions unit whose emissions of a regulated new source review pollutant could be affected by the project.
  - (C) A description of the applicability test used to determine that the project is not a major modification for any regulated NSR pollutant, including:
    - (i) Baseline actual emissions;
    - (ii) Projected actual emissions;
    - (iii) Amount of emissions excluded under section 326 IAC 2-2-1(rr)(2)(A)(iii) and/or 326 IAC 2-3-1 (mm)(2)(A)(iii); and
    - (iv) An explanation for why the amount was excluded, and any netting calculations, if applicable.
- (d) If there is a reasonable possibility (as defined in 40 CFR 51.165 (a)(6)(vi)(A) and/or 40 CFR 51.166 (r)(6)(vi)(a)) that a "project" (as defined in 326 IAC 2-2-1(qq) and/or 326 IAC 2-3-1(II)) at an existing emissions unit, other than projects at a source with a Plantwide Applicability Limitation (PAL), which is not part of a "major modification" (as defined in 326 IAC 2-2-1(ee) and/or 326 IAC 2-3-1(z)) may result in significant emissions increase and the Permittee elects to utilize the "projected actual emissions" (as defined in 326 IAC 2-2-1(rr) and/or 326 IAC 2-3-1(mm)), the Permittee shall comply with the following:
  - (1) Monitor the emissions of any regulated NSR pollutant that could increase as a result of the project and that is emitted by any existing emissions unit identified in (c)(1)(B) above; and
  - (2) Calculate and maintain a record of the annual emissions, in tons per year on a calendar year basis, for a period of five (5) years following resumption of regular operations after the change, or for a period of ten (10) years following resumption of regular operations after the change if the project increases the design capacity of or the potential to emit that regulated NSR pollutant at the emissions unit.

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

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- (a) The Permittee shall submit the attached Quarterly Deviation and Compliance Monitoring Report or its equivalent. Any deviation from permit requirements, the date(s) of each deviation, the cause of the deviation, and the response steps taken must be reported. This report shall be submitted within thirty (30) days of the end of the reporting period. The Quarterly Deviation and Compliance Monitoring Report shall include the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).
- (b) The report required in (a) of this condition and reports required by conditions in Section D of this permit shall be submitted to:

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

- (c) Unless otherwise specified in this permit, any notice, report, or other submission required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ, on or before the date it is due.
- (d) Unless otherwise specified in this permit, all reports required in Section D of this permit shall be submitted within thirty (30) days of the end of the reporting period. All reports do require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).
- (e) The first report shall cover the period commencing on the date of issuance of this permit and ending on the last day of the reporting period. Reporting periods are based on calendar years, unless otherwise specified in this permit. For the purpose of this permit, "calendar year" means the twelve (12) month period from January 1 to December 31 inclusive.
- (f) If the Permittee is required to comply with the recordkeeping provisions of Condition C.20, paragraph (d), in Section C – General Record Keeping Requirements for any "project" (as defined in 326 IAC 2-2-1(qq) and/or 326 IAC 2-3-1(II) at an existing Electric Utility Steam Generating Unit, then for that project the Permittee shall:
  - (1) Submit to IDEM, OAQ a copy of the information required by Condition C.20, paragraph (c)(1), in Section C – General Record Keeping Requirements
  - (2) Submit a report to IDEM, OAQ within sixty (60) days after the end of each year during which records are generated in accordance with Condition C.20, paragraphs (d)(1) and (2), in Section C – General Record Keeping Requirements. The report shall contain all information and data describing the annual emissions for the emissions units during the calendar year that preceded the submission of report.

Reports required in this part shall be submitted to:

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

- (g) If the Permittee is required to comply with the recordkeeping provisions of Condition C.20, paragraph (d), in Section C – General Record Keeping Requirements for any "project" (as defined in 326 IAC 2-2-1(qq) and/or 326 IAC 2-3-1(II) at an existing emissions unit other than an Electric Utility Steam Generating Unit, and the project meets the following criteria, then the Permittee shall submit a report to IDEM, OAQ:

- (1) The annual emissions, in tons per year, from the project identified in (c)(1) in Section C – General Record Keeping Requirements exceed the baseline actual emissions, as documented and maintained under Section C – General Record Keeping Requirements, Condition C.20, paragraph (c)(1)(C)(i), by a significant amount, as defined in 326 IAC 2-2-1(xx) and/or 326 IAC 2-3-1(qq), for that regulated NSR pollutant, and
  - (2) The emissions differ from the preconstruction projection as documented and maintained under Section C – General Record Keeping Requirements, Condition C.20, paragraph (c)(1)(C)(ii).
- (h) The report for a project at an existing emissions unit other than Electric Utility Steam Generating Unit shall be submitted within sixty (60) days after the end of the year and contain the following:
- (1) The name, address, and telephone number of the major stationary source.
  - (2) The annual emissions calculated in accordance with Condition C.20, paragraphs (d)(1) and (2), in Section C – General Record Keeping Requirements.
  - (3) The emissions calculated under the actual-to-projected actual test stated in 326 IAC 2-2-2(d)(3) and/or 326 IAC 2-3-2(c)(3).
  - (4) Any other information that the Permittee deems fit to include in this report,

Reports required in this part shall be submitted to:

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

- (i) The Permittee shall make the information required to be documented and maintained in accordance with Condition C.20, paragraph (c), in Section C - General Record Keeping Requirements available for review upon a request for inspection by IDEM, OAQ. The general public may request this information from the IDEM, OAQ under 326 IAC 17.1.

### **Stratospheric Ozone Protection**

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

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

- (a) Persons opening appliances for maintenance, service, repair, or disposal must comply with the required practices pursuant to 40 CFR 82.156.
- (b) Equipment used during the maintenance, service, repair, or disposal of appliances must comply with the standards for recycling and recovery equipment pursuant to 40 CFR 82.158.
- (c) Persons performing maintenance, service, repair, or disposal of appliances must be certified by an approved technician certification program pursuant to 40 CFR 82.161.

- (d) Pursuant to 40 CFR 82, Subpart E (The Labeling of Products Using Ozone-Depleting Substances), all containers in which a Class I or Class II substance is stored or transported and all products containing a Class I substance shall be labeled as required under 40 CFR Part 82.

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

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

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

## SECTION D.1 FACILITY OPERATION CONDITIONS - Coal-Fired Boiler, Unit 14

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

- (a) One (1) cyclone coal-fired boiler identified as Unit 14, with construction commenced in 1970 and commercial operation begun in 1976, with a design heat input capacity of 4,650 million Btu per hour (MMBtu/hr), combusting No. 2 fuel oil and/or natural gas for ignition and as supplemental fuels, using an electrostatic precipitator (ESP) for control of particulate matter and exhausting to stack 14. Unit 14 has a selective catalytic reduction (SCR) system, and has continuous emissions monitoring systems (CEMS) for monitoring nitrogen oxides (NO<sub>x</sub>) and sulfur dioxide (SO<sub>2</sub>) and a continuous opacity monitoring (COM) system.

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

- (g) Other activities or categories not previously identified with potential, uncontrolled emissions equal to or less than thresholds require listing only: Pb 0.6 ton per year or 3.29 pounds per day, SO<sub>2</sub> 5 pounds per hour or 25 pounds per day, NO<sub>x</sub> 5 pounds per hour or 25 pounds per day, CO 25 pounds per day, PM 5 pounds per hour or 25 pounds per day, VOC 3 pounds per hour or 15 pounds per day:
- (1) Evaporation of Boiler Chemical Cleaning wastes.

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

### D.1.0 NOV Provisions

U.S. EPA has issued a Notice of Violation to this Permittee for allegedly failing to obtain, and comply with, New Source Review ("NSR"), Prevention of Significant Deterioration, and/or NSR for minor source Permits authorizing construction of physical modifications to units and operation of the modified units, as required by provisions set out in the Clean Air Act and 326 IAC 2. Therefore, the permit shield in Section B - Permit Shield does not shield the Permittee from possible enforcement actions initiated by U.S. EPA, IDEM or citizens involving boiler Unit 14. Compliance with the terms of this permit does not serve as proof of compliance for boiler Unit 14 or the matters addressed in the NOV. Following resolution of this action, IDEM will reopen this permit, if necessary, to incorporate a compliance schedule or any new applicable requirements. The standard language of Section B - Permit Shield does not shield any activity on which the permit is silent.

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

#### D.1.1 Particulate Emission Requirements [326 IAC 6-2-1(g)]

Pursuant to 326 IAC 6-2-1(g) and Operation Permit 37-05-91-0102, issued on September 14, 1988, the particulate matter (PM) emissions to the atmosphere from the boiler identified as Unit 14 shall not exceed 0.1 pound per million Btu (lb/MMBtu) of energy input. The Permittee may request a permit revision to change the Unit 14 particulate limit to that required pursuant to 326 IAC 6-2-3, in accordance with 326 IAC 2-7-12, if accompanied by a demonstration that the National Ambient Air Quality Standards (NAAQS) are protected.

#### D.1.2 Startup, Shutdown, and Other Opacity Limits [326 IAC 5-1-3]

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

- (1) When building a new fire in a boiler, opacity may exceed the applicable limitation established in 326 IAC 5-1-2 for a period not to exceed a cumulative total of one (1) hour (ten (10) six (6)-minute averaging periods) during the startup period, or until the flue gas temperature reaches two hundred fifty (250) degrees Fahrenheit at the inlet of the electrostatic precipitator, whichever occurs first, provided, however, that once every three years opacity may exceed the applicable limitation established in 326 IAC 5-1-2 for a period not to exceed a cumulative total of three (3) hours (thirty (30) six (6) minute averaging periods) during the startup period.
  - (2) When shutting down a boiler, opacity may exceed the applicable limitation established in 326 IAC 5-1-2 for a period not to exceed a total of one (1) hour (ten (10) six (6)-minute averaging periods) during the shutdown period.
  - (3) Operation of the electrostatic precipitator is not required during these times.
- (b) When removing ashes from the fuel bed or furnace in a boiler or blowing tubes, opacity may exceed the applicable limit established in 326 IAC 5-1-2. However, opacity 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 in excess of forty percent (40%) shall not be permitted for more than three (3) six (6)-minute averaging periods in a twelve (12) hour period. [326 IAC 5-1-3(b)]
- (c) If a facility cannot meet the opacity limitations of 326 IAC 5-1-3(b), 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 7-1.1-2]

- (a) Pursuant to 326 IAC 7.1.1-2(a)(3), sulfur dioxide emissions from Unit 14 shall not exceed 0.5 pounds per million Btu's (lb/MMBtu) when combusting only distillate oil or only distillate oil and natural gas.
- (b) Pursuant to 326 IAC 7-1.1-2(a)(1), sulfur dioxide emissions from Unit 14 shall not exceed six and zero-tenths (6.0) pounds per million Btu for coal combustion.
- (c) Pursuant to 326 IAC 7-1.1-2(b), sulfur dioxide emissions from Unit 14 shall not exceed six and zero-tenths (6.0) pounds per million Btu when combusting coal and oil simultaneously.

#### D.1.4 Capacity Limitation [326 IAC 6-2-1(g)] [326 IAC 2-7-5]

Pursuant to 326 IAC 6-2-1(g) and Operation Permit 37-05-91-0102, issued on September 14, 1988, unit No. 14 shall not exceed a maximum hourly average of 468 megawatts gross until such time as stack testing indicates compliance with the PM and opacity limitations in Condition D.1.1 and Section C - Opacity at a higher level. The Permittee may request a temporary exemption in accordance with 326 IAC 2-1.1-3(g)(3) for stack testing at a higher capacity.

### **Compliance Determination Requirements**

#### D.1.5 Testing Requirements [326 IAC 2-7-6(1),(6)] [326 IAC 2-1.1-11]

By December 31 of the second calendar year following the most recent stack test, or within 180 days after issuance of this permit, whichever is later, compliance with the PM limitation in Condition D.1.1 shall be determined by a performance stack test conducted using Method 5 or other methods as approved by the Commissioner. This testing shall be repeated by December 31 of every second calendar year following this valid compliance demonstration. Testing shall be conducted in accordance with Section C - Performance Testing.

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

**D.1.6 Operation of Electrostatic Precipitator [326 IAC 2-7-6(6)]**

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Except as otherwise provided by statute or rule or in this permit, the electrostatic precipitator (ESP) for Unit 14 shall be operated at all times that coal is being combusted in Unit 14.

**D.1.7 Continuous Emissions Monitoring [326 IAC 3-5]**

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- (a) Pursuant to 326 IAC 3-5 (Continuous Monitoring of Emissions), continuous emission monitoring systems for Unit 14 shall be calibrated, maintained, and operated for measuring SO<sub>2</sub>, and either CO<sub>2</sub> or O<sub>2</sub>, which meet the performance specifications of 326 IAC 3-5-2.
- (b) All continuous emission monitoring systems are subject to monitor system certification requirements pursuant to 326 IAC 3-5-3.
- (c) Pursuant to 326 IAC 3-5-4(a), if revisions are made to the continuous monitoring standard operating procedures (SOP), the Permittee shall submit updates to the department biennially.
- (d) Nothing in this permit shall excuse the Permittee from complying with the requirements to operate a continuous emission monitoring system pursuant to 326 IAC 3-5, 326 IAC 10-4, 40 CFR 60, or 40 CFR 75.

**D.1.8 Sulfur Dioxide Emissions and Sulfur Content [326 IAC 3] [326 IAC 7-2] [326 IAC 7-1.1-2]**

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- (a) Pursuant to 326 IAC 7-2-1(c), the Permittee shall demonstrate that the sulfur dioxide emissions do not exceed the SO<sub>2</sub> emission limits in Condition D.1.3 using a thirty (30) day rolling weighted average.
- (b) Continuous emission monitoring data collected and reported pursuant to 326 IAC 3-5 may be used as the means for determining compliance with the emission limitations in 326 IAC 7 and other requirements of 326 IAC 7-2 shall not apply. [326 IAC 7-2-1(g)]

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

**D.1.9 Transformer-Rectifier (T-R) Sets [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]**

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

**D.1.10 Opacity Readings [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]**

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- (a) In the event of emissions exceeding thirty percent (30%) average opacity for three (3) consecutive six (6) minute averaging periods, appropriate response steps shall be taken in accordance with Section C - Response to Excursions and Exceedances such that the cause(s) of the excursion are identified and corrected and opacity levels are brought back below thirty percent (30%). Examples of expected response steps include, but are not limited to, boiler loads being reduced and ESP T-R sets being returned to service.

- (b) Opacity readings in excess of thirty percent (30%) but not exceeding the opacity limit for the unit are not a deviation from this permit. Failure to take response steps in accordance with Section C - Response to Excursions and Exceedances shall be considered a deviation from this permit.
- (c) The Permittee may request that the IDEM, OAQ approve a different opacity trigger level than the one specified in (a) and (b) of this condition, provided the Permittee can demonstrate, through stack testing or other appropriate means, that a different opacity trigger level is appropriate for monitoring compliance with the applicable particulate matter mass emission limits.

D.1.11 SO<sub>2</sub> Monitoring System Downtime [326 IAC 2-7-6] [326 IAC 2-7-5(3)]

- (a) Whenever both the primary and back-up SO<sub>2</sub> continuous emission monitoring systems (CEMS) are malfunctioning or down for repairs or adjustments, the following shall be used to provide information related to SO<sub>2</sub> emissions:
  - (1) If the CEMS is down for less than twenty-four (24) hours, the Permittee shall substitute an average of the quality-assured data from the hour immediately before and the hour immediately after the missing data period for each hour of missing data.
  - (2) If the CEMS is down for twenty-four (24) hours or more:
    - (A) Either fuel sampling and fuel preparation and analysis shall be conducted in accordance with 326 IAC 3-7-2(b) and (c), 326 IAC 3-7-2 (d) and 326 IAC 3-7-2(e) or, alternatively, a portable analyzer, properly calibrated according to the manufacturer specifications (such as manufacturer operating or maintenance manuals), shall be used to monitor SO<sub>2</sub> emissions. To the extent the Permittee elects to conduct fuel sampling: the Permittee shall collect the coal sample as bunkered; 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; and minimum sample size shall be five hundred (500) grams.

or

    - (B) Pursuant to 326 IAC 3-7-3, other manual and other non-ASTM automatic sampling and analysis procedures may be used upon a demonstration, submitted to the department for approval, that such procedures provide sulfur dioxide emission estimates representative either of estimates based on coal sampling and analysis procedures specified in 326 IAC 3-7-2 or of continuous emissions monitoring.
- (b) To the extent the Permittee elects to conduct fuel sampling to comply with Condition D.1.11(a), 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 any information collected pursuant to 326 IAC 3-7-2 through 326 IAC 3-7-4 under this Condition D.1.11. In addition, any revision to the SOP shall be submitted to IDEM, OAQ.

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

### D.1.12 Record Keeping Requirements

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- (a) To document compliance with Section C - Maintenance of Continuous Opacity Monitoring Equipment, and the particulate matter and opacity requirements in Conditions D.1.1, D.1.2, D.1.5, D.1.9, and D.1.10, the Permittee shall maintain records in accordance with (1) through (4) below. Records shall be complete and sufficient to establish compliance with the limits in Conditions D.1.1, and D.1.2.
- (1) Data and results from the most recent stack test.
  - (2) All continuous opacity monitoring data, pursuant to 326 IAC 3-5-6.
  - (3) The results of all Method 9 visible emission readings taken during any periods of COMS downtime.
  - (4) All ESP parametric monitoring readings pursuant to D.1.9.
- (b) To document compliance with SO<sub>2</sub> Conditions D.1.3, D.1.8, and D.1.11, the Permittee shall maintain the records identified in (1) through (3) below. Records shall be complete and sufficient to establish compliance with the SO<sub>2</sub> limits as required in Conditions D.1.3 and D.1.8. The Permittee shall maintain records in accordance with (2) and (3) below during SO<sub>2</sub> CEM system downtime.
- (1) All SO<sub>2</sub> continuous emissions monitoring data, pursuant to 326 IAC 3-5-6 and 326 IAC 7-2-1(g).
  - (2) Any fuel sampling and analysis data collected for or portable analyzer data for SO<sub>2</sub> CEM downtime, in accordance with Condition D.1.11.
  - (3) Actual fuel usage during each SO<sub>2</sub> CEM downtime to the extent such data is required by Condition D.1.11 to be obtained.
- (c) To document compliance with Condition D.1.4, the Permittee shall maintain records of the Unit 14 gross output, in gross MW per hour.
- (d) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

### D.1.13 Reporting Requirements

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- (a) A quarterly report of opacity exceedances and a quarterly summary of the information to document compliance with Conditions D.1.1, D.1.3, D.1.4, and D.1.7 shall be submitted to the address listed in Section C - General Reporting Requirements, of this permit, within thirty (30) days after the end of the quarter being reported. The report submitted by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).
- (b) Pursuant to 326 IAC 3-5-7(5), reporting of continuous monitoring system instrument downtime, except for zero (0) and span checks, which shall be reported separately, shall include the following:
- (1) Date of downtime.
  - (2) Time of commencement.
  - (3) Duration of each downtime.

- (4) Reasons for each downtime.
- (5) Nature of system repairs and adjustments.

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

## SECTION D.2 FACILITY OPERATION CONDITIONS - Coal Fired Boiler, Unit 15

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

- (b) One (1) dry bottom pulverized coal-fired boiler identified as Unit 15, with construction commenced in 1974 and commercial operation begun in 1979, with a design heat input capacity of 5,100 million Btu per hour (MMBtu/hr), with low NO<sub>x</sub> burners (replaced in 2008-2009), combusting No. 2 fuel oil and/or natural gas for ignition and as supplemental fuels, using an electrostatic precipitator (ESP) with a flue gas conditioning (FGC) system for control of particulate matter, and exhausting to stack 15. Unit 15 has continuous emissions monitoring systems (CEMS) for monitoring nitrogen oxides (NO<sub>x</sub>) and sulfur dioxide (SO<sub>2</sub>) and a continuous opacity monitoring (COM) system.

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

- (g) Other activities or categories not previously identified with potential, uncontrolled emissions equal to or less than thresholds require listing only: Pb 0.6 ton per year or 3.29 pounds per day, SO<sub>2</sub> 5 pounds per hour or 25 pounds per day, NO<sub>x</sub> 5 pounds per hour or 25 pounds per day, CO 25 pounds per day, PM 5 pounds per hour or 25 pounds per day, VOC 3 pounds per hour or 15 pounds per day:
- (1) Evaporation of Boiler Chemical Cleaning wastes.

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

### D.2.0 NOV Provisions

U.S. EPA has issued a Notice of Violation to this Permittee for allegedly failing to obtain, and comply with, New Source Review ("NSR"), Prevention of Significant Deterioration, and/or NSR for minor source Permits authorizing construction of physical modifications to units and operation of the modified units, as required by provisions set out in the Clean Air Act and 326 IAC 2. Therefore, the permit shield in Section B - Permit Shield does not shield the Permittee from possible enforcement actions initiated by U.S. EPA, IDEM or citizens involving boiler Unit 15. Compliance with the terms of this permit does not serve as proof of compliance for boiler Unit 15 or the matters addressed in the NOV. Following resolution of this action, IDEM will reopen this permit, if necessary, to incorporate a compliance schedule or any new applicable requirements. The standard language of Section B - Permit Shield does not shield any activity on which the permit is silent.

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

#### D.2.1 CO PSD BACT Requirements [326 IAC 2-2]

After completion of the LNB project and resumption of regular operation for unit 15 and a reasonable shakedown period not to exceed one hundred and eighty (180) days, the Permittee shall comply with the following requirements:

- (a) CO emissions from Unit 15 shall not exceed 1.63 lb/MMBtu based on a 3-hour average.
- (b) CO emissions from Unit 15 shall be minimized through the use of good combustion practices according to the Boiler Combustion Optimization Plan.

#### D.2.2 New Source Performance Standards (NSPS) [326 IAC 6-2-1(f)] [326 IAC 12] [40 CFR 60, Subpart D]

Pursuant to 326 IAC 12 and 40 CFR 60, Subpart D (Standards of Performance for Fossil-Fuel-Fired Steam Generators for Which Construction is Commenced After August 17, 1971), emissions from Unit 15 shall not exceed the following:

- (a) For particulate matter:
  - (1) 0.10 pound PM per million Btu (lb/MMBtu) heat input derived from fossil fuel. [40 CFR 60.42(a)(1)] [326 IAC 6-2-1(f)]
  - (2) Twenty percent (20%) opacity except for one six-minute period per hour of not more than twenty-seven percent (27%) opacity, except during periods of startup, shutdown, or malfunction. [40 CFR 60.11(c), 40 CFR 60.42(a)(2), and 40 CFR 60.45(g)(1)]
- (b) For sulfur dioxide:
  - (1) 0.80 pound SO<sub>2</sub> per million Btu (lb/MMBtu) heat input derived from liquid fossil fuel. [40 CFR 60.43(a)(1)]
  - (2) 1.2 pound SO<sub>2</sub> per million Btu (lb/MMBtu) heat input derived from solid fossil fuel. [40 CFR 60.43(a)(2)]
  - (3) When combusting different fossil fuels simultaneously, the applicable SO<sub>2</sub> limit shall be determined using the formula in 40 CFR 60.43(b).
  - (4) Compliance shall be based on the total heat input from all fossil fuels burned, including gaseous fuels. [40 CFR 60.43(c)]
- (c) For nitrogen oxides:
  - (1) 0.20 pound NO<sub>x</sub> per million Btu (lb/MMBtu) heat input derived from gaseous fossil fuel. [40 CFR 60.44(a)(1)]
  - (2) 0.30 pound NO<sub>x</sub> per million Btu (lb/MMBtu) heat input derived from liquid fossil fuel. [40 CFR 60.44(a)(2)]
  - (3) 0.70 pound NO<sub>x</sub> per million Btu (lb/MMBtu) heat input derived from solid fossil fuel (except lignite or a solid fossil fuel containing twenty-five percent (25%), by weight, or more of coal refuse). [40 CFR 60.44(a)(3)]
  - (4) When combusting different fossil fuels simultaneously, the applicable NO<sub>x</sub> limit shall be determined using the formula in 40 CFR 60.44(b).

#### D.2.3 Startup, Shutdown, and Other Opacity Limits [326 IAC 5-1-3]

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

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

**D.2.4 Sulfur Dioxide (SO<sub>2</sub>) [326 IAC 7-1.1-2]**

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- (a) Pursuant to 326 IAC 7.1.1-2(a)(3), sulfur dioxide emissions from Unit 15 shall not exceed five-tenths (0.5) pound per million Btu's (lb/MMBtu) when combusting only distillate oil or only distillate oil and natural gas.
- (b) Pursuant to 326 IAC 7-1.1-2(a)(1), sulfur dioxide emissions from Unit 15 shall not exceed six and zero-tenths (6.0) pounds per million Btu for coal combustion.
- (c) Pursuant to 326 IAC 7-1.1-2(b), sulfur dioxide emissions from Unit 15 shall not exceed six and zero-tenths (6.0) pounds per million Btu when combusting coal and oil simultaneously.

**D.2.5 General Provisions Relating to NSPS [326 IAC 12-1] [40 CFR 60, Subpart A]**

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

**Compliance Determination Requirements**

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

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- (a) Within 180 days of startup of the modified Unit 15 boiler equipped with LNB, compliance with the CO limitation in Condition D.2.1 shall be determined by a performance stack test conducted using methods approved by the Commissioner. This testing shall be repeated by December 31 of every fifth calendar year following this valid compliance demonstration.
- (b) By December 31 of the second calendar year following the most recent stack test, or within 180 days after issuance of this permit, whichever is later, compliance with the PM limitation in Condition D.2.2 shall be determined by a performance stack test conducted using Method 5 or other methods as approved by the Commissioner. This testing shall be repeated by December 31 of every second calendar year following this valid compliance demonstration.

Testing shall be conducted in accordance with Section C - Performance Testing. For the purpose of this permit, "calendar year" means the twelve (12) month period from January 1 to December 31 inclusive.

**D.2.7 Boiler Combustion Optimization Plan [326 IAC 2-2]**

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NIPSCO shall develop and implement a Boiler Combustion Optimization Plan within 120 days of the startup date of Unit 15 after the unit outage for the low-NO<sub>x</sub> Burner project. This plan will identify boiler operating parameters that indicate good combustion practices consistent with the BACT determination for Unit 15. NIPSCO will monitor operating parameters for Unit 15 consistent with this plan to demonstrate compliance with the BACT emission limit.

**D.2.8 Operation of Electrostatic Precipitator [326 IAC 2-7-6(6)]**

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

**D.2.9 Continuous Emissions Monitoring (CEMS) [326 IAC 2-2] [326 IAC 3-5] [326 IAC 12] [40 CFR 60, Subpart D]**

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- (a) Pursuant to 326 IAC 3-5 (Continuous Monitoring of Emissions) and 40 CFR 60.45, continuous emission monitoring systems for Unit 15 shall be calibrated, maintained, and operated for measuring SO<sub>2</sub>, NO<sub>x</sub> and either O<sub>2</sub> or CO<sub>2</sub>, which meet the performance specifications of 326 IAC 3-5-2 and 40 CFR 60.45.

- (b) All continuous emission monitoring systems are subject to monitor system certification requirements pursuant to 326 IAC 3-5-3.
- (c) Pursuant to 40 CFR 60.11(c), the opacity standard in Condition D.2.2(a) and 40 CFR 60.42(a)(2) shall apply at all times except during periods of startup, shutdown, or malfunction. At all times, including periods of startup, shutdown, and malfunction, owners and operators shall, to the extent practicable, maintain and operate any affected facility including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions [40 CFR 60.11(d)].
- (d) Pursuant to 40 CFR 60.13(e), except for system breakdowns, repairs, calibration checks, and zero and span adjustments required under paragraph (d) of 40 CFR 60.13, all continuous monitoring systems shall be in continuous operation and shall meet minimum frequency of operation requirements as follows:
  - (1) All continuous monitoring systems referenced by paragraph (c) of this section for measuring opacity of emissions shall complete a minimum of one cycle of sampling and analyzing for each successive 10-second period and one cycle of data recording for each successive 6-minute period.
  - (2) All continuous monitoring systems referenced by paragraph (c) of this section for measuring emissions, except opacity, shall complete a minimum of one cycle of operation (sampling, analyzing, and data recording) for each successive 15-minute period.
- (e) Excess SO<sub>2</sub> emissions for affected facilities are defined as any three-hour period during which the average emissions (arithmetic average of three contiguous one-hour periods) of sulfur dioxide as measured by a continuous monitoring system exceed the applicable standard under 40 CFR 60.43. [40 CFR 60.45(g)(2)(i)]
- (f) Excess NO<sub>x</sub> emissions for affected facilities using a continuous monitoring system for measuring nitrogen oxides are defined as any three-hour period during which the average emissions (arithmetic average of three contiguous one-hour periods) exceed the applicable standards under 40 CFR 60.44. [40 CFR 60.45(g)(3)]
- (g) Pursuant to 326 IAC 3-5-4(a), if revisions are made to the continuous monitoring standard operating procedures (SOP), the Permittee shall submit updates to the department biennially.
- (h) Nothing in this permit shall excuse the Permittee from complying with the requirements to operate a continuous emission monitoring system pursuant to 326 IAC 3-5, 326 IAC 10-4, 40 CFR 60, or 40 CFR 75.

D.2.10 Sulfur Dioxide Emissions and Sulfur Content [326 IAC 3] [326 IAC 7-2] [326 IAC 7-1.1-2]

- (a) Pursuant to 326 IAC 7-2-1(a) and (c), the Permittee shall demonstrate that the sulfur dioxide emissions do not exceed the equivalent of five-tenths (0.5) pound per MMBtu when combusting distillate oil or distillate oil and natural gas using a thirty (30) day rolling weighted average.
- (b) Continuous emission monitoring data collected and reported pursuant to 326 IAC 3-5 may be used as the means for determining compliance with the emission limitations in 326 IAC 7 and the other requirements of 326 IAC 7-2 shall not apply. [326 IAC 7-2-1(g)]

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

### D.2.11 Transformer-Rectifier (T-R) Sets [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]

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- (a) The ability of the ESP to control particulate emissions shall be monitored once per day, 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 T-R sets.
- (b) Reasonable response steps shall be taken in accordance with Section C - Response to Excursions and Exceedances whenever a total of more than four (4) T-R sets are not in service. T-R set failure resulting in a response step obligation under the preceding sentence is not a deviation from this permit. Failure to take response steps in accordance with Section C - Response to Excursions and Exceedances shall be considered a deviation from this permit.

### D.2.12 SO<sub>2</sub> Monitoring System Downtime [326 IAC 2-7-6] [326 IAC 2-7-5(3)]

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Whenever both the primary and back-up SO<sub>2</sub> continuous emission monitoring systems (CEMS) are malfunctioning or down for repairs or adjustments, the following shall be used to provide information related to SO<sub>2</sub> emissions:

- (a) If the CEMS is down for less than twenty-four (24) hours, the Permittee shall substitute an average of the quality-assured data from the hour immediately before and the hour immediately after the missing data period for each hour of missing data.
- (b) If the CEMS is down for twenty-four (24) hours or more:
  - (1) Either fuel sampling and fuel preparation and analysis shall be conducted in accordance with 326 IAC 3-7-2(b) and (c), 326 IAC 3-7-2(d) and 326 IAC 3-7-2(e) or, alternatively, a portable analyzer, properly calibrated according to manufacturer specifications (such as manufacturer operating or maintenance manuals), shall be used to monitor SO<sub>2</sub> emissions. To the extent the Permittee elects to conduct fuel sampling: the Permittee shall collect the coal sample as bunkered; 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; and minimum sample size shall be five hundred (500) grams

or

  - (2) Pursuant to 326 IAC 3-7-3, other manual and other non-ASTM automatic sampling and analysis procedures may be used upon a demonstration, submitted to the department for approval, that such procedures provide sulfur dioxide emission estimates representative either of estimates based on coal sampling and analysis procedures specified in 326 IAC 3-7-2 or of continuous emissions monitoring.
- (c) To the extent the Permittee elects to conduct fuel sampling to comply with Condition D.2.10(a), 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 any information collected pursuant to 326 IAC 3-7-2 through 326 IAC 3-7-4 under this Condition D.2.10. In addition, any revision to the SOP shall be submitted to IDEM, OAQ.

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

### D.2.13 Record Keeping Requirements

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- (a) To document compliance with the carbon monoxide requirements in Condition D.2.1 and D.2.6(a), the Permittee shall maintain records on-site in accordance with (1) and (2) below. Records shall be complete and sufficient to establish compliance with the limit in Condition D.2.1.
  - (1) Data and results from the most recent stack test.
  - (2) Boiler Combustion Optimization Plan.
- (b) To document compliance with Section C - Maintenance of Continuous Opacity Monitoring Equipment, and the particulate matter and opacity requirements in Conditions D.2.2(a), D.2.3, D.2.6(b), D.2.8, and D.2.11, the Permittee shall maintain records in accordance with (1) through (4) below. Records shall be complete and sufficient to establish compliance with the limits in Conditions D.2.2(a) and D.2.3.
  - (1) Data and results from the most recent stack test.
  - (2) All continuous opacity monitoring data, pursuant to 326 IAC 3-5-6 and 40 CFR 60.42(a)(2).
  - (3) The results of all Method 9 visible emission readings taken during any periods of COMS downtime.
  - (4) All ESP parametric monitoring readings pursuant to condition D.2.11.
- (c) To document compliance with the SO<sub>2</sub> requirements in Conditions D.2.2(b), D.2.4, D.2.9, D.2.10, and D.2.12, the Permittee shall maintain the records identified in (1) through (3) below. Records shall be complete and sufficient to establish compliance with the applicable SO<sub>2</sub> limit(s) as required in Conditions D.2.2(b), D.2.4, and D.2.10. The Permittee shall maintain records in accordance with (2) and (3) below during SO<sub>2</sub> CEM system downtime.
  - (1) All SO<sub>2</sub> continuous emissions monitoring data, pursuant to 326 IAC 3-5-6, 326 IAC 7-2-1(g), and 40 CFR 60.45.
  - (2) Any fuel sampling and analysis data collected for or portable analyzer data for SO<sub>2</sub> CEM downtime, in accordance with Condition D.2.12.
  - (3) Actual fuel usage during each SO<sub>2</sub> CEM downtime to the extent such data is required by Condition D.2.12 to be obtained.
- (d) To document compliance with the NO<sub>x</sub> requirements in Conditions D.2.2(c) and the continuous emissions monitoring requirements for NO<sub>x</sub> and CO<sub>2</sub> or O<sub>2</sub> in Condition D.2.9, the Permittee shall maintain records of all NO<sub>x</sub> and CO<sub>2</sub> or O<sub>2</sub> continuous emissions monitoring data, pursuant to 326 IAC 3-5-6 and 40 CFR 60.45. Records shall be complete and sufficient to establish compliance with the NO<sub>x</sub> limit as required in Condition D.2.2(c) and D.2.9.
- (e) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

#### D.2.14 Reporting Requirements

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- (a) A quarterly report of opacity exceedances and a quarterly summary of the information to document compliance with Conditions D.2.1, D.2.2, D.2.3, D.2.4, D.2.9, D.2.10, D.2.11, and D.2.12, shall be submitted to the address listed in Section C - General Reporting Requirements, of this permit, within thirty (30) days after the end of the quarter being reported. The report submitted by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).
- (b) Pursuant to 40 CFR 60.45(g), excess emissions and monitoring system performance (MSP) reports shall be submitted to the administrator semi-annually for each six month period in the calendar year. All semiannual reports shall be postmarked by the 30th day following the end of each six-month period. Each excess emission and MSP report shall include the information required in 40 CFR 60.7(c). These reports shall be submitted to:

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

and

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

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

- (c) Pursuant to 326 IAC 3-5-7(5), reporting of continuous monitoring system instrument downtime, except for zero (0) and span checks, which shall be reported separately, shall include the following:
- (1) Date of downtime.
  - (2) Time of commencement.
  - (3) Duration of each downtime.
  - (4) Reasons for each downtime.
  - (5) Nature of system repairs and adjustments.

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

## SECTION D.3 FACILITY OPERATION CONDITIONS - Coal-Fired Boilers, Units 17 and 18

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

- (c) One (1) dry bottom pulverized coal-fired boiler identified as Unit 17, with construction started in 1980 and commercial operation begun in 1983, with a design heat input capacity of 3,967 million Btu per hour (MMBtu/hr), with low NO<sub>x</sub> burners, combusting No. 2 fuel oil and/or natural gas for ignition and as supplemental fuels, using an electrostatic precipitator (ESP) for control of particulate matter, and exhausting through a limestone-based flue gas desulfurization system to stack 17. Unit 17 is equipped with continuous emissions monitoring systems (CEMS) for monitoring nitrogen oxides (NO<sub>x</sub>) and sulfur dioxide (SO<sub>2</sub>) and a continuous opacity monitoring (COM) system. Unit 17 has been approved to fire blends of coal and petroleum coke.
- (d) One (1) dry bottom pulverized coal-fired boiler identified as Unit 18, with construction started in 1980 and commercial operation begun in 1986, with a design heat input capacity of 3,967 million Btu per hour (MMBtu/hr), with low NO<sub>x</sub> burners, combusting No. 2 fuel oil and/or natural gas for ignition and as supplemental fuels, using an electrostatic precipitator (ESP) for control of particulate matter, and exhausting through a limestone-based flue gas desulfurization system to stack 18. Unit 18 has continuous emissions monitoring systems (CEMS) for monitoring nitrogen oxides (NO<sub>x</sub>) and sulfur dioxide (SO<sub>2</sub>) and a continuous opacity monitoring (COM) system. Unit 18 has been approved to fire blends of coal and petroleum coke.

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

- (g) Other activities or categories not previously identified with potential, uncontrolled emissions equal to or less than thresholds require listing only: Pb 0.6 ton per year or 3.29 pounds per day, SO<sub>2</sub> 5 pounds per hour or 25 pounds per day, NO<sub>x</sub> 5 pounds per hour or 25 pounds per day, CO 25 pounds per day, PM 5 pounds per hour or 25 pounds per day, VOC 3 pounds per hour or 15 pounds per day:
- (1) Evaporation of Boiler Chemical Cleaning wastes.

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

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

#### D.3.1 Prevention of Significant Deterioration (PSD) and Construction Permit Limitations [326 IAC 2-2] [326 IAC 6-2-1(g)] [326 IAC 7-1.1-2] [40 CFR 52.21]

Pursuant to Prevention of Significant Deterioration Approval to Construct EPA-5-A-80-18, issued on April 3, 1980, and the preconstruction approval from the Indiana Air Pollution Control Board, Construction Permit PC (37) 1460, issued April 14, 1980:

- (a) Each boiler unit (Units 17 and 18) shall not be operated in excess of 3,967 MMBtu per hour heat input. (in EPA-5-A-80-18 only)
- (b) Stack gas particulate emissions shall be controlled to 0.03 pound or less of total suspended particulates per million BTU (lb/MMBtu) of heat input to comply with the NSPS.

This requirement will be met by using electrostatic precipitators (ECP) which will provide a 99.8 percent guaranteed control efficiency. (in PC (37) 1460 only)

- (c) The opacity of the exhaust gases shall not exceed twenty percent (20%) based on a six-minute average except for one six-minute period per hour of opacity not exceeding twenty-seven percent (27%). (EPA 5-A-80-18 only)
- (d) Stack gas sulfur dioxide emissions from each unit shall not exceed 0.62 pound per million BTU (lb/MMBTU) of heat input. A 90 percent reduction in potential SO<sub>2</sub> emissions is required, as determined on a continuous basis by using continuous monitors to obtain a 30-day rolling average.
- (e) Nitrogen oxide emissions from each boiler shall not exceed 0.6 pound per million BTU (lb/MMBTU) of heat input.
- (f) The Permittee shall continue to operate the existing meteorological and air quality sampling network for SO<sub>2</sub>. [326 IAC 2-2-4(c)(5) and (6)] (in PC (37) 1460 only)

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

Pursuant to 326 IAC 12 and 40 CFR 60, Subpart Da (Standards of Performance for Electric Utility Steam Generating Units for Which Construction is Commenced After September 18, 1978), emissions from Units 17 and 18 shall not exceed the following:

- (a) for particulate matter:
  - (1) 0.03 pound PM per million Btu (lb/MMBtu) heat input when combusting solid, liquid, or gaseous fuel. [40 CFR 60.42a(a)(1)]
  - (2) Ninety-nine percent (99%) reduction in PM emissions when combusting solid fuel. [40 CFR 60.42a(a)(2)]
  - (3) Seventy percent (70%) reduction in PM emissions when combusting liquid fuel. [40 CFR 60.42a(a)(3)]
  - (4) 20 percent (%) opacity (six (6)-minute average), except for one six (6)-minute period per hour of not more than 27 percent (%) opacity. [40 CFR 60.42a(b)]
- (b) For sulfur dioxide:
  - (1) While combusting solid fuel or solid-derived fuel:
    - (A) 1.20 pound SO<sub>2</sub> per million Btu (lb/MMBtu) heat input and 10 percent (%) of the potential combustion concentration (90 percent (%) reduction), or
    - (B) 30 percent (%) of the potential combustion concentration (70 percent (%) reduction), when emissions are less than 0.60 pound SO<sub>2</sub> per million Btu (lb/MMBtu) heat input. [40 CFR 60.43a(a)(1) and (2)].
  - (2) While combusting liquid or gaseous fuels:
    - (A) 0.80 pound SO<sub>2</sub> per million Btu (lb/MMBtu) heat input and 10 percent (%) of the potential combustion concentration (90 percent (%) reduction), or
    - (B) One hundred percent (100%) of the potential combustion concentration (zero (0%) reduction) when emissions are less than 0.20 pound SO<sub>2</sub> per million Btu (0.20 lb/MMBtu) heat input. [40 CFR 60.43a(b)(1) and (2)]
  - (3) When different fuels are combusted simultaneously, the applicable standard is determined using the formula in 40 CFR 60.43a(h).

- (c) For nitrogen oxides:
- (1) 0.20 pound NO<sub>x</sub> per million Btu (lb/MMBtu) heat input and 25 percent (%) reduction while combusting gaseous fuels. [40 CFR 60.44a(a)(1) and (2)]
  - (2) 0.30 pound NO<sub>x</sub> per million Btu (lb/MMBtu) heat input and thirty percent (30%) reduction while combusting liquid fuels. [40 CFR 60.44a(a)(1) and (2)]
  - (3) 0.50 pound NO<sub>x</sub> per million Btu (lb/MMBtu) heat input and 65 percent (%) reduction while combusting subbituminous coal. [40 CFR 60.44a(a)(1) and (2)]
  - (4) 0.60 pound NO<sub>x</sub> per million Btu (lb/MMBtu) heat input and 65 percent (%) reduction while combusting bituminous coal. [40 CFR 60.44a(a)(1) and (2)]
  - (5) 0.60 pound NO<sub>x</sub> per million Btu (lb/MMBtu) heat input and 65 percent (%) reduction while combusting all other solid fuels. [40 CFR 60.44a(a)(1) and (2)]
  - (6) When combusting two or more fuels simultaneously, the applicable standard is determined by proration using the formula in 40 CFR 60.44a(c).

#### D.3.3 Alternative Fuel Blends [326 IAC 2-2]

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- (a) Pursuant to a letter from IDEM, OAQ, to NIPSCO dated June 13, 1996, based on the results of emissions testing performed in 1995 and subsequent ambient air modeling studies, petroleum coke may be combusted in Units 17 and 18 at a blend rate of no more than 30 percent (30%) petroleum coke (by weight). The conditions of the Units 17 and 18 federal PSD construction permit are not affected by this ruling, and all requirements contained therein still apply.
- (b) The flue gas desulfurization (FGD) system shall be in operation at all times when pet coke is being fired. Should an emergency condition occur which causes a malfunction of the FGD system, the Permittee shall cease bunkering pet coke until the FGD system is fully operational.

#### D.3.4 General Provisions Relating to NSPS [326 IAC 12-1] [40 CFR Part 60, Subpart A]

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

### Compliance Determination Requirements

#### D.3.5 Testing Requirements [326 IAC 2-7-6(1),(6)] [326 IAC 2-1.1-11]

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By December 31 of the second calendar year following the most recent stack test, or within 180 days after issuance of this permit, whichever is later, compliance with the PM limitation in Condition D.3.1 shall be determined by a performance stack test conducted using Method 5B or 17, or other methods as approved by the Commissioner. This testing shall be repeated by December 31 of every second calendar year following this valid compliance demonstration. Testing shall be conducted in accordance with Section C - Performance Testing.

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

D.3.6 Operation of Electrostatic Precipitator [326 IAC 2-7-6(6)]

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

D.3.7 Scrubber Operation [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]

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

D.3.8 NSPS Compliance Provisions [326 IAC 12] [40 CFR 60, Subpart Da]

- (a) Compliance with the pound per million Btu (lb/MMBtu) PM emission limitation in Condition D.3.2 constitutes compliance with the percent reduction requirements for PM in Condition D.3.2. [40 CFR 60.46a(a)]
- (b) Compliance with the pound per million Btu (lb/MMBtu) NO<sub>x</sub> emission limitations in Condition D.3.2 constitutes compliance with the percent reduction requirements for NO<sub>x</sub> in Condition D.3.2. [40 CFR 60.46a(b)]
- (c) The PM and opacity emission limitations in Condition D.3.2(a) and the NO<sub>x</sub> emission limitations in Condition D.3.2(c) apply at all times except during periods of startup, shutdown, or malfunction. [40 CFR 60.46a(c)]
- (d) The SO<sub>2</sub> emission limitations in Condition D.3.2 apply at all times except during periods of startup, shutdown, or when emergency conditions exist and the procedures under 40 CFR 40.46a(d) are implemented. [40 CFR 60.46a(c)]
- (e) Pursuant to 40 CFR 60.46a(d), during emergency conditions in the principal company, an affected facility with a malfunctioning flue gas desulfurization (FGD) system may be operated if sulfur dioxide emissions are minimized by:
  - (1) Operating all operable FGD system modules, and bringing back into operation any malfunctioned module as soon as repairs are completed,
  - (2) Bypassing flue gases around only those FGD system modules that have been taken out of operation because they were incapable of any sulfur dioxide emission reduction or which would have suffered significant physical damage if they had remained in operation, and
  - (3) Designing, constructing, and operating a spare FGD system module. The Administrator may at his discretion require the owner or operator within 60 days of notification to demonstrate spare module capability.
- (f) Compliance with the SO<sub>2</sub> emission limitations and SO<sub>2</sub> percent reduction requirements under 40 CFR 60.43a and the NO<sub>x</sub> emission limitations under 40 CFR 60.44a (shown in Condition D.3.2) shall be based on the average emission rate for 30 successive boiler operating days. A separate performance test is completed at the end of each boiler operating day after the initial performance test, and a new 30 day average emission rate for both SO<sub>2</sub> and NO<sub>x</sub> and a new percent reduction for sulfur dioxide are calculated to show compliance. [40 CFR 60.46a(e)]

- (g) Compliance is determined by calculating the arithmetic average of all hourly emission rates for SO<sub>2</sub> and NO<sub>x</sub> for the 30 successive boiler operating days, except for data obtained during startup, shutdown, or malfunction for NO<sub>x</sub>, and data obtained during startup, shutdown, or emergency conditions for SO<sub>2</sub>. Compliance with the percentage reduction requirements for SO<sub>2</sub> is determined based on the average inlet and average outlet SO<sub>2</sub> emission rates for the 30 successive boiler operating days. [40 CFR 60.46a(g)]
- (h) If an owner or operator has not obtained the minimum quantity of emission data as required under 40 CFR 60.47a, compliance of the affect facility with the emission requirements under 40 CFR 60.43a and 40 CFR 60.44a for the day on which the 30-day period ends may be determined by the Administrator by following the applicable procedures in section 7 of Method 19. [40 CFR 60.46a(h)]

D.3.9 Continuous Emissions Monitoring [326 IAC 2-2] [326 IAC 3-5] [326 IAC 7-2-1(g)] [326 IAC 12] [40 CFR 60, Subpart Da]

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- (a) Pursuant to 326 IAC 3-5 (Continuous Monitoring of Emissions), 40 CFR 60 Subpart Da, Indiana Air Pollution Control Board Construction Permit PC (37) 1460, issued April 14, 1980, and 326 IAC 2-2, continuous emission monitoring systems for Units 17 and 18 shall be calibrated, maintained, and operated for measuring opacity, SO<sub>2</sub>, NO<sub>x</sub>, and either CO<sub>2</sub> or O<sub>2</sub>, which meet all applicable performance specifications of 326 IAC 3-5-2 and 40 CFR 60.49a.
- (b) All continuous emission monitoring systems are subject to monitor system certification requirements pursuant to 326 IAC 3-5-3.
- (c) If the owner or operator has installed a nitrogen oxides (NO<sub>x</sub>) emission rate continuous monitoring system (CEMS) to meet the requirements of 40 CFR 75 and is continuing to meet the ongoing requirements of 40 CFR 75, that CEMS may be used to meet the requirements of 40 CFR 60.49a, except that the owner or operator shall also meet the requirements of 40 CFR 60.51a. Data reported to meet the requirements of 40 CFR 60.51a shall not include data substituted using the missing data procedures in subpart D of 40 CFR 75, nor shall the data have been bias adjusted according to the procedures of 40 CFR 75. [40 CFR 60.49a(c)(2)]
- (d) The continuous monitoring systems under 40 CFR 60.49a(b), (c), and (d) (SO<sub>2</sub>, NO<sub>x</sub>, and O<sub>2</sub> or CO<sub>2</sub>) are operated and data recorded during all periods of operation of the affected facility including periods of startup, shutdown, malfunction or emergency conditions, except for continuous monitoring system breakdowns, repairs, calibration checks, and zero and span adjustments. [40 CFR 60.49a(e)]
- (e) The owner or operator shall obtain emission data for at least 18 hours in at least 22 out of 30 successive boiler operating days. If this minimum data requirement cannot be met with a continuous monitoring system, the owner or operator shall supplement emission data with other monitoring systems approved by the Administrator or the reference methods and procedures as described in 40 CFR 60.49a(h). [40 CFR 60.49a(f)]
- (f) Pursuant to 326 IAC 3-5-4(a), if revisions are made to the continuous monitoring standard operating procedures (SOP), the Permittee shall submit updates to the department biennially.
- (g) Nothing in this permit shall excuse the Permittee from complying with the requirements to operate a continuous emission monitoring system pursuant to 326 IAC 3-5, 326 IAC 10-4, 40 CFR 60, or 40 CFR 75.

**D.3.10 Sulfur Dioxide Emissions and Sulfur Content [326 IAC 3]**

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The Permittee shall demonstrate that the sulfur dioxide emissions do not exceed the limits in Condition D.3.1(d), as established in PSD Approval to Construct EPA-5-A-80-18, issued on April 3, 1980, and Construction Permit PC (37) 1460, issued April 14, 1980, using a thirty (30) day rolling arithmetic average in the same manner as is required under D.3.8(g).

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

**D.3.11 Transformer-Rectifier (T-R) Sets [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]**

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- (a) The ability of the ESP to control particulate emissions shall be monitored once per day, 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 T-R sets.
- (b) Reasonable response steps shall be taken in accordance with Section C - Response to Excursions and Exceedances whenever a total of more than three (3) T-R sets at Unit 17 or a total of more than two (2) T-R sets at Unit 18 are not in service. T-R set failure resulting in a response step obligation under the preceding sentence is not a deviation from this permit. Failure to take response steps in accordance with Section C - Response to Excursions and Exceedances shall be considered a deviation from this permit.

**D.3.12 SO<sub>2</sub> Monitoring System Downtime [326 IAC 2-2] [326 IAC 2-7-6] [326 IAC 2-7-5(3)]**

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Whenever both the primary and back-up SO<sub>2</sub> continuous emission monitoring systems (CEMS) are malfunctioning or down for repairs or adjustments for a period of twenty-four (24) hours or more, the Permittee shall monitor and record boiler load, recirculation pH, slurry valve position, and absorber level to demonstrate that the operation of the scrubber continues in a manner typical for the boiler load and sulfur content of the coal fired. Scrubber parametric monitoring readings shall be recorded at least twice per day until the primary CEMS or a backup CEMS is brought online.

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

**D.3.13 Record Keeping Requirements**

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- (a) To document compliance with Section C - Maintenance of Continuous Opacity Monitoring Equipment, and the particulate matter and opacity requirements in Conditions D.3.1, D.3.2, D.3.8, D.3.9, and D.3.11 the Permittee shall maintain records in accordance with (1) through (4) below. Records shall be complete and sufficient to establish compliance with the limits in Conditions D.3.1 and D.3.2.
  - (1) Data and results from the most recent stack test.
  - (2) All continuous opacity monitoring data, pursuant to 326 IAC 3-5-6 and 40 CFR 60.47a.
  - (3) The results of all Method 9 visible emission readings taken during any periods of COMS downtime.
  - (4) All ESP parametric monitoring readings pursuant to condition D.3.11.
- (b) To document compliance with SO<sub>2</sub> Conditions D.3.1(d), D.3.2(b), D.3.8, D.3.9, D.3.10, and D.3.12, the Permittee shall maintain records in accordance with (1) and (2) below. Records shall be complete and sufficient to establish compliance with the SO<sub>2</sub> limit(s) as required in Conditions D.3.1(d), D.3.2(b), D.3.8, D.3.9, D.3.10, and D.3.12. The Permittee shall maintain records in accordance with (2) below during SO<sub>2</sub> CEM system downtime.

- (1) All SO<sub>2</sub> continuous emissions monitoring data, pursuant to 326 IAC 3-5-6, 326 IAC 7-2-1(g) and/or 40 CFR 60.47a.
- (2) All scrubber parametric monitoring readings taken during any periods of CEM downtime, in accordance with Condition D.3.12.
- (c) To document compliance with NO<sub>x</sub> Conditions D.3.1(e), D.3.2(c), D.3.8 and D.3.9, the Permittee shall maintain records of all NO<sub>x</sub> and CO<sub>2</sub> or O<sub>2</sub> continuous emissions monitoring data, pursuant to 326 IAC 3-5-6, 326 IAC 2-2 and 40 CFR 60.47a. Records shall be complete and sufficient to establish compliance with the NO<sub>x</sub> limits as required in Conditions D.3.1(e), D.3.2(c), D.3.8, and D.3.9.
- (d) To document compliance with the ambient monitoring requirements of Condition D.3.1(f), the Permittee shall maintain records of the meteorological and SO<sub>2</sub> readings.
- (e) To document compliance with Condition D.3.3, the Permittee shall maintain records of the amount of petroleum coke combusted and the pet coke/coal blend rate for each boiler. Records shall be complete and sufficient to establish compliance with the fuel limit of Condition D.3.3 using a thirty (30) day rolling weighted average.
- (f) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

#### D.3.14 Reporting Requirements

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- (a) A quarterly report of opacity exceedances and a quarterly summary of the information to document compliance with Conditions D.3.1 and D.3.3 shall be submitted to the address listed in Section C - General Reporting Requirements, of this permit, within thirty (30) days after the end of the quarter being reported. The report submitted by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).
- (b) The Permittee shall report the air quality and meteorological data required by Condition D.3.1(f) in a format specified by the commissioner within ninety (90) days after the end of each calendar quarter.
- (c) To document compliance with Condition D.3.2 and pursuant to 40 CFR 60.49a(i), the reports required under 40 CFR 60a and 40 CFR 60 Subpart A shall be submitted to the administrator semi-annually for each six month period in the calendar year. All semiannual reports shall be postmarked by the 30th day following the end of each six-month period. These reports shall be submitted to:

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

and

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

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

- (d) Pursuant to 326 IAC 3-5-7(5), reporting of continuous monitoring system instrument downtime, except for zero (0) and span checks, which shall be reported separately, shall include the following:
- (1) Date of downtime.
  - (2) Time of commencement.
  - (3) Duration of each downtime.
  - (4) Reasons for each downtime.
  - (5) Nature of system repairs and adjustments.

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

## SECTION D.4 FACILITY OPERATION CONDITIONS - Turbines 16A and 16B

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

- (e) Two (2) natural gas-fired combustion turbines, identified as 16A and 16B, constructed in 1979, each with a design heat input capacity of 1,450 million Btu per hour (MMBtu/hr), each using water injection as needed for NO<sub>x</sub> control, exhausting to stacks 16A and 16B, respectively. Units 16A and 16B have continuous emissions monitoring systems (CEMS) for monitoring nitrogen oxides (NO<sub>x</sub>) for use during the ozone control period, and continuous monitoring systems to measure the water to fuel ratio.

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

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

#### D.4.1 Prevention of Significant Deterioration (PSD) and Construction Permit Limitations [326 IAC 2-2] [40 CFR 52.21]

Pursuant to Prevention of Significant Deterioration Approval to Construct EPA-5-79-A-25, issued on August 16, 1979, and the preconstruction approval from the Indiana Air Pollution Control Board, Construction Permit PC (37) 1380, issued May 9, 1979:

- (a) Nitrogen oxide (NO<sub>x</sub>) emissions from each turbine shall not exceed 93 ppm at 15% oxygen on a dry basis.
- (b) Each turbine unit shall not operate in excess of 2,000 hours per twelve (12) consecutive month period with compliance determined at the end of each month.

#### D.4.2 New Source Performance Standard (NSPS) [326 IAC 12] [40 CFR 60, Subpart GG]

Pursuant to 326 IAC 12 and 40 CFR 60, Subpart GG (Stationary Gas Turbines), emissions from the combustion turbine shall be limited as follows:

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

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

Where

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

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

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

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

#### D.4.3 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.

#### D.4.4 General Provisions Relating to NSPS [326 IAC 12-1] [40 CFR 60, Subpart A]

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

### Compliance Determination Requirements

#### D.4.5 NO<sub>x</sub> Control

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To the extent necessary to comply with Condition D.4.1, the water injection systems which are used to control the NO<sub>x</sub> emissions from turbines 16A and 16B shall be in operation and control emissions from turbines 16A and 16B.

#### D.4.6 Continuous Monitoring System [326 IAC 12] [40 CFR 60, Subpart GG]

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- (a) Pursuant to 40 CFR 60, Subpart GG (Stationary Gas Turbines), a continuous monitoring system for the measurement of fuel consumption and the ratio of water to fuel being fired in the turbine, shall be installed, calibrated, operated, and maintained. This system shall be accurate to within 5.0 percent and shall be approved by the Administrator.  
[40 CFR 60.334]
- (b) Pursuant to 40 CFR 60.334(b), the Permittee may, as an alternative to operating the continuous monitoring system for the fuel consumption and the ratio of water or steam to fuel being fired, install, certify, maintain, operate, and quality-assure a continuous emission monitoring system (CEMS) consisting of NO<sub>x</sub> and O<sub>2</sub> monitors. The CEMS shall be installed, certified, maintained and operated as specified in 40 CFR 60.334(b)(1) through (3).
- (c) Nothing in this permit shall excuse the Permittee from complying with the requirements to operate a continuous emission monitoring system pursuant to 326 IAC 10-4 or 40 CFR 75.

#### D.4.7 Natural Gas Definition [326 IAC 12] [40 CFR 60, Subpart GG]

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Pursuant to 40 CFR 60.334(h)(3), the Permittee may elect not to monitor the total sulfur content of the gaseous fuel combusted in the turbine, if the gaseous fuel is demonstrated to meet the definition of natural gas in 40 CFR 60.331(u), regardless of whether an existing custom schedule approved by the administrator for subpart GG requires such monitoring. The Permittee shall use one of the following sources of information to make the required demonstration:

- (a) The gas quality characteristics in a current, valid purchase contract, tariff sheet or transportation contract for the gaseous fuel, specifying that the maximum total sulfur content of the fuel is 20.0 grains/100 scf or less; or
- (b) Representative fuel sampling data which show that the sulfur content of the gaseous fuel does not exceed 20 grains/100 scf. At a minimum, the amount of fuel sampling data specified in section 2.3.1.4 or 2.3.2.4 of appendix D to part 75 of this chapter is required.

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

### D.4.8 Record Keeping Requirements

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- (a) To document compliance with Conditions D.4.1(a), D.4.2, D.4.6, and D.4.7, the Permittee shall maintain records in accordance with (1) through (3) below. Records shall be complete and sufficient to establish compliance with the nitrogen oxides (NO<sub>x</sub>) and sulfur dioxide (SO<sub>2</sub>) limits established in Conditions D.4.1(a) and D.4.2.
- (1) Data and results from the most recent stack test.
- (2) To document compliance with Condition D.4.6, the Permittee shall maintain records of:
- (i) All continuous monitoring system data of fuel consumption and the ratio of water to fuel being fired; or
- (i) All continuous emission monitoring system (CEMS) data of NO<sub>x</sub> and O<sub>2</sub> whenever Permittee elects to use CEMS to monitor NO<sub>x</sub> and O<sub>2</sub>.
- (3) Documents to support that the fuel used in turbines 16A and 16B meets the natural gas definition in 40 CFR 60.331(u).
- (b) To document compliance with Condition D.4.1(b), the Permittee shall maintain records of the date and times for all periods of turbine operation.
- (c) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

### D.4.9 Reporting Requirements

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- (a) To document compliance with Condition D.4.1(a), the Permittee shall submit a quarterly summary of :
- (1) The ratio of water to fuel if using the continuous monitoring method outlined in Condition D.4.6(a); or
- (2) The NO<sub>x</sub> emissions if using the continuous emissions monitoring method outlined in Condition D.4.6(b).

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

- (b) To document compliance with Condition D.4.1(b), the Permittee shall submit a quarterly summary of the hours of operation for each combustion turbine. These reports shall be submitted to the address listed in Section C - General Reporting Requirements, of this approval. The report submitted by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).
- (c) The Permittee shall submit the following information pursuant to 40 CFR 60.334 and 40 CFR 60.7:

- (1) To document compliance with Conditions D.4.2, D.4.6, and D.4.7, pursuant to 40 CFR 60.334(j)(1)(iii), excess emissions and monitoring system performance (MSP) reports shall be submitted to the administrator semi-annually for each six month period in the calendar year. All semiannual reports shall be postmarked by the 30th day following the end of each six-month period. For the purpose of reports required under 40 CFR 60.7(c), periods of excess emissions that shall be reported are defined as follows:
  - (A) An hour of excess emissions shall be any unit operating hour in which the 4-hour rolling average NOx concentration exceeds the applicable emission limit in 40 CFR 60.332(a)(1) or (2). For the purposes of this subpart, a "4-hour rolling average NOx concentration" is the arithmetic average of the average NOx concentration measured by the CEMS for a given hour (corrected to 15 percent O<sub>2</sub> and, if required under 40 CFR 60.335(b)(1), to ISO standard conditions) and the three unit operating hour average NOx concentrations immediately preceding that unit operating hour.
  - (B) A period of monitor downtime shall be any unit operating hour in which sufficient data are not obtained to validate the hour, for either NOx concentration or diluent (or both).
  - (C) Each report shall include the ambient conditions (temperature, pressure, and humidity) at the time of the excess emission period and (if the Permittee has claimed an emission allowance for fuel bound nitrogen) the nitrogen content of the fuel during the period of excess emissions. The Permittee is not required to report ambient conditions if they opt to use the worst case ISO correction factor as specified in 40 CFR 60.334(b)(3)(ii), or if are not using the ISO correction equation under the provisions of 40 CFR 60.335(b)(1).
- (2) For ice fog, pursuant to 40 CFR 60.334(c)(3), each period during which an exemption is provided in 40 CFR 60.332(f) is in effect shall be reported in writing to the Administrator quarterly.

These reports shall be submitted to:

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

and

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

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

## SECTION D.5 FACILITY OPERATION CONDITIONS - Units 14 and 15 Fuel Handling

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

- (f) Coal storage and handling systems for Unit 14 and 15 boilers constructed in 1972.
  - (1) Rail car unloading with wet suppression for PM control during unloading and enclosure for ancillary dust control.
  - (2) Coal pile unloading, coal storage pile(s), material handling equipment, and coal conveyors.
  - (3) Transfer House, with carryover wet suppression and enclosed transfer points within an enclosure for ancillary dust control, with an estimated throughput of 3,000 tons per hour.
  - (4) Crusher House, with carryover wet suppression for PM control and enclosed transfer points within an enclosure for ancillary dust control.
  - (5) Tripper House to tripper bays, with enclosed transfer points within an enclosure for dust control.
  - (6) Two (2) tripper bays with an estimated combined capacity of 3,000 tons per hour, with carryover wet suppression for PM control, each using an enclosure for ancillary dust control.

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

- (a) Conveyors as follows [326 IAC 6-3]:
  - (1) Covered conveyor for coal or coke conveying of less than or equal to 360 tons per day;
  - (3) Uncovered coal conveying of less than or equal to 120 tons per day.
  - (4) Underground conveyors.
- (b) Coal bunker and coal scale exhausts and associated dust collector vents. [326 IAC 6-3]

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

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

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

Pursuant to 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes), allowable particulate emissions for the coal handling operations shall be calculated as follows:

- (a) Particulate shall not be emitted in excess of the amount shown in the table in 326 IAC 6-3-2(e). The allowable rate of emission shall be based on the process weight rate for the process.
- (b) Interpolation of the data in the table in 326 IAC 6-3-2(e) for process weight rates up to sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

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

- (c) Interpolation and extrapolation of the data in the table in 326 IAC 6-3-2(e) for process weight rates in excess of sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

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

- (d) When the process weight rate exceeds two hundred (200) tons per hour, the allowable emission may exceed that shown in the table in 326 IAC 6-3-2(e), provided the concentration of particulate in the discharge gases to the atmosphere is less than one-tenth (0.10) pound per one thousand (1,000) pounds of gases.

## SECTION D.6 FACILITY OPERATION CONDITIONS - Units 17 and 18 Fuel Handling

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

- (g) Fuel storage and handling systems for Unit 17 and 18 boilers.
- (1) Rail car unloading of coal, with a multi-compartment baghouse for PM control and enclosure for ancillary dust control.
  - (2) Truck unloading of petroleum coke (petcoke).
  - (3) Coal pile unloading, coal storage pile(s), petcoke pile unloading, petcoke storage pile(s), material handling equipment, and conveyors.
  - (4) Transfer House with an estimated throughput of 4,000 tons per hour, with enclosed transfer points within an enclosure for ancillary dust control, with a multi-compartment baghouse for PM control. To produce petcoke blends, coal and petcoke are combined in rotary plow during transfer to conveyor.
  - (5) Crusher House with a designated capacity of 3,000 tons per hour, with enclosed transfer points within an enclosure for dust control, with a multi-compartment baghouse for PM control.
  - (6) Transfer House to tripper with an estimated throughput of 3,000 tons per hour, with enclosed transfer points within an enclosure for ancillary dust control.
  - (7) Two (2) tripper conveyors with an estimated combined throughput of 3,000 tons per hour with enclosure for ancillary dust control, with a multi-compartment baghouse for PM control.
  - (8) Twelve (12) Fuel Silos (bunkers) with enclosure for dust control, with two (2) multi-compartment vent filters for PM control.

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

- (a) Conveyors as follows [326 IAC 6-3]:
- (1) Covered conveyor for coal or coke conveying of less than or equal to 360 tons per day;
  - (3) Uncovered coal conveying of less than or equal to 120 tons per day; and
  - (4) Underground conveyors.
- (b) Coal bunker and coal scale exhausts and associated dust collector vents. [326 IAC 6-3]

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

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

#### D.6.1 Prevention of Significant Deterioration (PSD) [326 IAC 2-2] [40 CFR 52.21]

Pursuant to Approval to Construct EPA-5-A-80-18, issued on April 3, 1980:

- (a) Particulate emissions from coal unloading shall not exceed ten percent (10%) opacity for the duration of the unloading operation.

- (b) All coal conveyors shall be completely enclosed.
- (c) All transfer points shall be completely enclosed except those at the storage pile.
- (d) Particulate emissions from the crusher house, conveyor room and reclaim tunnels shall be controlled to 99 percent.
- (e) Fugitive emissions from the coal piles shall be minimized by compaction and other appropriate measures (surfactant spray etc.).

D.6.2 New Source Performance Standard (NSPS) [326 IAC 12] [40 CFR 60, Subpart Y]

- (a) Pursuant to 326 IAC 12 and 40 CFR 60.252, the emissions from the fuel storage and handling systems for Units 17 and 18, beginning after the fuel storage piles, shall not exhibit opacity greater than or equal to twenty percent (20%).
- (b) For the purposes of 40 CFR 60, Subpart Y, petroleum coke is classified as coal. [40 CFR 60.251(c)]

D.6.3 Particulate [326 IAC 6-3-2]

Pursuant to 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes), for the fuel storage and handling systems for Units 17 and 18 other than the coal storage piles, allowable particulate emissions for the coal handling operations shall be calculated as follows:

- (a) Particulate shall not be emitted in excess of the amount shown in the table in 326 IAC 6-3-2(e). The allowable rate of emission shall be based on the process weight rate for the process.
- (b) Interpolation of the data in the table in 326 IAC 6-3-2(e) for process weight rates up to sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:  
$$E = 4.10 P^{0.67}$$
 where E = rate of emission in pounds per hour and P = process weight rate in tons per hour.
- (c) Interpolation and extrapolation of the data in the table in 326 IAC 6-3-2(e) for process weight rates in excess of sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:  
$$E = 55.0 P^{0.11} - 40$$
 where E = rate of emission in pounds per hour; and P = process weight rate in tons per hour.
- (d) When the process weight rate exceeds two hundred (200) tons per hour, the allowable emission may exceed that shown in the table in 326 IAC 6-3-2(e), provided the concentration of particulate in the discharge gases to the atmosphere is less than one-tenth (0.10) pound per one thousand (1,000) pounds of gases.

D.6.4 General Provisions Relating to NSPS [326 IAC 12-1] [40 CFR 60, Subpart A]

The provisions of 40 CFR Part 60, Subpart A - General Provisions, which are incorporated by reference in 326 IAC 12-1, apply to the fuel storage and handling systems for Units 17 and 18, beginning after the fuel storage piles, except when otherwise specified in 40 CFR Part 60, Subpart Y.

## Compliance Determination Requirements

### D.6.5 Particulate Control [326 IAC 2-7-6(6)]

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In the event that bag failure is observed in a multi-compartment baghouse, if operations will continue for ten (10) days or more after the failure is observed before the failed bag will be repaired or replaced, the Permittee shall promptly notify the IDEM, OAQ of the expected date the failed bag will be repaired or replaced. The notification shall also include the results of any response actions taken up to the time of notification.

### D.6.6 NSPS Compliance Provisions [326 IAC 12] [40 CFR 60, Subpart Y]

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Method 9 and the procedures in 40 CFR 60.11 shall be used to determine opacity.  
[40 CFR 60.254(b)(2)]

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

### D.6.7 Visible Emissions Notations [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]

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- (a) Visible emission notations of the rail car unloading station openings shall be performed once per day during normal daylight operations when unloading coal. A trained employee shall record whether emissions are normal or abnormal.
- (b) Visible emission notations of the fuel transfer exhaust points shall be performed once per week during normal daylight operations when transferring fuel. A trained employee shall record whether emissions are normal or abnormal.
- (c) Visible emission notations of the coal crusher exhaust shall be performed once per week during normal daylight operations when the crusher is in operation. A trained employee shall record whether emissions are normal or abnormal.
- (d) If abnormal emissions of dust are observed from the rail car unloading station openings, the fuel transfer exhaust points, or the coal crusher exhaust, the Permittee shall take reasonable response steps in accordance with Section C - Response to Excursions and Exceedances. Observation of abnormal visible emissions that do not violate 326 IAC 6-4 (Fugitive Dust Emissions) or an applicable opacity limit is not a deviation from this permit. Failure to take response steps in accordance with Section C - Response to Excursions and Exceedances, shall be considered a deviation from this permit.
- (e) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation.
- (f) 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.
- (g) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.

**D.6.8 Baghouse Parametric Monitoring [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]**

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- (a) The Permittee shall record the pressure drop across the baghouse used in conjunction with the coal crusher at least once per week when the coal crusher is in operation. When for any one reading, the pressure drop across the baghouse is outside the normal range of 2.0 and 8.0 inches of water or a range established during the latest stack test, the Permittee shall take reasonable response steps in accordance with Section C - Response to Excursions and Exceedances. 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 - Response to Excursions and Exceedances, shall be considered a deviation from this permit.
- (b) The Permittee shall record the pressure drop across each of the baghouses used in conjunction with the fuel transfer points at least once per week when fuel is being transferred. When for any one reading, the pressure drop across the baghouse is outside the normal range of 2.0 and 8.0 inches of water or a range established during the latest stack test, the Permittee shall take reasonable response steps in accordance with Section C - Response to Excursions and Exceedances. 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 - Response to Excursions and Exceedances, shall be considered a deviation from this permit.
- (c) Each instrument used for determining the pressure shall comply with Section C -Instrument Specifications, and shall be calibrated in accordance with the manufacturer's specifications. The specifications shall be available on site with the Preventive Maintenance Plan.

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

**D.6.9 Record Keeping Requirements**

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- (a) To document compliance with Condition D.6.7, the Permittee shall maintain records of the visible emission notations of the coal unloading station openings, coal transfer exhaust points, and crusher baghouse exhaust.
- (b) To document compliance with Condition D.6.8, the Permittee shall maintain records of the pressure drop across each baghouse.
- (c) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

## SECTION D.7 FACILITY OPERATION CONDITIONS - FGD System Material Handling

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

- (h) Material handling for the flue gas desulfurization systems for Units 17 and 18, including the following:
- (1) One (1) limestone slurry preparation system with a maximum hourly throughput rate of 38,941 pounds of limestone per hour.
  - (2) Two (2) ground limestone pneumatic truck unloading systems connected to Unit 17 limestone silos, with baghouses for PM control.
  - (3) Two (2) ground limestone pneumatic truck unloading systems connected to Unit 18 limestone silos, with baghouses for PM control.
  - (4) One (1) gypsum conveying system, with a maximum design throughput of 150 tons per hour. All gypsum is handled wet.

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

- (a) Conveyors as follows [326 IAC 6-3]:
- (2) Covered conveyors for limestone conveying of less than or equal to 7,200 tons per day for sources other than mineral processing plants constructed after August 31, 1983;
  - (4) Underground conveyors.
- (g) Other activities or categories not previously identified with potential, uncontrolled emissions equal to or less than thresholds require listing only: Pb 0.6 ton per year or 3.29 pounds per day, SO<sub>2</sub> 5 pounds per hour or 25 pounds per day, NO<sub>x</sub> 5 pounds per hour or 25 pounds per day, CO 25 pounds per day, PM 5 pounds per hour or 25 pounds per day, VOC 3 pounds per hour or 15 pounds per day:
- (5) Gypsum stockpile [326 IAC 6-3].

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

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

#### D.7.1 Particulate [326 IAC 6-3-2]

Pursuant to 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes), the particulate emission rate from the limestone handling system shall not exceed 30 pounds per hour when operating at a process weight rate of 38,941 pounds per hour. This 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:

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

## SECTION D.8 FACILITY OPERATION CONDITIONS - Fly Ash Handling

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

- (i) Dry fly ash handling and disposal.
  - (1) Pneumatic conveyance to storage silos, with a design capacity of 70 tons per hour of fly ash from Units 14 and 15 combined, and a design capacity of 63 tons per hour of fly ash from each of Units 17 and 18.
  - (2) Fly ash storage silos for Units 14, 15, 17, and 18, with cyclone separators, silo collector bag filters, and silo bin vent bag filters. Each silo has wet and dry unloaders, each with a design unloading capacity of 300+ tons per hour, with particulate emissions controlled by the use of a telescoping chute with a vacuum system and a bin vent filter when the ash is being loaded dry, and controlled by the use of water spray mixed with the ash when the ash is being loaded wet.
  - (3) Two (2) storage silos originally used for dual-alkali FGD system, currently used for storage of fly ash from Unit 15; with cyclone separators, silo collector bag filters, and bin vent bag filters; with telescoping chute unloaders with vacuum line to the silo for dry ash unloading to enclosed trucks.
  - (4) Transportation by truck via in-plant haul roads; and onsite disposal area.

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

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

#### D.8.1 Prevention of Significant Deterioration (PSD) [40 CFR 52.21] [326 IAC 2-2]

For the fly ash from Units 17 and 18, pursuant to Approval to Construct EPA-5-A-80-18, issued on April 3, 1980:

Fly ash handling, storage and transport shall be controlled by wetting and/or by installation of baghouses. Trucks utilized for dry or unconditioned ash disposal shall be covered. (in EPA-5-A-80-18 only)

#### D.8.2 Particulate [326 IAC 6-3-2]

- (a) Pursuant to 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes), the particulate emission rate from the fly ash conveyance from Units 14 and 15 shall not exceed 47.8 pounds per hour when operating at a process weight rate of 70 tons per hour of ash, and the particulate emission rate from the fly ash conveyance from each of Units 17 and 18 shall not exceed 46.8 pounds per hour when operating at a process weight rate of 63 tons per hour of fly ash from each of Units 17 and 18. These pounds per hour limitations were calculated using the following equation:

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

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

- (b) Pursuant to 326 IAC 6-3-2(e)(3) (Particulate Emission Limitations for Manufacturing Processes), for dry fly ash silo unloading at a throughput rate greater than 200 tons per hour, the concentration of particulate in the discharge gases to the atmosphere shall be less than 0.10 pounds per one thousand (1,000) pounds of gases.

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

**D.8.3 Visible Emissions Notations [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]**

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- (a) Visible emission notations of the ash silo unloading station openings shall be performed at least once per day during normal daylight operations when ash is being unloaded. A trained employee shall record whether emissions are normal or abnormal.
- (b) Visible emission notations of the fly ash conveyance and silo bag filter and bin vent filter exhausts shall be performed at least once per day during normal daylight operations when transferring ash to the corresponding silo. A trained employee shall record whether emissions are normal or abnormal.
- (c) Visible emission notations of the nozzle of each telescoping chute shall be performed at least once per day during normal daylight operations when unloading ash through the chute. A trained employee shall record whether emissions are normal or abnormal.
- (d) If abnormal visible emissions of ash are observed from the ash silo unloading station openings, the Permittee shall take reasonable response steps in accordance with Section C - Response to Excursions and Exceedances. Observation of abnormal visible emissions that do not violate 326 IAC 6-4 (Fugitive Dust Emissions) or an applicable opacity limit is not a deviation from this permit. Failure to take response steps in accordance with Section C - Response to Excursions and Exceedances, shall be considered a deviation from this permit.
- (e) If abnormal emissions are observed at any bag filter exhaust, the Permittee shall take reasonable response steps in accordance with Section C - Response to Excursions and Exceedances. Observation of abnormal emissions that do not violate 326 IAC 6-4 (Fugitive Dust Emissions) or an applicable opacity limit is not a deviation from this permit. Failure to take response steps in accordance with Section C - Response to Excursions and Exceedances, shall be considered a deviation from this permit.
- (f) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.
- (g) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.
- (h) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.

**D.8.4 Baghouse Parametric Monitoring [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]**

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- (a) The Permittee shall record the pressure drop across the bag filters used in conjunction with the ash handling at least once per day when the ash handling is in operation. When for any one reading, the pressure drop across the baghouse is outside the normal range of 3.0 and 6.0 inches of water or a range established during the latest stack test, the Permittee shall take reasonable response steps in accordance with Section C - Response to Excursions and Exceedances. A pressure drop 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 - Response to Excursions and Exceedances, shall be considered a deviation from this permit.
- (b) The instrument used for determining the pressure shall comply with Section C - Instrument Specifications, and shall be calibrated in accordance with the manufacturer's specifications. The specifications shall be available on site with the Preventive Maintenance Plan.

**D.8.5 Broken or Failed Bag Detection [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]**

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In the event that bag failure has been observed:

For bin vent filters, if failure is indicated by an opacity violation, or if filter failure is determined by other means, such as gas temperatures, flow rates, air infiltration, leaks, dust traces or triboflows, then failed unit and the associated process will be shut down immediately until the failed unit has been repaired or replaced. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions).

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

**D.8.6 Record Keeping Requirements**

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- (a) To document compliance with Condition D.8.3, the Permittee shall maintain records of the visible emission notations of the Unit 17 and 18 ash silo unloading station openings, and the Unit 17 and 18 baghouse stack exhaust.
- (b) To document compliance with Condition D.8.4, the Permittee shall maintain records of the pressure drop across each bag filter.
- (c) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

## SECTION D.9 FACILITY OPERATION CONDITIONS - Bottom Ash and FGD Waste

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

- (j) Wet process bottom ash handling, with sluicing lines conveying ash to storage ponds in the Waste Disposal Area.
- (k) Poned bottom ash handling/removal operations.

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

- (g) Other activities or categories not previously identified with potential, uncontrolled emissions equal to or less than thresholds require listing only: Pb 0.6 ton per year or 3.29 pounds per day, SO<sub>2</sub> 5 pounds per hour or 25 pounds per day, NO<sub>x</sub> 5 pounds per hour or 25 pounds per day, CO 25 pounds per day, PM 5 pounds per hour or 25 pounds per day, VOC 3 pounds per hour or 15 pounds per day:
  - (3) Wet handling of FGD sludge material collected from the FGD building sumps, sluiced to the Material Storage Runoff Pond. FGD material dredged from pond inlet area is dewatered on the pond bank with trucks conveying dewatered material to onsite landfill. [326 IAC 6-4]

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

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

#### D.9.1 Prevention of Significant Deterioration (PSD) and Construction Permit Limitations [326 IAC 2-2] [40 CFR 52.21]

Pursuant to Approval to Construct EPA-5-A-80-18, issued on April 3, 1980, and Indiana Air Pollution Control Board Construction Permit PC (37) 1460, issued April 14, 1980, with respect to Units 17 and 18:

- (a) The bottom ash shall be sluiced to waste disposal ponds. (in PC (37) 1460 only)
- (b) Bottom ash handling, storage and transport shall be controlled by wetting and/or by installation of baghouses. (in EPA-5-A-80-18 only)

#### D.9.2 Fugitive Dust Emission Limitations [326 IAC 6-4-2]

Pursuant to 326 IAC 6-4-2:

- (a) Any ash storage pond area or onsite landfill generating fugitive dust shall be in violation of this rule (326 IAC 6-4) if any of the following criteria are violated:
  - (1) A source or combination of sources which cause to exist fugitive dust concentrations greater than sixty-seven percent (67%) in excess of ambient upwind concentrations as determined by the following formula:

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

Where

P = Percentage increase

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

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

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

$$P_R = (1.5 N) P$$

Where

N = Fraction of fugitive dust that is respirable dust;

P<sub>R</sub> = allowable percentage increase in dust concentration above background;  
and

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

- (3) The ground level ambient air concentrations exceed fifty (50) micrograms per cubic meter above background concentrations for a sixty (60) minute period.
- (4) If fugitive dust is visible crossing the boundary or property line of a source. This subdivision may be refuted by factual data expressed in subdivisions (1), (2) or (3) of this section. 326 IAC 6-4-2(4) is not federally enforceable.
- (b) Pursuant to 326 IAC 6-4-6(6) (Exceptions), fugitive dust from a source caused by adverse meteorological conditions will be considered an exception to this rule (326 IAC 6-4) and therefore not in violation.

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

#### D.9.3 Visible Emissions Notations [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]

- (a) Visible emission notations of any active onsite landfill area(s) shall be performed at least once per day during normal daylight operations. Any storage pond in the Waste Disposal Area or the Material Storage Runoff Pond area that contains either bottom ash and/or FGD sludge shall be observed once per week to determine if sufficient water is present in the pond to cover or saturate bottom ash and/or sludge deposited in the pond. During any period when there is not sufficient water in the pond to cover or saturate bottom ash and/or sludge present in the pond, visible emission notations of such storage pond area(s) shall be performed at least once per day during normal daylight operations. When daily visible emission notations are made, a trained employee shall record whether emissions are normal or abnormal.
- (b) If visible emissions are observed crossing the property line or boundaries of the property, right-of-way, or easement on which the source is located, the Permittee shall take reasonable response steps in accordance with Section C - Response to Excursions and Exceedances. Failure to take response steps in accordance with Section C - Response to Excursions and Exceedances, shall be considered a deviation from this permit.
- (c) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation.
- (d) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.
- (e) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.

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

### **D.9.4 Record Keeping Requirements**

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- (a) To document compliance with Condition D.9.3, the Permittee shall maintain records of visible observations, and any resulting visible emission notations of the Waste Disposal Area and the Material Storage Runoff Pond area, and records of visible emission notations relating to any active onsite landfill area(s).
  
- (b) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

## SECTION D.10 FACILITY OPERATION CONDITIONS - Emergency Generator

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

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

- (e) Emergency generators as follows: Diesel generators not exceeding 1600 horsepower.  
[326 IAC 7]

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

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

#### D.10.1 Sulfur Dioxide (SO<sub>2</sub>) [326 IAC 7-1.1-2]

Pursuant to 326 IAC 7-1.1-2 (Sulfur Dioxide Emission Limitations), the SO<sub>2</sub> emissions from the diesel-fired emergency generator(s) shall not exceed 0.5 pounds per million Btu (lbs/MMBtu).

### Compliance Determination Requirements

#### D.10.2 Sulfur Dioxide Emissions and Sulfur Content [326 IAC 3] [326 IAC 7-2] [326 IAC 7-1.1-2]

Compliance with Condition D.10.1 shall be determined utilizing one of the following options:

- (a) Pursuant to 326 IAC 7-2-1(c), the Permittee shall demonstrate that the sulfur dioxide emissions from the emergency generator(s) do not exceed the equivalent of five-tenths (0.5) pound per million Btu heat input.
- (b) Pursuant to 326 IAC 7-2-1(e) and 326 IAC 3-7-4, fuel sampling and analysis data shall be collected as follows:
- (1) The Permittee may rely upon vendor analysis of fuel delivered, if accompanied by a vendor certification [326 IAC 3-7-4(b)]; or,
  - (2) The Permittee shall perform sampling and analysis of fuel oil samples in accordance with 326 IAC 3-7-4(a).
    - (A) Oil samples shall be collected from the tanker truck load prior to transferring fuel to the storage tank; or
    - (B) Oil samples shall be collected from the storage tank immediately after each addition of fuel to the tank.

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

#### D.10.3 Record Keeping Requirements

- (a) To document compliance with the requirements in Conditions D.10.1 and D.10.2, the Permittee shall maintain records of all fuel sampling and analysis data, pursuant to 326 IAC 7-2. Records shall be complete and sufficient to establish compliance with the SO<sub>2</sub> limit in Condition D.10.1.
- (b) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

## SECTION D.11 FACILITY OPERATION CONDITIONS - Additional Insignificant Activities

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

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

- (c) The following equipment related to manufacturing activities not resulting in the emission of HAPs: brazing equipment, cutting torches, soldering equipment, welding equipment. [326 IAC 6-3]
- (d) Any of the following structural steel and bridge fabrication activities: [326 IAC 6-3]
  - (1) Cutting 200,000 linear feet or less of one inch (10) plate or equivalent.
  - (2) Using 80 tons or less of welding consumables.
- (f) Grinding and machining operations controlled with fabric filters, scrubbers, mist collectors, wet collectors and electrostatic precipitators with a design grain loading of less than or equal to 0.03 grains per actual cubic foot and a gas flow rate less than or equal to 4000 actual cubic feet per minute, including the following: deburring; buffing; polishing; abrasive blasting; pneumatic conveying; and woodworking operations. [326 IAC 6-3]
- (g) Other activities or categories not previously identified with potential, uncontrolled emissions equal to or less than thresholds require listing only: Pb 0.6 ton per year or 3.29 pounds per day, SO<sub>2</sub> 5 pounds per hour or 25 pounds per day, NO<sub>x</sub> 5 pounds per hour or 25 pounds per day, CO 25 pounds per day, PM 5 pounds per hour or 25 pounds per day, VOC 3 pounds per hour or 15 pounds per day: [326 IAC 6-3]
  - (4) Shot blasters. [326 IAC 6-3]

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

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

#### D.11.1 Particulate [326 IAC 6-3-2]

- (a) Pursuant to 326 IAC 6-3-2(e)(2), particulate emissions from any process not exempt under 326 IAC 6-3-1(b) or (c) which has a maximum process weight rate less than 100 pounds per hour and the methods in 326 IAC 6-3-2(b) through (d) do not apply shall not exceed 0.551 pounds per hour.
- (b) Pursuant to 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes), particulate emission rate from the brazing, cutting, soldering, welding, grinding, and machining operations shall not exceed an amount determined by the following, for a process weight rate equal to or greater than 100 pounds per hour:

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:

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

## SECTION E TITLE IV CONDITIONS

ORIS Code: 6085

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

- (a) One (1) cyclone coal-fired boiler identified as Unit 14, with construction commenced in 1970 and commercial operation begun in 1976, with a design heat input capacity of 4,650 million Btu per hour (MMBTU/hr), combusting No. 2 fuel oil and/or natural gas for ignition and as supplemental fuels, using an electrostatic precipitator (ESP) for control of particulate matter and exhausting to stack 14. Unit 14 has a selective catalytic reduction (SCR) system, and has continuous emissions monitoring systems (CEMS) for monitoring nitrogen oxides (NO<sub>x</sub>) and sulfur dioxide (SO<sub>2</sub>) and a continuous opacity monitoring (COM) system.
- (b) One (1) dry bottom pulverized coal-fired boiler identified as Unit 15, with construction commenced in 1974 and commercial operation begun in 1979, with a design heat input capacity of 5,100 million Btu per hour (MMBTU/hr), with low NO<sub>x</sub> burners (replaced in 2008-2009), combusting No. 2 fuel oil and/or natural gas for ignition and as supplemental fuels, using an electrostatic precipitator (ESP) with a flue gas conditioning (FGC) system for control of particulate matter, and exhausting to stack 15. Unit 15 has continuous emissions monitoring systems (CEMS) for monitoring nitrogen oxides (NO<sub>x</sub>) and sulfur dioxide (SO<sub>2</sub>) and a continuous opacity monitoring (COM) system.
- (c) One (1) dry bottom pulverized coal-fired boiler identified as Unit 17, with construction started in 1980 and commercial operation begun in 1983, with a design heat input capacity of 3,967 million Btu per hour (MMBTU/hr), with low NO<sub>x</sub> burners, combusting No. 2 fuel oil and/or natural gas for ignition and as supplemental fuels, using an electrostatic precipitator (ESP) for control of particulate matter, and exhausting through a limestone-based flue gas desulfurization system to stack 17. Unit 17 is equipped with continuous emissions monitoring systems (CEMS) for monitoring nitrogen oxides (NO<sub>x</sub>) and sulfur dioxide (SO<sub>2</sub>) and a continuous opacity monitoring (COM) system. Unit 17 has been approved to fire blends of coal and petroleum coke.
- (d) One (1) dry bottom pulverized coal-fired boiler identified as Unit 18, with construction started in 1980 and commercial operation begun in 1986, with a design heat input capacity of 3,967 million Btu per hour (MMBTU/hr), with low NO<sub>x</sub> burners, combusting No. 2 fuel oil and/or natural gas for ignition and as supplemental fuels, using an electrostatic precipitator (ESP) for control of particulate matter, and exhausting through a limestone-based flue gas desulfurization system to stack 18. Unit 18 has continuous emissions monitoring systems (CEMS) for monitoring nitrogen oxides (NO<sub>x</sub>) and sulfur dioxide (SO<sub>2</sub>) and a continuous opacity monitoring (COM) system. Unit 18 has been approved to fire blends of coal and petroleum coke.
- (e) Two (2) natural gas-fired combustion turbines, identified as 16A and 16B, constructed in 1979, each with a design heat input capacity of 1,450 million Btu per hour (MMBtu/hr), each using water injection as needed for NO<sub>x</sub> control, exhausting to stacks 16A and 16B, respectively. Units 16A and 16B have continuous emissions monitoring systems (CEMS) for monitoring nitrogen oxides (NO<sub>x</sub>) for use during the ozone control period, and continuous monitoring systems to measure the water to fuel ratio.

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

## Acid Rain Program

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

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

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

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

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

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

**ORIS Code: 6085**

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

- (a) One (1) cyclone coal-fired boiler identified as Unit 14, with construction commenced in 1970 and commercial operation begun in 1976, with a design heat input capacity of 4,650 million Btu per hour (MMBTU/hr), combusting No. 2 fuel oil and/or natural gas for ignition and as supplemental fuels, using an electrostatic precipitator (ESP) for control of particulate matter and exhausting to stack 14. Unit 14 has a selective catalytic reduction (SCR) system, and has continuous emissions monitoring systems (CEMS) for monitoring nitrogen oxides (NO<sub>x</sub>) and sulfur dioxide (SO<sub>2</sub>) and a continuous opacity monitoring (COM) system.
- (b) One (1) dry bottom pulverized coal-fired boiler identified as Unit 15, with construction commenced in 1974 and commercial operation begun in 1979, with a design heat input capacity of 5,100 million Btu per hour (MMBTU/hr), with low NO<sub>x</sub> burners (replaced in 2008-2009), combusting No. 2 fuel oil and/or natural gas for ignition and as supplemental fuels, using an electrostatic precipitator (ESP) with a flue gas conditioning (FGC) system for control of particulate matter, and exhausting to stack 15. Unit 15 has continuous emissions monitoring systems (CEMS) for monitoring nitrogen oxides (NO<sub>x</sub>) and sulfur dioxide (SO<sub>2</sub>) and a continuous opacity monitoring (COM) system.
- (c) One (1) dry bottom pulverized coal-fired boiler identified as Unit 17, with construction started in 1980 and commercial operation begun in 1983, with a design heat input capacity of 3,967 million Btu per hour (MMBTU/hr), with low NO<sub>x</sub> burners, combusting No. 2 fuel oil and/or natural gas for ignition and as supplemental fuels, using an electrostatic precipitator (ESP) for control of particulate matter, and exhausting through a limestone-based flue gas desulfurization system to stack 17. Unit 17 is equipped with continuous emissions monitoring systems (CEMS) for monitoring nitrogen oxides (NO<sub>x</sub>) and sulfur dioxide (SO<sub>2</sub>) and a continuous opacity monitoring (COM) system. Unit 17 has been approved to fire blends of coal and petroleum coke.
- (d) One (1) dry bottom pulverized coal-fired boiler identified as Unit 18, with construction started in 1980 and commercial operation begun in 1986, with a design heat input capacity of 3,967 million Btu per hour (MMBTU/hr), with low NO<sub>x</sub> burners, combusting No. 2 fuel oil and/or natural gas for ignition and as supplemental fuels, using an electrostatic precipitator (ESP) for control of particulate matter, and exhausting through a limestone-based flue gas desulfurization system to stack 18. Unit 18 has continuous emissions monitoring systems (CEMS) for monitoring nitrogen oxides (NO<sub>x</sub>) and sulfur dioxide (SO<sub>2</sub>) and a continuous opacity monitoring (COM) system. Unit 18 has been approved to fire blends of coal and petroleum coke.
- (e) Two (2) natural gas-fired combustion turbines, identified as 16A and 16B, constructed in 1979, each with a design heat input capacity of 1,450 million Btu per hour (MMBtu/hr), each using water injection as needed for NO<sub>x</sub> control, exhausting to stacks 16A and 16B, respectively. Units 16A and 16B have continuous emissions monitoring systems (CEMS) for monitoring nitrogen oxides (NO<sub>x</sub>) for use during the ozone control period, and continuous monitoring systems to measure the water to fuel ratio.

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

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

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

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

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- (a) The owners and operators of the NO<sub>x</sub> budget source and each NO<sub>x</sub> budget unit shall operate each unit in compliance with this NO<sub>x</sub> budget permit.
- (b) The NO<sub>x</sub> budget units subject to this NO<sub>x</sub> budget permit are Unit 14, Unit 15, Unit 17, Unit 18, Unit 16A, and Unit 16B.

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

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

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

---

- (a) The owners and operators of the NO<sub>x</sub> budget source and each NO<sub>x</sub> budget unit at the source shall hold NO<sub>x</sub> allowances available for compliance deductions under 326 IAC 10-4-10(j), as of the NO<sub>x</sub> allowance transfer deadline, in each unit's compliance account and the source's overdraft account in an amount:
  - (1) Not less than the total NO<sub>x</sub> emissions for the ozone control period from the unit, as determined in accordance with 40 CFR 75 and 326 IAC 10-4-12;
  - (2) To account for excess emissions for a prior ozone control period under 326 IAC 10-4-10(k)(5); or
  - (3) To account for withdrawal from the NO<sub>x</sub> budget trading program, or a change in regulatory status of a NO<sub>x</sub> budget opt-in unit.
- (b) Each ton of NO<sub>x</sub> emitted in excess of the NO<sub>x</sub> budget emissions limitation shall constitute a separate violation of the Clean Air Act (CAA) and 326 IAC 10-4.
- (c) Each NO<sub>x</sub> budget unit shall be subject to the requirements under (a) above and 326 IAC 10-4-4(c)(1) starting on May 31, 2004.
- (d) NO<sub>x</sub> allowances shall be held in, deducted from, or transferred among NO<sub>x</sub> allowance tracking system accounts in accordance with 326 IAC 10-4-9 through 11, 326 IAC 10-4-13, and 326 IAC 10-4-14.
- (e) A NO<sub>x</sub> allowance shall not be deducted, in order to comply with the requirements under (a) above and 326 IAC 10-4-4(c)(1), for an ozone control period in a year prior to the year for which the NO<sub>x</sub> allowance was allocated.

- (f) A NO<sub>x</sub> allowance allocated under the NO<sub>x</sub> budget trading program is a limited authorization to emit one (1) ton of NO<sub>x</sub> in accordance with the NO<sub>x</sub> budget trading program. No provision of the NO<sub>x</sub> budget trading program, the NO<sub>x</sub> budget permit application, the NO<sub>x</sub> budget permit, or an exemption under 326 IAC 10-4-3 and no provision of law shall be construed to limit the authority of the U.S. EPA or IDEM, OAQ to terminate or limit the authorization.
- (g) A NO<sub>x</sub> allowance allocated under the NO<sub>x</sub> budget trading program does not constitute a property right.
- (h) Upon recordation by the U.S. EPA under 326 IAC 10-4-10, 326 IAC 10-4-11, or 326 IAC 10-4-13, every allocation, transfer, or deduction of a NO<sub>x</sub> allowance to or from each NO<sub>x</sub> budget unit's compliance account or the overdraft account of the source where the unit is located is deemed to amend automatically, and become a part of, this NO<sub>x</sub> budget permit of the NO<sub>x</sub> budget unit by operation of law without any further review.

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

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

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

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

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

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

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

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

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- (a) The NO<sub>x</sub> authorized account representative of the NO<sub>x</sub> budget source and each NO<sub>x</sub> budget unit at the source shall submit the reports and compliance certifications required under the NO<sub>x</sub> budget trading program, including those under 326 IAC 10-4-8, 326 IAC 10-4-12, or 326 IAC 10-4-13.
- (b) Pursuant to 326 IAC 10-4-4(e) and 326 IAC 10-4-6(e)(1), each submission shall include the following certification statement by the NO<sub>x</sub> authorized account representative: "I am authorized to make this submission on behalf of the owners and operators of the NO<sub>x</sub> budget sources or NO<sub>x</sub> budget units for which the submission is made. I certify under penalty of law that I have personally examined, and am familiar with, the statements and information submitted in this document and all its attachments. Based on my inquiry of those individuals with primary responsibility for obtaining the information, I certify that the statements and information are to the best of my knowledge and belief true, accurate, and complete. I am aware that there are significant penalties for submitting false statements and information or omitting required statements and information, including the possibility of fine or imprisonment."
- (c) Where 326 IAC 10-4 requires a submission to IDEM, OAQ, the NO<sub>x</sub> authorized account representative shall submit required information to:  
  
Indiana Department of Environmental Management  
Office of Air Quality  
100 North Senate Avenue  
MC 61-53, IGCN 1003  
Indianapolis, Indiana 46204-2251
- (d) Where 326 IAC 10-4 requires a submission to U.S. EPA, the NO<sub>x</sub> authorized account representative shall submit required information to:  
  
U.S. Environmental Protection Agency  
Clean Air Markets Division  
1200 Pennsylvania Avenue, NW  
Mail Code 6204N  
Washington, DC 20460

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

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

- (a) Any person who knowingly violates any requirement or prohibition of the NO<sub>x</sub> budget trading program, a NO<sub>x</sub> budget permit, or an exemption under 326 IAC 10-4-3 shall be subject to enforcement pursuant to applicable state or federal law.
- (b) Any person who knowingly makes a false material statement in any record, submission, or report under the NO<sub>x</sub> budget trading program shall be subject to criminal enforcement pursuant to the applicable state or federal law.

- (c) No permit revision shall excuse any violation of the requirements of the NO<sub>x</sub> budget trading program that occurs prior to the date that the revision takes effect.
- (d) Each NO<sub>x</sub> budget source and each NO<sub>x</sub> budget unit shall meet the requirements of the NO<sub>x</sub> budget trading program.
- (e) Any provision of the NO<sub>x</sub> budget trading program that applies to a NO<sub>x</sub> budget source, including a provision applicable to the NO<sub>x</sub> authorized account representative of a NO<sub>x</sub> budget source, shall also apply to the owners and operators of the source and of the NO<sub>x</sub> budget units at the source.
- (f) Any provision of the NO<sub>x</sub> budget trading program that applies to a NO<sub>x</sub> budget unit, including a provision applicable to the NO<sub>x</sub> authorized account representative of a NO<sub>x</sub> budget unit, shall also apply to the owners and operators of the unit. Except with regard to the requirements applicable to units with a common stack under 40 CFR 75 and 326 IAC 10-4-12, the owners and operators and the NO<sub>x</sub> authorized account representative of one (1) NO<sub>x</sub> budget unit shall not be liable for any violation by any other NO<sub>x</sub> budget unit of which they are not owners or operators or the NO<sub>x</sub> authorized account representative and that is located at a source of which they are not owners or operators or the NO<sub>x</sub> authorized account representative.

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

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

## INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT OFFICE OF AIR QUALITY

### PART 70 OPERATING PERMIT CERTIFICATION

Source Name: NIPSCO R. M. Schahfer Generating Station  
Source Address: Environmental, Health & Safety Department,  
2723 East, 1500 North, Wheatfield, Indiana, 46392  
Mailing Address: 801 E. 86th Avenue, Merrillville, Indiana, 46410  
Part 70 Permit No.: T 073-6792-00008

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

Please check what document is being certified:

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

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

Signature:

Printed Name:

Title/Position:

Phone:

Date:

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT  
OFFICE OF AIR QUALITY  
COMPLIANCE BRANCH  
100 North Senate Avenue  
MC 61-53, IGCN 1003  
Indianapolis, Indiana 46204-2251  
Phone: 317-233-0178  
Fax: 317-233-6865**

**PART 70 OPERATING PERMIT  
EMERGENCY OCCURRENCE REPORT**

Source Name: NIPSCO R. M. Schahfer Generating Station  
Source Address: Environmental, Health & Safety Department,  
2723 East, 1500 North, Wheatfield, Indiana, 46392  
Mailing Address: 801 E. 86th Avenue, Merrillville, Indiana, 46410  
Part 70 Permit No.: T 073-6792-00008

**This form consists of 2 pages**

**Page 1 of 2**

<input type="checkbox"/> This is an emergency as defined in 326 IAC 2-7-1(12) <ul style="list-style-type: none"><li>• The Permittee must notify the Office of Air Quality (OAQ), within four (4) business hours (1-800-451-6027 or 317-233-0178, ask for Compliance Section); and</li><li>• The Permittee must submit notice in writing or by facsimile within two (2) days (Facsimile Number: 317-233-6865), and follow the other requirements of 326 IAC 2-7-16.</li></ul>
------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

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

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

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

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

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

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: NIPSCO R. M. Schahfer Generating Station  
Source Address: Environmental, Health & Safety Department,  
2723 East, 1500 North, Wheatfield, Indiana, 46392  
Mailing Address: 801 E. 86th Avenue, Merrillville, Indiana, 46410  
Part 70 Permit No.: T 073-6792-00008  
Facility: Turbine 16A  
Parameter: Operating Hours  
Limit: Less than 2,000 hours per twelve (12) consecutive month period with compliance determined at the end of each month

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

Month	Column 1	Column 2	Column 1 + Column 2
	This Month	Previous 11 Months	12 Month Total
Month 1			
Month 2			
Month 3			

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

Submitted By: \_\_\_\_\_

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

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

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

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

Attach a signed certification to complete this report.

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

## Part 70 Quarterly Report

Source Name: NIPSCO R. M. Schahfer Generating Station  
Source Address: Environmental, Health & Safety Department,  
2723 East, 1500 North, Wheatfield, Indiana, 46392  
Mailing Address: 801 E. 86th Avenue, Merrillville, Indiana, 46410  
Part 70 Permit No.: T 073-6792-00008  
Facility: Turbine 16B  
Parameter: Operating Hours  
Limit: Less than 2,000 hours per twelve (12) consecutive month period with compliance determined at the end of each month

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

Month	Column 1	Column 2	Column 1 + Column 2
	This Month	Previous 11 Months	12 Month Total
Month 1			
Month 2			
Month 3			

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

Submitted By: \_\_\_\_\_

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

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

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

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

Attach a signed certification to complete this report.

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

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

Source Name: NIPSCO R. M. Schahfer Generating Station  
Source Address: Environmental, Health & Safety Department,  
2723 East, 1500 North, Wheatfield, Indiana, 46392  
Mailing Address: 801 E. 86th Avenue, Merrillville, Indiana, 46410  
Part 70 Permit No.: T 073-6792-00008

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

Page 1 of 2

<p>This report shall be submitted quarterly based on a calendar year. Any deviation from the requirements, the date(s) of each deviation, the probable cause of the deviation, and the response steps taken must be reported. A deviation required to be reported pursuant to an applicable requirement that exists independent of the permit, shall be reported according to the schedule stated in the applicable requirement and does not need to be included in this report. Additional pages may be attached if necessary. If no deviations occurred, please specify in the box marked "No deviations occurred this reporting period".</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 (specify permit condition #)</b>	
<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 (specify permit condition #)</b>	
<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 (specify permit condition #)</b>	
<b>Date of Deviation:</b>	<b>Duration of Deviation:</b>
<b>Number of Deviations:</b>	
<b>Probable Cause of Deviation:</b>	
<b>Response Steps Taken:</b>	

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

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

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

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

Attach a signed certification to complete this report.



# INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

*We Protect Hoosiers and Our Environment.*

*Mitchell E. Daniels Jr.*  
Governor

*Thomas W. Easterly*  
Commissioner

100 North Senate Avenue  
Indianapolis, Indiana 46204  
(317) 232-8603  
Toll Free (800) 451-6027  
[www.idem.IN.gov](http://www.idem.IN.gov)

## ATTACHMENT A to the PART 70 OPERATING PERMIT

### TITLE IV (ACID RAIN) PERMIT RENEWAL OFFICE OF AIR QUALITY

**Northern Indiana Public Service Company (NIPSCO)  
R.M. Schahfer Generating Station  
2723 East 1500 North  
Wheatfield, Indiana 46392**

**ORIS: 6085**

The owners and operators (hereinafter collectively known as the Permittee) of the above source are issued this permit under the provisions of 326 Indiana Administrative Code (IAC) 21 with conditions listed on the attached pages.

Operation Permit No.: AR 073-19674-00008	
Issued by: original signed by:  Nisha Sizemore, Chief Permits Branch Office of Air Quality	Issuance Date: August 21, 2006  Expiration Date: August 21, 2011

## Title IV Operating Conditions

### Title IV Source Description:

- (a) One (1) cyclone coal-fired boiler identified as Unit 14, with a design heat input capacity of 4,650 million Btu per hour (MMBtu/hr), combusting No. 2 fuel oil and/or natural gas for ignition and as supplemental fuels, using an electrostatic precipitator (ESP) for control of particulate matter and exhausting to stack 14. Unit 14 has a selective catalytic reduction (SCR) system, and has continuous emissions monitoring systems (CEMS) for monitoring nitrogen oxides (NO<sub>x</sub>) and sulfur dioxide (SO<sub>2</sub>) and a continuous opacity monitoring (COM) system.
- (b) One (1) dry bottom pulverized coal-fired boiler identified as Unit 15, with a design heat input capacity of 5,100 million Btu per hour (MMBtu/hr), with low NO<sub>x</sub> burners (replaced in 2008-2009), combusting No. 2 fuel oil and/or natural gas for ignition and as supplemental fuels, using an electrostatic precipitator (ESP) with a flue gas conditioning (FGC) system for control of particulate matter, and exhausting to stack 15. Unit 15 has continuous emissions monitoring systems (CEMS) for monitoring nitrogen oxides (NO<sub>x</sub>) and sulfur dioxide (SO<sub>2</sub>) and a continuous opacity monitoring (COM) system.
- (c) One (1) dry bottom pulverized coal-fired boiler identified as Unit 17, with a design heat input capacity of 3,967 million Btu per hour (MMBtu/hr), with low NO<sub>x</sub> burners, combusting No. 2 fuel oil and/or natural gas for ignition and as supplemental fuels, using an electrostatic precipitator (ESP) for control of particulate matter, and exhausting through a limestone-based flue gas desulfurization system to stack 17. Unit 17 is equipped with continuous emissions monitoring systems (CEMS) for monitoring nitrogen oxides (NO<sub>x</sub>) and sulfur dioxide (SO<sub>2</sub>) and a continuous opacity monitoring (COM) system. Unit 17 has been approved to fire blends of coal and petroleum coke.
- (d) One (1) dry bottom pulverized coal-fired boiler identified as Unit 18, with a design heat input capacity of 3,967 million Btu per hour (MMBtu/hr), with low NO<sub>x</sub> burners, combusting No. 2 fuel oil and/or natural gas for ignition and as supplemental fuels, using an electrostatic precipitator (ESP) for control of particulate matter, and exhausting through a limestone-based flue gas desulfurization system to stack 18. Unit 18 has continuous emissions monitoring systems (CEMS) for monitoring nitrogen oxides (NO<sub>x</sub>) and sulfur dioxide (SO<sub>2</sub>) and a continuous opacity monitoring (COM) system. Unit 18 has been approved to fire blends of coal and petroleum coke.
- (e) Two (2) natural gas-fired combustion turbines, identified as 16A and 16B, constructed in 1979, each with a design heat input capacity of 1,450 million Btu per hour (MMBtu/hr), each using water injection as needed for NO<sub>x</sub> control, exhausting to stacks 16A and 16B, respectively. Units 16A and 16B have continuous emissions monitoring systems (CEMS) for monitoring nitrogen oxides (NO<sub>x</sub>) for use during the ozone control period, and continuous monitoring systems to measure the water to fuel ratio.

(The information contained in this box is descriptive information and does not constitute enforceable conditions.)

### 1. Statutory and Regulatory Authorities

In accordance with IC 13-17-3-4 and IC 13-17-3-11 as well as Titles IV and V of the Clean Air Act, the Indiana Department of Environmental Management (IDEM), Office of Air Quality (OAQ) issues this permit pursuant to 326 IAC 2 and 326 IAC 21 (incorporates by reference 40 Code of Federal Regulations (CFR) 72 through 78).

### 2. Standard Permit Requirements [326 IAC 21]

- (a) The designated representative has submitted a complete acid rain permit application in accordance with in 40 CFR 72.30.
- (b) The Permittee shall operate Units 14, 15, 17, and 18 in compliance with this permit.

3. Monitoring Requirements [326 IAC 21]

- (a) The Permittee and, to the extent applicable, the designated representative of Units 14, 15, 17, and 18 shall comply with the monitoring requirements as provided in 40 CFR 75 and 76.
- (b) The emissions measurements recorded and reported in accordance with 40 CFR 75 and 76 shall be used to determine compliance by Units 14, 15, 17, and 18 with the acid rain emissions limitations and emissions reduction requirements for sulfur dioxide and nitrogen oxides under the Acid Rain Program.
- (c) The requirements of 40 CFR 75 and 76 shall not affect the responsibility of the Permittee to monitor emissions of other pollutants or other emissions characteristics at Units 14, 15, 17, and 18 under other applicable requirements of the Clean Air Act and other provisions of the operating permit for the source.

4. Sulfur Dioxide Requirements [326 IAC 21]

- (a) The Permittee shall:
  - (1) Hold allowances, as of the allowance transfer deadline (as defined in 40 CFR 72.2), in the compliance subaccount of Units 14, 15, 17, and 18, after deductions under 40 CFR 73.34(c), not less than the total annual emissions of sulfur dioxide for the previous calendar year from Units 14, 15, 17, and 18; and,
  - (2) Comply with the applicable acid rain emissions limitations for sulfur dioxide.
- (b) Each ton of sulfur dioxide emitted in excess of the acid rain emissions limitations for sulfur dioxide shall constitute a separate violation of the Clean Air Act.
- (c) Units 14, 15, 17, and 18 shall be subject to the requirements under paragraph 4(a) of the sulfur dioxide requirements as follows:
  - (1) Starting January 1, 2000, an affected unit under 40 CFR 72.6(a)(2); or,
  - (2) Starting on the latter of January 1, 2000, or the deadline for monitor certification under 40 CFR 75, an affected unit under 40 CFR 72.6(a)(3).
- (d) Allowances shall be held in, deducted from, or transferred among Allowance Tracking System accounts in accordance with the Acid Rain Program.
- (e) An allowance shall not be deducted in order to comply with the requirements under paragraph 4(a) of the sulfur dioxide requirements prior to the calendar year for which the allowance was allocated.
- (f) An allowance allocated by the U.S. EPA under the Acid Rain Program is a limited authorization to emit sulfur dioxide in accordance with the Acid Rain Program. No provision of the Acid Rain Program, the acid rain permit application, the acid rain permit, the acid rain portion of an operating permit, or the written exemption under 40 CFR 72.7 and 72.8 and 326 IAC 21, and no provision of law shall be construed to limit the authority of the United States to terminate or limit such authorization.
- (g) An allowance allocated by U.S. EPA under the Acid Rain Program does not constitute a property right.
- (h) No permit revision may be required for increases in emissions that are authorized by allowances acquired pursuant to the Acid Rain Program, provided that the increases do not require a permit revision under any other applicable requirement.  
[326 IAC 2-7-5(4)(A)]

- (i) No limit shall be placed on the number of allowances held by the Permittee. The Permittee may not, however, use allowances as a defense to noncompliance with any applicable requirement other than the requirements of the Acid Rain Program. [326 IAC 2-7-5(4)(B)]
- (j) Units 16A and 16B are natural gas fired and have no annual allocated sulfur dioxide emission allowances established in the Title IV Acid Rain Program. The units will be required to seek sulfur dioxide emission allowances from other units, in order to account for all sulfur dioxide emissions, as required by 40 CFR 72.9(c).
- (k) Sulfur dioxide allowances have been allocated to units at the source as follows:

SO <sub>2</sub> Annual Allowance Allocations (tons)					
	2005	2006	2007	2008	2009
Unit 14	10,355*	10,355*	10,355*	10,355*	10,355*
Unit 15	10,692*	10,692*	10,692*	10,692*	10,692*
Unit 17	5,222*	5,222*	5,222*	5,222*	5,222*
Unit 18	5,187*	5,187*	5,187*	5,187*	5,187*

\* The number of allowances allocated to Phase II affected units by U.S. EPA may change in a revision to 40 CFR 73 Tables 2, 3 and 4 and 326 IAC 21. In addition, the number of allowances actually held by an affected source in a unit account may differ from the number allocated by U.S. EPA. Neither of the aforementioned conditions necessitates a revision to the unit SO<sub>2</sub> allowance allocations identified in this permit. (See 40 CFR 72.84)

5. Nitrogen Oxides Requirements [326 IAC 21]

- (a) The Permittee shall comply with the applicable acid rain emissions limitation of nitrogen oxides (NO<sub>x</sub>) for Units 14, 15, 17, and 18.
- (b) NO<sub>x</sub> Emission Averaging Plan for Unit 14:
  - (1) Pursuant to 40 CFR 76.11, the Indiana Department of Environmental Management, Office of Air Quality approves a NO<sub>x</sub> emission averaging plan for Unit 14, effective from calendar year 2008 through 2011. Under the plan, the NO<sub>x</sub> emissions from Unit 14 shall be averaged with the NO<sub>x</sub> emissions for Unit 15 located at NIPSCO - RM Schahfer Generating Station (ORIS 6085), Units 7 and 8 located at NIPSCO - Bailly Generating Station (ORIS 995), and Unit 12 located at NIPSCO - Michigan City Generating Station (ORIS 997).
  - (2) Under the plan, except as provided in paragraph (b)(3) of this condition, Unit 14 shall not exceed the annual average alternative contemporaneous emission limitation (ACEL) of 0.65 lb/MMBtu and shall not have an annual heat input less than 13,800,000 MMBtu. Beginning January 1, 2012, Unit 14 shall not exceed the standard annual average NO<sub>x</sub> emission limitation under 40 CFR 76.6(a)(2) of 0.86 lb/mmBtu for cyclone boilers, unless the designated representative timely submits a different NO<sub>x</sub> compliance plan in the Acid Rain permit renewal application required by 40 CFR 76.9(d) and 72.30(c). As provided by 40 CFR 72.32(c), a complete Acid Rain permit application (including a new or revised NO<sub>x</sub> compliance plan) is binding and shall be enforceable as an Acid Rain permit from the date of submission of the permit application until the issuance or denial of an Acid Rain permit covering the units.
  - (3) Under the plan, the actual Btu-weighted annual average NO<sub>x</sub> emission rate for all the units in the plan shall be 0.76 lb/MMBtu. In addition, the actual Btu-weighted annual average NO<sub>x</sub> emission rate for all the units in the plan shall be less than or equal to the Btu-weighted annual average NO<sub>x</sub> emission rate for the same units

had they each been operated, during the same period of time, in compliance with the applicable emission limitations under 40 CFR 76.5. If the designated representative demonstrates that the requirement of the prior sentence (as set forth in 40 CFR 76.11) is met for a year under the plan, then Unit 14 shall be deemed to be in compliance for that year with its alternative contemporaneous annual emission limitation and annual heat input limit.

(c) NO<sub>x</sub> Emission Averaging Plan for Unit 15:

- (1) Pursuant to 40 CFR 76.11, the Indiana Department of Environmental Management, Office of Air Quality approves a NO<sub>x</sub> emission averaging plan for Unit 15, effective from calendar year 2008 through 2011. Under the plan, the NO<sub>x</sub> emissions from Unit 15 shall be averaged with the NO<sub>x</sub> emissions for Unit 14 located at NIPSCO - RM Schahfer Generating Station (ORIS 6085), Units 7 and 8 located at NIPSCO - Bailly Generating Station (ORIS 995), and Unit 12 located at NIPSCO - Michigan City Generating Station (ORIS 997).
- (2) Under the plan, except as provided in paragraph (c)(3) of this condition, the NO<sub>x</sub> emissions from Unit 15 shall not exceed the annual average alternative contemporaneous emission limitation (ACEL) of 0.25 lb/MMBtu and shall not have an annual heat input less than 25,300,000 MMBtu. Beginning January 1, 2012, Unit 15 shall not exceed the standard annual average NO<sub>x</sub> emission limitation under 40 CFR 76.5(a)(2) of 0.50 lb/MMBtu for dry bottom wall-fired boilers, unless the designated representative timely submits a different NO<sub>x</sub> compliance plan in the Acid Rain permit renewal application required by 40 CFR 76.9(d) and 72.30(c). As provided by 40 CFR 72.32(c), a complete Acid Rain permit application (including a new or revised NO<sub>x</sub> compliance plan) is binding and shall be enforceable as an Acid Rain permit from the date of submission of the permit application until the issuance or denial of an Acid Rain permit covering the units.
- (3) Under the plan, the actual Btu-weighted annual average NO<sub>x</sub> emission rate for all the units in the plan shall be 0.76 lb/MMBtu. In addition, the actual Btu-weighted annual average NO<sub>x</sub> emission rate for all the units in the plan shall be less than or equal to the Btu-weighted annual average NO<sub>x</sub> emission rate for the same units had they each been operated, during the same period of time, in compliance with the applicable emission limitations under 40 CFR 76.5. If the designated representative demonstrates that the requirement of the prior sentence (as set forth in 40 CFR 76.11) is met for a year under the plan, then Unit 15 shall be deemed to be in compliance for that year with its alternative contemporaneous annual emission limitation and annual heat input limit.

(d) NO<sub>x</sub> Emission Compliance Plan for Unit 17:

Pursuant to 40 CFR 76.11, the Indiana Department of Environmental Management, Office of Air Quality approves a standard NO<sub>x</sub> emission compliance plan for Unit 17. Under the plan, the NO<sub>x</sub> emissions from Unit 17 shall not exceed the annual average emission limitation of 0.40 lb/MMBtu for tangentially fired boilers.

(e) NO<sub>x</sub> Emission Compliance Plan for Unit 18:

Pursuant to 40 CFR 76.11, the Indiana Department of Environmental Management, Office of Air Quality approves a standard NO<sub>x</sub> emission compliance plan for Unit 18. Under the plan, the NO<sub>x</sub> emissions from Unit 18 shall not exceed the annual average emission limitation of 0.40 lb/MMBtu for tangentially fired boilers.

- (f) In addition to the described NO<sub>x</sub> compliance plan, Units 14, 15, 17 and 18 shall comply with all other applicable requirements of 40 CFR 76, including the duty to reapply for a NO<sub>x</sub> compliance plan and requirements covering excess emissions.

- (g) Pursuant to 40 CFR 76, Acid Rain Nitrogen Oxides Emission Reduction Program, the natural gas fired combined cycle units, 16A and 16B are not subject to the nitrogen oxide limitations set out in 40 CFR 76.

6. Excess Emissions Requirements [40 CFR 77] [326 IAC 21]

- (a) If Unit 14, 15, 17 or 18 has excess emission of sulfur dioxide in any calendar year, the designated representative shall submit a proposed offset plan to U.S. EPA and IDEM, OAQ as required under 40 CFR 77 and 326 IAC 21.

- (b) The designated representative shall submit required information to:

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

And

Ms. Cecilia Mijares  
Air and Radiation Division  
U.S. Environmental Protection Agency, Region V  
77 West Jackson Boulevard  
Chicago, IL 60604-3590

And

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

- (c) If Unit 14, 15, 17 or 18 has excess emissions, as defined in 40 CFR 72.2, in any calendar year, the Permittee shall:
  - (1) Pay to U.S. EPA without demand the penalty required, and pay to U.S. EPA upon demand the interest on that penalty, as required by 40 CFR 77 and 326 IAC 21; and,
  - (2) Comply with the terms of an approved sulfur dioxide offset plan, as required by 40 CFR 77 and 326 IAC 21.

7. Record Keeping and Reporting Requirements [326 IAC 21]

- (a) Unless otherwise provided, the Permittee shall keep on site each of the following documents for a period of 5 years, as required by 40 CFR 72.9(f), from the date the document is created. This period may be extended for cause, at any time prior to the end of the 5 years, in writing by U.S. EPA or IDEM, OAQ:
  - (1) The certificate of representation for the designated representative of Units 14, 15, 17, and 18, and all documents that demonstrate the truth of the statements in the certificate of representation, in accordance with 40 CFR 72.24; provided that the certificate and documents shall be retained on site at the source beyond such 5 year period until such documents are superseded because of the submission of a new certificate of representation changing the designated representative;
  - (2) All emissions monitoring information collected in accordance with 40 CFR 75 shall be retained on site for 3 years;

- (3) Copies of all reports, compliance certifications, and other submissions and all records made or required under the Acid Rain Program; and,
  - (4) Copies of all documents used to complete an acid rain permit application and any other submission under the Acid Rain Program or to demonstrate compliance with the requirements of the Acid Rain Program.
- (b) The designated representative of Units 14, 15, 17 and 18 shall submit the reports and compliance certifications required under the Acid Rain Program, including those under 40 CFR 72, Subpart I, 40 CFR 75, and 326 IAC 21. The required information is to be submitted to the appropriate authority(ies) as specified in 40 CFR 72.90, Subpart I, and 40 CFR 75.

8. Submissions [326 IAC 21]

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- (a) The designated representative of Units 14, 15, 17, and 18, shall submit a certificate of representation, and any superseding certificate of representation, to U.S. EPA and IDEM, OAQ in accordance with 40 CFR 72 and 326 IAC 21.
- (b) The designated representative shall submit required information to:
- Indiana Department of Environmental Management  
Permits Branch, Office of Air Quality  
100 North Senate Avenue  
MC 61-53, Room 1003  
Indianapolis, IN 46204-2251
- and
- U.S. Environmental Protection Agency  
Clean Air Markets Division  
1200 Pennsylvania Avenue, NW  
Mail Code (6204N)  
Washington, DC 20460
- (c) Each such submission under the Acid Rain Program shall be submitted, signed and certified by the designated representative for all sources on behalf of which the submission is made.
- (d) In each submission under the Acid Rain Program, the designated representative shall certify, by his or her signature, the following statements which shall be included verbatim in the submission:
- (1) "I am authorized to make this submission on behalf of the owners and operators of the affected source or affected units for which the submission is made."; and,
  - (2) "I certify under penalty of law that I have personally examined, and am familiar with, the statements and information submitted in this document and all its attachments. Based on my inquiry of those individuals with primary responsibility for obtaining the information, I certify that the statements and information are to the best of my knowledge and belief true, accurate, and complete. I am aware that there are significant penalties for submitting false statements and information or omitting required statements and information, including the possibility of fine or imprisonment."
- (e) The designated representative of Units 14, 15, 17, and 18, shall notify the Permittee:
- (1) By the date of submission, of any Acid Rain Program submissions by the designated representative;

- (2) Within 10 business days of receipt of any written determination by U.S. EPA or IDEM, OAQ.
- (3) Provided that the submission or determination covers Units 14,15, 17, or 18.
- (f) The designated representative of Units 14, 15, 17, and 18, shall provide the Permittee a copy of any submission or determination under paragraph 8(e) of this section, unless the Permittee expressly waives the right to receive a copy.

9. Severability [326 IAC 21]

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Invalidation of the acid rain portion of an operating permit does not affect the continuing validity of the rest of the operating permit, nor shall invalidation of any other portion of the operating permit affect the continuing validity of the acid rain portion of the permit. [40 CFR 72.72(b), 326 IAC 21, and 326 IAC 2-7-5(5)]

10. Liability [326 IAC 21]

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- (a) Any person who knowingly violates any requirement or prohibition of the Acid Rain Program, an acid rain permit, an acid rain portion of an operation permit, or a written exemption under 40 CFR 72.7 or 72.8, including any requirement for the payment of any penalty owed to the United States, shall be subject to enforcement by U.S. EPA pursuant to Section 113(c) of the Clean Air Act and shall be subject to enforcement by IDEM pursuant to 326 IAC 21 and IC 13-30-3.
- (b) Any person who knowingly makes a false, material statement in any record, submission, or report under the Acid Rain Program shall be subject to criminal enforcement pursuant to Section 113(c) of the Clean Air Act, 18 U.S.C. 1001 and IDEM pursuant to 326 IAC 21 and IC 13-30-6-2.
- (c) No permit revision shall excuse any violation of the requirements of the Acid Rain Program that occurs prior to the date that the revision takes effect.
- (d) Units 14, 15, 17 and 18 shall meet the requirements of the Acid Rain Program.
- (e) Any provision of the Acid Rain Program that applies to Unit 14, 15, 17, or 18, including a provision applicable to the designated representative of Unit 14, 15, 17, or 18, shall also apply to the Permittee.
- (f) Except as provided under 40 CFR 72.44 (Phase II repowering extension plans) and 40 CFR 76.11 (NO<sub>x</sub> averaging plans), and except with regard to the requirements applicable to units with a common stack under 40 CFR 75, including 40 CFR 75.16, 75.17, and 75.18, the Permittee and the designated representative of one affected unit shall not be liable for any violation by any other affected unit of which they are not the Permittee or the designated representative and that is located at a source of which they are not the Permittee or the designated representative.
- (g) Each violation of a provision of 40 CFR 72, 73, 75, 76, 77, and 78 by Units 14, 15, 17 or 18, or by the Permittee or designated representative of Unit 14, 15, 17 or 18, shall be a separate violation of the Clean Air Act.

11. Effect on Other Authorities [326 IAC 21]

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No provision of the Acid Rain Program, an acid rain permit application, an acid rain permit, an acid rain portion of an operation permit, or a written exemption under 40 CFR 72.7 or 72.8 shall be construed as:

- (a) Except as expressly provided in Title IV of the Clean Air Act (42 USC 7651 to 7651(o)), exempting or excluding the Permittee and, to the extent applicable, the designated representative of Unit 14, 15, 17 or 18 from compliance with any other provision of the Clean Air Act, including the provisions of Title I of the Clean Air Act relating to applicable National Ambient Air Quality Standards or State Implementation Plans;

- (b) Limiting the number of allowances a unit can hold; provided, that the number of allowances held by the unit shall not affect the source's obligation to comply with any other provisions of the Clean Air Act;
- (c) Requiring a change of any kind in any state law regulating electric utility rates and charges, affecting any state law regarding such state regulation, or limiting such state regulation, including any prudence review requirements under such state law;
- (d) Modifying the Federal Power Act (16 USC 791(a) et seq.) or affecting the authority of the Federal Energy Regulatory Commission under the Federal Power Act; or,
- (e) Interfering with or impairing any program for competitive bidding for power supply in a state in which such a program is established.

## Indiana Department of Environmental Management Office of Air Quality

### Addendum to the Technical Support Document (TSD) for a Part 70 Significant Source Modification and a Part 70 Significant Permit Modification

#### Source Description and Location

Source Name:	NIPSCO – RM Schahfer Generating Station
Source Location:	2733 East, 1500 North, Wheatfield, Indiana, 46392
County:	Jasper
SIC Code:	4911, 4952
Operation Permit No.:	T 073-6792-00008
Operation Permit Issuance Date:	September 7, 2006
Significant Source Modification No.:	073-26380-00008
Significant Permit Modification No.:	073-26402-00008
Permit Reviewer:	Kimberly Cottrell

#### Public Notice Information

On August 14, 2008, the Office of Air Quality (OAQ) had a notice published in Rennsselaer Republican, in Rennsselaer, Indiana, stating that the NIPSCO – RM Schahfer Generating Station had applied for a significant modification to their Part 70 Operating Permit issued on September 7, 2006 to install new Low NO<sub>x</sub> Burners (LNB) in Unit 15 as a pollution control project in order to reduce NO<sub>x</sub> emissions to meet requirements of phase one of the CAIR (“LNB Project” or “Project”). 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.

The comments are summarized in the subsequent pages, with IDEM’s corresponding responses.

#### NIPSCO Comments and IDEM’s Responses

On September 16, 2008, OAQ received comments from John Ross, on behalf of NIPSCO – RM Schahfer Generating Station. The summary of the comments and IDEM, OAQ responses, including changes to the permit (language deleted is shown in ~~strikeout~~ and language added is shown in **bold**) are as follows:

#### Company Comment 1:

##### Significant Source Modification No. T 073-26380-00008

The third paragraph of the draft cover letter, which is intended to describe the emission units that are approved for modification at the source, refers to the replacement of the LNB as occurring in 2008. NIPSCO notes that this is inconsistent with the language of A.2(b) on page 8 of 94 of the draft permit and request it be harmonized with the language of A.2(b) that states “...(replaced in 2008-2009)...”. This would avoid potential confusion between these paragraphs and be more accurate should the proposed project not be completed by the end of the calendar year.

### **IDEM Response 1:**

The cover letter for Significant Source Modification No. T 073-26380-00008 is revised as follows:

NIPSCO is proposing to install new Low NO<sub>x</sub> Burners (LNB) in Unit 15 as a pollution control project in order to reduce NO<sub>x</sub> emissions to meet requirements of phase one of the CAIR (“LNB Project” or “Project”). The new LNB incorporate an improved over-fire air system with an improved capability to reduce NO<sub>x</sub> emissions. Pursuant to 326 IAC 2-7-10.5 the following emission units are approved for modification at the source:

One (1) dry bottom pulverized coal-fired boiler identified as Unit 15, with construction commenced in 1974 and commercial operation begun in 1979, with a design heat input capacity of 5,100 million Btu per hour (MMBtu/hr), with low NO<sub>x</sub> burners (replaced in ~~2008-2008-2009~~), combusting No. 2 fuel oil and/or natural gas for ignition and as supplemental fuels, using an electrostatic precipitator (ESP) with a flue gas conditioning (FGC) system for control of particulate matter, and exhausting to stack 15. Unit 15 has continuous emissions monitoring systems (CEMS) for monitoring nitrogen oxides (NO<sub>x</sub>) and sulfur dioxide (SO<sub>2</sub>) and a continuous opacity monitoring (COM) system.

### **Company Comment 2:**

NIPSCO understands that IDEM has recently revised its permit template to remove the name of specific individuals from the mailing address portion of the permit in Condition A.1. However, to facilitate timely delivery of any correspondence from IDEM related to this permit, NIPSCO recommends that any such mailings be directed to the attention of the Environmental, Health & Safety department at the address currently listed in A.1. Please make this change throughout the permit, accompanying compliance forms, the technical support document and attachments.

### **IDEM Response 2:**

The following change has been made throughout the permit:

Source Address: **Environmental, Health & Safety Department,**  
2723 East, 1500 North, Wheatfield, Indiana, 46392

### **Company Comment 3:**

Condition B.13(b) references “...by this part 70 operating permit,...”. NIPSCO believes the inclusion of this reference is not appropriate since on page 1 of 94 this document is identified as a “Draft Prevention of Significant Deterioration and Part 70 Significant Source Modification” (No. T 073-26380-00008) and not as a part 70 operating permit. NIPSCO requests that IDEM correct this reference.

### **IDEM Response 3:**

Paragraph (b) of Condition B.13 is revised as follows:

**B.13** Prior Permits Superseded [326 IAC 2-1.1-9.5] [326 IAC 2-7-10.5]

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(b) All previous registrations and permits are superseded by this part 70 operating permit **T 073-6792-00008**, except for permits issued pursuant to Title IV of the Clean Air Act and 326 IAC 21 (Acid Deposition Control).

#### Company Comment 4:

In the process of adding the provisions for the LNB project to Section D.2 of the permit NIPSCO believes renumbering of the existing conditions has resulted in some incorrect references to permit conditions or sections. NIPSCO believes the following corrections are needed in the following two conditions.

- (a) In Condition D.2.12(c), the second line appears to incorrectly reference Condition D.2.11(a) which is a condition that deals with the ESP and particulate matter emissions, not SO<sub>2</sub>. Similarly, the end of the second to the last sentence of Condition D.2.12(c) lists “this Condition D.2.11.” NIPSCO requests that IDEM re-examine these references and correct the references as appropriate. NIPSCO believes the correct references may be to Condition D.2.12.
- (b) Condition D.2.13(b)(4) concerning the ESP cites condition D.2.12 which instead deals with SO<sub>2</sub>. NIPSCO believes that the listing of D.2.12 here is incorrect and should be D.2.11.

#### IDEM Response 4:

Paragraph (c) of Condition D.2.12 and paragraph (b)(4) of Condition D.2.13 are revised as follows:

##### D.2.12 SO<sub>2</sub> Monitoring System Downtime [326 IAC 2-7-6] [326 IAC 2-7-5(3)]

- (c) To the extent the Permittee elects to conduct fuel sampling to comply with Condition ~~D.2.11(a)~~ **D.2.10(a)**, 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 any information collected pursuant to 326 IAC 3-7-2 through 326 IAC 3-7-4 under this Condition ~~D.2.11~~ **D.2.10**. In addition, any revision to the SOP shall be submitted to IDEM, OAQ.

##### D.2.13 Record Keeping Requirements

- (b) ...
- (4) All ESP parametric monitoring readings pursuant to condition ~~D.2.12~~ **D.2.11**.

#### Company Comment 5:

ATTACHMENT A to the PART 70 OPERATING PERMIT  
TITLE IV (ACID RAIN) PERMIT RENEWAL (AR 070-19674-00008)

##### Significant Source Modification No. T 073-26380-00008

The TABLE OF CONTENTS (page 7 of 94) lists an “Attachment A: Acid Rain Permit” as part of the Significant Source Modification No. T 073-26380-00008. However, the “Attachment A: Acid Rain Permit” was not included as part of the document provided by IDEM. This attachment is not appropriate for inclusion in this “Prevention of Significant Deterioration and Part 70 Significant Source Modification” document. Therefore, NIPSCO requests that IDEM revise the TABLE OF CONTENTS for the Significant Source Modification No. T 073-26380-00008 to reflect this.

Significant Permit Modification No. T 073-26402-00008

- (a) In the "Title IV Source Description" box, NIPSCO request the descriptive information for the natural gas turbines in "e" be made consistent with the information in Sections A.2 and the descriptive box in Section D.4 of the Part 70 Operating Permit. For consistency, NIPSCO recommends this change also be made in the descriptive box on page 74 of 94 in the E section of the Part 70 permit and all other descriptive boxes within the permit document that include the natural gas turbines.
- (b) In Condition 4.(k) on page 4 of 9, the allowance allocation box does not include the "\*" in the row for Unit 17. NIPSCO requests that IDEM re-check the appropriateness of inclusion of the "\*" and make adjustments as appropriate.
- (c) In Condition 5.(b)(2) on page 4 of 9, language addressing compliance with the heat input limitation provision and annual average alternative contemporaneous emission limitation should both provide for the alternative contemporaneous emission limitation demonstration allowed in Condition 5.(b)(3). As currently written, Condition 5.(b)(2) incorrectly portrays the requirement. NIPSCO recommends the following language (bold and strikethrough are used to identify additions and deletions, respectively) to correct this:
- Under the plan, **except as provided in paragraph (b)(3) of this condition**, Unit 14 shall not exceed the annual average alternative contemporaneous emission limitation (ACEL) of 0.65 lb/MMBtu, ~~except as provided in paragraph (b)(3) of this condition. In addition, and Unit 14~~ shall not have an annual heat input less than 13,800,000 MMBtu. Beginning January 1, 2012, Unit 14 shall not exceed the standard annual average NO<sub>x</sub> emission limitation under 40 CFR 76.6(a)(2) of 0.86 lb/mmBtu for cyclone boilers, unless the designated representative timely submits a different NO<sub>x</sub> compliance plan in the Acid Rain permit renewal application required by 40 CFR 76.9(d) and 72.30(c). As provided by 40 CFR 72.32(c), a complete Acid Rain permit application (including a new or revised NO<sub>x</sub> compliance plan) is binding and shall be enforceable as an Acid Rain permit from the date of submission of the permit application until the issuance or denial of an Acid Rain permit covering the units.
- (d) In Condition 5.(c)(2) on page 5 of 9, language addressing compliance with the heat input limitation provision and annual average alternative contemporaneous emission limitation should both provide for the alternative contemporaneous emission limitation demonstration allowed in Condition 5.(c)(3). As currently written, Condition 5.(c)(2) incorrectly portrays the requirement. NIPSCO recommends the following language (bold and strikethrough are used to identify additions and deletions, respectively) to correct this:
- Under the plan, **except as provided in paragraph (c)(3) of this condition**, the NO<sub>x</sub> emissions from Unit 15 shall not exceed the annual average alternative contemporaneous emission limitation (ACEL) of 0.25 lb/MMBtu, ~~except as provided in paragraph (c)(3) of this condition. In addition, Unit 15~~ and shall not have an annual heat input less than 25,300,000 MMBtu. Beginning January 1, 2012, Unit 15 shall not exceed the standard annual average NO<sub>x</sub> emission limitation under 40 CFR 76. 5(a)(2) of 0.50 lb/MMBtu for dry bottom wall-fired boilers, unless the designated representative timely submits a different NO<sub>x</sub> compliance plan in the Acid Rain permit renewal application required by 40 CFR 76.9(d) and 72.30(c). As provided by 40 CFR 72.32(c), a complete Acid Rain permit application (including a new or revised NO<sub>x</sub> compliance plan) is binding and shall be enforceable as an Acid Rain permit from the date of submission of the permit application until the issuance or denial of an Acid Rain permit covering the units.
- (e) In Condition 10.(f) on page 8 of 9, the entire first sentence is duplicative of the language in Condition 10.(e). Therefore, NIPSCO recommends the first sentence of Condition 10.(f) be deleted to avoid unnecessary duplication of requirements.

**IDEM Response 5:**

The Facility Description in Section E is revised as follows:

**SECTION E TITLE IV CONDITIONS**

**ORIS Code: 6085**

<p><b>Facility Description [326 IAC 2-7-5(15)]</b></p> <p>(a) - (d) ...</p> <p><del>(e) Two (2) natural gas-fired combustion turbines, identified as 16A and 16B, constructed in 1979, each with a design heat input capacity of 998 million Btu per hour (MMBTU/hr), each using water injection as needed for NO<sub>x</sub> control, exhausting to stacks 16A and 16B, respectively. Units 16A and 16B have continuous emissions monitoring systems (CEMS) for monitoring nitrogen oxides (NO<sub>x</sub>) for use during the ozone control period, and continuous monitoring systems to measure the water to fuel ratio.</del></p> <p><b>(e) Two (2) natural gas-fired combustion turbines, identified as 16A and 16B, constructed in 1979, each with a design heat input capacity of 1,450 million Btu per hour (MMBtu/hr), each using water injection as needed for NO<sub>x</sub> control, exhausting to stacks 16A and 16B, respectively. Units 16A and 16B have continuous emissions monitoring systems (CEMS) for monitoring nitrogen oxides (NO<sub>x</sub>) for use during the ozone control period, and continuous monitoring systems to measure the water to fuel ratio.</b></p> <p>(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)</p>
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The applicable portions of Attachment A, Acid Rain Permit, are revised as follows:

<p><b>Title IV Source Description:</b></p> <p>(a) - (d) ...</p> <p><del>(e) Two (2) natural gas-fired combustion turbines, identified as 16A and 16B, with a design heat input capacity of 998 control, exhausting to stacks 16A and 16B, respectively. Units 16A and 16B have continuous emissions monitoring systems (CEMS) for monitoring nitrogen oxides (NO<sub>x</sub>) for use during the ozone control period, and continuous monitoring systems to measure the water to fuel ratio.</del></p> <p><b>(e) Two (2) natural gas-fired combustion turbines, identified as 16A and 16B, constructed in 1979, each with a design heat input capacity of 1,450 million Btu per hour (MMBtu/hr), each using water injection as needed for NO<sub>x</sub> control, exhausting to stacks 16A and 16B, respectively. Units 16A and 16B have continuous emissions monitoring systems (CEMS) for monitoring nitrogen oxides (NO<sub>x</sub>) for use during the ozone control period, and continuous monitoring systems to measure the water to fuel ratio.</b></p> <p>(The information contained in this box is descriptive information and does not constitute enforceable conditions.)</p>
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4. Sulfur Dioxide Requirements [326 IAC 21]

(k) Sulfur dioxide allowances have been allocated to units at the source as follows:

SO <sub>2</sub> Annual Allowance Allocations (tons)					
	2005	2006	2007	2008	2009
Unit 14	10,355*	10,355*	10,355*	10,355*	10,355*
Unit 15	10,692*	10,692*	10,692*	10,692*	10,692*
Unit 17	5,222	5,222	5,222	5,222	5,222
<b>Unit 17</b>	<b>5,222*</b>	<b>5,222*</b>	<b>5,222*</b>	<b>5,222*</b>	<b>5,222*</b>
Unit 18	5,187*	5,187*	5,187*	5,187*	5,187*

\* The number of allowances allocated to Phase II affected units by U.S. EPA may change in a revision to 40 CFR 73 Tables 2, 3 and 4 and 326 IAC 21. In addition, the number of allowances actually held by an affected source in a unit account may differ from the number allocated by U.S. EPA. Neither of the aforementioned conditions necessitates a revision to the unit SO<sub>2</sub> allowance allocations identified in this permit. (See 40 CFR 72.84)

5. Nitrogen Oxides Requirements [326 IAC 21]

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(b) NO<sub>x</sub> Emission Averaging Plan for Unit 14:

(2) Under the plan, **except as provided in paragraph (b)(3) of this condition**, Unit 14 shall not exceed the annual average alternative contemporaneous emission limitation (ACEL) of 0.65 lb/MMBtu, ~~except as provided in paragraph (b)(3) of this condition. In addition, and~~ Unit 14 shall not have an annual heat input less than 13,800,000 MMBtu. Beginning January 1, 2012, Unit 14 shall not exceed the standard annual average NO<sub>x</sub> emission limitation under 40 CFR 76.6(a)(2) of 0.86 lb/mmBtu for cyclone boilers, unless the designated representative timely submits a different NO<sub>x</sub> compliance plan in the Acid Rain permit renewal application required by 40 CFR 76.9(d) and 72.30(c). As provided by 40 CFR 72.32(c), a complete Acid Rain permit application (including a new or revised NO<sub>x</sub> compliance plan) is binding and shall be enforceable as an Acid Rain permit from the date of submission of the permit application until the issuance or denial of an Acid Rain permit covering the units.

(c) NO<sub>x</sub> Emission Averaging Plan for Unit 15:

(2) Under the plan, **except as provided in paragraph (c)(3) of this condition**, the NO<sub>x</sub> emissions from Unit 15 shall not exceed the annual average alternative contemporaneous emission limitation (ACEL) of 0.25 lb/MMBtu, ~~except as provided in paragraph (c)(3) of this condition. In addition, Unit 15 and~~ shall not have an annual heat input less than 25,300,000 MMBtu. Beginning January 1, 2012, Unit 15 shall not exceed the standard annual average NO<sub>x</sub> emission limitation under 40 CFR 76. 5(a)(2) of 0.50 lb/MMBtu for dry bottom wall-fired boilers, unless the designated representative timely submits a different NO<sub>x</sub> compliance plan in the Acid Rain permit renewal application required by 40 CFR 76.9(d) and 72.30(c). As provided by 40 CFR 72.32(c), a complete Acid Rain permit application (including a new or revised NO<sub>x</sub> compliance plan) is binding and shall be enforceable as an Acid Rain permit from the date of submission of the permit application until the issuance or denial of an Acid Rain permit covering the units.

10. Liability [326 IAC 21]

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- (e) Any provision of the Acid Rain Program that applies to Unit 14, 15, 17, or 18, including a provision applicable to the designated representative of Unit 14, 15, 17, or 18, shall also apply to the Permittee.
- (f) ~~Any provision of the Acid Rain Program that applies to Unit 14, 15, 17 or 18, including a provision applicable to the designated representative of Units 14, 15, 17 and 18, shall also apply to the Permittee.~~ Except as provided under 40 CFR 72.44 (Phase II repowering extension plans) and 40 CFR 76.11 (NO<sub>x</sub> averaging plans), and except with regard to the requirements applicable to units with a common stack under 40 CFR 75, including 40 CFR 75.16, 75.17, and 75.18, the Permittee and the designated representative of one affected unit shall not be liable for any violation by any other affected unit of which they are not the Permittee or the designated representative and that is located at a source of which they are not the Permittee or the designated representative.

**Company Comment 6:**

Given the recent vacature of the federal CAIR rule by the U.S. Court of Appeals for the D.C. Circuit, NIPSCO believe it is inappropriate to include CAIR requirements in the permit and therefore recommend Section G of the draft permit be deleted in its entirety. NIPSCO believes the current uncertainty brought about by the court's vacature makes it premature to include the CAIR provisions and deadlines in the Part 70 permit at this time. In the unlikely event the court decision is overturned, NIPSCO look forward to working with IDEM regarding the appropriate language to be included in the Part 70 permit.

**IDEM Response 6:**

IDEM agrees. The federal Clean Air Interstate Rule (CAIR) was vacated on July 15, 2008; therefore, CAIR requirements have been removed from this permit.

~~SECTION G — Clean Air Interstate (CAIR) Nitrogen Oxides Annual, Sulfur Dioxide, and Nitrogen Oxides Ozone Season Trading Programs — CAIR Permit for CAIR Units Under 326 IAC 24-1-1(a), 326 IAC 24-2-1(a), and 326 IAC 24-3-1(a)~~

~~ORIS Code: — 6085~~

~~CAIR Permit for CAIR Units Under 326 IAC 24-1-1(a), 326 IAC 24-2-1(a), and 326 IAC 24-3-1(a)~~

- ~~(a) — One (1) cyclone coal-fired boiler identified as Unit 14, with construction commenced in 1970 and commercial operation begun in 1976, with a design heat input capacity of 4,650 million Btu per hour (MMBTU/hr), combusting No. 2 fuel oil and/or natural gas for ignition and as supplemental fuels, using an electrostatic precipitator (ESP) for control of particulate matter and exhausting to stack 14. Unit 14 has a selective catalytic reduction (SCR) system, and has continuous emissions monitoring systems (CEMS) for monitoring nitrogen oxides (NO<sub>x</sub>) and sulfur dioxide (SO<sub>2</sub>) and a continuous opacity monitoring (COM) system.~~
- ~~(b) — One (1) dry bottom pulverized coal fired boiler identified as Unit 15, with construction commenced in 1974 and commercial operation begun in 1979, with a design heat input capacity of 5,100 million Btu per hour (MMBTU/hr), with low NO<sub>x</sub> burners (replaced in 2008-2009), combusting No. 2 fuel oil and/or natural gas for ignition and as supplemental fuels, using an electrostatic precipitator (ESP) with a flue gas conditioning (FGC) system for control of particulate matter, and exhausting to stack 15. Unit 15 has continuous emissions monitoring systems (CEMS) for monitoring nitrogen oxides (NO<sub>x</sub>) and sulfur dioxide (SO<sub>2</sub>) and a continuous opacity monitoring~~

(COM) system.

- (c) One (1) dry bottom pulverized coal fired boiler identified as Unit 17, with construction started in 1980 and commercial operation begun in 1983, with a design heat input capacity of 3,967 million Btu per hour (MMBTU/hr), with low NO<sub>x</sub> burners, combusting No. 2 fuel oil and/or natural gas for ignition and as supplemental fuels, using an electrostatic precipitator (ESP) for control of particulate matter, and exhausting through a limestone-based flue gas desulfurization system to stack 17. Unit 17 is equipped with continuous emissions monitoring systems (CEMS) for monitoring nitrogen oxides (NO<sub>x</sub>) and sulfur dioxide (SO<sub>2</sub>) and a continuous opacity monitoring (COM) system. Unit 17 has been approved to fire blends of coal and petroleum coke.
- (d) One (1) dry bottom pulverized coal fired boiler identified as Unit 18, with construction started in 1980 and commercial operation begun in 1986, with a design heat input capacity of 3,967 million Btu per hour (MMBTU/hr), with low NO<sub>x</sub> burners, combusting No. 2 fuel oil and/or natural gas for ignition and as supplemental fuels, using an electrostatic precipitator (ESP) for control of particulate matter, and exhausting through a limestone-based flue gas desulfurization system to stack 18. Unit 18 has continuous emissions monitoring systems (CEMS) for monitoring nitrogen oxides (NO<sub>x</sub>) and sulfur dioxide (SO<sub>2</sub>) and a continuous opacity monitoring (COM) system. Unit 18 has been approved to fire blends of coal and petroleum coke.
- (e) Two (2) natural gas fired combustion turbines, identified as 16A and 16B, constructed in 1979, each with a design heat input capacity of 998 million Btu per hour (MMBTU/hr), each using water injection as needed for NO<sub>x</sub> control, exhausting to stacks 16A and 16B, respectively. Units 16A and 16B have continuous emissions monitoring systems (CEMS) for monitoring nitrogen oxides (NO<sub>x</sub>) for use during the ozone control period, and continuous monitoring systems to measure the water to fuel ratio.

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

G.1 Automatic Incorporation of Definitions [326 IAC 24-1-7(e)] [326 IAC 24-2-7(e)] [326 IAC 24-3-7(e)]  
[40 CFR 97.123(b)] [40 CFR 97.223(b)] [40 CFR 97.323(b)]

This CAIR permit is deemed to incorporate automatically the definitions of terms under 326 IAC 24-1-2, 326 IAC 24-2-2, and 326 IAC 24-3-2.

G.2 Standard Permit Requirements [326 IAC 24-1-4(a)] [326 IAC 24-2-4(a)] [326 IAC 24-3-4(a)]  
[40 CFR 97.106(a)] [40 CFR 97.206(a)] [40 CFR 97.306(a)]

(a) The owners and operators of the CAIR NO<sub>x</sub> source, CAIR SO<sub>2</sub> source, and CAIR NO<sub>x</sub> ozone season source and CAIR NO<sub>x</sub> units, CAIR SO<sub>2</sub> units, and CAIR NO<sub>x</sub> ozone season units shall operate each unit in compliance with this CAIR permit.

(b) The CAIR NO<sub>x</sub> units, CAIR SO<sub>2</sub> units, and CAIR NO<sub>x</sub> ozone season units subject to this CAIR permit are Unit 14, Unit 15, Unit 16A, Unit 16B, Unit 17 and Unit 18.

G.3 Monitoring, Reporting, and Record Keeping Requirements [326 IAC 24-1-4(b)] [326 IAC 24-2-4(b)]  
[326 IAC 24-3-4(b)] [40 CFR 97.106(b)] [40 CFR 97.206(b)] [40 CFR 97.306(b)]

(a) The owners and operators, and the CAIR designated representative, of each CAIR NO<sub>x</sub> source, CAIR SO<sub>2</sub> source, and CAIR NO<sub>x</sub> ozone season source and CAIR NO<sub>x</sub> unit, CAIR SO<sub>2</sub> unit, and CAIR NO<sub>x</sub> ozone season unit at the source shall comply with the monitoring, reporting, and record keeping requirements of 326 IAC 24-1-11, 326 IAC 24-2-10, and 326 IAC 24-3-11.

- ~~(b) — The emissions measurements recorded and reported in accordance with 326 IAC 24-1-11, 326 IAC 24-2-10, and 326 IAC 24-3-11 shall be used to determine compliance by each CAIR NO<sub>x</sub> source, CAIR SO<sub>2</sub> source, and CAIR NO<sub>x</sub> ozone season source with the CAIR NO<sub>x</sub> emissions limitation under 326 IAC 24-1-4(c), CAIR SO<sub>2</sub> emissions limitation under 326 IAC 24-2-4(c), and CAIR NO<sub>x</sub> ozone season emissions limitation under 326 IAC 24-3-4(c) and Condition G.4.1, Nitrogen Oxides Emission Requirements, Condition G.4.2, Sulfur Dioxide Emission Requirements, and Condition G.4.3, Nitrogen Oxides Ozone Season Emission Requirements.~~

~~G.4.1 — Nitrogen Oxides Emission Requirements [326 IAC 24-1-4(c)] [40 CFR 97.106(c)]~~

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- ~~(a) — As of the allowance transfer deadline, the owners and operators of each CAIR NO<sub>x</sub> source and each CAIR NO<sub>x</sub> unit at the source shall hold, in the source's compliance account, CAIR NO<sub>x</sub> allowances available for compliance deductions for the control period under 326 IAC 24-1-9(i) in an amount not less than the tons of total nitrogen oxides emissions for the control period from all CAIR NO<sub>x</sub> units at the source, as determined in accordance with 326 IAC 24-1-11.~~
- ~~(b) — A CAIR NO<sub>x</sub> unit shall be subject to the requirements under (a) above and 326 IAC 24-1-4(c)(1) starting on January 1, 2008.~~
- ~~(c) — A CAIR NO<sub>x</sub> allowance shall not be deducted for compliance with the requirements under (a) above and 326 IAC 24-1-4(c)(1), for a control period in a calendar year before the year for which the CAIR NO<sub>x</sub> allowance was allocated.~~
- ~~(d) — CAIR NO<sub>x</sub> allowances shall be held in, deducted from, or transferred into or among CAIR NO<sub>x</sub> allowance tracking system accounts in accordance with 326 IAC 24-1-9, 326 IAC 24-1-10, and 326 IAC 24-1-12.~~
- ~~(e) — A CAIR NO<sub>x</sub> allowance is a limited authorization to emit one (1) ton of nitrogen oxides in accordance with the CAIR NO<sub>x</sub> annual trading program. No provision of the CAIR NO<sub>x</sub> annual trading program, the CAIR permit application, the CAIR permit, or an exemption under 326 IAC 24-1-3 and no provision of law shall be construed to limit the authority of the State of Indiana or the United States to terminate or limit the authorization.~~
- ~~(f) — A CAIR NO<sub>x</sub> allowance does not constitute a property right.~~
- ~~(g) — Upon recordation by the U.S. EPA under 326 IAC 24-1-8, 326 IAC 24-1-9, 326 IAC 24-1-10, or 326 IAC 24-1-12, every allocation, transfer, or deduction of a CAIR NO<sub>x</sub> allowance to or from a CAIR NO<sub>x</sub> source's compliance account is incorporated automatically in this CAIR permit.~~

~~G.4.2 — Sulfur Dioxide Emission Requirements [326 IAC 24-2-4(c)] [40 CFR 97.206(c)]~~

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- ~~(a) — As of the allowance transfer deadline, the owners and operators of the CAIR SO<sub>2</sub> source and each CAIR SO<sub>2</sub> unit at the source shall hold, in the source's compliance account, a tonnage equivalent of CAIR SO<sub>2</sub> allowances available for compliance deductions for the control period under 326 IAC 24-2-8(j) and 326 IAC 24-2-8(k) not less than the tons of total sulfur dioxide emissions for the control period from all CAIR SO<sub>2</sub> units at the source, as determined in accordance with 326 IAC 24-2-10.~~
- ~~(b) — A CAIR SO<sub>2</sub> unit shall be subject to the requirements under (a) above and 326 IAC 24-2-4(c)(1) starting on January 1, 2009.~~
- ~~(c) — A CAIR SO<sub>2</sub> allowance shall not be deducted for compliance with the requirements under (a) above and 326 IAC 24-2-4(c)(1), for a control period in a calendar year before the year for which the CAIR SO<sub>2</sub> allowance was allocated.~~

- ~~(d) — CAIR SO<sub>2</sub> allowances shall be held in, deducted from, or transferred into or among CAIR SO<sub>2</sub> allowance tracking system accounts in accordance with 326 IAC 24-2-8, 326 IAC 24-2-9, and 326 IAC 24-2-11.~~
- ~~(e) — A CAIR SO<sub>2</sub> allowance is a limited authorization to emit sulfur dioxide in accordance with the CAIR SO<sub>2</sub> trading program. No provision of the CAIR SO<sub>2</sub> trading program, the CAIR permit application, the CAIR permit, or an exemption under 326 IAC 24-2-3 and no provision of law shall be construed to limit the authority of the State of Indiana or the United States to terminate or limit the authorization.~~
- ~~(f) — A CAIR SO<sub>2</sub> allowance does not constitute a property right.~~
- ~~(g) — Upon recordation by the U.S. EPA under 326 IAC 24-2-8, 326 IAC 24-2-9, or 326 IAC 24-2-11, every allocation, transfer or deduction of a CAIR SO<sub>2</sub> allowance to or from a CAIR SO<sub>2</sub> source's compliance account is incorporated automatically in this CAIR permit.~~

~~G.4.3 Nitrogen Oxides Ozone Season Emission Requirements [326 IAC 24-3-4(c)] [40 CFR 97.306(c)]~~

- ~~(a) — As of the allowance transfer deadline, the owners and operators of the each CAIR NO<sub>x</sub> ozone season source and each CAIR NO<sub>x</sub> ozone season unit at the source shall hold, in the source's compliance account, CAIR NO<sub>x</sub> ozone season allowances available for compliance deductions for the control period under 326 IAC 24-3-9(i) in an amount not less than the tons of total nitrogen oxides emissions for the control period from all CAIR NO<sub>x</sub> ozone season units at the source, as determined in accordance with 326 IAC 24-3-11.~~
- ~~(b) — A CAIR NO<sub>x</sub> unit shall be subject to the requirements under (a) above and 326 IAC 24-3-4(c)(1) starting on May 1, 2008.~~
- ~~(c) — A CAIR NO<sub>x</sub> ozone season allowance shall not be deducted for compliance with the requirements under (a) above and 326 IAC 24-3-4(c)(1), for a control period in a calendar year before the year for which the CAIR NO<sub>x</sub> ozone season allowance was allocated.~~
- ~~(d) — CAIR NO<sub>x</sub> ozone season allowances shall be held in, deducted from, or transferred into or among CAIR NO<sub>x</sub> ozone season allowance tracking system accounts in accordance with 326 IAC 24-3-9, 326 IAC 24-3-10, and 326 IAC 24-3-12.~~
- ~~(e) — A CAIR NO<sub>x</sub> allowance is a limited authorization to emit one (1) ton of nitrogen oxides in accordance with the CAIR NO<sub>x</sub> ozone season trading program. No provision of the CAIR NO<sub>x</sub> ozone season trading program, the CAIR permit application, the CAIR permit, or an exemption under 326 IAC 24-3-3 and no provision of law shall be construed to limit the authority of the State of Indiana or the United States to terminate or limit the authorization.~~
- ~~(f) — A CAIR NO<sub>x</sub> allowance does not constitute a property right.~~
- ~~(g) — Upon recordation by the U.S. EPA under 326 IAC 24-3-8, 326 IAC 24-3-9, 326 IAC 24-3-10, or 326 IAC 24-3-12, every allocation, transfer, or deduction of a CAIR NO<sub>x</sub> ozone season allowance to or from a CAIR NO<sub>x</sub> ozone season source's compliance account is incorporated automatically in this CAIR permit.~~

~~G.5 Excess Emissions Requirements [326 IAC 24-1-4(d)] [326 IAC 24-2-4(d)] [326 IAC 24-3-4(d)] [40 CFR 97.106(d)] [40 CFR 97.206(d)] [40 CFR 97.306(d)]~~

~~The owners and operators of a CAIR NO<sub>x</sub> source and each CAIR NO<sub>x</sub> unit that emits nitrogen oxides during any control period in excess of the CAIR NO<sub>x</sub> emissions limitation shall do the following:~~

- ~~(a) Surrender the CAIR NO<sub>x</sub> allowances required for deduction under 326 IAC 24-1-9(j)(4).~~
- ~~(b) Pay any fine, penalty, or assessment or comply with any other remedy imposed, for the same violations, the Clean Air Act (CAA) or applicable state law.~~

~~Each ton of such excess emissions and each day of such control period shall constitute a separate violation of 326 IAC 24-1-4, the Clean Air Act (CAA), and applicable state law.~~

~~The owners and operators of a CAIR SO<sub>2</sub> source and each CAIR SO<sub>2</sub> unit that emits sulfur dioxide during any control period in excess of the CAIR SO<sub>2</sub> emissions limitation shall do the following:~~

- ~~(a) Surrender the CAIR SO<sub>2</sub> allowances required for deduction under 326 IAC 24-2-8(k)(4).~~
- ~~(b) Pay any fine, penalty, or assessment or comply with any other remedy imposed, for the same violations, the Clean Air Act (CAA) or applicable state law.~~

~~Each ton of such excess emissions and each day of such control period shall constitute a separate violation of 326 IAC 24-2-4, the Clean Air Act (CAA), and applicable state law.~~

~~The owners and operators of a CAIR NO<sub>x</sub> ozone season source and each CAIR NO<sub>x</sub> ozone season unit that emits nitrogen oxides during any control period in excess of the CAIR NO<sub>x</sub> ozone season emissions limitation shall do the following:~~

- ~~(a) Surrender the CAIR NO<sub>x</sub> ozone season allowances required for deduction under 326 IAC 24-3-9(j)(4).~~
- ~~(b) Pay any fine, penalty, or assessment or comply with any other remedy imposed, for the same violations, the Clean Air Act (CAA) or applicable state law.~~

~~Each ton of such excess emissions and each day of such control period shall constitute a separate violation of 326 IAC 24-3-4, the Clean Air Act (CAA), and applicable state law.~~

~~G.6 Record Keeping Requirements [326 IAC 24-1-4(e)] [326 IAC 24-2-4(e)] [326 IAC 24-3-4(e)] [326 IAC 2-7-5(3)] [40 CFR 97.106(e)] [40 CFR 97.206(e)] [40 CFR 97.306(e)]~~

~~Unless otherwise provided, the owners and operators of the CAIR NO<sub>x</sub> source, CAIR SO<sub>2</sub> source, and CAIR NO<sub>x</sub> ozone season source and each CAIR NO<sub>x</sub> unit, CAIR SO<sub>2</sub> unit, and CAIR NO<sub>x</sub> ozone season unit at the source shall keep on site at the source or at a central location within Indiana for those owners or operators with unattended sources, each of the following documents for a period of five (5) years from the date the document was created:~~

- ~~(a) The certificate of representation under 326 IAC 24-1-6(h), 326 IAC 24-2-6(h), 326 IAC 24-3-6(h) for the CAIR designated representative for the source and each CAIR NO<sub>x</sub> unit, CAIR SO<sub>2</sub> unit, and CAIR NO<sub>x</sub> ozone season unit at the source and all documents that demonstrate the truth of the statements in the certificate of representation. The certificate and documents shall be retained on site at the source or at a central location within Indiana for those owners or operators with unattended sources beyond such five (5) year period until such documents are superseded because of the submission of a new account certificate of representation under 326 IAC 24-1-6(h), 326 IAC 24-2-6(h), 326 IAC 24-3-6(h) changing the CAIR designated representative.~~
- ~~(b) All emissions monitoring information, in accordance with 326 IAC 24-1-11, 326 IAC 24-2-10, and 326 IAC 24-3-11, provided that to the extent that 326 IAC 24-1-11, 326 IAC 24-2-10, and 326 IAC 24-3-11 provides for a three (3) year period for record keeping, the three (3) year period shall apply.~~

- (c) ~~Copies of all reports, compliance certifications, and other submissions and all records made or required under the CAIR NO<sub>x</sub> annual trading program, CAIR SO<sub>2</sub> trading program, and CAIR NO<sub>x</sub> ozone season trading program.~~
- (d) ~~Copies of all documents used to complete a CAIR permit application and any other submission under the CAIR NO<sub>x</sub> annual trading program, CAIR SO<sub>2</sub> trading program, and CAIR NO<sub>x</sub> ozone season trading program or to demonstrate compliance with the requirements of the CAIR NO<sub>x</sub> annual trading program, CAIR SO<sub>2</sub> trading program, and CAIR NO<sub>x</sub> ozone season trading program.~~

~~This period may be extended for cause, at any time before the end of five (5) years, in writing by IDEM, OAQ or the U.S. EPA. Unless otherwise provided, all records shall be maintained in accordance with Section C – General Record Keeping Requirements, of this permit.~~

~~G.7 Reporting Requirements [326 IAC 24-1-4(e)] [326 IAC 24-2-4(e)] [326 IAC 24-3-4(e)] [40 CFR 97.106(e)] [40 CFR 97.206(e)] [40 CFR 97.306(e)]~~

~~(a) The CAIR designated representative of the CAIR NO<sub>x</sub> source, CAIR SO<sub>2</sub> source, and CAIR NO<sub>x</sub> ozone season source and each CAIR NO<sub>x</sub> unit, CAIR SO<sub>2</sub> unit, and CAIR NO<sub>x</sub> ozone season unit at the source shall submit the reports required under the CAIR NO<sub>x</sub> annual trading program, CAIR SO<sub>2</sub> trading program, and CAIR NO<sub>x</sub> ozone season trading program, including those under 326 IAC 24-1-11, 326 IAC 24-2-10, and 326 IAC 24-3-11.~~

~~(b) Pursuant to 326 IAC 24-1-4(e), 326 IAC 24-2-4(e), and 326 IAC 24-3-4(e) and 326 IAC 24-1-6(e)(1), 326 IAC 24-2-6(e)(1), and 326 IAC 24-3-6(e)(1), each submission under the CAIR NO<sub>x</sub> annual trading program, CAIR SO<sub>2</sub> trading program, and CAIR NO<sub>x</sub> ozone season trading program shall include the following certification statement by the CAIR designated representative: "I am authorized to make this submission on behalf of the owners and operators of the source or units for which the submission is made. I certify under penalty of law that I have personally examined, and am familiar with, the statements and information submitted in this document and all its attachments. Based on my inquiry of those individuals with primary responsibility for obtaining the information, I certify that the statements and information are to the best of my knowledge and belief true, accurate, and complete. I am aware that there are significant penalties for submitting false statements and information or omitting required statements and information, including the possibility of fine or imprisonment."~~

~~(c) Where 326 IAC 24-1, 326 IAC 24-2, and 326 IAC 24-3 requires a submission to IDEM, OAQ, the CAIR designated representative shall submit required information to:~~

~~Indiana Department of Environmental Management  
Office of Air Quality  
100 North Senate Avenue  
MC 61-53, IGCN 1003  
Indianapolis, Indiana 46204-2254~~

~~(d) Where 326 IAC 24-1, 326 IAC 24-2, and 326 IAC 24-3 requires a submission to U.S. EPA, the CAIR designated representative shall submit required information to:~~

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

~~G.8 Liability [326 IAC 24-1-4(f)] [326 IAC 24-2-4(f)] [326 IAC 24-3-4(f)] [40 CFR 97.106(f)]  
[40 CFR 97.206(f)] [40 CFR 97.306(f)]~~

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~~The owners and operators of each CAIR NO<sub>x</sub> source, CAIR SO<sub>2</sub> source, and CAIR NO<sub>x</sub> ozone season source and each CAIR NO<sub>x</sub> unit, CAIR SO<sub>2</sub> unit, and CAIR NO<sub>x</sub> ozone season unit shall be liable as follows:~~

- ~~(a) Each CAIR NO<sub>x</sub> source, CAIR SO<sub>2</sub> source, and CAIR NO<sub>x</sub> ozone season source and each CAIR NO<sub>x</sub> unit, CAIR SO<sub>2</sub> unit, and CAIR NO<sub>x</sub> ozone season unit shall meet the requirements of the CAIR NO<sub>x</sub> annual trading program, CAIR SO<sub>2</sub> trading program, and CAIR NO<sub>x</sub> ozone season trading program.~~
- ~~(b) Any provision of the CAIR NO<sub>x</sub> annual trading program, CAIR SO<sub>2</sub> trading program, and CAIR NO<sub>x</sub> ozone season trading program that applies to a CAIR NO<sub>x</sub> source, CAIR SO<sub>2</sub> source, and CAIR NO<sub>x</sub> ozone season source or the CAIR designated representative of a CAIR NO<sub>x</sub> source, CAIR SO<sub>2</sub> source, and CAIR NO<sub>x</sub> ozone season source shall also apply to the owners and operators of such source and of the CAIR NO<sub>x</sub> units, CAIR SO<sub>2</sub> units, and CAIR NO<sub>x</sub> ozone season units at the source~~
- ~~(c) Any provision of the CAIR NO<sub>x</sub> annual trading program, CAIR SO<sub>2</sub> trading program, and CAIR NO<sub>x</sub> ozone season trading program that applies to a CAIR NO<sub>x</sub> unit, CAIR SO<sub>2</sub> unit, and CAIR NO<sub>x</sub> ozone season unit or the CAIR designated representative of a CAIR NO<sub>x</sub> unit, CAIR SO<sub>2</sub> unit, and CAIR NO<sub>x</sub> ozone season unit shall also apply to the owners and operators of such units.~~

~~G.9 Effect on Other Authorities [326 IAC 24-1-4(g)] [326 IAC 24-2-4(g)] [326 IAC 24-3-4(g)]  
[40 CFR 97.106(g)] [40 CFR 97.206(g)] [40 CFR 97.306(g)]~~

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~~No provision of the CAIR NO<sub>x</sub> annual trading program, CAIR SO<sub>2</sub> trading program, and CAIR NO<sub>x</sub> ozone season trading program, a CAIR permit application, a CAIR permit, or an exemption under 326 IAC 24-1-3, 326 IAC 24-2-3, and 326 IAC 24-3-3 shall be construed as exempting or excluding the owners and operators, and the CAIR designated representative, of a CAIR NO<sub>x</sub> source, CAIR SO<sub>2</sub> source, and CAIR NO<sub>x</sub> ozone season source or CAIR NO<sub>x</sub> unit, CAIR SO<sub>2</sub> unit, and CAIR NO<sub>x</sub> ozone season unit from compliance with any other provision of the applicable, approved state implementation plan, a federally enforceable permit, or the Clean Air Act (CAA).~~

**Company Comment 7:**

For consistency NIPSCO recommends the changes suggested above to the various conditions in the draft permit be made in the corresponding portions of the TSD

**IDEM Response 7:**

The IDEM does not amend the Technical Support Document (TSD). The TSD is maintained to document the original review. This addendum to the TSD is used to document comments, responses to comments and changes made from the time the permit was drafted until a final decision is made.

**Company Comment 8:**

Below is a revised version of a portion of the Appendix A to the TSD spreadsheet that is changed by including an additional row (in red type) at the bottom of the calculation section for the “Unit 15 BOILER POTENTIAL EMISSIONS BEFORE NEW LNB PROJECT”. NIPSCO recommends that the four rows above the red row be deleted and be replaced with the calculation in the red row that is based on a long term average heat input.

**UNIT 15 BOILER POTENTIAL EMISSIONS BEFORE NEW LNB PROJECT**

	E Factor***	Units	Nominal/Maximum Capacity		lb/year	lb/ton	tpy
Boiler CO Emissions =	0.5	lb/ton	x 1,718,308 tons/year	=	859,154	/ 2000	= 429.58
	0.082	lb/MMBtu	x 44,676,000 MMBtu/year	=	3,663,432	/ 2000	= 1,831.72
	0.5	lb/ton	x 1,901,146 tons/year****	=	950,573	/ 2000	= 475.29
	0.082	lb/MMBtu	x 49,429,796 MMBtu/year****	=	4,053,243	/ 2000	= 2,026.62
<b>Coal</b>	<b>0.5</b>	<b>lb/ton</b>	<b>x 2,351,368 tons/year</b>	<b>=</b>	<b>1,175,684</b>	<b>/ 2000</b>	<b>= 587.84</b>
							2,501.91

\*\*\* Based on AP-42 Emission Factor of 0.5 lb of CO/Ton of coal – Table 1.1-3, Sept 1998 and 0.082 lb of CO/MMBtu of natural gas – Table 1.4-1, July 1998.

\*\*\*\* Based on higher capacity from worst case actual emissions because the PTE using the 0.5 emission factor was less than the actual emissions calculation.

**IDEM Response 8:**

IDEM has revised the emissions calculations as follows:

Pollutant	Previous Potential Emissions (tons/year) <sup>c</sup>	Emissions Increase due to project	PSD Significant Threshold (tons/year)	Emissions are expect to ...
CO	3,094 1,832	33,317 34,579	100	Past Potential to Future Potential - Increase due to this project

**UNIT 15 BOILER POTENTIAL EMISSIONS BEFORE NEW LNB PROJECT**

	E Factor <sup>3</sup>	Units	Nominal / Maximum Capacity		lb/year	lb/ton	tpy
Boiler CO Emissions =	0.5	lb CO/ton coal	x 1,718,308 tons/year	=	859,154	/ 2000	= 429.58
	0.082	lb CO/MMBtu ng	x 44,676,000 MMBtu/year	=	3,663,432	/ 2000	= 1,831.72
	0.5	lb CO/ton coal	x 2,351,368 tons/year <sup>4</sup>	=	1,175,684	/ 2000	= 587.84
	0.082	lb CO/MMBtu ng	x 61,135,579 MMBtu/year <sup>4</sup>	=	5,013,117	/ 2000	= 2,506.56
							<b>3,094.40</b>

<sup>3</sup> Based on AP-42 Emission Factor of 0.5 lb of CO/Ton of coal – Table 1.1-3, Sept 1998 and 0.082 lb of CO/MMBtu of natural gas – Table 1.4-1, July 1998.

<sup>4</sup> Based on higher capacity from worst case actual emissions because the PTE using the 0.5 emission factor was less than the actual emissions calculation. Annual coal usage is based on the 19 MMBtu/ton long term average coal usage for Unit 15.

The revised calculations are included as Appendix A to this Addendum.

Additionally, Table 5 of the Technical Support Document is revised as follows:

<b>Table 5: PTE Change of the Modified Process (tpy)</b>			
<b>Pollutant</b>	<b>New PTE <sup>a</sup></b>	<b>Previously Permitted PTE <sup>b</sup></b>	<b>Increase in PTE due to project</b>
CO	36,411	<del>3,094</del> 1,832	<del>33,317</del> 34,579

**Company Comment 9:**

On page 3 of 4 in the Meteorological Data section, NIPSCO recommends the text mention that the meteorological data was obtained in a “model ready” format from the IDEM and is considered representative of the project location, as was indicated in the permit application discussion regarding the meteorological data.

**IDEM Response 9:**

IDEM agrees that the meteorological data submitted by NIPSCO in the permit application was obtained in a “model ready” format from the IDEM and is considered representative of the project location. Although the Air Quality Analysis was performed based on the information submitted by the applicant, the "Meteorological Data" section on page 3 specifies the meteorological data used by IDEM staff while analyzing the projects air quality impacts with the AERMOD modeling software. There are no changes to the Air Quality Analysis as a result of this comment.

**IDEM Contact**

Questions regarding this proposed permit can be directed to:

Kimberly Cottrell  
Indiana Department Environmental Management  
Office of Air Quality  
100 North Senate Avenue  
MC 61-53, Room 1003  
Indianapolis, Indiana 46204-2251  
Toll free (within Indiana): 1-800-451-6027 extension 3-0870  
Or dial directly: (317) 233-0870  
kcottrel@idem.in.gov

Please refer to Significant Source Modification No.: 073-26380-00008 and Significant Permit Modification No. 073-26402-00008 in all correspondence.

**Indiana Department of Environmental Management  
Office of Air Quality**

Appendix A – Revised Emission Calculations  
Addendum to the Technical Support Document (TSD)  
Significant Source Modification (SSM) of a Part 70 Source  
Significant Permit Modification (SPM) of Part 70 Operating Permit

**Source Description and Location**

Company Name: NIPSCO – RM Schahfer Generating Station  
Address City IN Zip: 2733 East, 1500 North, Wheatfield, Indiana, 46392  
County: Jasper  
SIC / NAICS Code: 4911, 4952 / 221112  
Significant Source Modification No.: 073-26380-00008  
Significant Permit Modification No.: 073-26402-00008  
Permit Reviewer: Kimberly Cottrell  
Date: September 18, 2008

**Emissions Increase for Proposed Project at RMSGS Unit 15**

The information below details the calculations provided by NIPSCO – RM Schahfer Generating Station. IDEM has reviewed these calculations and verified their accuracy.

Pollutant	Potential to Emit (tons/year) <sup>a</sup>	Actual Emissions (tons/year) <sup>b</sup>	Previous Potential Emissions (tons/year) <sup>c</sup>	Emissions Increase due to project	PSD Significant Threshold (tons/year)	Emissions are expect to ...
CO	36,411	478.5	1,832	35,932	100	Past Actual to Future Potential - Increase due to this project
CO				34,579	100	Past Potential to Future Potential - Increase due to this project
NO <sub>x</sub>				0	40	Decrease due to this project <sup>d</sup>
SO <sub>2</sub>				0	40	Remain unchanged after the project <sup>d</sup>
VOC				0	40	Remain unchanged after the project <sup>d</sup>
PM filterable				0	25	Remain unchanged after the project <sup>d</sup>
PM <sub>10</sub> total				0	15	Remain unchanged after the project <sup>d</sup>
H <sub>2</sub> SO <sub>4</sub>				0	7	Remain unchanged after the project <sup>d</sup>
Fluorides				0	3	Remain unchanged after the project <sup>d</sup>
Lead				0	0.6	Remain unchanged after the project <sup>d</sup>

<sup>a</sup> Potential to Emit for Unit 15 is calculated assuming 8,760 hrs/yr operation at full load (5,100 MMBtu/hr). PTE of CO was calculated based on 1.63 lb/MMBtu.

NIPSCO conservatively estimated future emissions assuming full operation (i.e., maximum heat input capacity at 8,760 hour/yr) to avoid restrictions on operating schedule, and reporting in accordance with 326 IAC 2-2-1(rr)(2)(B). The highest CO emission rate of 1.63 lb CO/MMBtu was used for future emissions as a worst case Potential to Emit (PTE) for the unit. NIPSCO used this emission factor for new LNBs to illustrate that the proposed LNB project may result in a significant emissions increase of CO for determining applicability of the "major modification" provision under PSD. This conservative PTE value was also used to demonstrate that modeled ambient air impacts at this conservatively high emission rate were well below the significant impact levels.

<sup>b</sup> The actual emissions before the project were estimated using the average heat input for May 2003 to April 2005. NIPSCO used AP-42 CO emission factors to calculate actual emissions.

<sup>c</sup> The previous potential emissions were estimated using the maximum rated heat input and AP-42 CO emission factors.

<sup>d</sup> NIPSCO used the Actual-to-Projected Actual test for NO<sub>x</sub>, PM, PM<sub>10</sub>, SO<sub>2</sub>, and VOC. Based on EPA's finalized 'reasonable possibility' rule (72 FR 72607, December 21, 2007), there is no reasonable possibility that the proposed LNB project will result in emissions increases for regulated NSR pollutants other than CO. Also in accordance with 40 CFR 51.166(r)(6), NIPSCO will maintain records confirming this 'reasonable possibility' evaluation.

**UNIT 15 BOILER POTENTIAL TO EMIT AFTER NEW LNB PROJECT**

	E Factor <sup>1</sup>	Units	Capacity (MMBtu/hr) <sup>2</sup>		lb/hr	hrs/yr	lb/ton	tpy
Boiler CO Emissions =	1.63	lb/MMBtu	x 5,100	=	8,313	x 8,760	/ 2000	= 36,410.94

<sup>1</sup> Based on a 3-hour average.

<sup>2</sup> Boiler capacity is based on Part 70 Operating Permit description for this unit.

**UNIT 15 BOILER ACTUAL EMISSIONS BEFORE NEW LNB PROJECT**

	E Factor <sup>3</sup>	Units	May 2003 - Apr 2005 Unit 15 Data		lb/year	lb/ton	tpy
Boiler CO Emissions =	0.5	lb CO/ton coal	x 1,901,146 tons/year	=	950,573	/ 2000	= 475.29
	0.082	lb CO/MMBtu ng	x 78,755 MMBtu/year	=	6,458	/ 2000	= 3.23
							<b>478.5</b>

**UNIT 15 BOILER POTENTIAL EMISSIONS BEFORE NEW LNB PROJECT**

	E Factor <sup>3</sup>	Units	Nominal/Maximum Capacity		lb/year	lb/ton	tpy
Boiler CO Emissions =	0.5	lb CO/ton coal	x 2,351,368 tons/year <sup>4</sup>	=	1,175,684	/ 2000	= 587.84
	0.082	lb CO/MMBtu ng	x 44,676,000 MMBtu/year	=	3,663,432	/ 2000	= 1,831.72

<sup>3</sup> Based on AP-42 Emission Factor of 0.5 lb of CO/Ton of coal – Table 1.1-3, Sept 1998 and 0.082 lb of CO/MMBtu of natural gas – Table 1.4-1, July 1998.

<sup>4</sup> Based on higher capacity from worst case actual emissions. Annual coal usage is based on the 19 MMBtu/ton long term average coal usage for Unit 15.

**Indiana Department of Environmental Management  
Office of Air Quality**

**Technical Support Document (TSD)  
for a Part 70 Significant Source Modification and  
a Part 70 Significant Permit Modification**

<b>Source Description and Location</b>
----------------------------------------

Source Name:	NIPSCO – RM Schahfer Generating Station
Source Location:	2733 East, 1500 North, Wheatfield, Indiana, 46392
County:	Jasper
SIC Code:	4911, 4952
Operation Permit No.:	T 073-6792-00008
Operation Permit Issuance Date:	September 7, 2006
Significant Source Modification No.:	073-26380-00008
Significant Permit Modification No.:	073-26402-00008
Permit Reviewer:	Kimberly Cottrell

<b>Source Definition</b>
--------------------------

This stationary source consists of an electric utility generating station with an on-site contractor that processes and moisture conditions fly ash.

- (1) The electric utility generating station, NIPSCO, Schahfer Station, is the primary operation and is located at 2723 East, 1500 North, Wheatfield, Indiana; and
- (2) The fly ash processor, Headwaters Resources, Inc., is the supporting operation and is located at 2723 East, 1500 North, Wheatfield, Indiana.

IDEM has previously determined that the RM Schahfer Generating Station and the Headwaters Resources, Inc. will be considered one source as defined by 326 IAC 2-7-1(22) based on contractual control. Therefore, the term “source” in the Part 70 documents refers to both NIPSCO, Schahfer Station and Headwaters Resources, Inc., as one source.

Separate Part 70 Operating permits will be issued to NIPSCO, Schahfer Station and Headwaters Resources, Inc., solely for administrative purposes.

<b>Existing Approvals</b>
---------------------------

The source was issued Part 70 Operating Permit No. T 073-6792-00008 on September 7, 2006. The source has since received a Significant Permit Modification, 073-23745-00008, issued on May 7, 2008, to resolve appealed permit conditions.

<b>County Attainment Status</b>
---------------------------------

The source is located in Jasper County

<b>Pollutant</b>	<b>Designation</b>
CO	Unclassifiable or attainment effective November 15, 1990.
Pb	Not designated.
NO <sub>2</sub>	Cannot be classified or better than national standards.
O <sub>3</sub>	Unclassifiable or attainment effective June 15, 2004, for the 8-hour ozone standard. <sup>1</sup>
PM <sub>10</sub>	Unclassifiable effective November 15, 1990.
SO <sub>2</sub>	Better than national standards.
<sup>1</sup> Unclassifiable or attainment effective October 18, 2000, for the 1-hour ozone standard which was revoked effective June 15, 2005.	
Unclassifiable or attainment effective April 5, 2005, for PM <sub>2.5</sub> .	

- (a) Volatile organic compounds (VOC) and Nitrogen Oxides (NO<sub>x</sub>) are regulated under the Clean Air Act (CAA) for the purposes of attaining and maintaining the National Ambient Air Quality Standards (NAAQS) for ozone. Therefore, VOC emissions and NO<sub>x</sub> emissions are considered when evaluating the rule applicability relating to ozone. Jasper County has been designated as attainment or unclassifiable for ozone. Therefore, VOC emissions and NO<sub>x</sub> emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2. See the State Rule Applicability – Entire Source section.
- (b) Jasper County has been classified as attainment for PM<sub>2.5</sub>. U.S. EPA has not yet established the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2 for PM<sub>2.5</sub> emissions. Therefore, until the U.S.EPA adopts specific provisions for PSD review for PM<sub>2.5</sub> emissions, it has directed states to regulate PM<sub>10</sub> emissions as a surrogate for PM<sub>2.5</sub> emissions.
- (c) Jasper County has been classified as attainment or unclassifiable for (CO, Lead, NO<sub>2</sub>, PM<sub>10</sub>, and SO<sub>2</sub>). Therefore, these emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2.
- (d) Since this source is classified as a fossil fuel fired steam electric plants of more than two hundred fifty million (250,000,000) British thermal units per hour heat input, it is considered one of the twenty-eight (28) listed source categories, as specified in 326 IAC 2-2-1(gg)(1).
- (e) Fugitive Emissions  
 Since this type of operation is in one of the twenty-eight (28) listed source categories under 326 IAC 2-2 or 326 IAC 2-3, fugitive emissions are counted toward the determination of PSD and Emission Offset applicability.

<b>Source Status</b>
----------------------

The table below summarizes the potential to emit of the entire source, prior to the proposed modification, after consideration of all enforceable limits established in the effective permits:

<b>Pollutant</b>	<b>Emissions (ton/yr)</b>
CO	greater than 100
NO <sub>x</sub>	greater than 100
PM	greater than 100

<b>Table 2: Source Status PTE</b>	
<b>Pollutant</b>	<b>Emissions (ton/yr)</b>
PM <sub>10</sub>	greater than 100
PM <sub>2.5</sub>	greater than 100
SO <sub>2</sub>	greater than 100
VOC	greater than 100

- (a) This existing source is a major stationary source, under PSD (326 IAC 2-2), because a regulated pollutant is emitted at a rate of 100 tons per year or more, and it is one of the twenty-eight (28) listed source categories, as specified in 326 IAC 2-2-1(gg)(1).
- (b) These emissions are based upon the Part 70 Operating Permit T 073-6792-00008, issued on September 7, 2006.

The table below summarizes the potential to emit HAPs for the entire source, prior to the proposed modification, after consideration of all enforceable limits established in the effective permits:

<b>Table 3: Source Status HAP PTE</b>	
<b>HAPs</b>	<b>Emissions (ton/yr)</b>
Arsenic	less than 10
Beryllium	less than 10
Cadmium	less than 10
Chromium	less than 10
Cyanide	greater than 10
Formaldehyde	less than 10
HCl	greater than 10
HF	greater than 10
Lead	less than 10
Manganese	less than 10
Mercury	less than 10
Nickel	less than 10
Toluene	less than 10
<b>Total</b>	greater than 25

This existing source is a major source of HAPs, as defined in 40 CFR 63.41, because HAP emissions are greater than ten (10) tons per year for a single HAP and greater than twenty-five (25) tons per year for a combination of HAPs. Therefore, this source is a major source under Section 112 of the Clean Air Act (CAA).

**Actual Emissions**

The following table shows the actual emissions from the source. This information reflects the 2006 OAQ emission data.

<b>Table 4: Actual Emissions</b>	
<b>Pollutant</b>	<b>Actual Emissions (ton/yr)</b>
CO	1,345.38
NO <sub>x</sub>	14,619.81

<b>Pollutant</b>	<b>Actual Emissions (ton/yr)</b>
PM	2,310.75
PM <sub>10</sub>	1,526.60
PM <sub>2.5</sub>	679.48
SO <sub>2</sub>	35,907.85
VOC	198.73
HAP Lead	1.11
Total HAPs	not reported

#### Description of Proposed Modification

The Office of Air Quality (OAQ) has reviewed a modification application, submitted by NIPSCO – RM Schahfer Generating Station on April 4, 2008. NIPSCO is proposing to install new Low NO<sub>x</sub> Burners (LNB) in Unit 15 as a pollution control project in order to reduce NO<sub>x</sub> emissions to meet requirements of phase one of the CAIR (“LNB Project” or “Project”). The new LNB incorporates an improved over-fire air system with an improved capability to reduce NO<sub>x</sub> emissions. The following changes were made to the emission unit description for Unit 15:

One (1) dry bottom pulverized coal-fired boiler identified as Unit 15, with construction commenced in 1974 and commercial operation begun in 1979, with a design heat input capacity of 5,100 million Btu per hour (MMBtu/hr), with low NO<sub>x</sub> burners (**replaced in 2008**), combusting No. 2 fuel oil and/or natural gas for ignition and as supplemental fuels, using an electrostatic precipitator (ESP) with a flue gas conditioning (FGC) system for control of particulate matter, and exhausting to stack 15. Unit 15 has continuous emissions monitoring systems (CEMS) for monitoring nitrogen oxides (NO<sub>x</sub>) and sulfur dioxide (SO<sub>2</sub>) and a continuous opacity monitoring (COM) system.

#### Enforcement Issues

There are no pending enforcement actions related to this modification.

#### Emission Calculations

See Appendix A of this Technical Support Document for detailed emission calculations.

#### Permit Level Determination – Part 70

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

The following table is used to determine the appropriate permit level under 326 IAC 2-7-10.5. This table reflects the PTE before controls. Control equipment is not considered federally enforceable until it has been required in a federally enforceable permit.

<b>Pollutant</b>	<b>New PTE <sup>a</sup></b>	<b>Previously Permitted PTE <sup>b</sup></b>	<b>Increase in PTE due to project</b>
CO	36,411	3,094	33,317

<sup>a</sup> Potential to Emit for Unit 15 is calculated assuming 8,760 hrs/yr operation at full load (5,100 MMBtu/hr). PTE of CO was calculated based on 1.63 lb/MMBtu.

<sup>b</sup> The previous potential emissions were estimated using the maximum rated heat input and CO emission factors from the AP-42 Compilation of Emission Factors.

This source modification is subject to 326 IAC 2-7-10.5(f)(7) because the potential to emit carbon monoxide (CO) is greater than one hundred (100) tons per year before control. Additionally, the modification will be incorporated into the Part 70 Operating Permit through a significant permit modification issued pursuant to 326 IAC 2-7-12(d), because a case-by-case determination of an emission standard is being determined.

**Permit Level Determination – PSD**

The table below summarizes the potential to emit, reflecting all limits, of the emission units. Any control equipment is considered federally enforceable only after issuance of this Part 70 modification, and only to the extent that the effect of the control equipment is made practically enforceable in the permit.

<b>Process / Emission Unit</b>	<b>CO</b>	<b>NO<sub>x</sub> <sup>c</sup></b>	<b>PM <sup>c</sup></b>	<b>PM<sub>10</sub> <sup>c</sup></b>	<b>SO<sub>2</sub> <sup>c</sup></b>	<b>VOC <sup>c</sup></b>
Potential to Emit <sup>a</sup>	36,411					
Baseline Emissions <sup>b</sup>	478.5					
Increases from Unit 15 Modification	35,932	0	0	0	0	0
PSD Significant Level	100	40	25	15	100	40

<sup>a</sup> Potential to Emit for Unit 15 is calculated assuming 8,760 hrs/yr operation at full load (5,100 MMBtu/hr). PTE of CO was calculated based on 1.63 lb/MMBtu.

<sup>b</sup> The actual emissions before the project were estimated using the average heat input for May 2003 to April 2005. CO emission factors from the AP-42 Compilation of Emission Factors were used to calculate actual emissions.

<sup>c</sup> NIPSCO used the Actual-to-Projected Actual test for NO<sub>x</sub>, PM, PM<sub>10</sub>, SO<sub>2</sub>, and VOC. Based on EPA's finalized 'reasonable possibility' rule (72 FR 72607, December 21, 2007), there is no reasonable possibility that the proposed LNB project will result in emissions increases for regulated NSR pollutants other than CO. Also in accordance with 40 CFR 51.166(r)(6), NIPSCO will maintain records confirming this 'reasonable possibility' evaluation.

With regard to CO emissions, this modification was evaluated for PSD applicability based on the actual-to-potential applicability test under 326 IAC 2-2-2(d)(4). This modification to an existing major stationary source is major because the sum of the difference between the potential to emit CO emissions for Unit 15 after completion of the modification and the baseline actual emissions of CO emissions for Unit 15 exceeds the PSD significant level for CO. Therefore, pursuant to 326 IAC 2-2, the PSD requirements apply to this modification for CO emissions from Unit 15. See Appendix B of this Technical Support Document for the detailed Best Available Control Technology (BACT) evaluation for the CO emissions associated with this project.

### Federal Rule Applicability Determination

The following federal rules are applicable to the source due to this modification:

- (a) There are no New Source Performance Standards (NSPS) (326 IAC 12 and 40 CFR Part 60) applicable to this proposed modification.
- (b) There are no National Emission Standards for Hazardous Air Pollutants (NESHAPs) (326 IAC 14, 326 IAC 20 and 40 CFR Part 63) applicable to this proposed modification.
- (c) Pursuant to 40 CFR 64.2, Compliance Assurance Monitoring (CAM) is applicable to new or modified emission units that involve a pollutant-specific emission unit and meet the following criteria:
  - (1) has a potential to emit before controls equal to or greater than the major source threshold for the pollutant involved;
  - (2) is subject to an emission limitation or standard for that pollutant; and
  - (3) uses a control device, as defined in 40 CFR 64.1, to comply with that emission limitation or standard.

There is no control device used to reduce the CO emissions from Unit 15; therefore, the requirements of 40 CFR Part 64, CAM, are not applicable to Unit 15 as part of this modification.

### State Rule Applicability Determination

The following state rules are applicable to the source due to the modification:

#### **326 IAC 2-2 (PSD)**

Pursuant to 326 IAC 2-2-3 (Prevention of Significant Deterioration (PSD), the Permittee shall comply with the following requirements for carbon monoxide (CO) for the proposed modification to the pulverized coal-fired (PC) boiler identified as Unit 15:

- (a) CO emissions from Unit 15 shall not exceed 1.63 lb/MMBtu based on a 3-hour rolling average.
- (b) CO emissions from Unit 15 shall be minimized through the use of good combustion practices according to the Boiler Combustion Optimization Plan.

#### **326 IAC 2-4.1 (Major Sources of Hazardous Air Pollutants (HAP))**

There will not be any increase in HAP emissions due to modification of Unit 15; therefore, 326 IAC 2-4.1 does not apply.



**Change No. 2** The emission unit description for Unit 15 is revised throughout the permit to state that the Lox NO<sub>x</sub> burners are replaced in 2008:

- (b) One (1) dry bottom pulverized coal-fired boiler identified as Unit 15, with construction commenced in 1974 and commercial operation begun in 1979, with a design heat input capacity of 5,100 million Btu per hour (MMBtu/hr), with low NO<sub>x</sub> burners (**replaced in 2008-2009**), combusting No. 2 fuel oil and/or natural gas for ignition and as supplemental fuels, using an electrostatic precipitator (ESP) with a flue gas conditioning (FGC) system for control of particulate matter, and exhausting to stack 15. Unit 15 has continuous emissions monitoring systems (CEMS) for monitoring nitrogen oxides (NO<sub>x</sub>) and sulfur dioxide (SO<sub>2</sub>) and a continuous opacity monitoring (COM) system.

**Change No. 3** Revisions to have been made to the Section C – General Recordkeeping and Section C – General Reporting Requirements (original Conditions C.20 and C.21) to reflect NSR (New Source Review) reform provisions at the major sources.

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

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~~(c) If there is a reasonable possibility that a "project" (as defined in 326 IAC 2-2-1(qq) and/or 326 IAC 2-3-1(ll)) at an existing emissions unit, other than projects at a Clean Unit (or at a source with Plant-wide Applicability Limitation (PAL)), which is not part of a "major modification" (as defined in 326 IAC 2-2-1(ee) and/or 326 IAC 2-3-1(z)) may result in significant emissions increase and the Permittee elects to utilize the "projected actual emissions" (as defined in 326 IAC 2-2-1(rr) and/or 326 IAC 2-3-1(mm)), the Permittee shall comply with following:~~

~~(1) Before beginning actual construction of the "project" (as defined in 326 IAC 2-2-1(qq) and/or 326 IAC 2-3-1(ll)) at an existing emissions unit, document and maintain the following records:~~

~~(A) A description of the project.~~

~~(B) Identification of any emissions unit whose emissions of a regulated new source review pollutant could be affected by the project.~~

~~(C) A description of the applicability test used to determine that the project is not a major modification for any regulated NSR pollutant, including:~~

~~(i) Baseline actual emissions;~~

~~(ii) Projected actual emissions;~~

~~(iii) Amount of emissions excluded under section 326 IAC 2-2-1(rr)(2)(A)(iii) and/or 326 IAC 2-3-1(mm)(2)(A)(iii); and~~

~~(iv) An explanation for why the amount was excluded, and any netting calculations, if applicable.~~

~~(2) Monitor the emissions of any regulated NSR pollutant that could increase as a result of the project and that is emitted by any existing emissions unit identified in (1)(B) above; and~~

~~(3) Calculate and maintain a record of the annual emissions, in tons per year on a calendar year basis, for a period of five (5) years following resumption of regular operations after the change, or for a period of ten (10) years following resumption of regular operations after the change if the project increases the design capacity of or the potential to emit that regulated NSR pollutant at the emissions unit.~~

**(c) If there is a reasonable possibility (as defined in 40 CFR 51.165 (a)(6)(vi)(A), 40 CFR 51.165 (a)(6)(vi)(B), 40 CFR 51.166 (r)(6)(vi)(a), and/or 40 CFR 51.166 (r)(6)(vi)(b)) that a “project” (as defined in 326 IAC 2-2-1(qq) and/or 326 IAC 2-3-1(II)) at an existing emissions unit, other than projects at a source with a Plantwide Applicability Limitation (PAL), which is not part of a “major modification” (as defined in 326 IAC 2-2-1(ee) and/or 326 IAC 2-3-1(z)) may result in significant emissions increase and the Permittee elects to utilize the “projected actual emissions” (as defined in 326 IAC 2-2-1(rr) and/or 326 IAC 2-3-1(mm)), the Permittee shall comply with the following:**

**(1) Before beginning actual construction of the “project” (as defined in 326 IAC 2-2-1(qq) and/or 326 IAC 2-3-1(II)) at an existing emissions unit, document and maintain the following records:**

**(A) A description of the project.**

**(B) Identification of any emissions unit whose emissions of a regulated new source review pollutant could be affected by the project.**

**(C) A description of the applicability test used to determine that the project is not a major modification for any regulated NSR pollutant, including:**

**(i) Baseline actual emissions;**

**(ii) Projected actual emissions;**

**(iii) Amount of emissions excluded under section 326 IAC 2-2-1(rr)(2)(A)(iii) and/or 326 IAC 2-3-1 (mm)(2)(A)(iii); and**

**(iv) An explanation for why the amount was excluded, and any netting calculations, if applicable.**

**(d) If there is a reasonable possibility (as defined in 40 CFR 51.165 (a)(6)(vi)(A) and/or 40 CFR 51.166 (r)(6)(vi)(a)) that a “project” (as defined in 326 IAC 2-2-1(qq) and/or 326 IAC 2-3-1(II)) at an existing emissions unit, other than projects at a source with a Plantwide Applicability Limitation (PAL), which is not part of a “major modification” (as defined in 326 IAC 2-2-1(ee) and/or 326 IAC 2-3-1(z)) may result in significant emissions increase and the Permittee elects to utilize the “projected actual emissions” (as defined in 326 IAC 2-2-1(rr) and/or 326 IAC 2-3-1(mm)), the Permittee shall comply with the following:**

**(1) Monitor the emissions of any regulated NSR pollutant that could increase as a result of the project and that is emitted by any existing emissions unit identified in (c)(1)(B) above; and**

- (2) Calculate and maintain a record of the annual emissions, in tons per year on a calendar year basis, for a period of five (5) years following resumption of regular operations after the change, or for a period of ten (10) years following resumption of regular operations after the change if the project increases the design capacity of or the potential to emit that regulated NSR pollutant at the emissions unit.**

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

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- ~~(f) If the Permittee is required to comply with the recordkeeping provisions of (c) in Section C – General Record Keeping Requirements for any "project" (as defined in 326 IAC 2-2-1(qq) and/or 326 IAC 2-3-1(II)) at an existing Electric Utility Steam Generating Unit, then for that project the Permittee shall:~~
- ~~(1) Submit to IDEM, OAQ a copy of the information required by (c)(1) in Section C – General Record Keeping Requirements~~
- ~~(2) Submit a report to IDEM, OAQ within sixty (60) days after the end of each year during which records are generated in accordance with (c)(2) and (3) in Section C – General Record Keeping Requirements. The report shall contain all information and data describing the annual emissions for the emissions units during the calendar year that preceded the submission of report.~~

Reports required in this part shall be submitted to:

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

- ~~(g) If the Permittee is required to comply with the recordkeeping provisions of (c) in Section C – General Record Keeping Requirements for any "project" (as defined in 326 IAC 2-2-1(qq) and/or 326 IAC 2-3-1(II)) at an existing emissions unit other than Electric Utility Steam Generating Unit, and the project meets the following criteria, then the Permittee shall submit a report to IDEM, OAQ:~~
- ~~(1) The annual emissions, in tons per year, from the project identified in (c)(1) in Section C – General Record Keeping Requirements exceed the baseline actual emissions, as documented and maintained under Section C – General Record Keeping Requirements (c)(1)(C)(i), by a significant amount, as defined in 326 IAC 2-2-1(xx) and/or 326 IAC 2-3-1 (qq), for that regulated NSR pollutant, and~~
- ~~(2) The emissions differ from the preconstruction projection as documented and maintained under Section C – General Record Keeping Requirements (c)(1)(C)(ii).~~
- ~~(h) The report for project at an existing emissions unit other than Electric Utility Steam Generating Unit shall be submitted within sixty (60) days after the end of the year and contain the following:~~
- ~~(1) The name, address, and telephone number of the major stationary source.~~
- ~~(2) The annual emissions calculated in accordance with (c)(2) and (3) in Section C – General Record Keeping Requirements.~~

~~(3) The emissions calculated under the actual-to-projected-actual test stated in 326 IAC 2-2-2(d)(3) and/or 326 IAC 2-3-2(c)(3).~~

~~(4) Any other information that the Permittee deems fit to include in this report,~~

Reports required in this part shall be submitted to:

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

**(f) If the Permittee is required to comply with the recordkeeping provisions of Condition C.20, paragraph (d), in Section C – General Record Keeping Requirements for any “project” (as defined in 326 IAC 2-2-1(qq) and/or 326 IAC 2-3-1(II) at an existing Electric Utility Steam Generating Unit, then for that project the Permittee shall:**

- (1) Submit to IDEM, OAQ a copy of the information required by Condition C.20, paragraph (c)(1), in Section C – General Record Keeping Requirements**
- (2) Submit a report to IDEM, OAQ within sixty (60) days after the end of each year during which records are generated in accordance with Condition C.20, paragraphs (d)(1) and (2), in Section C – General Record Keeping Requirements. The report shall contain all information and data describing the annual emissions for the emissions units during the calendar year that preceded the submission of report.**

Reports required in this part shall be submitted to:

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

**(g) If the Permittee is required to comply with the recordkeeping provisions of Condition C.20, paragraph (d), in Section C – General Record Keeping Requirements for any “project” (as defined in 326 IAC 2-2-1(qq) and/or 326 IAC 2-3-1(II) at an existing emissions unit other than an Electric Utility Steam Generating Unit, and the project meets the following criteria, then the Permittee shall submit a report to IDEM, OAQ:**

- (1) The annual emissions, in tons per year, from the project identified in (c)(1) in Section C – General Record Keeping Requirements exceed the baseline actual emissions, as documented and maintained under Section C – General Record Keeping Requirements, Condition C.20, paragraph (c)(1)(C)(i), by a significant amount, as defined in 326 IAC 2-2-1(xx) and/or 326 IAC 2-3-1(qq), for that regulated NSR pollutant, and**
- (2) The emissions differ from the preconstruction projection as documented and maintained under Section C – General Record Keeping Requirements, Condition C.20, paragraph (c)(1)(C)(ii).**

- (h) **The report for a project at an existing emissions unit other than Electric Utility Steam Generating Unit shall be submitted within sixty (60) days after the end of the year and contain the following:**
- (1) **The name, address, and telephone number of the major stationary source.**
  - (2) **The annual emissions calculated in accordance with Condition C.20, paragraphs (d)(1) and (2), in Section C – General Record Keeping Requirements.**
  - (3) **The emissions calculated under the actual-to-projected actual test stated in 326 IAC 2-2-2(d)(3) and/or 326 IAC 2-3-2(c)(3).**
  - (4) **Any other information that the Permittee deems fit to include in this report,**

**Reports required in this part shall be submitted to:**

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

- (i) The Permittee shall make the information required to be documented and maintained in accordance with **Condition C.20, paragraph (c)**, in Section C - General Record Keeping Requirements available for review upon a request for inspection by IDEM, OAQ. The general public may request this information from the IDEM, OAQ under 326 IAC 17.1.

**Change No. 4** Section 2 of the permit is modified to include the requirements for Best Available Control Technology (BACT) under 326 IAC 2-2-3 (Prevention of Significant Deterioration (PSD) for carbon monoxide (CO) emissions increases from the proposed modification to the pulverized coal-fired (PC) boiler identified as Unit 15. The changes are as follows:

- a. New Condition D.2.1, **CO PSD BACT Requirements**, has been added;
- b. Condition D.2.6, Testing Requirements has been updated to include the testing required to demonstrate compliance with the CO BACT Limit.
- c. Condition D.2.12, Record Keeping Requirements has been updated to include the record keeping required to document compliance with the CO BACT Limit.
- d. The remainder of the section has been renumbered and references to renumbered conditions have been updated.

#### **D.2.1 CO PSD BACT Requirements [326 IAC 2-2]**

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**After completion of the LNB project and resumption of regular operation for unit 15 and a reasonable shakedown period not to exceed one hundred and eighty (180) days, the Permittee shall comply with the following requirements:**

- (a) **CO emissions from Unit 15 shall not exceed 1.63 lb/MMBtu based on a 3-hour average.**

- (b) CO emissions from Unit 15 shall be minimized through the use of good combustion practices according to the Boiler Combustion Optimization Plan.**

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

- (a) Within 180 days of startup of the modified Unit 15 boiler equipped with LNB, compliance with the CO limitation in Condition D.2.1 shall be determined by a performance stack test conducted using methods approved by the Commissioner. This testing shall be repeated by December 31 of every fifth calendar year following this valid compliance demonstration.**
- (b) By December 31 of the second calendar year following the most recent stack test, or within 180 days after issuance of this permit, whichever is later, compliance with the PM limitation in Condition D.2.2 shall be determined by a performance stack test conducted using Method 5 or other methods as approved by the Commissioner. This testing shall be repeated by December 31 of every second calendar year following this valid compliance demonstration.**

Testing shall be conducted in accordance with Section C - Performance Testing. For the purpose of this permit, "calendar year" means the twelve (12) month period from January 1 to December 31 inclusive.

D.2.7 Boiler Combustion Optimization Plan [326 IAC 2-2]

**NIPSCO shall develop and implement a Boiler Combustion Optimization Plan within 120 days of the startup date of Unit 15 after the unit outage for the low-NO<sub>x</sub> Burner project. This plan will identify boiler operating parameters that indicate good combustion practices consistent with the BACT determination for Unit 15. NIPSCO will monitor operating parameters for Unit 15 consistent with this plan to demonstrate compliance with the BACT emission limit.**

~~D.2.11~~-D.2.13 Record Keeping Requirements

- (a) To document compliance with the carbon monoxide requirements in Condition D.2.1 and D.2.6(a), the Permittee shall maintain records on-site in accordance with (1) and (2) below. Records shall be complete and sufficient to establish compliance with the limit in Condition D.2.1.**
- (1) Data and results from the most recent stack test.**
  - (2) Boiler Combustion Optimization Plan.**
- (~~a~~) (b) To document compliance with Section C - Maintenance of Continuous Opacity Monitoring Equipment, and the particulate matter and opacity requirements in Conditions ~~D.2.1~~, D.2.2(a), D.2.3, D.2.6(b), ~~D.2.7~~, D.2.8, and ~~D.2.9~~-D.2.11, the Permittee shall maintain records in accordance with (1) through (4) below. Records shall be complete and sufficient to establish compliance with the limits in Conditions D.2.2(a) and ~~D.2.2~~-D.2.3.**
- (1) Data and results from the most recent stack test.**
  - (2) All continuous opacity monitoring data, pursuant to 326 IAC 3-5-6 and 40 CFR 60.42(a)(2).**
  - (3) The results of all Method 9 visible emission readings taken during any periods of COMS downtime.**
  - (4) All ESP parametric monitoring readings pursuant to condition ~~D.2.10~~ D.2.12.**

~~(b)~~ **(c)** To document compliance with the SO<sub>2</sub> requirements in Conditions ~~D.2.1, D.2.2(b), D.2.3, D.2.4, D.2.7, D.2.8, D.2.9, D.2.10, and D.2.10, D.2.12~~, the Permittee shall maintain the records identified in (1) through (3) below. Records shall be complete and sufficient to establish compliance with the applicable SO<sub>2</sub> limit(s) as required in Conditions ~~D.2.1, D.2.2(b), D.2.3, D.2.4, D.2.7, and D.2.8, D.2.10~~. The Permittee shall maintain records in accordance with (2) and (3) below during SO<sub>2</sub> CEM system downtime.

- (1) All SO<sub>2</sub> continuous emissions monitoring data, pursuant to 326 IAC 3-5-6, 326 IAC 7-2-1(g), and 40 CFR 60.45.
- (2) Any fuel sampling and analysis data collected for or portable analyzer data for SO<sub>2</sub> CEM downtime, in accordance with Condition ~~D.2.10~~ **D.2.12**.
- (3) Actual fuel usage during each SO<sub>2</sub> CEM downtime to the extent such data is required by Condition ~~D.2.10~~ **D.2.12** to be obtained.

~~(e)~~ **(d)** To document compliance with the NO<sub>x</sub> requirements in ~~Conditions D.2.1 and D.2.7, Condition D.2.2(c) and the continuous emissions monitoring requirements for NO<sub>x</sub> and CO<sub>2</sub> or O<sub>2</sub> in Condition D.2.9~~, the Permittee shall maintain records of all NO<sub>x</sub> and CO<sub>2</sub> or O<sub>2</sub> continuous emissions monitoring data, pursuant to 326 IAC 3-5-6 and 40 CFR 60.45. Records shall be complete and sufficient to establish compliance with the NO<sub>x</sub> limit as required in Condition ~~D.2.1-D.2.2(c) and D.2.7-D.2.9~~.

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

~~D.2.12-D.2.14~~ **D.2.14** Reporting Requirements

(a) A quarterly report of opacity exceedances and a quarterly summary of the information to document compliance with Conditions D.2.1, D.2.2, D.2.3, ~~D.2.7, and D.2.8~~ **D.2.4, D.2.9, D.2.10, D.2.11, and D.2.12** shall be submitted to the address listed in Section C - General Reporting Requirements, of this permit, within thirty (30) days after the end of the quarter being reported. The report submitted by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

(b) ...

**Change No. 5** Applicable requirements of the Clean Air Interstate Rule (CAIR) have been incorporated into the permit as a new Section G as follows:

**SECTION G Clean Air Interstate (CAIR) Nitrogen Oxides Annual, Sulfur Dioxide, and Nitrogen Oxides Ozone Season Trading Programs – CAIR Permit for CAIR Units Under 326 IAC 24-1-1(a), 326 IAC 24-2-1(a), and 326 IAC 24-3-1(a)**

**ORIS Code: 6085**

**CAIR Permit for CAIR Units Under 326 IAC 24-1-1(a), 326 IAC 24-2-1(a), and 326 IAC 24-3-1(a)**

(a) One (1) cyclone coal-fired boiler identified as Unit 14, with construction commenced in 1970 and commercial operation begun in 1976, with a design heat input capacity of 4,650 million Btu per hour (MMBTU/hr), combusting No. 2 fuel oil and/or natural gas for ignition and as supplemental fuels, using an electrostatic precipitator (ESP) for control of particulate matter and exhausting to stack 14. Unit 14 has a selective catalytic reduction (SCR) system, and has continuous emissions monitoring systems (CEMS) for monitoring

**nitrogen oxides (NO<sub>x</sub>) and sulfur dioxide (SO<sub>2</sub>) and a continuous opacity monitoring (COM) system.**

- (b) One (1) dry bottom pulverized coal-fired boiler identified as Unit 15, with construction commenced in 1974 and commercial operation begun in 1979, with a design heat input capacity of 5,100 million Btu per hour (MMBTU/hr), with low NO<sub>x</sub> burners (replaced in 2008-2009), combusting No. 2 fuel oil and/or natural gas for ignition and as supplemental fuels, using an electrostatic precipitator (ESP) with a flue gas conditioning (FGC) system for control of particulate matter, and exhausting to stack 15. Unit 15 has continuous emissions monitoring systems (CEMS) for monitoring nitrogen oxides (NO<sub>x</sub>) and sulfur dioxide (SO<sub>2</sub>) and a continuous opacity monitoring (COM) system.**
- (c) One (1) dry bottom pulverized coal-fired boiler identified as Unit 17, with construction started in 1980 and commercial operation begun in 1983, with a design heat input capacity of 3,967 million Btu per hour (MMBTU/hr), with low NO<sub>x</sub> burners, combusting No. 2 fuel oil and/or natural gas for ignition and as supplemental fuels, using an electrostatic precipitator (ESP) for control of particulate matter, and exhausting through a limestone-based flue gas desulfurization system to stack 17. Unit 17 is equipped with continuous emissions monitoring systems (CEMS) for monitoring nitrogen oxides (NO<sub>x</sub>) and sulfur dioxide (SO<sub>2</sub>) and a continuous opacity monitoring (COM) system. Unit 17 has been approved to fire blends of coal and petroleum coke.**
- (d) One (1) dry bottom pulverized coal-fired boiler identified as Unit 18, with construction started in 1980 and commercial operation begun in 1986, with a design heat input capacity of 3,967 million Btu per hour (MMBTU/hr), with low NO<sub>x</sub> burners, combusting No. 2 fuel oil and/or natural gas for ignition and as supplemental fuels, using an electrostatic precipitator (ESP) for control of particulate matter, and exhausting through a limestone-based flue gas desulfurization system to stack 18. Unit 18 has continuous emissions monitoring systems (CEMS) for monitoring nitrogen oxides (NO<sub>x</sub>) and sulfur dioxide (SO<sub>2</sub>) and a continuous opacity monitoring (COM) system. Unit 18 has been approved to fire blends of coal and petroleum coke.**
- (e) Two (2) natural gas-fired combustion turbines, identified as 16A and 16B, constructed in 1979, each with a design heat input capacity of 998 million Btu per hour (MMBTU/hr), each using water injection as needed for NO<sub>x</sub> control, exhausting to stacks 16A and 16B, respectively. Units 16A and 16B have continuous emissions monitoring systems (CEMS) for monitoring nitrogen oxides (NO<sub>x</sub>) for use during the ozone control period, and continuous monitoring systems to measure the water to fuel ratio.**

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

**G.1 Automatic Incorporation of Definitions [326 IAC 24-1-7(e)] [326 IAC 24-2-7(e)] [326 IAC 24-3-7(e)] [40 CFR 97.123(b)] [40 CFR 97.223(b)] [40 CFR 97.323(b)]**

This CAIR permit is deemed to incorporate automatically the definitions of terms under 326 IAC 24-1-2, 326 IAC 24-2-2, and 326 IAC 24-3-2.

**G.2 Standard Permit Requirements [326 IAC 24-1-4(a)] [326 IAC 24-2-4(a)] [326 IAC 24-3-4(a)] [40 CFR 97.106(a)] [40 CFR 97.206(a)] [40 CFR 97.306(a)]**

- (a) The owners and operators of the CAIR NO<sub>x</sub> source, CAIR SO<sub>2</sub> source, and CAIR NO<sub>x</sub> ozone season source and CAIR NO<sub>x</sub> units, CAIR SO<sub>2</sub> units, and CAIR NO<sub>x</sub> ozone season units shall operate each unit in compliance with this CAIR permit.**
- (b) The CAIR NO<sub>x</sub> units, CAIR SO<sub>2</sub> units, and CAIR NO<sub>x</sub> ozone season units subject to this CAIR permit are Unit 14, Unit 15, Unit 16A, Unit 16B, Unit 17 and Unit 18.**

**G.3 Monitoring, Reporting, and Record Keeping Requirements [326 IAC 24-1-4(b)]  
[326 IAC 24-2-4(b)] [326 IAC 24-3-4(b)] [40 CFR 97.106(b)] [40 CFR 97.206(b)]  
[40 CFR 97.306(b)]**

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- (a) The owners and operators, and the CAIR designated representative, of each CAIR NO<sub>x</sub> source, CAIR SO<sub>2</sub> source, and CAIR NO<sub>x</sub> ozone season source and CAIR NO<sub>x</sub> unit, CAIR SO<sub>2</sub> unit, and CAIR NO<sub>x</sub> ozone season unit at the source shall comply with the monitoring, reporting, and record keeping requirements of 326 IAC 24-1-11, 326 IAC 24-2-10, and 326 IAC 24-3-11.
- (b) The emissions measurements recorded and reported in accordance with 326 IAC 24-1-11, 326 IAC 24-2-10, and 326 IAC 24-3-11 shall be used to determine compliance by each CAIR NO<sub>x</sub> source, CAIR SO<sub>2</sub> source, and CAIR NO<sub>x</sub> ozone season source with the CAIR NO<sub>x</sub> emissions limitation under 326 IAC 24-1-4(c), CAIR SO<sub>2</sub> emissions limitation under 326 IAC 24-2-4(c), and CAIR NO<sub>x</sub> ozone season emissions limitation under 326 IAC 24-3-4(c) and Condition G.4.1, Nitrogen Oxides Emission Requirements, Condition G.4.2, Sulfur Dioxide Emission Requirements, and Condition G.4.3, Nitrogen Oxides Ozone Season Emission Requirements.

**G.4.1 Nitrogen Oxides Emission Requirements [326 IAC 24-1-4(c)] [40 CFR 97.106(c)]**

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- (a) As of the allowance transfer deadline, the owners and operators of each CAIR NO<sub>x</sub> source and each CAIR NO<sub>x</sub> unit at the source shall hold, in the source's compliance account, CAIR NO<sub>x</sub> allowances available for compliance deductions for the control period under 326 IAC 24-1-9(i) in an amount not less than the tons of total nitrogen oxides emissions for the control period from all CAIR NO<sub>x</sub> units at the source, as determined in accordance with 326 IAC 24-1-11.
- (b) A CAIR NO<sub>x</sub> unit shall be subject to the requirements under (a) above and 326 IAC 24-1-4(c)(1) starting on January 1, 2008.
- (c) A CAIR NO<sub>x</sub> allowance shall not be deducted for compliance with the requirements under (a) above and 326 IAC 24-1-4(c)(1), for a control period in a calendar year before the year for which the CAIR NO<sub>x</sub> allowance was allocated.
- (d) CAIR NO<sub>x</sub> allowances shall be held in, deducted from, or transferred into or among CAIR NO<sub>x</sub> allowance tracking system accounts in accordance with 326 IAC 24-1-9, 326 IAC 24-1-10, and 326 IAC 24-1-12.
- (e) A CAIR NO<sub>x</sub> allowance is a limited authorization to emit one (1) ton of nitrogen oxides in accordance with the CAIR NO<sub>x</sub> annual trading program. No provision of the CAIR NO<sub>x</sub> annual trading program, the CAIR permit application, the CAIR permit, or an exemption under 326 IAC 24-1-3 and no provision of law shall be construed to limit the authority of the State of Indiana or the United States to terminate or limit the authorization.
- (f) A CAIR NO<sub>x</sub> allowance does not constitute a property right.
- (g) Upon recordation by the U.S. EPA under 326 IAC 24-1-8, 326 IAC 24-1-9, 326 IAC 24-1-10, or 326 IAC 24-1-12, every allocation, transfer, or deduction of a CAIR NO<sub>x</sub> allowance to or from a CAIR NO<sub>x</sub> source's compliance account is incorporated automatically in this CAIR permit.

**G.4.2 Sulfur Dioxide Emission Requirements [326 IAC 24-2-4(c)] [40 CFR 97.206(c)]**

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- (a) As of the allowance transfer deadline, the owners and operators of the CAIR SO<sub>2</sub> source and each CAIR SO<sub>2</sub> unit at the source shall hold, in the source's compliance account, a tonnage equivalent of CAIR SO<sub>2</sub> allowances available for compliance deductions for the control period under 326 IAC 24-2-8(j) and 326 IAC 24-2-8(k) not less than the tons of total sulfur dioxide emissions for the control period from all CAIR SO<sub>2</sub> units at the source, as determined in accordance with 326 IAC 24-2-10.
- (b) A CAIR SO<sub>2</sub> unit shall be subject to the requirements under (a) above and 326 IAC 24-2-4(c)(1) starting on January 1, 2009.
- (c) A CAIR SO<sub>2</sub> allowance shall not be deducted for compliance with the requirements under (a) above and 326 IAC 24-2-4(c)(1), for a control period in a calendar year before the year for which the CAIR SO<sub>2</sub> allowance was allocated.
- (d) CAIR SO<sub>2</sub> allowances shall be held in, deducted from, or transferred into or among CAIR SO<sub>2</sub> allowance tracking system accounts in accordance with 326 IAC 24-2-8, 326 IAC 24-2-9, and 326 IAC 24-2-11.
- (e) A CAIR SO<sub>2</sub> allowance is a limited authorization to emit sulfur dioxide in accordance with the CAIR SO<sub>2</sub> trading program. No provision of the CAIR SO<sub>2</sub> trading program, the CAIR permit application, the CAIR permit, or an exemption under 326 IAC 24-2-3 and no provision of law shall be construed to limit the authority of the State of Indiana or the United States to terminate or limit the authorization.
- (f) A CAIR SO<sub>2</sub> allowance does not constitute a property right.
- (g) Upon recordation by the U.S. EPA under 326 IAC 24-2-8, 326 IAC 24-2-9, or 326 IAC 24-2-11, every allocation, transfer or deduction of a CAIR SO<sub>2</sub> allowance to or from a CAIR SO<sub>2</sub> source's compliance account is incorporated automatically in this CAIR permit.

**G.4.3 Nitrogen Oxides Ozone Season Emission Requirements [326 IAC 24-3-4(c)] [40 CFR 97.306(c)]**

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- (a) As of the allowance transfer deadline, the owners and operators of the each CAIR NO<sub>x</sub> ozone season source and each CAIR NO<sub>x</sub> ozone season unit at the source shall hold, in the source's compliance account, CAIR NO<sub>x</sub> ozone season allowances available for compliance deductions for the control period under 326 IAC 24-3-9(i) in an amount not less than the tons of total nitrogen oxides emissions for the control period from all CAIR NO<sub>x</sub> ozone season units at the source, as determined in accordance with 326 IAC 24-3-11.
- (b) A CAIR NO<sub>x</sub> unit shall be subject to the requirements under (a) above and 326 IAC 24-3-4(c)(1) starting on May 1, 2008.
- (c) A CAIR NO<sub>x</sub> ozone season allowance shall not be deducted for compliance with the requirements under (a) above and 326 IAC 24-3-4(c)(1), for a control period in a calendar year before the year for which the CAIR NO<sub>x</sub> ozone season allowance was allocated.
- (d) CAIR NO<sub>x</sub> ozone season allowances shall be held in, deducted from, or transferred into or among CAIR NO<sub>x</sub> ozone season allowance tracking system accounts in accordance with 326 IAC 24-3-9, 326 IAC 24-3-10, and 326 IAC 24-3-12.

- (e) A CAIR NO<sub>x</sub> allowance is a limited authorization to emit one (1) ton of nitrogen oxides in accordance with the CAIR NO<sub>x</sub> ozone season trading program. No provision of the CAIR NO<sub>x</sub> ozone season trading program, the CAIR permit application, the CAIR permit, or an exemption under 326 IAC 24-3-3 and no provision of law shall be construed to limit the authority of the State of Indiana or the United States to terminate or limit the authorization.
- (f) A CAIR NO<sub>x</sub> allowance does not constitute a property right.
- (g) Upon recordation by the U.S. EPA under 326 IAC 24-3-8, 326 IAC 24-3-9, 326 IAC 24-3-10, or 326 IAC 24-3-12, every allocation, transfer, or deduction of a CAIR NO<sub>x</sub> ozone season allowance to or from a CAIR NO<sub>x</sub> ozone season source's compliance account is incorporated automatically in this CAIR permit.

**G.5 Excess Emissions Requirements [326 IAC 24-1-4(d)] [326 IAC 24-2-4(d)] [326 IAC 24-3-4(d)] [40 CFR 97.106(d)] [40 CFR 97.206(d)] [40 CFR 97.306(d)]**

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The owners and operators of a CAIR NO<sub>x</sub> source and each CAIR NO<sub>x</sub> unit that emits nitrogen oxides during any control period in excess of the CAIR NO<sub>x</sub> emissions limitation shall do the following:

- (a) Surrender the CAIR NO<sub>x</sub> allowances required for deduction under 326 IAC 24-1-9(j)(4).
- (b) Pay any fine, penalty, or assessment or comply with any other remedy imposed, for the same violations, the Clean Air Act (CAA) or applicable state law.

Each ton of such excess emissions and each day of such control period shall constitute a separate violation of 326 IAC 24-1-4, the Clean Air Act (CAA), and applicable state law.

The owners and operators of a CAIR SO<sub>2</sub> source and each CAIR SO<sub>2</sub> unit that emits sulfur dioxide during any control period in excess of the CAIR SO<sub>2</sub> emissions limitation shall do the following:

- (a) Surrender the CAIR SO<sub>2</sub> allowances required for deduction under 326 IAC 24-2-8(k)(4).
- (b) Pay any fine, penalty, or assessment or comply with any other remedy imposed, for the same violations, the Clean Air Act (CAA) or applicable state law.

Each ton of such excess emissions and each day of such control period shall constitute a separate violation of 326 IAC 24-2-4, the Clean Air Act (CAA), and applicable state law.

The owners and operators of a CAIR NO<sub>x</sub> ozone season source and each CAIR NO<sub>x</sub> ozone season unit that emits nitrogen oxides during any control period in excess of the CAIR NO<sub>x</sub> ozone season emissions limitation shall do the following:

- (a) Surrender the CAIR NO<sub>x</sub> ozone season allowances required for deduction under 326 IAC 24-3-9(j)(4).
- (b) Pay any fine, penalty, or assessment or comply with any other remedy imposed, for the same violations, the Clean Air Act (CAA) or applicable state law.

**Each ton of such excess emissions and each day of such control period shall constitute a separate violation of 326 IAC 24-3-4, the Clean Air Act (CAA), and applicable state law.**

**G.6 Record Keeping Requirements [326 IAC 24-1-4(e)] [326 IAC 24-2-4(e)] [326 IAC 24-3-4(e)] [326 IAC 2-7-5(3)] [40 CFR 97.106(e)] [40 CFR 97.206(e)] [40 CFR 97.306(e)]**

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Unless otherwise provided, the owners and operators of the CAIR NO<sub>x</sub> source, CAIR SO<sub>2</sub> source, and CAIR NO<sub>x</sub> ozone season source and each CAIR NO<sub>x</sub> unit, CAIR SO<sub>2</sub> unit, and CAIR NO<sub>x</sub> ozone season unit at the source shall keep on site at the source or at a central location within Indiana for those owners or operators with unattended sources, each of the following documents for a period of five (5) years from the date the document was created:

- (a) The certificate of representation under 326 IAC 24-1-6(h), 326 IAC 24-2-6(h), 326 IAC 24-3-6(h) for the CAIR designated representative for the source and each CAIR NO<sub>x</sub> unit, CAIR SO<sub>2</sub> unit, and CAIR NO<sub>x</sub> ozone season unit at the source and all documents that demonstrate the truth of the statements in the certificate of representation. The certificate and documents shall be retained on site at the source or at a central location within Indiana for those owners or operators with unattended sources beyond such five (5) year period until such documents are superseded because of the submission of a new account certificate of representation under 326 IAC 24-1-6(h), 326 IAC 24-2-6(h), 326 IAC 24-3-6(h) changing the CAIR designated representative.
- (b) All emissions monitoring information, in accordance with 326 IAC 24-1-11, 326 IAC 24-2-10, and 326 IAC 24-3-11, provided that to the extent that 326 IAC 24-1-11, 32 IAC 24-2-10, and 326 IAC 24-3-11 provides for a three (3) year period for record keeping, the three (3) year period shall apply.
- (c) Copies of all reports, compliance certifications, and other submissions and all records made or required under the CAIR NO<sub>x</sub> annual trading program, CAIR SO<sub>2</sub> trading program, and CAIR NO<sub>x</sub> ozone season trading program.
- (d) Copies of all documents used to complete a CAIR permit application and any other submission under the CAIR NO<sub>x</sub> annual trading program, CAIR SO<sub>2</sub> trading program, and CAIR NO<sub>x</sub> ozone season trading program or to demonstrate compliance with the requirements of the CAIR NO<sub>x</sub> annual trading program, CAIR SO<sub>2</sub> trading program, and CAIR NO<sub>x</sub> ozone season trading program.

This period may be extended for cause, at any time before the end of five (5) years, in writing by IDEM, OAQ or the U.S. EPA. Unless otherwise provided, all records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

**G.7 Reporting Requirements [326 IAC 24-1-4(e)] [326 IAC 24-2-4(e)] [326 IAC 24-3-4(e)] [40 CFR 97.106(e)] [40 CFR 97.206(e)] [40 CFR 97.306(e)]**

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- (a) The CAIR designated representative of the CAIR NO<sub>x</sub> source, CAIR SO<sub>2</sub> source, and CAIR NO<sub>x</sub> ozone season source and each CAIR NO<sub>x</sub> unit, CAIR SO<sub>2</sub> unit, and CAIR NO<sub>x</sub> ozone season unit at the source shall submit the reports required under the CAIR NO<sub>x</sub> annual trading program, CAIR SO<sub>2</sub> trading program, and CAIR NO<sub>x</sub> ozone season trading program, including those under 326 IAC 24-1-11, 326 IAC 24-2-10, and 326 IAC 24-3-11.

- (b) Pursuant to 326 IAC 24-1-4(e), 326 IAC 24-2-4(e), and 326 IAC 24-3-4(e) and 326 IAC 24-1-6(e)(1), 326 IAC 24-2-6(e)(1), and 326 IAC 24-3-6(e)(1), each submission under the CAIR NO<sub>x</sub> annual trading program, CAIR SO<sub>2</sub> trading program, and CAIR NO<sub>x</sub> ozone season trading program shall include the following certification statement by the CAIR designated representative: "I am authorized to make this submission on behalf of the owners and operators of the source or units for which the submission is made. I certify under penalty of law that I have personally examined, and am familiar with, the statements and information submitted in this document and all its attachments. Based on my inquiry of those individuals with primary responsibility for obtaining the information, I certify that the statements and information are to the best of my knowledge and belief true, accurate, and complete. I am aware that there are significant penalties for submitting false statements and information or omitting required statements and information, including the possibility of fine or imprisonment."
- (c) Where 326 IAC 24-1, 326 IAC 24-2, and 326 IAC 24-3 requires a submission to IDEM, OAQ, the CAIR designated representative shall submit required information to:

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

- (d) Where 326 IAC 24-1, 326 IAC 24-2, and 326 IAC 24-3 requires a submission to U.S. EPA, the CAIR designated representative shall submit required information to:

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

**G.8 Liability [326 IAC 24-1-4(f)] [326 IAC 24-2-4(f)] [326 IAC 24-3-4(f)] [40 CFR 97.106(f)] [40 CFR 97.206(f)] [40 CFR 97.306(f)]**

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The owners and operators of each CAIR NO<sub>x</sub> source, CAIR SO<sub>2</sub> source, and CAIR NO<sub>x</sub> ozone season source and each CAIR NO<sub>x</sub> unit, CAIR SO<sub>2</sub> unit, and CAIR NO<sub>x</sub> ozone season unit shall be liable as follows:

- (a) Each CAIR NO<sub>x</sub> source, CAIR SO<sub>2</sub> source, and CAIR NO<sub>x</sub> ozone season source and each CAIR NO<sub>x</sub> unit, CAIR SO<sub>2</sub> unit, and CAIR NO<sub>x</sub> ozone season unit shall meet the requirements of the CAIR NO<sub>x</sub> annual trading program, CAIR SO<sub>2</sub> trading program, and CAIR NO<sub>x</sub> ozone season trading program.
- (b) Any provision of the CAIR NO<sub>x</sub> annual trading program, CAIR SO<sub>2</sub> trading program, and CAIR NO<sub>x</sub> ozone season trading program that applies to a CAIR NO<sub>x</sub> source, CAIR SO<sub>2</sub> source, and CAIR NO<sub>x</sub> ozone season source or the CAIR designated representative of a CAIR NO<sub>x</sub> source, CAIR SO<sub>2</sub> source, and CAIR NO<sub>x</sub> ozone season source shall also apply to the owners and operators of such source and of the CAIR NO<sub>x</sub> units, CAIR SO<sub>2</sub> units, and CAIR NO<sub>x</sub> ozone season units at the source

- (c) Any provision of the CAIR NO<sub>x</sub> annual trading program, CAIR SO<sub>2</sub> trading program, and CAIR NO<sub>x</sub> ozone season trading program that applies to a CAIR NO<sub>x</sub> unit, CAIR SO<sub>2</sub> unit, and CAIR NO<sub>x</sub> ozone season unit or the CAIR designated representative of a CAIR NO<sub>x</sub> unit, CAIR SO<sub>2</sub> unit, and CAIR NO<sub>x</sub> ozone season unit shall also apply to the owners and operators of such units.

**G.9 Effect on Other Authorities [326 IAC 24-1-4(g)] [326 IAC 24-2-4(g)] [326 IAC 24-3-4(g)] [40 CFR 97.106(g)] [40 CFR 97.206(g)] [40 CFR 97.306(g)]**

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No provision of the CAIR NO<sub>x</sub> annual trading program, CAIR SO<sub>2</sub> trading program, and CAIR NO<sub>x</sub> ozone season trading program, a CAIR permit application, a CAIR permit, or an exemption under 326 IAC 24-1-3, 326 IAC 24-2-3, and 326 IAC 24-3-3 shall be construed as exempting or excluding the owners and operators, and the CAIR designated representative, of a CAIR NO<sub>x</sub> source, CAIR SO<sub>2</sub> source, and CAIR NO<sub>x</sub> ozone season source or CAIR NO<sub>x</sub> unit, CAIR SO<sub>2</sub> unit, and CAIR NO<sub>x</sub> ozone season unit from compliance with any other provision of the applicable, approved state implementation plan, a federally enforceable permit, or the Clean Air Act (CAA).

**Change No. 6** Condition 5 of the Title IV Acid Rain Permit is modified as follows to incorporate the revised Phase II NO<sub>x</sub> Compliance Plan and NO<sub>x</sub> Averaging Plan:

**5. Nitrogen Oxides Requirements [326 IAC 21]**

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- (a) The Permittee shall comply with the applicable acid rain emissions limitation of nitrogen oxides (NO<sub>x</sub>) for Units 14, 15, 17, and 18.
- (b) ~~NO<sub>x</sub> Early Election Compliance Plan for Unit 15:  
Pursuant to 40 CFR 76.8(d)(2), the Indiana Department of Environmental Management, Office of Air Quality approves a NO<sub>x</sub> early election compliance plan for Unit 15. The compliance plan is effective for calendar year 2005 through 2007. Under the compliance plan, the annual average NO<sub>x</sub> emission rate of Unit 15 for each year, determined in accordance with 40 CFR 75, shall not exceed the applicable emission limitation, under 40 CFR 76.5(a)(2) of 0.50 lb/MMBtu for dry bottom wall fired boilers. If Unit 15 is in compliance with its applicable emission limitation for each year of the plan, then Unit 15 shall not be subject to the applicable emission limitation, under 40 CFR 76.7(a)(2), of 0.46 lb/MMBtu for dry bottom wall fired boilers until calendar year 2008.~~
- (c) ~~NO<sub>x</sub> Early Election Compliance Plan for Unit 17:  
Pursuant to 40 CFR 76.8(d)(2), the Indiana Department of Environmental Management, Office of Air Quality approves a NO<sub>x</sub> early election compliance plan for Unit 17. The compliance plan is effective for calendar year 2005 through 2007. Under the compliance plan, the annual average NO<sub>x</sub> emission rate of Unit 17 for each year, determined in accordance with 40 CFR 75, shall not exceed the applicable emission limitation, under 40 CFR 76.5(a)(2), of 0.50 lb/MMBtu for dry bottom wall fired boilers. If Unit 17 is in compliance with its applicable emission limitation for each year of the plan, then Unit 17 shall not be subject to the applicable emission limitation, under 40 CFR 76.7(a)(2), of 0.46 lb/MMBtu for dry bottom wall fired boilers until calendar year 2008.~~

- ~~(d) — NO<sub>x</sub> Early Election Compliance Plan for Unit 18:  
Pursuant to 40 CFR 76.8(d)(2), the Indiana Department of Environmental Management, Office of Air Quality approves a NO<sub>x</sub> early election compliance plan for Unit 18. The compliance plan is effective for calendar year 2005 through 2007. Under the compliance plan, the annual average NO<sub>x</sub> emission rate of Unit 18 for each year, determined in accordance with 40 CFR 75, shall not exceed the applicable emission limitation, under 40 CFR 76.5(a)(2), of 0.50 lb/MMBtu for dry bottom wall-fired boilers. If Unit 18 is in compliance with its applicable emission limitation for each year of the plan, then Unit 18 shall not be subject to the applicable emission limitation, under 40 CFR 76.7(a)(2), of 0.46 lb/MMBtu for dry bottom wall-fired boilers until calendar year 2008.~~
- ~~(e) — NO<sub>x</sub> Emission Averaging Plan for Unit 14:~~
- ~~(1) — Pursuant to 40 CFR 76.11, the Indiana Department of Environmental Management, Office of Air Quality approves a NO<sub>x</sub> emission averaging plan for Unit 14, effective from calendar year 2005 through 2009. Under the plan the NO<sub>x</sub> emissions from Unit 14 shall not exceed the annual average alternative contemporaneous emission limitation (ACEL) of 0.65 lb/MMBtu. In addition, Unit 14 shall not have a heat input for the calendar year less than 12,800,000 MMBtu specified below except as provided in condition 5(b)(2).~~
- ~~(2) — Under the plan, the actual Btu-weighted annual average NO<sub>x</sub> emission rate for Units 14 and 15 shall be less than or equal to the Btu-weighted annual average NO<sub>x</sub> emission rate for the same units had they each been operated, during the same period of time, in compliance with the applicable emission limitations under 40 CFR 76.5, 76.6, or 76.7, except that for any early election units, the applicable emission limitations shall be under 40 CFR 76.7. If the designated representative demonstrates that the requirement of the prior sentence (as set forth in 40 CFR 76.11(d)(1)(ii)(A)) is met for a year under the plan, then Unit 14 shall be deemed to be in compliance for that year with its annual ACEL and annual heat input limit.~~
- ~~(3) — In addition to the described NO<sub>x</sub> compliance plan, Unit 14 shall comply with all other applicable requirements of 40 CFR 76, including the duty to reapply for a NO<sub>x</sub> (Pursuant to 40 CFR 76, Acid Rain Nitrogen Oxides Emission Reduction) compliance plan and requirements covering excess emissions.~~
- ~~(f) — NO<sub>x</sub> Emission Averaging Plan for Unit 15:~~
- ~~(1) — Pursuant to 40 CFR 76.11, the Indiana Department of Environmental Management, Office of Air Quality approves a NO<sub>x</sub> emission averaging plan for Unit 15 effective from calendar year 2005 through 2009. Under the plan the NO<sub>x</sub> emissions from Unit 15 shall not exceed the annual average alternative contemporaneous emission limitation (ACEL) of 0.25 lb/MMBtu for the calendar year except as provided in 5(b)(2). In addition, Unit 15 shall not have a heat input for the calendar year less than 25,300,000 MMBtu specified below except as provided in condition 5(b)(2).~~

- ~~(2) Under the plan, the actual Btu-weighted annual average NO<sub>x</sub> emission rate for Unit 15 in the plan shall be less than or equal to the Btu-weighted annual average NO<sub>x</sub> emission rate for the same units had they each been operated, during the same period of time, in compliance with the applicable emission limitations under 40 CFR 76.5, 76.6, or 76.7, except that for any early election units, the applicable emission limitations shall be under 40 CFR 76.7. If the designated representative demonstrates that the requirement of the prior sentence (as set forth in 40 CFR 76.11(d)(1)(ii)(A)) is met for a year under the plan, then Unit 15 shall be deemed to be in compliance for that year with its annual ACEL and annual heat input limit.~~
- ~~(3) In addition to the described NO<sub>x</sub> compliance plan, Unit 15 shall comply with all other applicable requirements of 40 CFR 76, including the duty to reapply for a NO<sub>x</sub> (Pursuant to 40 CFR 76, Acid Rain Nitrogen Oxides Emission Reduction) compliance plan and requirements covering excess emissions compliance plan and requirements covering excess emissions.~~
- ~~(4) Notwithstanding the averaging plan described above, if Unit 15 exceeds the applicable NO<sub>x</sub> emission limitation under 40 CFR 76.8 (early election) of 0.50 lb/MMBtu for Unit 15, the early election plan for Unit 15 shall be terminated in accordance with 40 CFR 76.8(e)(3) and Unit 15 shall meet, beginning on the effective date of the termination, the applicable NO<sub>x</sub> emission limitation under 40 CFR 76.7. Such termination shall not terminate the averaging plan described above.~~

**(b) NO<sub>x</sub> Emission Averaging Plan for Unit 14:**

- (1) Pursuant to 40 CFR 76.11, the Indiana Department of Environmental Management, Office of Air Quality approves a NO<sub>x</sub> emission averaging plan for Unit 14, effective from calendar year 2008 through 2011. Under the plan, the NO<sub>x</sub> emissions from Unit 14 shall be averaged with the NO<sub>x</sub> emissions for Unit 15 located at NIPSCO - RM Schahfer City Generating Station (ORIS 6085), Units 7 and 8 located at NIPSCO - Bailly Generating Station (ORIS 995), and Unit 12 located at NIPSCO - Michigan City Generating Station (ORIS 997).**
- (2) Under the plan, Unit 14 shall not exceed the annual average alternative contemporaneous emission limitation (ACEL) of 0.65 lb/MMBtu. In addition, Unit 14 shall not have an annual heat input less than 13,800,000 MMBtu. On and after January 1, 2012, Unit 14 shall not exceed the standard emission limitation under 40 CFR 76.6(a)(2) of 0.86 lb/MMBtu for cyclone boilers unless the NO<sub>x</sub> Emission Averaging Plan is renewed.**
- (3) Under the plan, the actual Btu-weighted annual average NO<sub>x</sub> emission rate for all the units in the plan shall be 0.76 lb/MMBtu. In addition, the actual Btu-weighted annual average NO<sub>x</sub> emission rate for all the units in the plan shall be less than or equal to the Btu-weighted annual average NO<sub>x</sub> emission rate for the same units had they each been operated, during the same period of time, in compliance with the applicable emission limitations under 40 CFR 76.5. If the designated representative demonstrates that the requirement of the prior sentence (as set forth in 40 CFR 76.11) is met for a year under the plan, then Unit 14 shall be deemed to be in compliance for that year with its alternative contemporaneous annual emission limitation and annual heat input limit.**

**(c) NO<sub>x</sub> Emission Averaging Plan for Unit 15:**

- (1) Pursuant to 40 CFR 76.11, the Indiana Department of Environmental Management, Office of Air Quality approves a NO<sub>x</sub> emission averaging plan for Unit 15, effective from calendar year 2008 through 2011. Under the plan, the NO<sub>x</sub> emissions from Unit 15 shall not exceed the annual average alternative contemporaneous emission limitation (ACEL) of 0.25 lb/MMBtu. In addition, Unit 15 shall not have an annual heat input less than 25,300,000 MMBtu. Under the plan, the NO<sub>x</sub> emissions from Unit 15 shall be averaged with the NO<sub>x</sub> emissions for Unit 14 located at NIPSCO - RM Schahfer City Generating Station (ORIS 6085), Units 7 and 8 located at NIPSCO - Bailly Generating Station (ORIS 995), and Unit 12 located at NIPSCO - Michigan City Generating Station (ORIS 997).
- (2) Under the plan, Unit 15 shall not exceed the annual average alternative contemporaneous emission limitation (ACEL) of 0.25 lb/MMBtu. In addition, Unit 15 shall not have an annual heat input less than 13,800,000 MMBtu. On and after January 1, 2012, Unit 15 shall not exceed the standard emission limitation under 40 CFR 76. 5(a)(2) of 0.50 lb/MMBtu for dry bottom wall-fired boilers unless the NO<sub>x</sub> Emission Averaging Plan is renewed.
- (3) Under the plan, the actual Btu-weighted annual average NO<sub>x</sub> emission rate for all the units in the plan shall be 0.76 lb/MMBtu. In addition, the actual Btu-weighted annual average NO<sub>x</sub> emission rate for all the units in the plan shall be less than or equal to the Btu-weighted annual average NO<sub>x</sub> emission rate for the same units had they each been operated, during the same period of time, in compliance with the applicable emission limitations under 40 CFR 76.5. If the designated representative demonstrates that the requirement of the prior sentence (as set forth in 40 CFR 76.11) is met for a year under the plan, then Unit 15 shall be deemed to be in compliance for that year with its alternative contemporaneous annual emission limitation and annual heat input limit.
- (d) **NO<sub>x</sub> Emission Compliance Plan for Unit 17:**  
Pursuant to 40 CFR 76.11, the Indiana Department of Environmental Management, Office of Air Quality approves a standard NO<sub>x</sub> emission compliance plan for Unit 17. Under the plan, the NO<sub>x</sub> emissions from Unit 17 shall not exceed the annual average emission limitation of 0.40 lb/MMBtu for tangentially fired boilers.
- (e) **NO<sub>x</sub> Emission Compliance Plan for Unit 18:**  
Pursuant to 40 CFR 76.11, the Indiana Department of Environmental Management, Office of Air Quality approves a standard NO<sub>x</sub> emission compliance plan for Unit 18. Under the plan, the NO<sub>x</sub> emissions from Unit 18 shall not exceed the annual average emission limitation of 0.40 lb/MMBtu for tangentially fired boilers.
- (f) In addition to the described NO<sub>x</sub> compliance plan, Units 14, 15, 17 and 18 shall comply with all other applicable requirements of 40 CFR 76, including the duty to reapply for a NO<sub>x</sub> compliance plan and requirements covering excess emissions.
- (g) Pursuant to 40 CFR 76, Acid Rain Nitrogen Oxides Emission Reduction Program, the natural gas fired combined cycle units, 16A and 16B are not subject to the nitrogen oxide limitations set out in 40 CFR 76.

See Appendix C of this Technical Support Document for an Air Quality Impact Analysis for this modification.

### **Public Health and Safety**

The Office of Air Quality (OAQ) issues technically sound permits that are protective of public health. Within the boundaries of the law, the OAQ has conducted appropriate analysis of the impacts of this proposed facility on human health. State Implementation Plan (SIP) requirements are examples of health-based standards, because the SIP requirements were proposed by the state and approved by the U.S. EPA for the purposes of maintaining the National Ambient Air Quality Standards (NAAQS). These standards are health-based standards and based on the assessment of public health risks associated with certain levels of pollution in the ambient environment. The Clean Air Act (CAA) requires each state to develop air quality plans and outlines how the standards will be met.

U.S. EPA has established ambient levels that are protective of human health. Anticipated emissions can be modeled and the resulting ambient levels compared to the federal standard. If levels are not expected to increase above U.S. EPA's ambient standard, it is appropriate to conclude that the proposed facility will not pose an increased threat to public health.

### **Noise, Odor and Zoning**

The Office of Air Quality (OAQ) does not have jurisdiction over noise pollution, odor and zoning.

### **Environmental Justice (EJ)**

Based on the 2000 US Census, there are 12.5% of Indiana residents who identified themselves as racial minority. An area is classified as High Racial Minority if it falls between 18.75% to 24.99%. Jasper County, IN, where NIPSCO – RM Schahfer Generating Station is located does not fall under this classification.

Based on the 1990 US Census, 28% of Indiana residents lived in households that received an income less than or equal to twice the poverty level. This is classified a Low Income Household. Jasper County, IN, where NIPSCO – RM Schahfer Generating Station is located does not fall under this classification.

If the source being reviewed is going to be located in an area considered to be either a High Racial Minority or Low Income Household, the OAQ attempts to publish the notice for the public review in a non-English newspaper, and holds a public meeting prior to the issuing a final action. Since Jasper County, IN, where NIPSCO – RM Schahfer Generating Station is located is neither of these classifications, the OAQ will only publish the notice in a most circulated newspaper in the area.

For more information on Environmental Justice (EJ), please refer to [www.in.gov/idem/your\\_environment/community\\_involvement/ej/](http://www.in.gov/idem/your_environment/community_involvement/ej/).

### Conclusion and Recommendation

The construction of this proposed modification shall be subject to the conditions of the attached proposed Part 70 Significant Source Modification No.: 073-26380-00008 and Significant Permit Modification No. 073-26402-00008.

- (1) Based on the facts, conditions and evaluations made, OAQ recommends to the IDEM Commissioner that the Significant Source Modification No.: 073-26380-00008 and Significant Permit Modification No. 073-26402-00008 be approved.
- (2) A copy of the preliminary findings is also available on the Internet at: [www.in.gov/idem/permits/air/pending.html](http://www.in.gov/idem/permits/air/pending.html).
- (3) For additional information about air permits and how the public and interested parties can participate, refer to the IDEM's Guide for Citizen Participation and Permit Guide on the Internet at: [www.in.gov/idem/permits/guide/](http://www.in.gov/idem/permits/guide/).

### TSD Appendices

The following are the appendices of this TSD:

- (1) Appendix A – Emissions Calculations
- (2) Appendix B – PSD BACT Analyses
- (3) Appendix C – Air Quality Impact Analysis

### IDEM Contact

Questions regarding this proposed permit can be directed to:

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Please refer to Significant Source Modification No.: 073-26380-00008 and Significant Permit Modification No. 073-26402-00008 in all correspondence.

**Indiana Department of Environmental Management  
Office of Air Quality**

Appendix A – Emission Calculations  
Technical Support Document (TSD)  
Significant Source Modification (SSM) of a Part 70 Source  
Significant Permit Modification (SPM) of Part 70 Operating Permit

**Source Description and Location**

Company Name: NIPSCO – RM Schahfer Generating Station  
Address City IN Zip: 2733 East, 1500 North, Wheatfield, Indiana, 46392  
County: Jasper  
SIC / NAICS Code: 4911, 4952 / 221112  
Significant Source Modification No.: 073-26380-00008  
Significant Permit Modification No.: 073-26402-00008  
Permit Reviewer: Kimberly Cottrell  
Date: August 7, 2008

**Emissions Increase for Proposed Project at RMSGS Unit 15**

The information below details the calculations provided by NIPSCO – RM Schahfer Generating Station. IDEM has reviewed these calculations and verified their accuracy.

Pollutant	Potential to Emit (tons/year) <sup>a</sup>	Actual Emissions (tons/year) <sup>b</sup>	Previous Potential Emissions (tons/year) <sup>c</sup>	Emissions Increase due to project	PSD Significant Threshold (tons/year)	Emissions are expect to ...
CO	36,411	478.5	3,094	35,932	100	Past Actual to Future Potential - Increase due to this project
CO				33,317	100	Past Potential to Future Potential - Increase due to this project
NO <sub>x</sub>				0	40	Decrease due to this project <sup>d</sup>
SO <sub>2</sub>				0	40	Remain unchanged after the project <sup>d</sup>
VOC				0	40	Remain unchanged after the project <sup>d</sup>
PM filterable				0	25	Remain unchanged after the project <sup>d</sup>
PM <sub>10</sub> total				0	15	Remain unchanged after the project <sup>d</sup>
H <sub>2</sub> SO <sub>4</sub>				0	7	Remain unchanged after the project <sup>d</sup>
Fluorides				0	3	Remain unchanged after the project <sup>d</sup>
Lead				0	0.6	Remain unchanged after the project <sup>d</sup>

<sup>a</sup> Potential to Emit for Unit 15 is calculated assuming 8,760 hrs/yr operation at full load (5,100 MMBtu/hr). PTE of CO was calculated based on 1.63 lb/MMBtu.

NIPSCO conservatively estimated future emissions assuming full operation (i.e., maximum heat input capacity at 8,760 hour/yr) to avoid restrictions on operating schedule, and reporting in accordance with 326 IAC 2-2-1(rr)(2)(B). The highest CO emission rate of 1.63 lb CO/MMBtu was used for future emissions as a worst case Potential to Emit (PTE) for the unit. NIPSCO used this emission factor for new LNBs to illustrate that the proposed LNB project may result in a significant emissions increase of CO for determining applicability of the "major modification" provision under PSD. This conservative PTE value was also used to demonstrate that modeled ambient air impacts at this conservatively high emission rate were well below the significant impact levels.

<sup>b</sup> The actual emissions before the project were estimated using the average heat input for May 2003 to April 2005. NIPSCO used AP-42 CO emission factors to calculate actual emissions.

<sup>c</sup> The previous potential emissions were estimated using the maximum rated heat input and AP-42 CO emission factors.

<sup>d</sup> NIPSCO used the Actual-to-Projected Actual test for NO<sub>x</sub>, PM, PM<sub>10</sub>, SO<sub>2</sub>, and VOC. Based on EPA's finalized 'reasonable possibility' rule (72 FR 72607, December 21, 2007), there is no reasonable possibility that the proposed LNB project will result in emissions increases for regulated NSR pollutants other than CO. Also in accordance with 40 CFR 51.166(r)(6), NIPSCO will maintain records confirming this 'reasonable possibility' evaluation.

**UNIT 15 BOILER POTENTIAL TO EMIT AFTER NEW LNB PROJECT**

	E Factor <sup>1</sup>	Units	Capacity (MMBtu/hr) <sup>2</sup>	=	lb/hr	x	hrs/yr	/	lb/ton	=	tpy
Boiler CO Emissions =	1.63	lb/MMBtu	5,100	=	8,313	x	8,760	/	2000	=	<b>36,410.94</b>

<sup>1</sup> Based on a 3-hour average.

<sup>2</sup> Boiler capacity is based on Part 70 Operating Permit description for this unit.

**UNIT 15 BOILER ACTUAL EMISSIONS BEFORE NEW LNB PROJECT**

	E Factor <sup>3</sup>	Units	May 2003 - Apr 2005 Unit 15 Data	=	lb/year	/	lb/ton	=	tpy
Boiler CO Emissions =	0.5	lb CO/ton coal	1,901,146 tons/year	=	950,573	/	2000	=	475.29
	0.082	lb CO/MMBtu ng	78,755 MMBtu/year	=	6,458	/	2000	=	3.23
									<b>478.5</b>

**UNIT 15 BOILER POTENTIAL EMISSIONS BEFORE NEW LNB PROJECT**

	E Factor <sup>3</sup>	Units	Nominal/Maximum Capacity	=	lb/year	/	lb/ton	=	tpy
Boiler CO Emissions =	0.5	lb CO/ton coal	1,718,308 tons/year	=	859,154	/	2000	=	429.58
	0.082	lb CO/MMBtu ng	44,676,000 MMBtu/year	=	3,663,432	/	2000	=	1,831.72
	0.5	lb CO/ton coal	2,351,368 tons/year <sup>4</sup>	=	1,175,684	/	2000	=	<b>587.84</b>
	0.082	lb CO/MMBtu ng	61,135,579 MMBtu/year <sup>4</sup>	=	5,013,117	/	2000	=	<b>2,506.56</b>
									<b>3,094.40</b>

<sup>3</sup> Based on AP-42 Emission Factor of 0.5 lb of CO/Ton of coal – Table 1.1-3, Sept 1998 and 0.082 lb of CO/MMBtu of natural gas – Table 1.4-1, July 1998.

<sup>4</sup> Based on higher capacity from worst case actual emissions because the PTE using the 0.5 emission factor was less than the actual emissions calculation. Annual coal usage is based on the 19 MMBtu/ton long term average coal usage for Unit 15.

## Indiana Department of Environmental Management Office of Air Quality

### Appendix B – BACT Analyses Technical Support Document (TSD) Prevention of Significant Deterioration (PSD) Significant Source Modification (SSM) of a Part 70 Source Significant Permit Modification (SPM) of Part 70 Operating Permit

#### Source Description and Location

Source Name:	NIPSCO – RM Schahfer Generating Station
Source Location:	2733 East, 1500 North, Wheatfield, Indiana, 46392
County:	Jasper
SIC Code:	4911, 4952
Operation Permit No.:	T 073-6792-00008
Operation Permit Issuance Date:	September 7, 2006
Significant Source Modification No.:	073-26380-00008
Significant Permit Modification No.:	073-26402-00008
Permit Reviewer:	Kimberly Cottrell

#### Proposed Project

On April 4, 2008, the Office of Air Quality (OAQ) received an application from NIPSCO – RM Schahfer Generating Station located at 2733 E 1500 North, Wheatfield, Indiana, 46392, in Jasper County. NIPSCO is proposing to install new Low NO<sub>x</sub> Burners (LNB) in Unit 15 in order to reduce NO<sub>x</sub> emissions to meet requirements of phase one of the CAIR (“LNB Project” or “Project”). The new LNB incorporate an improved over-fire air system with an improved capability to reduce NO<sub>x</sub> emissions.

The proposed modification will require modification of the emission unit description for Unit 15 as follows:

One (1) dry bottom pulverized coal-fired boiler identified as Unit 15, with construction commenced in 1974 and commercial operation begun in 1979, with a design heat input capacity of 5,100 million Btu per hour (MMBtu/hr), with low NO<sub>x</sub> burners (**replaced in 2008-2009**), combusting No. 2 fuel oil and/or natural gas for ignition and as supplemental fuels, using an electrostatic precipitator (ESP) with a flue gas conditioning (FGC) system for control of particulate matter, and exhausting to stack 15. Unit 15 has continuous emissions monitoring systems (CEMS) for monitoring nitrogen oxides (NO<sub>x</sub>) and sulfur dioxide (SO<sub>2</sub>) and a continuous opacity monitoring (COM) system.

#### Requirement for Best Available Control Technology (BACT)

326 IAC 2-2 requires a best available control technology (BACT) review to be performed on the proposed modification because the proposed modification has the potential to emit carbon monoxide (CO) greater than 100 tons per year.

## Emission Calculations

See Appendix A – Emission Calculations – of this TSD for detailed Potential to Emit (PTE) calculations.

## Summary of the Best Available Control Technology (BACT) Process

BACT is a mass emission limitation based on the maximum degree of pollution reduction of emissions, which is achievable on a case-by-case basis. BACT analysis takes into account the energy, environmental, and economic impacts on the source. These reductions may be determined through the application of available control techniques, process design, work practices, and operational limitations. Such reductions are necessary to demonstrate that the emissions remaining after application of BACT will not cause or contribute to significant degradation of air quality, thereby protecting public health and the environment.

Federal guidance on BACT requires an evaluation that follows a “top down” process. In this approach, the applicant identifies the best-controlled similar source on the basis of controls required by regulation or permit, or controls achieved in practice. The highest level of control is then evaluated for technical feasibility.

The five (5) basic steps of a top-down BACT analysis are listed below:

### *Step 1: Identify Potential Control Technologies*

The first step is to identify potentially “available” control options for each emission unit and for each pollutant under review. Available options should consist of a comprehensive list of those technologies with a potentially practical application to the emissions unit in question. The list should include lowest achievable emission rate (LAER) technologies, innovative technologies, and controls applied to similar source categories. There is no requirement in the State or Federal regulations to require innovative control to be used as BACT.

### *Step 2: Eliminate Technically Infeasible Options*

The second step is to eliminate technically infeasible options from further consideration. To be considered feasible, a technology must be both available and applicable. It is important in this step that any presentation of a technical argument for eliminating a technology from further consideration be clearly documented based on physical, chemical, engineering, and source-specific factors related to safe and successful use of the controls. Innovative control means a control that has not been demonstrated in a commercial application on similar units. Innovative control technology is projected to have equivalent or better emission reductions to the best available control technology. The source has not requested to use an innovative control technology; therefore, the OAQ will not evaluate or require any innovative controls for this BACT analysis. Only available and proven control technologies are evaluated. A control technology is considered available when there are sufficient data indicating that the technology results in a reduction in emissions of regulated pollutants.

*Step 3: Rank the Remaining Control Technologies by Control Effectiveness*

The third step is to rank the technologies not eliminated in Step 2 in order of descending control effectiveness for each pollutant of concern. The ranked alternatives are reviewed in terms of environmental, energy, and economic impacts specific to the proposed modification. If the analysis determines that the evaluated alternative is not appropriate as BACT due to any of the impacts, then the next most effective is evaluated. This process is repeated until a control alternative is chosen as BACT. If the highest ranked technology is proposed as BACT, it is not necessary to perform any further technical or economic evaluation, except for the environmental analyses.

*Step 4: Evaluate the Most Effective Controls and Document the Results*

The fourth step entails an evaluation of energy, environmental, and economic impacts for determining a final level of control. The evaluation begins with the most stringent control option and continues until a technology under consideration cannot be eliminated based on adverse energy, environmental, or economic impacts.

*Step 5: Select BACT*

The fifth and final step is to select as BACT the most effective of the remaining technologies under consideration for each pollutant of concern. For the technologies determined to be feasible, there may be several different limits that have been set as BACT for the same control technology. The permitting agency has to choose the most stringent limit as BACT unless the applicant demonstrates in a convincing manner why that limit is not feasible. The final BACT determination would be the technology with the most stringent corresponding limit that is economically feasible. BACT must, at a minimum, be no less stringent than the level of control required by any applicable New Source Performance Standard (NSPS) and National Emissions Standard for Hazardous Air Pollutants (NESHAP) or state regulatory standards applicable to the emission units included in the permits.

The Office of Air Quality (OAQ) makes BACT determinations by following the five steps identified above.

**Summary of Similar Sources (SIC Code 4911)**

The table below summarizes existing sources with similar operations (SIC Code 4911) that are listed in the U.S. EPA RACT/BACT/LAER (RBLA) Clearinghouse database and other resources, such as other permitting agencies websites. Sources are listed in alphabetical order.

<b>Table 1: Sources with SIC Code 4911</b>			
<b>Company Name and Location</b>	<b>Process</b>	<b>Date Constructed / Permitted</b>	<b>Boiler Fuel Type</b>
CLECO Corp Dolet Hills Power Station	electric utility generating station	November 2006	Lignite; Wet BTM
Detroit Edison Company Monroe Power Plant	electric utility generating station	March 2006	Pulverized Coal
		November 2005	
Detroit Edison Company St. Clair Power Plant	electric utility generating station	January 2006	Pulverized Coal

<b>Table 1: Sources with SIC Code 4911</b>			
<b>Company Name and Location</b>	<b>Process</b>	<b>Date Constructed / Permitted</b>	<b>Boiler Fuel Type</b>
Iowa Power And Light Ottumwa Generating Station	electric utility generating station	February 2007	Pulverized Coal
MidAmerican Energy Company George Neal North	electric utility generating station	September 2007	Coal – Cyclone
		December 2005	Pulverized Coal
MidAmerican Energy Company Neal Energy Center South	electric utility generating station	September 2005	Pulverized Coal
Mississippi Power Company – Jack Watson	electric utility generating station	September 2007	Pulverized Coal
NPPD Gerald Gentleman Station	electric utility generating station	August 2006	Pulverized PRB Coal
OPPD - Nebraska City Station	electric utility generating station	March 2005	Pulverized Coal
Reliant Energy – WA Parish Electric Generating Station	electric utility generating station	October 2003	Pulverized Coal
		October 2002	
Westar Energy, Inc. - Jeffrey Energy Center	electric utility generating station	September 2005	Pulverized Coal

**Step 1: Identify Potential Control Technologies**

Carbon monoxide is emitted from the Unit 15 boiler due to incomplete fuel combustion.

Emissions of carbon monoxide (CO) are generally controlled by oxidation. Combustion control technologies include recuperative thermal oxidation, regenerative thermal oxidation, recuperative catalytic oxidation, regenerative catalytic oxidation, and flares.

Optimization of the combustion process is another effective method for reducing CO emissions.

**Step 2: Eliminate Technically Infeasible Options**

**Thermal Incineration**

Typical methods of thermal incineration include regenerative thermal oxidizers, recuperative incinerators, direct flame incinerators, and boilers. The destruction of organic compounds usually requires temperatures ranging from 1200°F to 2200°F for direct thermal oxidizers or 600°F to 1200°F for catalytic systems. Combustion temperature depends on the chemical composition and the desired destruction efficiency. Carbon dioxide and water vapor are the typical products of complete combustion. Turbulent mixing and combustion chamber retention times of 0.5 to 1.0 seconds are needed to obtain high destruction efficiencies.

Except for the use of boilers, all of these methods have high costs due to energy consumption and/or capital requirements, and are not cost effective for exhaust gases having low CO levels such as those found in coal fired utility boilers. These devices are typically employed to control sources with high levels of CO and volatile organic compounds thus requiring less supplemental fuel for reheating the exhaust gas. Additionally, the exhaust gas CO concentrations from these devices would be similar to that expected from a boiler with good combustions design and operation, which would be expected given the combustion conditions and temperatures are similar to those found in boilers.

For these reasons, thermal incineration is not considered technically feasible for PC boilers.

### **Oxidation Catalysts**

Oxidation catalysts can be used to reduce CO emissions as a post combustion control system. While oxidation catalysts have been used to reduce CO emissions from natural gas and low sulfur, oil fired combustion turbines; oxidation catalysts have not been used for solid fuel fired boiler applications. Solid fuel fired boilers have several technical problems related to the use of oxidation catalyst, including:

- Catalyst plugging, fouling and poisoning by fuel sulfur and fly ash; and
- Conversion of SO<sub>2</sub> to SO<sub>3</sub>/sulfuric acid mist.

For these reasons, oxidation catalysts have never been used or demonstrated in practice on solid fuel fired boilers.

The typical oxidation catalyst for CO is a rhodium or platinum (noble metal) catalyst on an alumina support material. This catalyst is installed in an enlarged duct or reactor with flue gas inlet and outlet distribution plates. Acceptable catalyst operating temperatures range from 400 - 1250 °F, with the optimum temperature range being 850 - 1,100°F. Below 600°F, a greater catalyst volume would be required to achieve the same reduction. To achieve this temperature range in the existing PC boilers, the catalyst would need to be installed before the boiler economizer, which is ahead of the unit's particulate controls (electrostatic precipitators). However, installation of the catalyst in this section of the boiler would result in rapid poisoning and deactivation of the catalyst by sulfur and metal compounds, and plugging and fouling of the active catalyst sites with particulates due to the high dust loading. Additionally, significant cost would be incurred for retrofitting this technology to an existing boiler as opposed to new combustion turbines. These retrofit costs would be similar to those required to retrofit hot side selective catalytic reduction technology.

In addition, because the catalyst would oxidize a high percentage of the flue gas SO<sub>2</sub> to sulfur trioxide (SO<sub>3</sub>), the oxidation catalyst would result in significantly increased sulfuric acid mist formation, and condensable particulate. High levels of sulfuric acid mist would lead to rapid and destructive corrosion of ducts and equipment downstream of the catalyst. The higher levels of sulfuric acid mist would lead to higher fine particulate and opacity levels, and a visible plume from the stack. Current oxidation catalyst technology has not been designed for the higher particulate and sulfur dioxide levels found in coal fired applications.

For these reasons, catalytic oxidation is not considered technically feasible for PC boilers.

### **Combustion Control**

Combustion controls generally include the following:

- Staged combustion to minimize NO<sub>x</sub> formation;
- High temperatures and low oxygen levels in the primary combustion zone;
- Sufficient excess air to complete combustion;

- Sufficient residence times; and
- Good Air/Fuel Mixing.

In PC boilers, combustion control is the most effective means for reducing CO emissions from PC boilers. Combustion efficiency is often related to the three “T’s” of combustion: Time, Temperature, and Turbulence. These components of combustion efficiency are designed into the PC boiler to maximize fuel efficiency and reduce operating costs in terms of fuel consumption. Therefore, combustion control is accomplished primarily through burner/furnace design and operation (as it relates to time, temperature and turbulence). The primary combustion control methods used, once the burner/furnace design is set, are adjustments in the amount of air and the ratio of primary air to secondary air. These adjustments significantly affect combustion efficiency, and the CO levels in the combustion flue gases. In addition water wall/tube corrosion and erosion, steam temperatures, and NO<sub>x</sub> emissions are also affected by adjustments to the ratio of primary air to secondary air.

Low NO<sub>x</sub> burners for PC boilers are designed to burn the coal in a slow, controlled manner using diffusion flame type combustion process. These burners result in the minimum possible quantity of combustion air in the primary combustion zone. Thus the fuel is initially combusted in fuel rich conditions. This initial combustion zone helps to reduce NO<sub>x</sub> formation. Using this low NO<sub>x</sub> burner technology, the primary unburned combustible by product produced from this primary combustion zone is CO. Carbon Monoxide formation in this zone reduces NO<sub>x</sub> formation during the initial combustion process, and provides an easier fuel to be burned to completion in the upper furnaces stages. Secondary and tertiary air is introduced above and around the primary combustion zone. Tertiary air injected through over fire air ports in the upper furnace section brings the total amount of combustion air up to the level needed to achieved complete combustion and minimizes CO emissions. The total amount of oxygen measured at the outlet of the boiler is typically 2 – 4 percent oxygen.

Changes in excess air affect the availability of oxygen and combustion efficiency. Very low or very high excess air levels may cause high CO formation, and may also affect NO<sub>x</sub> formation. Increased excess air levels will reduce CO emissions until so much excess air is introduced that the overall combustion temperature drops significantly. If combustion temperatures drop significantly, then boiler efficiency and steam temperatures are negatively affected. Because of these interrelationships, PC boilers with low NO<sub>x</sub> burners usually operate within a narrow range of excess air. Typically, this range is set to minimize the formation of NO<sub>x</sub> and to maximize combustion efficiency (maximize the oxidation of the fuel to its totally oxidized state of CO<sub>2</sub> and H<sub>2</sub>O) while meeting the steam rate and quality demands on the boiler. The presence of CO and other products of incomplete combustion (unburned carbon and hydrocarbon) in the flue gas mean the total fuel energy value of the fuel has not been released. As such, it is economically desirable to minimize the flue gas levels of CO, and unburned carbon and hydrocarbon.

Good combustion practices are considered technically feasible for PC boilers.

### **Step 3: Rank the Remaining Control Technologies by Control Effectiveness**

Based on the above review, good combustion practice is the only technically feasible control option for CO from the pulverized coal-fired (PC) boiler identified as Unit 15. Since there is only one technically feasible control to evaluate, analysis and comparison of economic, environmental, and energy impacts is not necessary.

**Step 4: Evaluate the Most Effective Controls and Document the Results**

The following table lists the proposed CO BACT determination along with the existing CO BACT determinations for pulverized coal-fired (PC) boilers at electric utility generating stations. All data in the table is based on the information obtained from the permit application submitted by NIPSCO – RM Schahfer Station, the U.S. EPA RACT/BACT/LAER Clearinghouse (RBLCL), and electronic versions of permits available at the websites of other permitting agencies.

<b>Table 2: Existing CO BACT Limits – Pulverized Coal-Fired (PC) Boilers</b>						
<b>RBLCL ID or State</b>	<b>Company/ Facility/Unit</b>	<b>Firing Rate (MMBtu/hr)</b>	<b>Permit Date</b>	<b>Fuel &amp; Boiler Type</b>	<b>CO Limit and Averaging Period* (lb/MMBtu)</b>	<b>Control Method</b>
<b>PROPOSAL</b>						
NA	NIPSCO – RM Schahfer Station Wheatfield, Indiana	5,100	NA	Pulverized Coal	1.63 (3-hour rolling average)	Good Combustion Practices**
<b>COMPARABLE BACT DETERMINATIONS (Listed in Top-Down Order by Emission Limit)</b>						
MS-0088	Mississippi Power Company – Jack Watson Unit 5	5,095	9/26/2007	Pulverized Coal	0.1490 (none specified)	Good Combustion Practices**
MS-0088	Mississippi Power Company – Jack Watson Unit 4	2,526	9/26/2007	Pulverized Coal	0.1490 (none specified)	Good Combustion Practices**
LA-0210	CLECO Corp Dolet Hills Power Station Unit 1	7,600	11/21/2006	Lignite Wet BTM	0.15 (annual average)	Good Combustion Practices**
NE-0031	OPPD - Nebraska City Station Unit 1	616	3/9/2005	Pulverized Coal	0.16 (3-hour rolling average)	Good Combustion Practices**
IA-0091	Iowa Power And Light Ottumwa Generating Station Unit 1	6,370	2/27/2007	Pulverized Coal	0.163 (30-day rolling average)	Good Combustion Practices**
Kansas	Westar Energy, Inc. - Jeffrey Energy Center Unit 3	6,000 (Approx.)	9/29/2005	Pulverized Coal	0.25 (30-day rolling average)	Good Combustion Practices**
TX-0298	Reliant Energy – WA Parish Electric Generating Station Units 5 & 6	7,400	10/15/2003	Pulverized Coal	0.292 (none specified)  9,496 tons/year	Combustion Controls**

<b>Table 2: Existing CO BACT Limits – Pulverized Coal-Fired (PC) Boilers</b>						
<b>RBLC ID or State</b>	<b>Company/ Facility/Unit</b>	<b>Firing Rate (MMBtu/hr)</b>	<b>Permit Date</b>	<b>Fuel &amp; Boiler Type</b>	<b>CO Limit and Averaging Period* (lb/MMBtu)</b>	<b>Control Method</b>
TX-0358	Reliant Energy– WA Parish Electric Generating Station Units 7	6,700	10/15/2002	Pulverized Coal	0.33 (none specified)  8,281 tons/year	Combustion Controls**
IA-0080	MidAmerican Energy Company Neal Energy Center South Unit 4	6,900	9/28/2005	Pulverized Coal	0.42 (1 calendar day)	Good Combustion Practices**
NE-0045	NPPD Gerald Gentleman Station Unit 1	7,538	8/18/2006	Pulverized PRB Coal	0.5 (30-day rolling average)	Good Combustion Practices**
IA-0081	MidAmerican Energy Company George Neal North Unit 1	1,363	12/9/2005	Coal Cyclone	1.26 (3-hour average)	Good Combustion Practices**
IA-0090	MidAmerican Energy Company George Neal North Unit 2	3,081	9/5/2007	Pulverized Coal	1.63 (3-hour rolling average)	Good Combustion Practices**
MI-0379	Detroit Edison Company Monroe Power Plant Unit 1	7,624	3/3/2006	Pulverized Coal	No limit	Good Combustion Practices**
MI-0380	Detroit Edison Company St. Clair Power Plant Units 1 & 2	1,900	1/4/2006	Pulverized Coal	No limit	Good Combustion Practices**
MI-0381	Detroit Edison Company Monroe Power Plant Unit 4	7,624	11/15/2005	Pulverized Coal	No limit	Good Combustion Practices**

\* The CO emission limitations for modified existing units range from 0.15 to 1.63 lb/MMBtu (with varying averaging times), where limits were specified. There are some instances where no CO emissions limits were established, and a work practice standard was specified based on the use of combustion control. The review of RBLC database did not yield any information regarding whether these modified existing boilers have demonstrated compliance with the noted CO BACT emission limits.

\*\* Good combustion practices as CO control generally includes high temperatures and low oxygen levels in the primary combustion zone; sufficient excess air to complete combustion; sufficient residence times; and good air/fuel mixing.

The RACT/BACT/LAER (RBLC) Clearinghouse and review of other New Source Review (NSR) permits reveal that similar electric utility generating stations use only good combustion practices for controlling CO emissions from pulverized coal-fired (PC) boilers.

Good combustion practice is proposed as BACT for CO from the pulverized coal-fired (PC) boiler identified as Unit 15. This control method is equivalent to the BACT level of control achieved by all other permitted facilities.

The CO emissions from coal-fired utility boilers equipped with low NO<sub>x</sub> burners vary depending on the boiler type (wall-fired, tangential-fired, cyclone fired, etc.), fuel type (bituminous, subbituminous, lignites, coke, etc.), boiler furnace volume (pre-NSPS, NSPS D & Da, fuel, etc.), and NO<sub>x</sub> emission rate (moderate to deep reductions).

- (a) MidAmerican Energy Company George Neal North Unit 2, Iowa:  
The CO BACT emission limit proposed by NIPSCO is the same as the 1.63 lbs CO/MMBtu BACT limit for the George Neal Unit 2 boiler. The NIPSCO Unit 15 boiler is a Foster Wheeler wall-fired boiler using circular burner technology with over-fire air for the control of NO<sub>x</sub> and CO. The George Neal Unit 2 boiler is a Foster Wheeler wall-fired boiler using circular burner technology with over-fire air for the control of NO<sub>x</sub> and CO. Since these boilers are similar and fire similar coals, the emission levels achievable by the NIPSCO Unit 15 boiler should be comparable to the George Neal Unit 1 boiler.
- (b) MidAmerican Energy Company George Neal North Unit 1, Iowa:  
While it appears that the CO BACT emission limit proposed by NIPSCO for Unit 15 is less stringent than the 1.26 lbs CO/MMBtu BACT emission limit for the George Neal Unit 1 boiler, these are different boiler types with significantly different combustion and emission characteristics. The NIPSCO Unit 15 boiler is a Foster Wheeler wall-fired boiler using circular burner technology with over-fire air for the control of NO<sub>x</sub> and CO. The George Neal Unit 1 boiler is a Babcock & Wilcox cyclone type boiler using over-fire air for the control of NO<sub>x</sub> and CO. Cyclone boilers by their burner design operate with higher combustion temperatures and lower CO emission levels relative to Foster Wheeler wall-fired boilers; therefore, the emission levels achievable by the George Neal Unit 1 boiler are not comparable to the NIPSCO Unit 15 boiler.
- (c) Remaining Boilers (Table 2):  
The emission limits for the remaining boilers have significantly longer averaging periods (24-hour, 30-day and annual/12-month) relative to the averaging period of 3-hours proposed for NIPSCO's Unit 15 boiler. Short-term averaging periods have to take into account normal short term variations in operation that are dampened/averaged down by the longer averaging periods. For example, CO emissions from pulverized coal boilers can spike during changes in operating conditions, such as mill (pulverizer) starts and stops, load changes, and changes in coal properties (e.g., moisture content). CO spikes occur because the oxygen demand/balance in the boiler changes with these types of operating condition changes, and time is required to make the oxygen balance changes needed to lower the CO emissions while at the same time controlling NO<sub>x</sub> emissions to acceptable levels. Although the oxygen balance adjustments can typically be made in an hour, a one hour CO spike is more easily averaged down with 23 hours (for a 24 hour averaging period) or 719 hours (for a 30 day averaging period) of lower values relative to 2 hours (for a 3 hour averaging period) of lower values.

#### **Step 5: Select BACT - Unit 15 PC Boiler (CO)**

Pursuant to 326 IAC 2-2-3 (Prevention of Significant Deterioration (PSD)), the Permittee shall comply with the following requirements for carbon monoxide (CO) for the proposed modification to the pulverized coal-fired (PC) boiler identified as Unit 15:

- (a) CO emissions from Unit 15 shall not exceed 1.63 lb/MMBtu based on a 3-hour rolling average.
- (b) CO emissions from Unit 15 shall be minimized through the use of good combustion practices according to the Boiler Combustion Optimization Plan.

## **Compliance Determination and Monitoring**

### **Compliance Testing Requirements**

Within 180 days of startup of the modified Unit 15 boiler equipped with LNB, compliance with the CO limitation in Condition D.2.1 shall be determined by a performance stack test conducted using methods approved by the Commissioner. This testing shall be repeated by December 31 of every fifth calendar year following this valid compliance demonstration. Testing shall be conducted in accordance with Section C - Performance Testing. For the purpose of this permit, "calendar year" means the twelve (12) month period from January 1 to December 31 inclusive.

### **Boiler Combustion Optimization**

NIPSCO shall develop and implement a Boiler Combustion Optimization Plan within 120 days of the startup date of Unit 15 after the unit outage for the low-NO<sub>x</sub> Burner project. This plan will identify boiler operating parameters that indicate good combustion practices consistent with the BACT determination for Unit 15. NIPSCO will monitor operating parameters for Unit 15 consistent with this plan to demonstrate compliance with the BACT emission limit.

## **IDEM Contact**

Questions regarding this proposed permit can be directed to:

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MC 61-53, Room 1003  
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Toll free (within Indiana): 1-800-451-6027 extension 3-0870  
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Please refer to Significant Source Modification No.: 073-26380-00008 and Significant Permit Modification No. 073-26402-00008 in all correspondence.

**Indiana Department of Environmental Management  
Office of Air Quality**

**Appendix C – Air Quality Analysis  
To the Technical Support Document (TSD)  
for a Part 70 Significant Source Modification and  
a Part 70 Significant Permit Modification**

**Source Description and Location**

Source Name:	NIPSCO – RM Schahfer Generating Station
Source Location:	2733 East, 1500 North, Wheatfield, Indiana, 46392
County:	Jasper
SIC Code:	4911, 4952
Operation Permit No.:	T 073-6792-00008
Operation Permit Issuance Date:	September 7, 2006
Significant Source Modification No.:	073-26380-00008
Significant Permit Modification No.:	073-26402-00008
Modeler:	Steven Sherman

**Proposed Project**

NIPSCO, RM Schahfer Generating Station, has submitted a request to install Low NOx Burners (LNB) at their Wheatfield facility. The Modeling Section in the Office of Air Quality (QAQ) received the permit application April 4, 2008. This technical support document provides the air quality analysis review of the permit application.

**Analysis Summary**

Based on the net emissions changes after controls, a PSD air quality analysis was triggered for CO. The significant impact analysis for CO determined that modeling concentrations did not exceed the significant impact levels. An additional impact analysis was conducted and showed no significant impact.

**Air Quality Impact Objectives**

The purpose of the air quality impact analysis in the permit application is to accomplish the following objectives. Each objective is individually addressed in this document in each section outlined below.

- (A) Establish which pollutants require an air quality analysis based on PSD significant emission rates.
- (B) Provide analyses of actual stack heights with respect to Good Engineering Practice (GEP), the meteorological data used, a description of the model used in the analysis, and the receptor grid utilized for the analyses.
- (C) Determine the significant impact level, the area impacted by the source's emissions and background air quality levels.

- (D) Perform a qualitative analysis of the source's impact on general growth, soils, vegetation and visibility in the impact area with emphasis on any Class I areas. The nearest Class I area is Kentucky's Mammoth Cave National Park.
- (E) Summarize the Air Quality Analysis.

**Section A - Pollutants Analyzed for Air Quality Impact**

**Applicability**

The PSD requirements, 326 IAC 2-2, apply in attainment and unclassifiable areas and require an air quality impact analysis of each regulated pollutant emitted in significant amounts by a major stationary source or modification. Significant emission levels for each pollutant are defined in 326 IAC 2-2-1 and in the Code of Federal Regulations (CFR) 52.21(b)(23)(i).

**Proposed Project Emissions**

CO is the only pollutant that will be emitted from the project. The net emissions increase for this project is summarized below in Table 1. CO potential emissions after controls exceed the PSD significant emission rates and will require an air quality analysis.

<b>Table 1: Significant Emission Rates for PSD</b>			
<b>POLLUTANT</b>	<b>NET PROJECT EMISSION RATE (tpy)</b>	<b>SIGNIFICANT EMISSION RATE (tpy)</b>	<b>PRELIMINARY AIR QUALITY ANALYSIS REQUIRED?</b>
CO	35,932	100	Yes

These modeled emission rates are taken from their permit application.

**Section B – Good Engineering Practice (GEP), Met Data, Model Used, Receptor Grid and Terrain**

**Stack Height Compliance with Good Engineering Practice (GEP)**

**Applicability**

Stacks should comply with GEP requirements established in 326 IAC 1-7-4. If stacks are lower than GEP, excessive ambient concentrations due to aerodynamic downwash may occur. Dispersion modeling credit for stacks taller than 65 meters (213 feet) are limited to GEP for the purpose of establishing emission limitations. The GEP stack height takes into account the distance and dimensions of nearby structures, which would affect the downwind wake of the stack. The downwind wake is considered to extend five times the lesser of the structure's height or width. A GEP stack height is determined for each nearby structure by the following formula:

$$H_g = H + 1.5L$$

Where:  $H_g$  is the GEP stack height  
 H is the structure height  
 L is the structure's lesser dimension (height or width)

**Meteorological Data**

The meteorological data used in AERMOD consisted of 1988 through 1992 surface data from the South Bend, Indiana and upper air measurements taken at Peoria, Illinois. The meteorological data was preprocessed using AERMET.

**Model Description**

RTP Environmental used AERMOD, Version 07026. OAQ compared EPA’s version of AERMOD to Bowman Engineering’s AERMOD software and demonstrated equivalence to at least 4 significant figures. The two programs were used to determine maximum off-property concentrations or impacts for each pollutant. All regulatory default options were utilized in the U.S. EPA approved model, as listed in the 40 CFR Part 51, Appendix W, “Guideline on Air Quality Models”.

**Receptor Grid**

OAQ modeling used the same receptor grids generated by RTP Environmental. The receptor grid contains 13,762 individual receptors.

- 100 meter spacing from the fenceline to 3,000 meters from the facility.
- 250 meters spacing from 3,000 to 7,500 meters from the facility.
- 500 meters spacing from 7,500 to 10,000 meters from the facility.
- 1,000 meters spacing from 10,000 to 15,000 meters from the facility.

**Treatment of Terrain**

Receptor terrain elevation inputs were interpolated from DEM (Digital Elevation Model) data obtained from the USGS. DEM terrain data was preprocessed using AERMAP.

**Section C - Significant Impact Level/Area (SIA) and Background Air Quality Levels**

A significant impact analysis was conducted to determine if the source would exceed the PSD significant impact levels (concentrations). If the source’s concentrations would exceed these levels, further air quality analysis is required. Refined modeling for CO was not required because the results fell below significant impact levels. Significant impact levels are defined by the following time periods in Table 2 below with all maximum-modeled concentrations from the worst case operating scenarios. Worst-case emission rates for and startup and shutdown operation scenarios will not exceed the permitted limit.

<b>Table 2: Significant Impact Analysis</b>				
<b>POLLUTANT</b>	<b>TIME AVERAGING PERIOD</b>	<b>MAXIMUM MODELED IMPACTS (ug/m<sup>3</sup>)</b>	<b>SIGNIFICANT IMPACT LEVEL (ug/m<sup>3</sup>)</b>	<b>REFINED AQ ANALYSIS REQUIRED</b>
CO	1 hour*	435	2000	No
CO	8 hour*	230	500	No

\*First highest values per EPA NSR manual October 1990. Impacts are from NIPSCO only.

**Part D – Qualitative Analysis**

**Additional Impact Analysis**

All PSD permit applicants must prepare additional impacts analysis for each pollutant subject to regulation under the Clean Air Act. This analysis assesses the impacts on growth, soils and vegetation, endangered species and visibility caused by any increase in emissions of any regulated pollutant from the source. The NIPSCO modeling submittal provided an additional impact analysis performed by RTP Environmental.

### **Economic Growth**

The purpose of the growth analysis is to quantify project associated growth and estimate the air quality impacts from this growth either quantitatively or qualitatively.

The addition of the Low NOx Burners at the Wheatfield facility should not result in any noticeable residential growth in the area. Commercial growth is anticipated to occur at a gradual rate in the future. However, this growth will not be directly associated with the proposed project. Since the area is predominately rural, it is not expected the growth impacts will cause a violation of the NAAQS.

### **Soils and Vegetation Analysis**

A list of soil types present in the general area was determined. Soil types include the following: Sandy and Loamy Lacustrine deposits and Eolian sand.

Due to the agricultural nature of the land, crops in the Jasper County area consist mainly of corn, sorghum, wheat, soybeans, and oats (2002 Agricultural Census for Jasper County). The maximum modeled concentrations for NIPSCO are well below the threshold limits necessary to have adverse impacts on the surrounding vegetation such as autumn bent, nimblewill, barnyard grass, bishopscap, horsetail, and milkweed (Flora of Indiana – Charles Deam). Livestock in Jasper County consists mainly of hogs, cattle, and sheep (2002 Agricultural Census for Jasper County) and will not be adversely impacted from the facility. Trees in the area are mainly hardwoods. These are hardy trees and no significant adverse impacts are expected due to modeled concentrations.

### **Federal and State Endangered Species Analysis**

Federal and state endangered or threatened species are listed by the U.S. Fish and Wildlife Service; Division of Endangered Species for Indiana and includes 5 amphibians, 27 birds, 10 fishes, 7 mammals, 15 mollusks, and 15 reptiles. Of the federal and state endangered species on the list, 2 amphibians, 7 reptiles, 16 mollusks, 7 fish, 18 birds, and 4 mammals have habitat within Jasper County. The mollusks, fish, amphibians and certain species of birds and mammals are found along rivers and lakes while the other species of birds and mammals are found in forested areas. The facility is not expected to have any additional adverse effects on the habitats of the species than what has already occurred from the industrial, farming, and residential activities in the area.

Federal and state endangered or threatened plants are listed by the U.S. Fish and Wildlife Service, Division of Endangered Species for Indiana. They list 22 state significant species of plants. At this time no federally endangered plant species are found in Jasper County. The endangered plants do not thrive in industrialized and residential areas. The facility is not expected to adversely affect any plant on the endangered species list.

### **Additional Analysis Conclusions**

Finally, the results of the additional impact analysis conclude the operation of the facility will have no significant impact on economic growth, soils, vegetation or visibility in the immediate vicinity or on any Class I area.

<b>Part E - Summary of Air Quality Analysis</b>
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RTP Environmental prepared the modeling portion of the PSD application. Jasper County is designated as attainment for all criteria pollutants. CO emission rates associated with the proposed facility exceeded the respective significant emission rates. Modeling results taken from the latest version of the AERMOD model showed CO impacts were predicted to be less than the significant impact levels. No NAAQS modeling for CO was necessary. The nearest Class I area is Mammoth Cave National Park in Kentucky over 300 kilometers away from the source. An additional impact analysis was required but the operation of the proposed facility will have no significant impact.