



Mitchell E. Daniels, Jr.
Governor

Thomas W. Easterly
Commissioner

100 North Senate Avenue
Indianapolis, Indiana 46204
(317) 232-8603
(800) 451-6027
www.IN.gov/idem

TO: Interested Parties / Applicant

DATE: October 18, 2006

RE: Indiana-Kentucky Electric Corp. Clifty Creek Station / 077-7168-00001

FROM: Nisha Sizemore
Chief, Permits Branch
Office of Air Quality

Notice of Decision: Approval – Effective Immediately

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

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

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

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

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

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

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

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

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

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

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

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



Mitchell E. Daniels, Jr.
Governor

Thomas W. Easterly
Commissioner

100 North Senate Avenue
Indianapolis, Indiana 46204-2251
(317) 232-8603
(800) 451-6027
www.IN.gov/idem

PART 70 OPERATING PERMIT OFFICE OF AIR QUALITY

**Indiana-Kentucky Electric Corporation
Clifty Creek Station
S.R. 56 West
Madison, Indiana 47250**

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

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

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

Operation Permit No.: T077-7168-00001	
Original signed by Nisha Sizemore, Permits Branch Chief Office of Air Quality	Issuance Date: October 18, 2006 Expiration Date: October 18, 2011

TABLE OF CONTENTS

A	SOURCE SUMMARY	6
A.1	General Information [326 IAC 2-7-4(c)] [326 IAC 2-7-5(15)] [326 IAC 2-7-1(22)]	
A.2	Emission Units and Pollution Control Equipment Summary [326 IAC 2-7-4(c)(3)] [326 IAC 2-7-5(15)]	
A.3	Specifically Regulated Insignificant Activities [326 IAC 2-7-1(21)] [326 IAC 2-7-4(c)] [326 IAC 2-7-5(15)]	
A.4	Part 70 Permit Applicability [326 IAC 2-7-2]	
B	GENERAL CONDITIONS	9
B.1	Definitions [326 IAC 2-7-1]	
B.2	Permit Term [326 IAC 2-7-5(2)] [326 IAC 2-1.1-9.5] [326 IAC 2-7-4(a)(1)(D)] [IC13-15-3-6(a)]	
B.3	Term of Conditions [326 IAC 2-1.1-9.5]	
B.4	Enforceability [326 IAC 2-7-7]	
B.5	Severability [326 IAC 2-7-5(5)]	
B.6	Property Rights or Exclusive Privilege [326 IAC 2-7-5(6)(D)]	
B.7	Duty to Provide Information [326 IAC 2-7-5(6)(E)]	
B.8	Certification [326 IAC 2-7-4(f)] [326 IAC 2-7-6(1)] [326 IAC 2-7-5(3)(C)]	
B.9	Annual Compliance Certification [326 IAC 2-7-6(5)]	
B.10	Preventive Maintenance Plan [326 IAC 2-7-5(1),(3)and (13)][326 IAC 2-7-6(1)and(6)] [326 IAC 1-6-3]	
B.11	Emergency Provisions [326 IAC 2-7-16]	
B.12	Permit Shield [326 IAC 2-7-15] [326 IAC 2-7-20] [326 IAC 2-7-12]	
B.13	Prior Permits Superseded [326 IAC 2-1.1-9.5] [326 IAC 2-7-10.5]	
B.14	Termination of Right to Operate [326 IAC 2-7-10] [326 IAC 2-7-4(a)]	
B.15	Deviations from Permit Requirements and Conditions [326 IAC 2-7-5(3)(C)(ii)]	
B.16	Permit Modification, Reopening, Revocation and Reissuance, or Termination [326 IAC 2-7-5(6)(C)] [326 IAC 2-7-8(a)] [326 IAC 2-7-9]	
B.17	Permit Renewal [326 IAC 2-7-3] [326 IAC 2-7-4] [326 IAC 2-7-8(e)]	
B.18	Source Modification [326 IAC 1-2-42] [326 IAC 2-7-10.5] [326 IAC 2-2-2]	
B.19	Permit Amendment or Modification [326 IAC 2-7-11] [326 IAC 2-7-12] [40 CFR 72]	
B.20	Permit Revision Under Economic Incentives and Other Programs [326 IAC 2-7-5(8)] [326 IAC 2-7-12 (b)(2)]	
B.21	Operational Flexibility [326 IAC 2-7-20] [326 IAC 2-7-10.5]	
B.22	Inspection and Entry [326 IAC 2-7-6] [IC 13-14-2-2] [IC 13-17-3-2] [IC 13-30-3-1]	
B.23	Transfer of Ownership or Operational Control [326 IAC 2-7-11]	
B.24	Annual Fee Payment [326 IAC 2-7-19] [326 IAC 2-7-5(7)] [326 IAC 2-1.1-7]	
B.25	Credible Evidence [326 IAC 2-7-5(3)] [326 IAC 2-7-6] [62 FR 8314] [326 IAC 1-1-6]	
C	SOURCE OPERATION CONDITIONS	20
	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]	
C.2	Opacity [326 IAC 5-1]	
C.3	Open Burning [326 IAC 4-1] [IC 13-17-9]	
C.4	Incineration [326 IAC 4-2] [326 IAC 9-1-2]	
C.5	Fugitive Dust Emissions [326 IAC 6-4]	
C.6	Motor Vehicle Fugitive Dust Sources [326 IAC 6-4-4]	
C.7	Stack Height [326 IAC 1-7]	
C.8	Asbestos Abatement Projects [326 IAC 14-10] [326 IAC 18] [40 CFR 61, Subpart M]	
	Testing Requirements [326 IAC 2-7-6(1)]	
C.9	Performance Testing [326 IAC 3-6]	

Compliance Requirements [326 IAC 2-1.1-11]

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

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)]
- C.12 Maintenance of Continuous Opacity Monitoring Equipment [326 IAC 2-7-5(3)(A)(iii)]
- C.13 Monitoring Methods [326 IAC 3] [40 CFR 60] [40 CFR 63]
- C.14 Instrument Specifications [326 IAC 2-1.1-11]
[326 IAC 2-7-5(3)] [326 IAC 2-7-6(1)]

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

- C.15 Emergency Reduction Plans [326 IAC 1-5-2] [326 IAC 1-5-3]
- C.16 Risk Management Plan [326 IAC 2-7-5(12)] [40 CFR 68]
- C.17 Response to Excursions or Exceedances
[326 IAC 2-7-5] [326 IAC 2-7-6]
- C.18 Actions Related to Noncompliance Demonstrated by a Stack Test [326 IAC 2-7-5]
[326 IAC 2-7-6]

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]
- 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]
- 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]

Stratospheric Ozone Protection

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

D.1 FACILITY OPERATION CONDITIONS - Six (6) coal fired boilers: Units 1 through 6 29

- D.1.1 Particulate Emission Limitations for Sources of Indirect Heating [326 IAC 6-2]
- D.1.2 Temporary Alternative Opacity Limitations [326 IAC 5-1-3]
- D.1.3 Sulfur Dioxide (SO₂) [326 IAC 7-4-6]

Compliance Determination Requirements

- D.1.4 Testing Requirements [326 IAC 2-7-6(1),(6)] [326 IAC 2-1.1-11]
- D.1.5 Operation of Electrostatic Precipitator [326 IAC 2-7-6(6)]
- D.1.6 Continuous Emissions Monitoring [326 IAC 3-5]
- D.1.7 Sulfur Dioxide Emissions and Sulfur Content [326 IAC 3] [326 IAC 7-2] [326 IAC 7-4-6]

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

- D.1.8 Transformer-Rectifier (T-R) Sets [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]
- D.1.9 Opacity Readings [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]
- D.1.10 SO₂ Monitoring System Downtime [326 IAC 2-7-6] [326 IAC 2-7-5(3)]

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

- D.1.11 Record Keeping Requirements
- D.1.12 Reporting Requirements

D.2 FACILITY OPERATION CONDITIONS - Coal handling 34

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

- D.2.1 Particulate [326 IAC 6-3-2]
- D.2.2 Fugitive Particulate Matter Emission Limitations [326 IAC 6-5]

Compliance Determination Requirements

D.2.3 Particulate Control [326 IAC 2-7-6(6)]

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

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

D.2.5 Broken or Failed Bag Detection [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]

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

D.2.6 Record Keeping Requirements

D.2.7 Reporting Requirements

D.3 FACILITY OPERATION CONDITIONS - Fly ash handling 37

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

D.3.1 Particulate [326 IAC 6-3-2]

D.3.2 Fugitive Particulate Matter Emission Limitations [326 IAC 6-5]

Compliance Determination Requirements

D.3.3 Particulate Control [326 IAC 2-7-6(6)]

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

D.3.4 Visible Emissions Notations [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]

D.3.5 Broken or Failed Bag Detection [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]

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

D.3.6 Record Keeping Requirements

D.4 FACILITY OPERATION CONDITIONS - Bottom Ash Handling 40

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

D.4.1 Fugitive Dust Emission Limitations [326 IAC 6-4-2]

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

D.4.2 Visible Emissions Notations [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]

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

D.4.3 Record Keeping Requirements

D.5 FACILITY OPERATION CONDITIONS - 20,000 gallon diesel storage tank 42

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

D.5.1 Record Keeping Requirements [326 IAC 12] [40 CFR 60, Subpart Kb]

D.6 FACILITY OPERATION CONDITIONS - Insignificant Activities: fluxing facilities 43

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

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

E ACID RAIN PROGRAM CONDITIONS 44

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

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

**F NITROGEN OXIDES BUDGET TRADING PROGRAM - NO_x Budget Permit for NO_x Budget
Units Under 326 IAC 10-4-1(a) 45**

- F.1 Automatic Incorporation of Definitions [326 IAC 10-4-7(e)]
- F.2 Standard Permit Requirements [326 IAC 10-4-4(a)]
- F.3 Monitoring Requirements [326 IAC 10-4-4(b)]
- F.4 Nitrogen Oxides Requirements [326 IAC 10-4-4(c)]
- F.5 Excess Emissions Requirements [326 IAC 10-4-4(d)]
- F.6 Record Keeping Requirements [326 IAC 10-4-4(e)] [326 IAC 2-7-5(3)]
- F.7 Reporting Requirements [326 IAC 10-4-4(e)]
- F.8 Liability [326 IAC 10-4-4(f)]
- F.9 Effect on Other Authorities [326 IAC 10-4-4(g)]

Certification 49
Emergency Occurrence Report 50
Quarterly Deviation and Compliance Monitoring Report 52

Appendix A: Acid Rain Permit

SECTION A

SOURCE SUMMARY

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

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

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

Responsible Official: Title IV Designated Representative
Source Address: S.R. 56 West, Madison, Indiana, 47250
Mailing Address: P.O. Box 468, Piketon, Ohio 45661
Source Telephone: 740-289-7254
SIC Code: 4911
County Location: Jefferson
Source Location Status: Nonattainment for PM_{2.5}, effective April 5, 2005
Attainment for all other criteria pollutants
Source Status: Part 70 Permit Program
Major Source, under PSD Rules and Emission Offset 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)]

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

- (a) Five (5) wet-bottom pulverized coal-fired boilers identified as Units 1 through 5, with construction completed in 1955, each with a rated capacity of 1,869 million Btu per hour (MMBtu/hr). Units 1 through 5 each have a selective catalytic reduction (SCR) system and over-fire air system for NO_x control, and each unit exhausts through a "cold-side" electrostatic precipitator (ESP) for control of particulate matter. SO₃ flue gas conditioning systems are utilized as needed on Units 1 through 5 to maintain opacity and particulate limits. Units 1, 2, and 3 exhaust to stack 1. Units 4 and 5 exhaust to stack 2. No. 2 fuel oil is combusted during startup and stabilization periods. Used oil generated at facilities within the OVEC-IKEC system may be combusted as supplemental fuel for energy recovery. Stacks 1 and 2 have continuous emissions monitoring systems (CEMS) for nitrogen oxides (NO_x) and sulfur dioxide (SO₂) and continuous opacity monitoring (COM) systems.
- (b) One (1) wet-bottom pulverized coal-fired boiler identified as Unit 6, with construction completed in 1956, with a rated capacity of 1,869 million Btu per hour (MMBtu/hr). NO_x emissions are reduced by an over-fire air system. Unit 6 exhausts to stack 2 through a "hot-side" electrostatic precipitator (ESP) for control of particulate matter. No. 2 fuel oil is combusted during startup and stabilization periods. Used oil generated at facilities within the OVEC-IKEC system may be combusted as supplemental fuel for energy recovery. Stack 2 has continuous emissions monitoring systems (CEMS) for nitrogen oxides (NO_x) and sulfur dioxide (SO₂) and a continuous opacity monitoring (COM) system.
- (c) Coal handling facilities with a maximum design transfer rate of 2400 tons per hour, and coal storage systems, including the following:

- (1) facilities installed in the 1950's, including coal conveyors and transfer house facilities, coal unloading stations 1 and 4 using clamshell barge unloaders, coal pile unloading, and coal piles; and
 - (2) facilities installed in 1993 to allow increased use of subbituminous coal to reduce SO₂ emissions, including transfer stations B1, B2, B3 and B4, and conveyors 5B1, B12, B23, B34 E, and B34 W.
- (d) Dry fly ash handling and disposal facilities, including the following:
- (1) Dry fly ash handling system installed in 1990 and 1991, including pneumatic conveyance to two (2) main silos with a maximum design transfer rate of 40 tons per hour, rotary and dry unloaders with a maximum design unloading rate of 250 tons per hour for each silo, and transportation by truck via in-plant haul roads to onsite disposal area or for transportation offsite.
 - (2) Two (2) additional dry fly ash storage silos (a.k.a truck bins) installed in 1994 and 1995 for unmarketable fly ash, including pneumatic conveyance to silos with a maximum design transfer rate of 40 tons per hour, rotary unloaders with a maximum design unloading rate of 250 tons per hour for each silo, and transportation by truck via in-plant haul roads to onsite disposal area.
- (f) Wet process bottom ash handling, with hydroveyors conveying ash to storage ponds.

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

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

- (a) Coal bunker and coal scale exhausts and associated dust collector vents. [326 IAC 6-3]
- (b) 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, SO₂ 5 pounds per hour or 25 pounds per day, NO_x 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) Four (4) No. 2 fuel oil fired coal transfer station heaters, installed in 1993:
[326 IAC 6-3] [326 IAC 5]
One (1) with 1.25 MMBtu/hr heat input capacity for Station 2;
One (1) with 1.75 MMBtu/hr heat input capacity for Station 5; and
Two (2) with 2.75 MMBtu/hr heat input capacity for Stations B3 and B4.
 - (2) One (1) 20,000 gallon diesel fuel storage tank installed in 1995 for refueling equipment working in the coal yard. The annual throughput is approximately 150,000 gallons. [326 IAC 12] [40 CFR 60, Subpart Kb]
 - (3) Limestone/iron ore flux handling facility, including limestone storage area, dump hopper, conveyor, and enclosed surge bin, installed in 1994, with a maximum design throughput rate of 300,000 lb/hr. [326 IAC 6-3] [326 IAC 5]

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]

Terms in this permit shall have the definition assigned to such terms in the referenced regulation. In the absence of definitions in the referenced regulation, the applicable definitions found in the statutes or regulations (IC 13-11, 326 IAC 1-2 and 326 IAC 2-7) shall prevail.

B.2 Permit Term [326 IAC 2-7-5(2)] [326 IAC 2-1.1-9.5] [326 IAC 2-7-4(a)(1)(D)] [IC13-15-3-6(a)]

- (a) This permit, T077-7168-00001, 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 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.

B.4 Enforceability [326 IAC 2-7-7]

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

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

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

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

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

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

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

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

- (a) Where specifically designated by this permit or required by an applicable requirement, any application form, report, or compliance certification submitted shall contain certification by a responsible official of truth, accuracy, and completeness. This certification shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.
- (b) One (1) certification shall be included, using the attached Certification Form, with each submittal requiring certification. One (1) certification can cover multiple forms in one (1) submittal.
- (c) A responsible official is defined at 326 IAC 2-7-1(34).

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

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

Indiana Department of Environmental Management
Compliance Branch, Office of Air Quality
100 North Senate Avenue
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 2-7-5(1),(3) and (13)] [326 IAC 2-7-6(1) and (6)]
[326 IAC 1-6-3]

- (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.
- (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]

- (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: 317-233-6865.

- (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
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 2-7-15] [326 IAC 2-7-20] [326 IAC 2-7-12]

- (a) Pursuant to 326 IAC 2-7-15, the Permittee has been granted a permit shield. The permit shield provides that compliance with the conditions of this permit shall be deemed compliance with any applicable requirements as of the date of permit issuance, provided that either the applicable requirements are included and specifically identified in this permit or the permit contains an explicit determination or concise summary of a determination that

other specifically identified requirements are not applicable. The Indiana statutes from IC 13 and rules from 326 IAC, referenced in conditions in this permit, are those applicable at the time the permit was issued. The issuance or possession of this permit shall not alone constitute a defense against an alleged violation of any law, regulation or standard, except for the requirement to obtain a Part 70 permit under 326 IAC 2-7 or for applicable requirements for which a permit shield has been granted.

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

- (b) If, after issuance of this permit, it is determined that the permit is in nonconformance with an applicable requirement that applied to the source on the date of permit issuance, IDEM, OAQ, shall immediately take steps to reopen and revise this permit and issue a compliance order to the Permittee to ensure expeditious compliance with the applicable requirement until the permit is reissued. The permit shield shall continue in effect so long as the Permittee is in compliance with the compliance order.
- (c) No permit shield shall apply to any permit term or condition that is determined after issuance of this permit to have been based on erroneous information supplied in the permit application. Erroneous information means information that the Permittee knew to be false, or in the exercise of reasonable care should have been known to be false, at the time the information was submitted.
- (d) Nothing in 326 IAC 2-7-15 or in this permit shall alter or affect the following:
 - (1) The provisions of Section 303 of the Clean Air Act (emergency orders), including the authority of the U.S. EPA under Section 303 of the Clean Air Act;
 - (2) The liability of the Permittee for any violation of applicable requirements prior to or at the time of this permit's issuance;
 - (3) The applicable requirements of the acid rain program, consistent with Section 408(a) of the Clean Air Act; and
 - (4) The ability of U.S. EPA to obtain information from the Permittee under Section 114 of the Clean Air Act.
- (e) This permit shield is not applicable to any change made under 326 IAC 2-7-20(b)(2) (Sections 502(b)(10) of the Clean Air Act changes) and 326 IAC 2-7-20(c)(2) (trading based on State Implementation Plan (SIP) provisions).
- (f) This permit shield is not applicable to modifications eligible for group processing until after IDEM, OAQ, has issued the modifications. [326 IAC 2-7-12(c)(7)]
- (g) This permit shield is not applicable to minor Part 70 permit modifications until after IDEM, OAQ, has issued the modification. [326 IAC 2-7-12(b)(8)]

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

- (a) All terms and conditions of permits established prior to T077-7168-00021 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) Provided that all terms and conditions are accurately reflected in this permit, all previous registrations and permits are superseded by this Part 70 operating permit, except for permits issued pursuant to Title IV of the Clean Air Act and 326 IAC 21 (Acid Deposition Control).

B.14 Termination of Right to Operate [326 IAC 2-7-10] [326 IAC 2-7-4(a)]

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

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

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

Indiana Department of Environmental Management
Compliance Data Section, Office of Air Quality
100 North Senate Avenue
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.16 Permit Modification, Reopening, Revocation and Reissuance, or Termination [326 IAC 2-7-5(6)(C)] [326 IAC 2-7-8(a)] [326 IAC 2-7-9]

- (a) This permit may be modified, reopened, revoked and reissued, or terminated for cause. The filing of a request by the Permittee for a Part 70 permit modification, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay any condition of this permit. [326 IAC 2-7-5(6)(C)] The notification by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).
- (b) This permit shall be reopened and revised under any of the circumstances listed in IC 13-15-7-2 or if IDEM, OAQ, determines any of the following:
- (1) That this permit contains a material mistake.
 - (2) That inaccurate statements were made in establishing the emissions standards or other terms or conditions.
 - (3) That this permit must be revised or revoked to assure compliance with an applicable requirement. [326 IAC 2-7-9(a)(3)]

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

B.17 Permit Renewal [326 IAC 2-7-3] [326 IAC 2-7-4] [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
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.18 Source Modification [326 IAC 1-2-42] [326 IAC 2-7-10.5] [326 IAC 2-2-2] [326 IAC 2-3-2]

- (a) The Permittee shall obtain approval as required by 326 IAC 2-7-10.5 from the IDEM, OAQ prior to making any modification to the source. Pursuant to 326 IAC 1-2-42, "Modification" means one (1) or more of the following activities at an existing source:
 - (1) A physical change or change in the method of operation of any existing emissions unit that increases the potential to emit any regulated pollutant that could be emitted from the emissions unit, or that results in emissions of any regulated pollutant not previously emitted.
 - (2) Construction of one (1) or more new emissions units that have the potential to emit regulated air pollutants.

- (3) Reconstruction of one (1) or more existing emission units that increases the potential to emit of any regulated air pollutant.
- (b) Any application requesting a source modification shall be submitted to:

Indiana Department of Environmental Management
Permits Branch, Office of Air Quality
100 North Senate Avenue
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 and/or 326 IAC 2-3-2.

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

- (a) Permit amendments and modifications are governed by the requirements of 326 IAC 2-7-11 or 326 IAC 2-7-12 whenever the Permittee seeks to amend or modify this permit.
- (b) Pursuant to 326 IAC 2-7-11(b) and 326 IAC 2-7-12(a), administrative Part 70 permit amendments and permit modifications for purposes of the acid rain portion of a Part 70 permit shall be governed by regulations promulgated under Title IV of the Clean Air Act. [40 CFR 72]
- (c) Any application requesting an amendment or modification of this permit shall be submitted to:

Indiana Department of Environmental Management
Permits Branch, Office of Air Quality
100 North Senate Avenue
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.20 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.21 Operational Flexibility [326 IAC 2-7-20] [326 IAC 2-7-10.5]

(a) The Permittee may make any change or changes at the source that are described in 326 IAC 2-7-20(b), (c), or (e), without a prior permit revision, if each of the following conditions is met:

- (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
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 increases and decreases in emissions in the source, where the applicable SIP provides for such emission trades without requiring a permit revision, subject to the constraints of Section (a) of this condition and those in 326 IAC 2-7-20(c).
- (d) Alternative Operating Scenarios [326 IAC 2-7-20(d)]
The Permittee may make changes at the source within the range of alternative operating scenarios that are described in the terms and conditions of this permit in accordance with 326 IAC 2-7-5(9). No prior notification of IDEM, OAQ, or U.S. EPA is required.
- (e) Backup fuel switches specifically addressed in, and limited under, Section D of this permit shall not be considered alternative operating scenarios. Therefore, the notification requirements of part (a) of this condition do not apply.
- (f) This condition does not apply to emission trades of SO₂ or NO_x under 326 IAC 21 or 326 IAC 10-4.

B.22 Inspection and Entry [326 IAC 2-7-6] [IC 13-14-2-2] [IC 13-17-3-2] [IC 13-30-3-1]

Upon presentation of proper identification cards, credentials, and other documents as may be required by law, and subject to the Permittee's right under all applicable laws and regulations to assert that the information collected by the agency is confidential and entitled to be treated as such, the Permittee shall allow IDEM, OAQ, 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.23 Transfer of Ownership or Operational Control [326 IAC 2-7-11]

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

Indiana Department of Environmental Management
Permits Branch, Office of Air Quality
100 North Senate Avenue
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.24 Annual Fee Payment [326 IAC 2-7-19] [326 IAC 2-7-5(7)] [326 IAC 2-1.1-7]

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

B.25 Credible Evidence [326 IAC 2-7-5(3)] [326 IAC 2-7-6] [62 FR 8314] [326 IAC 1-1-6]

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.

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), 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]

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

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

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

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

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

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

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

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

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

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

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

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

Indiana Department of Environmental Management
Compliance Branch, Office of Air Quality
100 North Senate Avenue
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)]

- (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.
 - (1) 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) 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 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.
- (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.

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

Any monitoring or testing required by Section D of this permit shall be performed according to the provisions of 326 IAC 3, 40 CFR 60 Appendix A, 40 CFR 60 Appendix B, 40 CFR 63, 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)]

- (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]

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

- (a) The Permittee prepared and submitted a written emergency reduction plan (ERP) consistent with safe operating procedures on October 18, 1989. The ERP was approved by IDEM, OAQ, on February 21, 1990.
- (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) To ensure that current ERPs are readily available, the Permittee shall review the ERPs, update if necessary, and resubmit to:

Indiana Department of Environmental Management
Compliance Branch, Office of Air Quality
100 North Senate Avenue
Indianapolis, Indiana 46204-2251

within ninety (90) days after the date of issuance of this permit.

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

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

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

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

- (a) Upon detecting an excursion or exceedance, the Permittee shall restore operation of the emissions unit (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 while the response actions are being implemented.
- (b) A retest to demonstrate compliance shall be performed within one hundred twenty (120) days of receipt of the original test results. Should the Permittee demonstrate to IDEM, OAQ that retesting in one-hundred and twenty (120) days is not practicable, IDEM, OAQ may extend the retesting deadline.
- (c) IDEM, OAQ reserves the authority to take any actions allowed under law in response to noncompliant stack tests.

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

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

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

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

- (2) Indicate estimated actual emissions of regulated pollutants as defined by 326 IAC 2-7-1(32) ("Regulated pollutant which is used only for purposes of Section 19 of this rule") from the source, for purposes of 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
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 2-2-1(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 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, 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)(3); 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.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]

- (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
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 (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(ll) 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
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 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 (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 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 (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
Indianapolis, Indiana 46204-2251

- (i) The Permittee shall make the information required to be documented and maintained in accordance with (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

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

- (a) Persons opening appliances for maintenance, service, repair, or disposal must comply with the required practices pursuant to 40 CFR 82.156.
- (b) Equipment used during the maintenance, service, repair, or disposal of appliances must comply with the standards for recycling and recovery equipment pursuant to 40 CFR 82.158.
- (c) Persons performing maintenance, service, repair, or disposal of appliances must be certified by an approved technician certification program pursuant to 40 CFR 82.161.
- (d) Pursuant to 40 CFR 82, Subpart E (The Labeling of Products Using Ozone-Depleting Substances), all containers in which a Class I or Class II substance is stored or transported and all products containing a Class I substance shall be labeled as required under 40 CFR Part 82.

SECTION D.1 FACILITY OPERATION CONDITIONS

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

- (a) Five (5) wet-bottom pulverized coal-fired boilers identified as Units 1 through 5, with construction completed in 1955, each with a rated capacity of 1,869 million Btu per hour (MMBtu/hr). Units 1 through 5 each have a selective catalytic reduction (SCR) system and over-fire air system for NO_x control, and each unit exhausts through a "cold-side" electrostatic precipitator (ESP) for control of particulate matter. SO₃ flue gas conditioning systems are utilized as needed on Units 1 through 5 to maintain opacity and particulate limits. Units 1, 2, and 3 exhaust to stack 1. Units 4 and 5 exhaust to stack 2. No. 2 fuel oil is combusted during startup and stabilization periods. Used oil generated at facilities within the OVEC-IKEC system may be combusted as supplemental fuel for energy recovery. Stacks 1 and 2 have continuous emissions monitoring systems (CEMS) for nitrogen oxides (NO_x) and sulfur dioxide (SO₂) and continuous opacity monitoring (COM) systems.
- (b) One (1) wet-bottom pulverized coal-fired boiler identified as Unit 6, with construction completed in 1956, with a rated capacity of 1,869 million Btu per hour (MMBtu/hr). NO_x emissions are reduced by an over-fire air system. Unit 6 exhausts to stack 2 through a "hot-side" electrostatic precipitator (ESP) for control of particulate matter. No. 2 fuel oil is combusted during startup and stabilization periods. Used oil generated at facilities within the OVEC-IKEC system may be combusted as supplemental fuel for energy recovery. Stack 2 has continuous emissions monitoring systems (CEMS) for nitrogen oxides (NO_x) and sulfur dioxide (SO₂) and a continuous opacity monitoring (COM) system.

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

D.1.1 Particulate Emission Limitations for Sources of Indirect Heating [326 IAC 6-2]

Pursuant to Amendment No. 2 to the Agreed Order entered October 26, 1973, Air Pollution Control Board vs. Indiana-Kentucky Electric Corporation (IKEC), and dated September 26, 1975, the particulate matter (PM) emissions from each boiler (Units 1 through 6) shall not exceed 0.236 pound per million Btu heat input (lb/MMBtu).

This limit is more stringent than the value that would be derived using the stack configuration information for the stacks in use on June 8, 1972 and the equation in 326 IAC 6-2-3(a); therefore, compliance with this limit is deemed compliance with 326 IAC 6-2.

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

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

- (a) When building a new fire in a boiler, opacity may exceed the applicable limit established in 326 IAC 5-1-2 for a period not to exceed thirty (30) minutes (five (5) six (6)-minute averaging periods) or until the flue gas temperature reaches two hundred fifty (250) degrees Fahrenheit at the inlet of the electrostatic precipitator, whichever occurs first. Operation of the electrostatic precipitator is not required during these times. [326 IAC 5-1-3(e)(2)]
- (b) When shutting down a boiler, opacity may exceed the applicable limit established in 326 IAC 5-1-2; however, opacity levels shall not exceed sixty percent (60%) for any six (6)-minute averaging period. Opacity in excess of the applicable limit established in 326 IAC 5-1-2 shall not continue for more than two (2) six (6)-minute averaging periods in any twenty-four (24) hour period. [326 IAC 5-1-3(a)]

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

D.1.3 Sulfur Dioxide (SO₂) [326 IAC 7-4-6]

Pursuant to 326 IAC 7-4-6 (Sulfur Dioxide Emission Limitations for Jefferson County), the SO₂ emissions from Units 1 through 6 shall not exceed 7.52 pounds per million Btu (lbs/MMBtu), demonstrated on a thirty (30) day rolling weighted average.

Compliance Determination Requirements

D.1.4 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 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 may be conducted in the common stacks (Stack 1 shared by Units 1, 2, and 3, and Stack 2 shared by Units 4, 5, and 6). Testing shall be conducted with all units exhausting to the common stack in operation, or as otherwise approved by OAQ. 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.1.5 Operation of Electrostatic Precipitator [326 IAC 2-7-6(6)]

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

D.1.6 Continuous Emissions Monitoring [326 IAC 3-5]

- (a) Pursuant to 326 IAC 3-5 (Continuous Monitoring of Emissions), continuous emission monitoring systems for Boilers 1 through 6 shall be calibrated, maintained, and operated for measuring opacity and SO₂, which meet all applicable 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, 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, or 40 CFR 75.

D.1.7 Sulfur Dioxide Emissions and Sulfur Content [326 IAC 3] [326 IAC 7-2] [326 IAC 7-4-6]

Pursuant to 326 IAC 7-2-1(c), the Permittee shall demonstrate that the sulfur dioxide emissions from Units 1 through 6 do not exceed the limit specified in Condition D.1.3 (Sulfur Dioxide (SO₂)) and 326 IAC 7-4-6. Compliance with these limits shall be determined using SO₂ CEMS data.

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

D.1.8 Transformer-Rectifier (T-R) Sets [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]

- (a) The ability of the ESP to control particulate emissions shall be monitored once per 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 or 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 or Exceedances, shall be considered a deviation from this permit.

D.1.9 Opacity Readings [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]

- (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 or 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, adjustment of flue gas conditioning rate, and ESP T-R sets being returned to service.
- (b) Opacity readings in excess of thirty percent (30%) but not exceeding the opacity limit for the unit are not a deviation from this permit. Failure to take response steps in accordance with Section C - Response to Excursions or 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.1.10 SO₂ Monitoring System Downtime [326 IAC 2-7-6] [326 IAC 2-7-5(3)]

Whenever the SO₂ continuous emission monitoring system (CEMS) is malfunctioning or down for repairs or adjustments, the following shall be used to provide information related to SO₂ 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, fuel sampling shall be conducted as follows:

Fuel sampling shall be conducted as specified in 326 IAC 3-7-2(b). Fuel sample preparation and analysis shall be conducted as specified in 326 IAC 3-7-2(c), 326 IAC 3-7-2(d), and 326 IAC 3-7-2(e). Pursuant to 326 IAC 3-7-3, manual or other non-ASTM automatic sampling and analysis procedures may be used upon a demonstration, submitted to the department for approval, that such procedures provide sulfur dioxide emission estimates representative either of estimates based on coal sampling and analysis procedures specified in 326 IAC 3-7-2 or of continuous emissions monitoring.

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

D.1.11 Record Keeping Requirements

- (a) To document compliance with Section C - Opacity, Section C - Maintenance of Continuous Opacity Monitoring Equipment, and the particulate matter and opacity requirements in Conditions D.1.1, D.1.2, D.1.4, D.1.5, D.1.6, D.1.8, and D.1.9, the Permittee shall maintain records in accordance with (1) through (4) below. Records shall be complete and sufficient to establish compliance with the limits established in Section C - Opacity and in Conditions D.1.1 and D.1.2.
- (1) Data and results from the most recent stack test;
 - (2) All continuous opacity monitoring data, pursuant to 326 IAC 3-5-6;
 - (3) The results of all Method 9 visible emission readings taken during any periods of COM downtime.
 - (4) All ESP parametric monitoring readings.
- (b) To document compliance with SO₂ conditions D.1.3, D.1.7, and D.1.10, the Permittee shall maintain records in accordance with (1) below. Records shall be complete and sufficient to establish compliance with the SO₂ limits as required in conditions D.1.3 and D.1.7. The Permittee shall maintain records in accordance with (2) and (3) below during SO₂ CEMS malfunction or downtime.
- (1) All SO₂ continuous emissions monitoring data, pursuant to 326 IAC 3-5-6 and 326 IAC 7-2-1(g).
 - (2) All fuel sampling and analysis data collected for SO₂ CEMS downtime, in accordance with Condition D.1.10.
 - (3) Actual fuel usage during each SO₂ CEMS downtime.
- (c) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

D.1.12 Reporting Requirements

- (a) A quarterly report of opacity exceedances and a quarterly summary of the information to document compliance with the SO₂ requirements of Condition D.1.3 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) Pursuant to 326 IAC 3-5-7(5), reporting of continuous monitoring system instrument downtime, except for zero (0) and span checks, which shall be reported separately, shall include the following:
- (1) Date of downtime.
 - (2) Time of commencement.
 - (3) Duration of each downtime.
 - (4) Reasons for each downtime.
 - (5) Nature of system repairs and adjustments.

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

SECTION D.2 FACILITY OPERATION CONDITIONS

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

- (c) Coal handling facilities with a maximum design transfer rate of 2400 tons per hour, and coal storage systems, including the following:
- (1) facilities installed in the 1950's, including coal conveyors and transfer house facilities, coal unloading stations 1 and 4 using clamshell barge unloaders, coal pile unloading, and coal piles; and
 - (2) facilities installed in 1993 to allow increased use of subbituminous coal to reduce SO₂ emissions, including transfer stations B1, B2, B3 and B4, and conveyors 5B1, B12, B23, B34 E, and B34 W.

Insignificant Activities:

Coal bunker and coal scale exhausts and associated dust collector vents.

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

D.2.1 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.

D.2.2 Fugitive Particulate Matter Emission Limitations [326 IAC 6-5]

Pursuant to CP 077-2716, issued March 16, 1993, and 326 IAC 6-5 (Fugitive Particulate Matter Emission Limitations), fugitive dust emissions from the coal handling shall comply with the plan submitted December 7, 1992, as revised March 4, 2002. This plan requires that:

- (a) For the unloading stations, the hoppers at stations 1 and 4 shall be enclosed on three sides. Water and/or dust suppressant chemicals shall be applied as needed to minimize visible emissions.
- (b) For the conveyors, the top and at least one side shall be enclosed.
- (c) For the transfer stations, the foam and wetting systems will promote a reduction in emissions. Modified chutes will be provided at coal drop points.

Compliance Determination Requirements

D.2.3 Particulate Control [326 IAC 2-7-6(6)]

Except as otherwise provided by statute, rule, or in this permit, the baghouses for particulate control shall be in operation and control emissions at all times the associated coal processing points or drop point conveyors are in operation.

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

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

- (a) Visible emission notations of the coal unloading station 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 transfer points baghouse exhausts shall be performed once per day during normal daylight operations when transferring coal. A trained employee shall record whether emissions are normal or abnormal.
- (c) If abnormal emissions are observed from the coal unloading station or at any baghouse exhaust, the Permittee shall take reasonable response steps in accordance with Section C - Response to Excursions or Exceedances. Observation of visible emissions that do not violate 326 IAC 6-4 (Fugitive Dust Emissions) or an applicable opacity limit is not a deviation from this permit. Failure to take response steps in accordance with Section C - Response to Excursions or Exceedances, shall be considered a deviation from this permit.
- (d) 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.
- (e) 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.
- (f) 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.2.5 Broken or Failed Bag Detection [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]

- (a) For a single compartment baghouse controlling emissions from a process operated continuously, a failed unit and the associated process shall 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).
- (b) For a single compartment baghouse controlling emissions from a batch process, the feed to the process shall be shut down immediately until the failed unit has been repaired or replaced. The emission unit shall be shut down no later than the completion of the

processing of the material in the line. 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).

Bag failure can be indicated by a significant drop in the baghouse's pressure reading with abnormal visible emissions, by an opacity violation, or by other means such as gas temperature, flow rate, air infiltration, leaks, dust traces or triboflows.

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

D.2.6 Record Keeping Requirements

- (a) To document compliance with Section C - Opacity and Condition D.2.4, the Permittee shall maintain records of the visible emission notations of the coal transfer point baghouse exhausts.
- (b) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

D.2.7 Reporting Requirements

The Permittee shall report all incidents of smoldering coal observed on a barge docked at a coal unloading station within four (4) daytime business hours after the initial observation. Notification shall be made to one of the following:

Telephone Number: 1-800-451-6027 (ask for Office of Air Quality, Compliance Section), or
Telephone Number: 317-233-0178 (ask for Compliance Section); or
Facsimile Number: 317-233-6865.

SECTION D.3 FACILITY OPERATION CONDITIONS

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

- (d) Dry fly ash handling and disposal facilities, including the following:
- (1) Dry fly ash handling system installed in 1990 and 1991, including pneumatic conveyance to two (2) main silos with a maximum design transfer rate of 40 tons per hour, rotary and dry unloaders with a maximum design unloading rate of 250 tons per hour for each silo, and transportation by truck via in-plant haul roads to onsite disposal area or for transportation offsite.
 - (2) Two (2) additional dry fly ash storage silos (a.k.a. truck bins) installed in 1994 and 1995 for unmarketable fly ash, including pneumatic conveyance to silos with a maximum design transfer rate of 40 tons per hour, rotary unloaders with a maximum design unloading rate of 250 tons per hour for each silo, and transportation by truck via in-plant haul roads to onsite disposal area.

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

D.3.1 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 pneumatic conveying system shall not exceed 42.5 pounds per hour when operating at a process weight rate of 40 tons per hour. This pounds per hour limitation was 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 any ash transfer 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.

D.3.2 Fugitive Particulate Matter Emission Limitations [326 IAC 6-5]

Pursuant to the Registration issued April 18, 1989, and 326 IAC 6-5 (Fugitive Particulate Matter Emission Limitations), fugitive dust emissions from the fly ash handling shall comply with the plan submitted March 9, 1989, and revised November 15, 1993. This plan requires that:

- (a) For intermediate storage, use of pneumatic conveyance to silos equipped with separators to collect the fly ash, ash fluidizing system to help unload the ash, and bag filter systems for dust control.
- (b) For unloading from silos into trucks:
 - (1) Area under the silos where the unloaders are located is totally enclosed, except for the openings for the vehicles to enter and exit. The truck entrance and exit points are equipped with spray curtains.

- (2) For on-site fly ash disposal: Use of rotary unloaders that condition fly ash with water and use flexible chute extensions to load ash into open-type trucks for transport to disposal area.
 - (3) For fly ash sold for off site use: Use of dry unloaders equipped with telescoping chutes with bellows-type shrouds which are connected to vent fans and piping to pull displaced air and fugitive fly ash emissions from the receiving vessel back into the silos.
- (c) For transportation from silo area:
- (1) To on-site disposal: Use of trucks which are covered while in motion and which go through a truck wash and hose down area as they exit the silo area. In-plant haul roads in silo area and to onsite disposal area are paved and are periodically swept/vacuumed. Truck routes on the surface of the disposal area are treated as needed with a combination of water and/or dust-suppressant chemicals.
 - (2) For ash sold for use off site: The majority of fly ash hauled off-site is in closed, dry bulk container trucks. If conditioned fly ash is purchased for off site use, it is hauled in covered dump trucks which are washed prior to leaving site.
- (d) At on-site disposal area:
- (1) Dumping, placement and compaction of conditioned (moistened) fly ash, with a combination of watering, dust-suppressant chemicals and/or temporary cover used to further control fugitive dust if necessary.
 - (2) Size of the open (uncovered) or working face of each phase of the disposal area will be limited as much as possible.

Compliance Determination Requirements

D.3.3 Particulate Control [326 IAC 2-7-6(6)]

Except as otherwise provided by statute or rule or in this permit, the bag filter systems for PM control shall be in operation and control emissions at all times the associated fly ash transfer points are in operation.

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

D.3.4 Visible Emissions Notations [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]

- (a) Visible emission notations of the fly ash disposal area(s) shall be performed at least once per day during normal daylight operations. A trained employee shall record whether emissions are normal or abnormal.
- (b) 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.
- (c) Visible emission notations of the fly ash transfer points bag filter system exhausts shall be performed at least once per day during normal daylight operations when transferring ash. A trained employee shall record whether emissions are normal or abnormal.
- (d) If visible emissions are observed crossing the property line or boundaries of the property, right-of-way, or easement on which the source is located, the Permittee shall take

reasonable response steps in accordance with Section C - Response to Excursions or Exceedances.

- (e) If abnormal emissions are observed from the ash silo unloading station openings or at any bag filter system exhaust, the Permittee shall take reasonable response steps in accordance with Section C - Response to Excursions or 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 or 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.3.5 Broken or Failed Bag Detection [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]

- (a) For a single compartment baghouse controlling emissions from a process operated continuously, failed units and the associated process shall be shut down immediately until the failed units have been repaired or replaced. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions).
- (b) For a single compartment baghouse controlling emissions from a batch process, the feed to the process shall be shut down immediately until the failed units have been repaired or replaced. The emission unit shall be shut down no later than the completion of the processing of the material in the line. 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).

Bag failure can be indicated by a significant drop in the baghouse's pressure reading with abnormal visible emissions, by an opacity violation, or by other means such as gas temperature, flow rate, air infiltration, leaks, dust traces or triboflows.

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

D.3.6 Record Keeping Requirements

- (a) To document compliance with Section C - Opacity and Condition D.3.4, the Permittee shall maintain records of the visible emission notations of the active fly ash disposal area(s), the ash silo unloading station openings, and the bag filter system exhausts.
- (b) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

SECTION D.4 FACILITY OPERATION CONDITIONS

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

- (e) Wet process bottom ash handling, with hydroveyors conveying ash to storage ponds.

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

D.4.1 Fugitive Dust Emission Limitations [326 IAC 6-4-2]

Pursuant to 326 IAC 6-4-2:

- (a) Any ash storage pond 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_R = allowable percentage increase in dust concentration above background; and

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

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

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

D.4.2 Visible Emissions Notations [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]

- (a) Visible emission notations of the ash storage pond area(s) shall be performed at least once per day during normal daylight operations. A trained employee shall record whether emissions are normal or abnormal.
- (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 or Exceedances. Failure to take response steps in accordance with Section C - Response to Excursions or 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.4.3 Record Keeping Requirements

- (a) To document compliance with Condition D.4.2, the Permittee shall maintain records of visible emission notations of the ash storage pond area(s).
- (b) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

SECTION D.5

FACILITY OPERATION CONDITIONS

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

Insignificant Activities:

One (1) 20,000 gallon diesel fuel storage tank for refueling equipment working in the coal yard. The annual throughput is approximately 150,000 gallons.

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

D.5.1 Record Keeping Requirements [326 IAC 12]

Pursuant to 326 IAC 1-1-3, 326 IAC 12 and 40 CFR 60.116b (2002 version):

- (a) The Permittee shall keep copies of the record required by paragraph (b) of this section for the life of the source.
- (b) The Permittee of each storage vessel as specified in 40 CFR 60.110b(a) (2002 version) shall keep readily accessible records showing the dimension of the storage vessel and an analysis showing the capacity of the storage vessel.

These requirements are incorporated by reference from the July 1, 2002, version of 40 CFR 60 Subpart Kb and are no longer federally enforceable.

SECTION D.6

FACILITY OPERATION CONDITIONS

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

Insignificant Activities:

Limestone/iron ore flux handling facility, including limestone storage area, dump hopper, conveyor, and enclosed surge bin.

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

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

Pursuant to 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes), the particulate emission rate from the limestone and iron ore handling drop points shall not exceed 7.13 pounds per hour when operating at a process weight rate of 4566.2 pounds per hour. The pounds per hour limitation was calculated using the following equation:

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

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

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

SECTION E

TITLE IV CONDITIONS

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

- (a) Five (5) wet-bottom pulverized coal-fired boilers identified as Units 1 through 5, with construction completed in 1955, each with a rated capacity of 1,869 million Btu per hour (MMBtu/hr). Units 1 through 5 each have a selective catalytic reduction (SCR) system and over-fire air system for NO_x control, and each unit exhausts through a “cold-side” electrostatic precipitator (ESP) for control of particulate matter. SO₃ flue gas conditioning systems are utilized as needed on Units 1 through 5 to maintain opacity and particulate limits. Units 1, 2, and 3 exhaust to stack 1. Units 4 and 5 exhaust to stack 2. No. 2 fuel oil is combusted during startup and stabilization periods. Used oil generated at facilities within the OVEC-IKEC system may be combusted as supplemental fuel for energy recovery. Stacks 1 and 2 have continuous emissions monitoring systems (CEMS) for nitrogen oxides (NO_x) and sulfur dioxide (SO₂) and continuous opacity monitoring (COM) systems.
- (b) One (1) wet-bottom pulverized coal-fired boiler identified as Unit 6, with construction completed in 1956, with a rated capacity of 1,869 million Btu per hour (MMBtu/hr). NO_x emissions are reduced by an over-fire air system. Unit 6 exhausts to stack 2 through a “hot-side” electrostatic precipitator (ESP) for control of particulate matter. No. 2 fuel oil is combusted during startup and stabilization periods. Used oil generated at facilities within the OVEC-IKEC system may be combusted as supplemental fuel for energy recovery. Stack 2 has continuous emissions monitoring systems (CEMS) for nitrogen oxides (NO_x) and sulfur dioxide (SO₂) and a continuous opacity monitoring (COM) system.

Acid Rain Program

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

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

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

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

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

SECTION F Nitrogen Oxides Budget Trading Program - NO_x Budget Permit for NO_x Budget Units Under 326 IAC 10-4-1(a)

ORIS Code: 983

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

- (a) Five (5) wet-bottom pulverized coal-fired boilers identified as Units 1 through 5, with construction completed in 1955, each with a rated capacity of 1,869 million Btu per hour (MMBtu/hr). Units 1 through 5 each have a selective catalytic reduction (SCR) system and over-fire air system for NO_x control, and each unit exhausts through a "cold-side" electrostatic precipitator (ESP) for control of particulate matter. SO₃ flue gas conditioning systems are utilized as needed on Units 1 through 5 to maintain opacity and particulate limits. Units 1, 2, and 3 exhaust to stack 1. Units 4 and 5 exhaust to stack 2. No. 2 fuel oil is combusted during startup and stabilization periods. Used oil generated at facilities within the OVEC-IKEC system may be combusted as supplemental fuel for energy recovery. Stacks 1 and 2 have continuous emissions monitoring systems (CEMS) for nitrogen oxides (NO_x) and sulfur dioxide (SO₂) and continuous opacity monitoring (COM) systems.
- (b) One (1) wet-bottom pulverized coal-fired boiler identified as Unit 6, with construction completed in 1956, with a rated capacity of 1,869 million Btu per hour (MMBtu/hr). NO_x emissions are reduced by an over-fire air system. Unit 6 exhausts to stack 2 through a "hot-side" electrostatic precipitator (ESP) for control of particulate matter. No. 2 fuel oil is combusted during startup and stabilization periods. Used oil generated at facilities within the OVEC-IKEC system may be combusted as supplemental fuel for energy recovery. Stack 2 has continuous emissions monitoring systems (CEMS) for nitrogen oxides (NO_x) and sulfur dioxide (SO₂) and a continuous opacity monitoring (COM) system.

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

This NO_x budget permit is deemed to incorporate automatically the definitions of terms under 326 IAC 10-4-2.

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

- (a) The owners and operators of the NO_x budget source and each NO_x budget unit shall operate each unit in compliance with this NO_x budget permit.
- (b) The NO_x budget Boilers subject to this NO_x budget permit are: Boilers 1, 2, 3, 4, 5 and 6.

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

- (a) The owners and operators and, to the extent applicable, the NO_x authorized account representative of the NO_x budget source and each NO_x 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_x 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_x budget source and each NO_x budget unit at the source shall hold NO_x allowances available for compliance deductions under 326 IAC 10-

4-10(j), as of the NO_x 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_x 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_x budget trading program, or a change in regulatory status of a NO_x budget opt-in unit.
- (b) Each ton of NO_x emitted in excess of the NO_x budget emissions limitation shall constitute a separate violation of the Clean Air Act (CAA) and 326 IAC 10-4.
- (c) NO_x allowances shall be held in, deducted from, or transferred among NO_x 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.
- (d) A NO_x 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_x allowance was allocated.
- (e) A NO_x allowance allocated under the NO_x budget trading program is a limited authorization to emit one (1) ton of NO_x in accordance with the NO_x budget trading program. No provision of the NO_x budget trading program, the NO_x budget permit application, the NO_x 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.
- (f) A NO_x allowance allocated under the NO_x budget trading program does not constitute a property right.
- (g) 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_x allowance to or from each NO_x 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_x budget permit of the NO_x 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_x budget unit that has excess emissions in any ozone control period shall do the following:

- (a) Surrender the NO_x 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_x budget source and each NO_x 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_x authorized account representative for the source and each NO_x 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_x 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_x budget trading program.
- (d) Copies of all documents used to complete a NO_x budget permit application and any other submission under the NO_x budget trading program or to demonstrate compliance with the requirements of the NO_x 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 the department or U.S. EPA within three (3) business days following receipt of a written request. Nothing in 326 IAC 10-4-4(e) shall alter the record retention requirements for a source under 40 CFR 75. Unless otherwise provided, all records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

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

- (a) The NO_x authorized account representative of the NO_x budget source and each NO_x budget unit at the source shall submit the reports and compliance certifications required under the NO_x 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_x authorized account representative: "I am authorized to make this submission on behalf of the owners and operators of the NO_x budget sources or NO_x 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_x authorized account representative shall submit required information to:

Indiana Department of Environmental Management
Office of Air Quality
100 North Senate Avenue
Indianapolis, Indiana 46204-2251
- (d) Where 326 IAC 10-4 requires a submission to U.S. EPA, the NO_x authorized account representative shall submit required information to:

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

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

The owners and operators of each NO_x budget source shall be liable as follows:

- (a) Any person who knowingly violates any requirement or prohibition of the NO_x budget trading program, a NO_x 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_x 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_x budget trading program that occurs prior to the date that the revision takes effect.
- (d) Each NO_x budget source and each NO_x budget unit shall meet the requirements of the NO_x budget trading program.
- (e) Any provision of the NO_x budget trading program that applies to a NO_x budget source, including a provision applicable to the NO_x authorized account representative of a NO_x budget source, shall also apply to the owners and operators of the source and of the NO_x budget units at the source.
- (f) Any provision of the NO_x budget trading program that applies to a NO_x budget unit, including a provision applicable to the NO_x authorized account representative of a NO_x 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_x authorized account representative of one (1) NO_x budget unit shall not be liable for any violation by any other NO_x budget unit of which they are not owners or operators or the NO_x authorized account representative and that is located at a source of which they are not owners or operators or the NO_x authorized account representative.

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

No provision of the NO_x budget trading program, a NO_x budget permit application, a NO_x 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_x authorized account representative of a NO_x budget source or NO_x 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: Indiana-Kentucky Electric Corporation - Clifty Creek Station
Source Address: S.R. 56 West, Madison, Indiana 47250
Mailing Address: P.O. Box 468, Piketon, Ohio 45661
Part 70 Permit No.: T077-7168-00001

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

Please check what document is being certified:

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

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

Signature:

Printed Name:

Title/Position:

Telephone:

Date:

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

**PART 70 OPERATING PERMIT
EMERGENCY OCCURRENCE REPORT**

Source Name: Indiana-Kentucky Electric Corporation - Clifty Creek Station
Source Address: S.R. 56 West, Madison, Indiana 47250
Mailing Address: P.O. Box 468, Piketon, Ohio 45661
Part 70 Permit No.: T077-7168-00001

This form consists of 2 pages

Page 1 of 2

- 9** This is an emergency as defined in 326 IAC 2-7-1(12)
- 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
 - The Permittee must submit notice in writing or by facsimile within two (2) working days (Facsimile Number: 317-233-6865), and follow the other requirements of 326 IAC 2-7-16

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

Facility/Equipment/Operation:

Control Equipment:

Permit Condition or Operation Limitation in Permit:

Description of the Emergency:

Describe the cause of the Emergency:

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

Page 2 of 2

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

Form Completed by: _____

Title / Position: _____

Date: _____

Telephone: _____

A certification is not required for this report.

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

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

Source Name: Indiana-Kentucky Electric Corporation - Clifty Creek Station
Source Address: S.R. 56 West, Madison, Indiana 47250
Mailing Address: P.O. Box 468, Piketon, Ohio 45661
Part 70 Permit No.: T077-7168-00001

Months: _____ to _____ Year: _____

Page 1 of 2

This report shall be submitted quarterly based on a calendar year. For the purpose of this permit, "calendar year" means the twelve (12) month period from January 1 to December 31 inclusive. Any deviation from the requirements, the date(s) of each deviation, the probable cause of the deviation, and the response steps taken must be reported. 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".

NO DEVIATIONS OCCURRED THIS REPORTING PERIOD.

THE FOLLOWING DEVIATIONS OCCURRED THIS REPORTING PERIOD

Permit Requirement (specify permit condition #)

Date of Deviation:

Duration of Deviation:

Number of Deviations:

Probable Cause of Deviation:

Response Steps Taken:

Permit Requirement (specify permit condition #)

Date of Deviation:

Duration of Deviation:

Number of Deviations:

Probable Cause of Deviation:

Response Steps Taken:

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

Form Completed By: _____

Title / Position: _____

Date: _____

Telephone: _____

Attach a signed certification to complete this report.

Indiana Kentucky Electric Corporation (IKEC)
Clifty Creek Generating Station

Operation Permit: T077-7168-00001

Appendix A



Mitchell E. Daniels, Jr.
Governor

Thomas W. Easterly
Commissioner

100 North Senate Avenue
Indianapolis, Indiana 46204-2251
(317) 232-8603
(800) 451-6027
www.IN.gov/idem

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

Indiana-Kentucky Electric Corporation (IKEC)
Clifty Creek Generating Station
P. O. Box 97, State Route 56 West, Madison, Indiana 47250

ORIS: 983

This permit is issued under the provisions of 326 Indiana Administrative Code (IAC) 21 with conditions listed on the attached pages.

Operation Permit No.: AR 077-18761-00001	
Issued by: <i>Nisha Sizemore</i> Nisha Sizemore, Permits Branch Chief Office of Air Quality	Issuance Date: October 18, 2006 Expiration Date: October 18, 2011

Title IV Operating Conditions

Title IV Source Description:

- (a) Five (5) wet-bottom pulverized coal-fired boilers identified as Units 1 through 5, with construction completed in 1955, each with a rated capacity of 1,869 million Btu per hour (MMBtu/hr). Units 1 through 5 each have a selective catalytic reduction (SCR) system and over-fire air system for NO_x control. Units 1, 2, and 3 exhaust to stack 1. Units 4 and 5 exhaust to stack 2. No. 2 fuel oil is combusted during startup and stabilization periods. Used oil generated at facilities within the OVEC-IKEC system may be combusted as supplemental fuel for energy recovery. Stacks 1 and 2 have continuous emissions monitoring systems (CEMS) for nitrogen oxides (NO_x) and sulfur dioxide (SO₂).
- (b) One (1) wet-bottom pulverized coal-fired boiler identified as Unit 6, with construction completed in 1956, with a rated capacity of 1,869 million Btu per hour (MMBtu/hr). NO_x emissions are reduced by an over-fire air system. Unit 6 exhausts to stack 2. No. 2 fuel oil is combusted during startup and stabilization periods. Used oil generated at facilities within the OVEC-IKEC system may be combusted as supplemental fuel for energy recovery. Stack 2 has continuous emissions monitoring systems (CEMS) for nitrogen oxides (NO_x) and sulfur dioxide (SO₂).

(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 40 CFR 72.30.
- (b) The owners and operators of each affected source and each affected unit shall operate Units 1, 2, 3, 4, 5, and 6 in compliance with this permit.

3. Monitoring Requirements [326 IAC 21]

- (a) The owners and operators and, to the extent applicable, the designated representative of Units 1, 2, 3, 4, 5, and 6 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 1, 2, 3, 4, 5, and 6 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 owners and operators to monitor emissions of other pollutants or other emissions characteristics at Units 1, 2, 3, 4, 5, and 6 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 owners and operators of each source and each affected unit at the source shall:
 - (1) Hold allowances, as of the allowance transfer deadline (as defined in 40 CFR 72.2), in the compliance subaccount of Units 1, 2, 3, 4, 5, and 6, 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 1, 2, 3, 4, 5, and 6; 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 1, 2, 3, 4, 5, and 6 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 an affected source. An affected source 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) Sulfur dioxide allowances shall be allocated to each unit at the source as follows:

SO ₂ Annual Allowance Allocations (tons)					
Year:	2005	2006	2007	2008	2009
Unit 1	8,462*	8,462*	8,462*	8,462*	8,462*
Unit 2	8,321*	8,321*	8,321*	8,321*	8,321*
Unit 3	8,570*	8,570*	8,570*	8,570*	8,570*
Unit 4	8,431*	8,431*	8,431*	8,431*	8,431*
Unit 5	8,129*	8,129*	8,129*	8,129*	8,129*
Unit 6	8,557*	8,557*	8,557*	8,557*	8,557*

* 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 SO₂ allowance allocations identified in this permit. (See 40 CFR 72.84)

5. Nitrogen Oxides Requirements [326 IAC 21]

- (a) The owners and operators of the source and each affected unit at the source shall comply with the applicable acid rain emissions limitation of nitrogen oxides (NO_x) for Units 1, 2, 3, 4, 5, and 6.
- (b) NO_x Emission Averaging Plan for Unit 1:
- (1) Pursuant to 40 CFR 76.11, the Indiana Department of Environmental Management, Office of Air Quality approves a NO_x emission averaging plan for Unit 1, effective for calendar years 2005 through 2009. Under this plan, the combined actual BTU-weighted annual average NO_x emission rates from the common stacks serving Units 1 through 6 at the Indiana-Kentucky Electric Corporation's Clifty Creek Station and the common stack serving Units 1 through 5 at the Ohio Valley Electric Corporation's Kyger Creek Station shall not exceed 0.84 lb/MMBtu.
 - (2) The owner or operator must annually demonstrate that Unit 1 meets the NO_x emission limit of 0.84 lb/MMBtu by showing that emissions at the common stack (through which emissions from Units 1, 2 and 3 are vented) meet such limit, based upon the data from certified continuous emission monitoring systems (CEMS) at common stack 1. CEMS certification must be performed in accordance with the requirements and specifications delineated at 40 CFR 75.
- (c) NO_x Emission Averaging Plan for Unit 2:
- (1) Pursuant to 40 CFR 76.11, the Indiana Department of Environmental Management, Office of Air Quality approves a NO_x emission averaging plan for Unit 2, effective for calendar years 2005 through 2009. Under this plan, the combined actual BTU-weighted annual average NO_x emission rates from the common stacks serving Units 1 through 6 at the Indiana-Kentucky Electric Corporation's Clifty Creek Station and the common stack serving Units 1 through 5 at the Ohio Valley Electric Corporation's Kyger Creek Station shall not exceed 0.84 lb/MMBtu.
 - (2) The owner or operator must annually demonstrate that Unit 2 meets the NO_x emission limit of 0.84 lb/MMBtu by showing that emissions at the common stack (through which emissions from Units 1, 2 and 3 are vented) meet such limit, based upon the data from certified continuous emission monitoring systems (CEMS) at common stack 1. CEMS certification must be performed in accordance with the requirements and specifications delineated at 40 CFR 75.
- (d) NO_x Emission Averaging Plan for Unit 3:
- (1) Pursuant to 40 CFR 76.11, the Indiana Department of Environmental Management, Office of Air Quality approves a NO_x emission averaging plan for Unit 3, effective for calendar years 2005 through 2009. Under this plan, the combined actual BTU-weighted annual average NO_x emission rates from the common stacks serving Units 1 through 6 at the Indiana-Kentucky Electric Corporation's Clifty Creek Station and the common stack serving Units 1 through 5 at the Ohio Valley Electric Corporation's Kyger Creek Station shall not exceed 0.84 lb/MMBtu.
 - (2) The owner or operator must annually demonstrate that Unit 3 meets the NO_x emission limit of 0.84 lb/MMBtu by showing that emissions at the common stack (through which emissions from Units 1, 2 and 3 are vented) meet such limit, based upon the data from certified continuous emission monitoring systems (CEMS) at common stack 1. CEMS certification must be performed in accordance with the requirements and specifications delineated at 40 CFR 75.

- (e) NO_x Emission Averaging Plan for Unit 4:
- (1) Pursuant to 40 CFR 76.11, the Indiana Department of Environmental Management, Office of Air Quality approves a NO_x emission averaging plan for Unit 4, effective for calendar years 2005 through 2009. Under this plan, the combined actual BTU-weighted annual average NO_x emission rates from the common stacks serving Units 1 through 6 at the Indiana-Kentucky Electric Corporation's Clifty Creek Station and the common stack serving Units 1 through 5 at the Ohio Valley Electric Corporation's Kyger Creek Station shall not exceed 0.84 lb/MMBtu.
 - (2) The owner or operator must annually demonstrate that Unit 4 meets the NO_x emission limit of 0.84 lb/MMBtu by showing that emissions at the common stack (through which all emissions from Units 4, 5, and 6 are vented) meet such limit, based upon the data from certified continuous emission monitoring systems (CEMS) at common stack 2. CEMS certification must be performed in accordance with the requirements and specifications delineated at 40 CFR 75.
- (f) NO_x Emission Averaging Plan for Unit 5:
- (1) Pursuant to 40 CFR 76.11, the Indiana Department of Environmental Management, Office of Air Quality approves a NO_x emission averaging plan for Unit 5, effective for calendar years 2005 through 2009. Under this plan, the combined actual BTU-weighted annual average NO_x emission rates from the common stacks serving Units 1 through 6 at the Indiana-Kentucky Electric Corporation's Clifty Creek Station and the common stack serving Units 1 through 5 at the Ohio Valley Electric Corporation's Kyger Creek Station shall not exceed 0.84 lb/MMBtu.
 - (2) The owner or operator must annually demonstrate that Unit 5 meets the NO_x emission limit of 0.84 lb/MMBtu by showing that emissions at the common stack (through which all emissions from Units 4, 5, and 6 are vented) meet such limit, based upon the data from certified continuous emission monitoring systems (CEMS) at common stack 2. CEMS certification must be performed in accordance with the requirements and specifications delineated at 40 CFR 75.
- (g) NO_x Emission Averaging Plan for Unit 6:
- (1) Pursuant to 40 CFR 76.11, the Indiana Department of Environmental Management, Office of Air Quality approves a NO_x emission averaging plan for Unit 6, effective for calendar years 2005 through 2009. Under this plan, the combined actual BTU-weighted annual average NO_x emission rates from the common stacks serving Units 1 through 6 at the Indiana-Kentucky Electric Corporation's Clifty Creek Station and the common stack serving Units 1 through 5 at the Ohio Valley Electric Corporation's Kyger Creek Station shall not exceed 0.84 lb/MMBtu.
 - (2) The owner or operator must annually demonstrate that Unit 6 meets the NO_x emission limit of 0.84 lb/MMBtu by showing that emissions at the common stack (through which emissions from Units 4, 5, and 6 are vented) meet such limit, based upon the data from certified continuous emission monitoring systems (CEMS) at common stack 2. CEMS certification must be performed in accordance with the requirements and specifications delineated at 40 CFR 75.
- (h) Under the plan, the actual Btu-weighted annual average NO_x emission rate for Units 1, 2, 3, 4, 5, and 6 shall be less than or equal to the Btu-weighted annual average NO_x 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(d)(1)(ii)(A)) is met for a year under the plan, then Units 1, 2, 3, 4, 5,

and 6 shall be deemed to be in compliance for that year with its alternative contemporaneous annual emission limitation and annual heat input limit.

- (i) In accordance with 40 CFR 72.40(b)(2), approval of the averaging plan shall be final only when the Ohio Environmental Protection Agency has also approved this averaging plan.
- (j) In addition to the described NO_x compliance plan, Units 1, 2, 3, 4, 5, and 6 shall comply with all other applicable requirements of 40 CFR 76, including the duty to reapply for a NO_x compliance plan and requirements covering excess emissions.

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

(a) If Unit 1, 2, 3, 4, 5, or 6 has excess emissions 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
Indianapolis, Indiana 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 1, 2, 3, 4, 5, or 6 has excess emissions, as defined in 40 CFR 72.2, in any calendar year the owners and operators 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 owners and operators of the source and each affected unit at the source 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 1, 2, 3, 4, 5, and 6 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 1, 2, 3, 4, 5, and 6 shall submit the reports and compliance certifications required under the Acid Rain Program, including those under 40 CFR 72.90, 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]

- (a) The designated representative of Units 1, 2, 3, 4, 5, and 6 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
Indianapolis, Indiana 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 1, 2, 3, 4, 5, and 6 shall notify each owner and operator of the source and of an affected unit at the source:
 - (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; and,
- (3) Provided that the submission or determination covers Unit 1, 2, 3, 4, 5, or 6.
- (f) The designated representative of Units 1, 2, 3, 4, 5, and 6 shall provide each owner and operator of an affected unit at the source a copy of any submission or determination under paragraph 8(e), unless the owner or operator expressly waives the right to receive a copy.

9. Severability [326 IAC 21]

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]

- (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 1, 2, 3, 4, 5, and 6 shall meet the requirements of the Acid Rain Program.
- (e) Any provision of the Acid Rain Program that applies to Unit 1, 2, 3, 4, 5, or 6, including a provision applicable to the designated representative of Unit 1, 2, 3, 4, 5, or 6 shall also apply to the owners and operators of such source and of the affected units at the source.
- (f) Any provision of the Acid Rain Program that applies to Unit 1, 2, 3, 4, 5, or 6, including a provision applicable to the designated representative, shall also apply to the owners and operators of such unit. Except as provided under 40 CFR 72.44 (Phase II repowering extension plans) and 40 CFR 76.11 (NO_x 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 owners and operators 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 owners or operators or the designated representative and that is located at a source of which they are not owners or operators or the designated representative.
- (g) Each violation of a provision of 40 CFR Parts 72, 73, 75, 76, 77, and 78 by Unit 1, 2, 3, 4, 5, or 6, or by an owner or operator or designated representative shall be a separate violation of the Clean Air Act.

11. Effect on Other Authorities [326 IAC 21]

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 owners and operators and, to the extent applicable, the designated representative of Unit 1, 2, 3, 4, 5, or 6 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 for a Part 70 Operating Permit

Source Name: Indiana-Kentucky Electric Corporation - Clifty Creek Station
 Source Location: S.R. 56 West, Madison, Indiana 47250
 County: Jefferson
 SIC Code: 4911
 Operation Permit No.: T077-7168-00001
 Permit Reviewer: Vickie Cordell

On February 21, 2006, the Office of Air Quality (OAQ) had a notice published in the Madison Courier in Madison, Indiana, stating that Indiana-Kentucky Electric Corporation (IKEC) had applied for a Part 70 Operating Permit to operate the Clifty Creek Station. The notice also stated that OAQ proposed to issue a permit for this operation and provided information on how the public could review the proposed permit and other documentation. Finally, the notice informed interested parties that there was a period of thirty (30) days to provide comments on whether or not this permit should be issued as proposed.

Public information meetings regarding the pending environmental permits for the station were held at the Clifty Falls Inn at Madison, Indiana, on May 22, 2003, and March 15, 2006. A request for an extension of the comment period was received during the 2006 meeting, and the comment period was extended to May 22, 2006. A request for an additional extension of the comment period was received on May 19, 2006, and the comment period was extended to June 16, 2006. Notices of the extensions of the comment period were published in the Madison Courier on April 10, 2006, and June 2, 2006.

Written comments were received from citizens groups, U.S. EPA, and Indiana-Kentucky Electric Corporation. The following is a summary of the comments. In the responses, additions to the permit are bolded for emphasis; the language with a line through it has been deleted. The Table of Contents in the permit has been modified to reflect these changes.

On June 11, 2006, comments were received from David Bender of Garvey McNeil & McGillivray SC, representing the citizens groups Valley Watch and Save the Valley, Inc.

Citizens Comment 1

The draft permit does not appear to include a CAM Plan as required by 40 CFR Part 64.

The six boilers at Clifty Creek are subject to particulate matter (PM) limits, rely on electrostatic precipitators (ESPs) to control PM, and have potential pre-control emissions of PM greater than 100 tons per year [40 CFR 64.2(a)]. Therefore, the boilers are subject to the CAM requirements of 40 CFR 64. The source was required to submit a plan and specific data with its Part 70 operating permit application [40 CFR 64.5]. IDEM must then include CAM requirements into the Part 70 permit for Clifty Creek [40 CFR 65.5; 40 CFR 70.6]. The draft permit does not appear to include these requirements. Instead, the draft permit relies on a stack test every 24 months to ensure compliance with the PM limits for the boilers. See Condition D.1.4.

Response to Citizens Comment 1

Pursuant to 40 CFR 64.5, Deadlines for Submittals, the Compliance Assurance Monitoring (CAM) Plan for large pollutant-specific emissions units, such as the boilers at the Clifty Creek Station, were required to be

submitted as part of the initial Part 70 permit only if the Part 70 application had not been filed before April 20, 1998, or if the application had not yet been determined to be complete by the permitting authority by that date. The Part 70 application for the Clifty Creek Station was received on November 14, 1996. A letter stating that the application had been determined by IDEM to be administratively complete was issued on December 30, 1996.

Pursuant to 40 CFR 64.5(a)(2), IDEM will evaluate CAM applicability as part of the review of any significant permit revision application that is submitted after April 20, 1998. Pursuant to 40 CFR 64.5(a)(3), a CAM Plan will be required as part of the Title V renewal application for any subject emissions unit that has not already had a CAM Plan submitted.

There has been no change in response to this comment.

Citizens Comment 2

The permit must include sufficient monitoring to provide sufficient data to determine and assure continuous compliance.

The draft permit fails to include a method to determine continuous compliance with the PM limits for the boilers and fails to require sufficient monitoring. The permit should include parametric monitoring ranges that correlate to compliance, and must explicitly state that operation outside of that range constitutes a violation of the underlying emission limit. Part 70 permits must establish a method to ensure continuous compliance with all permit limits [40 CFR 70.6(a)(3)(i)(B)]. The “periodic monitoring rule,” 40 CFR 70.6(a)(3)(i)(B), requires that

“[w]here the applicable requirement does not require periodic testing or instrumental or noninstrumental monitoring (which may consist of record keeping designed to serve as monitoring), [each title V permit must contain] periodic monitoring sufficient to yield reliable data from the relevant time period that are representative of the source’s compliance with the permit. . . Such monitoring requirements shall assure use of terms, test methods, units, averaging periods, and other statistical conventions consistent with the applicable requirement.

In the Matter of Midwest Generation, LLC, Waukegan Generation Station, Order Responding to Petitioner’s Request That the Administrator Object to Issuance of a State Operating Permit at page 19 (September 22, 2005) (hereinafter “*Waukegan*”) (*citing* 69 Fed. Reg. at 3202, 3204 (Jan. 22, 2004)); see also, *Appalachian Power Co. v. EPA*, 208 F.3d 1015 (D.C. Cir. 2000); Carraway, Candace, U.S. EPA Office of Air Quality Planning and Standards, How Do I Review Each Applicable Requirement for Adequate Periodic Monitoring? at page 2 (June 2000).

The PM limits contained in the draft permit for the six boilers at Clifty Creek do not include a monitoring requirement. Therefore, the Part 70 permit must provide sufficient monitoring to yield continuous data from which the source’s compliance can be determined at any given point in time [40 CFR 70.6(a)(3)(i)(B)]. Additionally, 326 IAC 2-7 requires permits to “ensure that sources can demonstrate compliance with applicable state and federal rules on a more or less continuous basis”, as stated in the Technical Support Document for a Part 70 Operating Permit, Operating Permit No. T077-7168-00001 page 18 (hereinafter “TSD”). In other words, the “compliance demonstration” provisions in the permit must be sufficient such that the data collected and recorded can be used to demonstrate non-compliance with the underlying limit, without the need for additional testing.

The draft permit requires the source to monitor Transformer-Rectifier (“T-R”) Sets once per day, including the number of T-R sets in service and the primary and secondary voltages and currents [Condition D.1.8.(a)]. The draft permit also requires “reasonable steps” when the T-R sets in service fall below 90%,

but states that failing to keep 90% of the T-R sets in service is not a violation of the permit [Condition D.1.8(b)]. Page 18 of the TSD further states that “failure to meet Compliance Monitoring conditions... [are] not grounds for enforcement action.” The draft permit contains similar requirements to monitor opacity ranges, but notes that emissions above the indicator range “are not a deviation from this permit.” [Condition D.1.9]. This is insufficient to comply with Part 70. A sufficient Part 70 permit must include a connection between monitoring the T-R sets, voltages and currents, and opacity ranges and compliance with the PM limit. The permit “must include a correlation between these measurements and compliance with the PM emission limitations.” *Waukegan*, supra, page 20; see also *In Re Port Hudson Operation Georgia Pacific*, Petition No. 6-03-01, at pages 37-40 (May 9, 2003) (“Georgia Pacific”); *In Re Doe Run Company Buick Mill and Mine*, Petition No. VII-1999-001, at pages 24-25 (July 31, 2002) (“Doe Run”).

U.S. EPA has consistently required that if ESP parameters are monitored pursuant to the requirement for continuous monitoring in Part 70, the permit must specify the upper and/or lower range for each parameter that establishes compliance with the PM limit. *Id.*; *In the Matter of Dunkirk Power LLC*, Order Objecting to Proposed Operating Permit No. II-2002-02 at 20 (Adm’r July 31, 2003) (“Once the operating ranges have been established for the ESP operating parameters [based on emission stack tests], operating the ESP outside of any of these ranges would constitute a violation of the title V permit.”); *In the Matter of Oxy Vinyls, LP, Louisville, Kentucky*, Objection to Proposed Part 70 Operating Permit No. 212-99-TV (Feb. 1, 2001) (“The permit must specify the parametric range or procedure used to establish that range, as well as the frequency for re-evaluating the range.”). (Footnote to the comment: These U.S. EPA decisions are based on 40 CFR 70.06(a)(1), and any modification to U.S. EPA’s interpretation of 40 CFR 70.6(c) would not change the requirement to correlate a parameter range and the emission rate.) The same is true for opacity ranges. *Id.* For example, U.S. EPA objected to a proposed Title V permit for Tampa Electric’s F.J. Gannon Station for failing to include a parameter range that correlates to an emission rate:

While the permit does include parametric monitoring of emission unit and control equipment operations in the O & M plans for these units... the parametric monitoring scheme that has been specified is not adequate. The parameters to be monitored and the frequency of monitoring have been specified in the permit, but the parameters have not been set as enforceable limits. In order to make the parametric monitoring conditions enforceable, a correlation needs to be developed between the control equipment parameter(s) to be monitored and the pollutant emission levels. The source needs to provide an adequate demonstration (historical data, performance test, etc.) to support the approach used. In addition, an acceptable performance range for each parameter that is to be monitored should be established.

In the Matter of Tampa Electric Co., F.J. Gannon Station, Objection to Proposed Part 70 Operating Permit No. 0570040-002-AV (Sept. 8, 2000) (emphasis added); see also *In the Matter of the Huntley Generating Station*, Order Objecting to Operating Permit No. II-2002-01 at 21-22 (Adm’r July 31, 2003) (same). Therefore, the final permit must establish specific parameter ranges for the ESPs and opacity that must be met at all times to demonstrate compliance with the PM limit.

Response to Citizens Comment 2

The commenter correctly quotes the “periodic monitoring rule” contained at 40 CFR 70.6(a)(3)(i)(B) which requires that “[w]here *the applicable requirement does not require periodic testing* or instrumental or noninstrumental monitoring..., [each title V permit must contain] periodic monitoring sufficient to yield reliable data from the relevant time period.” (emphasis added). By its definition, though, the rule only applies if the requirement is not subject to periodic testing. The commenter’s conclusion that “the six boilers at Clifty Creek do not include a monitoring requirement” is incorrect. In fact, Permit Section D.1.4 (on page 30 of the draft permit) requires the facility to do a stack test approximately every two years on

Stack 1 and Stack 2 for PM. To ensure continued compliance between stack tests, IDEM requires both monitoring of the percentage of T-R sets in service and opacity through a COM system.

In addition, the commenter's use of U.S. EPA's objections only supports the analysis provided above. For example, the commenter cites an objection from U.S. EPA relating to a Part 70 permit being issued in Illinois. *In re Midwest Generation, LLC, Waukegan Generating Station*, Order Responding to Petitioner's Request that the Administrator Object to Issuance of a State Operating Permit, available at: http://www.epa.gov/rgytgrnj/programs/artd/air/title5/petitiondb/petitions/midwest_generation_waukegan_decision2004.pdf. In *Waukegan*, U.S. EPA objected to the issuance of the permit because the absence of periodic stack testing required the permit to have a clear connection between the COM readings or other parametric monitoring and the PM emission limits since that is what Illinois EPA relied on to test compliance. See *id.* at 20-21. Unlike *Waukegan*, though, IDEM relies on stack tests for compliance every two years and does not purport to use the opacity trigger or the percentage of T-R sets in service on the ESP as a surrogate for PM testing.

Citizens Comment 3

The draft permit fails to include an opacity limit for periods of normal operation.

Section D.1.2 of the draft permit includes "Temporary Alternative Opacity Limitations." These limits apply during startup, shutdown, and while removing ashes from the fuel bed or furnace. However, the draft permit does not appear to include an opacity limit for all other periods - i.e., there is no limit in the permit for periods of normal operation. Pursuant to 326 IAC 5-1-2, opacity cannot exceed 40% in any 6-minute period and cannot exceed 60% for more than 15 one-minute averages in a six-hour period. The TSD includes these limits. See TSD at page 11. The final permit should include these limits.

Response to Citizens Comment 3

The opacity limitations of 326 IAC 5-1-2 for the source, including the boilers, are included in the permit in Condition C.2. There has been no change in response to this comment.

Citizens Comment 4

The alternative opacity limits are unlawful and must be modified or removed from the permit.

The draft permit establishes "Alternative Opacity Limitations" in Condition D.1.2. These limits apply during startup, shutdown, and ash removal/sootblowing periods [Condition D.1.2.(a)-(c)]. It appears that these "alternative" limits are established pursuant to 326 IAC 5-1-3(a), (b), and (e)(2). However, the limits in the draft permit conflict with the limits established in the Indiana SIP. 326 IAC 5-1-3 provides that:

(a) When building a new fire in a boiler, or shutting down a boiler, visible emissions may exceed the applicable opacity limit established in section 2 of this rule; however, visible emissions shall not exceed an average of sixty percent (60%) opacity. Visible emissions in excess of the applicable opacity limit established in section 2 of this rule shall not continue for more than twelve (12) continuous minutes on one (1) occasion in any twenty-four (24) hour period.

(b) When removing ashes from the fuel bed or furnace in a boiler or blowing tubes, visible emissions may exceed the applicable opacity limit established in section 2 of this rule; however, visible emissions shall not exceed sixty percent (60%) opacity and visible emissions in excess of the applicable opacity limit shall not continue for more than six (6)

continuous minutes on one (1) occasion in a sixty (60) minute period. The visible emissions shall not be permitted on more than three (3) occasions in a twelve (12) hour period.

(c) Facilities not temporarily exempted by subsections (a) and (b), and not located in Lake County, may be granted special temporary exemptions by the commissioner of the same duration and type authorized in subsections (a) and (b) provided that the facility proves to the satisfaction of the commissioner that the exemptions are needed and that during periods of startup and shutdown, owners and operators shall, to the extent practicable, maintain and operate an affected facility including air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information provided to the commissioner upon request, which may include, but is not limited to, the following: (1) Monitoring results. (2) Opacity observations. (3) Review of operating and maintenance procedures. (4) Inspection of the source. The commissioner may require a source to install a certified opacity emissions monitor, where technically feasible, operate the certified opacity emissions monitor in accordance with procedures specified in 326 IAC 3, and maintain other records needed to verify compliance with the temporary exemption.

The "alternate limit" in section D.1.2.(a) appears to conflict with 326 IAC 5-1-3(a) because the draft permit allows opacity to exceed 40% for 30 minutes during startup, whereas 326 IAC 5-1-3(a) only allows opacity to exceed 40% for 12 minutes during any startup. The draft permit cites 326 IAC 5-1-3(e)(2) for this "alternate" limit. Section 5-1-3(e) provides that IDEM can set source-specific opacity limits, if minimum requirements are met. However, 326 IAC 5-1-3(e)(2) does not appear to be included in the Indiana SIP, nor does it appear that the SIP provides a site-specific exemption to the Clifty Creek plant. Once EPA approves a SIP, it becomes binding federal law until EPA approves a modification. See *American Lung Assoc. v. Kean*, 871 F.2d 319, 322 (3rd Cir. 1989); *Ford Motor Co.*, 814 F.2d 1099 (6th Cir. 1987); *Coalition for Clean Air, Inc. v. So. Coast Air Quality Mgmt. Dist.*, 1999 WL 33842864, * 1 (C.D. Cal. 1999); *Oregon Environmental Council v. Oregon Dept. of Environmental Quality*, 1992 WL 252123 (D.Or. 1992). Because EPA has never approved 326 IAC 5-1-3(e), IDEM cannot grant exemptions, or alternate limits, under that section. *In the Matter of Dunkirk Power LLC*, Order Objecting to Proposed Operating Permit No. II-2002-02 at 14 (Adm'r July 31, 2003) (state cannot grant a startup/shutdown/ malfunction exemption on a state rule that has not been approved into the SIP); *In the Matter of the Huntley Generating Station*, Order Objecting to Operating Permit No. II-2002-01 at 15 (Adm'r July 31, 2003) (same). Moreover, even if 5-1-3(e)(2) was included in the SIP, the limits in section D.1.2.(a) of the draft permit are only permissible if they were included in an operating permit in effect on the date that 5-1-3(e) became effective. See 326 IAC 5-1-3(e). It is not clear that the limit in section D.1.2(a) meets this requirement.

Response to Citizens Comment 4

326 IAC 5-1-3(e) has been incorporated into the SIP. The current version of the rule was published in the Indiana Register on November 1, 1998, and final approval of the SIP revision was published in the Federal Register on July 16, 2002, with an effective date of September 16, 2002. In accordance with 326 IAC 5-1-3(e)(2), the alternate opacity limitation for periods of startup and shutdown for the Clifty Creek boilers are "at least as stringent as those conditions in the operating permit in effect as of the effective date of this rule." The previously-issued alternative opacity provisions for the plant provided a period for each startup of up to three (3) hours in which the opacity levels were allowed to exceed the limitations of 326 IAC 5-1-2; Condition D.1.2 allows up to thirty (30) minutes per startup.

There has been no change in response to this comment.

Citizens Comment 5

The permit must require monitoring, recordkeeping, and reporting of parameters related to startup, shutdown, soot blowing, and ash removal.

If IDEM grants exemptions from the 40% opacity limit for startups, shutdowns, periods of soot blowing from tubes, and ash removal from the boilers, it must require sufficient monitoring, recordkeeping and reporting to determine whether excess emissions occurred during these periods and, if so, whether they met the "alternate limit." At a minimum, the permit should require the following:

- 1) Daily recording of all startup periods, including the time and boiler temperature at the beginning of each startup period and the time and boiler temperature at the end of the startup period;
- 2) Daily recording of all shutdown periods, including the time and boiler temperature at the beginning of each shutdown period and the time and boiler temperature at the end of the shutdown period;
- 3) Daily recording of the time of each soot blowing event;
- 4) Daily recording of the time that ash removal begins and ends.

This minimum monitoring and reporting is required by Part 70. A Part 70 permit must include "periodic monitoring sufficient to yield reliable data from the relevant time period that are representative of the source's compliance with the permit..." [40 CFR 70.6(a)(3)(B)]. If IDEM grants an exemption from the 40% opacity limit, it must ensure that the alternative limit is quantifiable, accountable, enforceable and based on replicable procedures [40 CFR 70.6(a)(1)(iii)]. Moreover, the permit must contain compliance certification, monitoring, reporting and recordkeeping sufficient to assure compliance [40 CFR 70.6(c)(1), (5)(ii) and (iii)]. If an alternative to the 40% limit applies only during specified periods (i.e., startup, shutdown, soot blowing, and ash removal), the permit must require sufficient monitoring, recordkeeping and reporting to determine whether and when the alternative limits apply.

Response to Citizens Comment 5

As shown in Condition D.1.6 (Continuous Emissions Monitoring), and pursuant to 326 IAC 3-5-1(c)(2)(A), the Permittee is required to operate a continuous opacity monitoring system (COMS) on each boiler exhaust stack. Quarterly reports of all opacity exceedances are required in accordance with 326 IAC 3-5-7, including the actual percent opacity of all six (6) minute averages for each period of excess emissions and the cause of each exceedance. Therefore, all occasions of startup, shutdown, soot blowing, and ash removal that result in opacity emissions in excess of the limitations of 326 IAC 5-1-2 are identified and quantified in the quarterly reports.

There has been no change in response to this comment.

Citizens Comment 6

IDEM should clarify that there is no exception to the opacity limits for Clifty Creek, other than those lawfully in the permit.

The permit file for Clifty Creek includes several letters from counsel for Indiana-Kentucky Electric Co. asking for a permit term allowing 2% noncompliance with the opacity limit. These letters requested that IDEM "add a new condition stating that 98% compliance with the opacity limit constitutes compliance with the applicable emission limit." See Letter from Anthony Sullivan, Barnes & Thornburg, to Vickie Cordell, IDEM, page 18

(May 19, 1999); see also Letter from Anthony Sullivan, Barnes & Thornburg, to Vickie Cordell, IDEM, (Dec. 18, 2001); Letter from Anthony Sullivan, Barnes & Thornburg, to Vickie Cordell, IDEM, page 1 (April 1, 2002). There is no legal basis for this request, and it does not appear that IDEM included such a condition in the draft permit. IDEM should verify that no such term exists and that **any** exceedances of the opacity limit constitutes both a violation of the Part 70 permit and of the underlying SIP requirement.

Response to Citizens Comment 6

The comment is correct in noting that IDEM has not granted a blanket exemption for exceedance of any limit, including the applicable opacity limitations. Exceedances of the opacity limitations of 326 IAC 5-1-2 are allowed only in accordance with the provisions of 326 IAC 5-1-3. There has been no change in response to this comment.

Citizens Comment 7

The permit should ensure that total PM emissions are measured.

The draft permit includes limits applicable to units 1 through 6 that were imposed by administrative order in 1973. See Condition D.1.1. These limits were needed to ensure compliance with ambient air standards. It is important that these limits apply to total particulate matter emissions. Specifically, PM in the ambient air consists of PM that is emitted as a solid from emission stacks ("filterable"), as well as PM that condenses into a solid after leaving the stack ("condensable"). There is no difference between these types of PM in the ambient air, or their effect on air quality and public health. Therefore, because the limits in section D.1.1 were set to protect ambient air quality, they apply to both filterable and condensable PM. The permit must require that compliance testing to show compliance with Condition D.1.1 include both filterable (Method 5), as well as condensable PM (Method 202).

Response to Citizens Comment 7

The 1973 administrative order is included as Appendix B to the Technical Support Document for this permit. The administrative order cites the state particulate emission regulation in effect at that time, APC 4R. APC 4R Section 1 provided that in all areas of the state designated as attainment areas at that time "the emission of particulate matter from the combustion of fuel for indirect heating shall be limited by the ASME Standard No. APS-1, second edition, November, 1968, "Recommended Guide for the Control of Dust Emission - Combustion for Indirect Heat Exchangers."

In addition, APC 4R Section 3 provided a lower particulate limit for new boilers with a heat input greater than 250 million Btu per hour "as required and specified in the Federal Environmental Protection Agency's "Standards for Performance of New Stationary Sources," Federal Register, December 23, 1971, Volume 36, Number 247, Part II." The preamble in the Federal Register presented revisions made to the NSPS in response to comments received on the proposed standards, including an explanation that "Particulate matter performance testing procedures have been revised to eliminate the requirement for impingers in the sampling train. Compliance will be based only on material collected in the dry filter and the probe preceding the filter." The provisions of APC 4R Section 3 were not applicable to the Clifty Creek boilers, but the inclusion of the NSPS in the state rule further demonstrates that the particulate limits established pursuant to APC 4R are for filterable particulate only, not condensable.

There has been no change in response to this comment.

Citizens Comment 8

The TSD fails to explain how the compliance determination requirements for the coal handling facilities ensure compliance with the PM limit.

The PM limit for the coal handling facilities is 0.10 pounds per 1000 pounds of gas. See Condition D.2.1. To comply with this limit, the draft permit requires the source to operate baghouses "except as otherwise provided by statute, rule or this permit." See Condition D.2.3. The TSD merely repeats the applicable limit, it does not explain how IDEM determined that operating a baghouse was sufficient to ensure compliance with the permit limit. See TSD at page 14.

Part 70 requires a statement of basis ("SOB") for each permit [40 CFR 70.7(a)(5)]. A SOB must set forth the legal and factual basis for the draft permit conditions. It must contain information about applicability determinations and, among other things, a discussion of how the required monitoring was selected and other factual information and supporting material relied upon in the permitting process. *Id.* The TSD lacks the required explanation of how a baghouse ensures compliance with the PM limit for the coal handling operations.

Response to Citizens Comment 8

The application for CP 077-2716, issued March 16, 1993, states that the outlet grain loading for each of the coal handling baghouses is 0.01 grain (gr) per actual cubic foot (acf) of outlet air. The standard density for dry air at 70° F is 0.075 pound (lb) per cubic foot (cf).

$$\frac{[0.01 \text{ gr} \times 1 \text{ lb}/7,000 \text{ gr}] \text{ particulate}}{[1 \text{ acf} \times 0.075 \text{ lb}/\text{cf}] \text{ outlet air}} \times 1,000 \text{ lbs outlet air} = \mathbf{0.02 \text{ lb particulate per 1,000 lbs outlet air}}$$

Therefore, the concentration of particulate in the discharge from the baghouses is less than 0.10 pounds per one thousand (1,000) pounds of exhaust gases.

Use of the baghouses is not the only compliance requirement for the coal handling operations. The permit also requires daily visible emissions notations for each of the baghouses.

To more fully reflect the requirements of 326 IAC 6-3 for any throughput rate for the coal processing operations, Condition D.2.1 has been revised as shown.

D.2.1 Particulate [326 IAC 6-3-2]

Pursuant to 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes), ~~for the coal processing 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.~~ **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:**

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

- (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.**

Citizens Comment 9

The permit must require parametric monitoring, and establish required ranges, for the coal handling equipment.

40 CFR 70.6(a)(3)(i)(B) requires that “[w]here the applicable requirement does not require periodic testing or instrumental or noninstrumental monitoring (which may consist of record keeping designed to serve as monitoring), [each title V permit must contain] periodic monitoring sufficient to yield reliable data from the relevant time period that are representative of the source’s compliance with the permit. . . Such monitoring requirements shall assure use of terms, test methods, units, averaging periods, and other statistical conventions consistent with the applicable requirement.” *In the Matter of Midwest Generation, LLC, Waukegan Generation Station*, Order Responding to Petitioner’s Request That the Administrator Object to Issuance of a State Operating Permit at page 19 (September 22, 2005) (hereinafter “*Waukegan*”) (citing 69 Fed. Reg. at 3202, 3204 (Jan. 22, 2004)); see also, *Appalachian Power Co. v. EPA*, 208 F.3d 1015 (D.C. Cir. 2000).

The draft permit does not require periodic monitoring and recording of baghouse parameters (i.e., pressure drop), nor any other sufficient monitoring to ensure continuous compliance with the applicable PM limits. At a minimum, the permit should require a stack test to determine compliance with the PM limit within the first 3 months of the permit’s term. During the stack test, the baghouse pressure drop (and all other relevant parameters) should be monitored and recorded. The permit should require the source to maintain the baghouse pressure drop and other parameters within the range observed as indicating compliance during the stack test. The permit “must include a correlation between these measurements and compliance with the PM emission limitations.” *Waukegan*, supra, page 20; see also *In Re Port Hudson Operation Georgia Pacific*, Petition No. 6-03-01, at pages 37-40 (May 9, 2003) (“*Georgia Pacific*”); *In Re Doe Run* at pages 24-25; *In the Matter of Dunkirk Power* at 20 (requiring the source to establish control equipment parameters through stack testing and requiring the Part 70 permit to state that operating “outside of any of these ranges would constitute a violation of the title V permit.”); *In the Matter of Oxy Vinyls*, (“The permit must specify the parametric range or procedure used to establish that range, as well as the frequency for re-evaluating the range.”). Periodic monitoring and recording of these parameters should be required, as well as reporting of any excursions from the pressure drop range.

Response to Citizens Comment 9

The baghouses on the coal transfer points were installed to allow Powder River Basin (PRB) coal to be handled more safely. The baghouses are distributed along the coal conveyor system stretching from the river to the boilers. The transfer points are fully enclosed, and a buildup of PRB dust in the enclosure would create an explosion hazard. IKEC requested the alternative compliance monitoring approach because it is not possible to modify the system to allow pressure drop readings to be made from a central control point, and the readings would have to be manually collected from each of the baghouse enclosures. Also, the pressure gauges on the baghouses have experienced frequent clogging, so that pressure readings have not historically been consistently obtainable.

As noted in the TSD, IKEC has agreed to perform visible emission (VE) notations of the coal handling exhaust points on a daily basis, rather than weekly, instead of the standard compliance monitoring requirements requiring weekly VE notations and weekly pressure drop readings for the coal handling baghouses. The OAQ Compliance Branch agreed that the alternative monitoring approach is acceptable for the Clifty Creek station. It is not possible to perform stack testing on the baghouses as they are currently constructed because the stacks are curved so that the exhaust is directed downward, and because there is not a steady exhaust flow rate.

There has been no change in response to this comment.

Citizens Comment 10

The fugitive PM limits in Condition D.2.2 are not practicably enforceable.

U.S. EPA policy requires that a Part 70 permit be enforceable as a practical matter. For a permit condition to be enforceable, the permit must leave no doubt as to exactly what the facility must do to comply with the condition. U.S. EPA Region 9 Title V Permit Review Guidelines, Sept. 9 1999, page III-46.

A permit is enforceable as a practical matter (or practically enforceable) if permit conditions establish a clear legal obligation for the source [and] allow compliance to be verified. Providing the source with clear information goes beyond identifying the applicable requirement. It is also important that permit conditions be unambiguous and do not contain language which may intentionally or unintentionally prevent enforcement.

The following requirements are not enforceable as a practical matter for the reasons stated:

- Section D.2.2(a) requires the source to apply “water and/or dust suppressant chemicals... as needed to minimize visible emissions.” The permit term does not specify whether water, dust suppressant, or water *and* dust suppressant is required. Further, the permit does not provide any guidance as to when “water and/or dust suppressant chemicals” are needed. Is the source required to apply “water and/or dust suppressant chemicals” at all times that the coal handling equipment is operated? Only during dry conditions? Furthermore, it is not clear what level of visible emission minimization is required. If the source experiences *any* visible emissions from the coal handling equipment and is not applying “water and/or dust suppressant chemicals,” or not applying the maximum volume of “water and/or dust suppressant chemicals,” the visible emissions are necessarily not “minimized.” The permit should clarify that *no* visible emissions are allowed unless the source is *maximizing* the use of “water and/or dust suppressant chemicals.”
- Section D.2.2(c) provides that “[f]or the transfer stations, the foam and wetting systems will promote a reduction in emissions.” This requirement is not clear. Are foam and wetting systems required? If so, when must the systems be operated and what system parameters must be monitored and reported to ensure that adequate dust control is being achieved?
- Section D.2.2(c) further provides that “[m]odified chutes will be provided at coal drop points.” This provision is not clear. Are “modified chutes” required by the permit? If so, what minimum characteristics of the chutes are required to ensure dust control? Is the source required to use the “modified” chutes at every drop point? If so, what parameters must be monitored and reported to ensure that the chutes are providing the necessary dust control?

Response to Citizens Comment 10

The coal for the plant typically has 12% moisture content when unloaded from the barges. The Fugitive Dust Control plan requires the use of water, or one or more dust suppressant chemicals, or a combination; the choice of suppressant is left up to the Permittee. 326 IAC 6-4 and 6-5 do not require no

visible emissions. 326 IAC 6-5-2 defines "as needed basis" as the frequency of application necessary to minimize visible particulate matter emissions as defined in the control plan.

The coal drop points requiring modified chutes are the discharge points from the conveyors to the storage piles. Modified chutes minimize the open air distance that the coal falls between the end of the conveyor and the top of the pile, and can be telescoping chutes or a stacker reclaim system.

Citizens Comment 11

IDEM should clarify whether 40 CFR Pt. 60, Subpart Y applies to the coal handling equipment installed in 1993.

The source modified its coal handling equipment in 1993 to allow increased production rates and to allow the use of more subbituminous coal, including transfer stations and conveyors. This coal handling equipment has a throughput greater than 200 tons per hour. Therefore, the NSPS standard in Part 60, Subpart Y applies. Pursuant to that standard, the opacity from B1, B2, B3, B4, 5B1, B12, B23, B34 E, and B34 W should not exceed 20% [40 CFR 60.252(c)]. The draft permit does not appear to incorporate Subpart Y, including the opacity requirement.

Response to Citizens Comment 11

As stated in the TSD, NSPS Subpart Y does not apply to any of the coal handling operations, because no coal is crushed, screened, or otherwise processed on site. EPA applicability determinations have clarified that only sources which break, crush, screen, clean or dry the coal are subject; sources which simply store or load coal without performing any of the processes listed in the definition are not subject. There has been no change to the permit in response to this comment.

Citizens Comment 12

A permit shield is not appropriate if IDEM has not determined that a requirement does not apply.

The permit shield included in the draft permit states that the source is granted a shield, which "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." See Condition B.12. It does not appear that IDEM has made an explicit determination of non-applicability in the permit. However, the TSD purports to make several non-applicability determinations. For example, the TSD states that the NSPS standards for fossil fuel fired generators do not apply to units 1 through 6 because "[t]hese units were constructed before the earliest applicability date of August 17, 1971." [TSD at page 9]. (Footnote to the comment: The TSD refers to Subpart Db. However, Subpart Db applies to industrial boilers and not utility boilers. It appears that the TSD intends to refer to Da, rather than Db.) This is an insufficient basis to find non-applicability.

The NSPS standards for fossil-fuel-fired steam generators in Subparts D, Da and Dc apply to any source that commences construction or modification after August 17, 1971, September 18, 1978, and June 9, 1989, respectively [40 CFR 60.40(c), 60.40a(a), and 60.40c(a)]. A "modification" includes "any physical change in, or change in the method of operation of, an existing facility which increases the amount of any air pollutant (to which a standard applies) emitted into the atmosphere by that facility or which results in the emission of any air pollutant (to which a standard applies) into the atmosphere not previously emitted." [40 CFR 60.2]. If the boilers were modified since any applicable New Source Performance Standard, much lower emission limits would apply, even if the boilers were "constructed" before 1971.

IDEM makes no determination in the TSD or public record for the Draft Title V Permit whether Units 1 through 6 were "modified" at any point since 1971. Even if it did, IDEM has no basis for such a determination because it has not reviewed all historic physical changes to the facility to determine if any resulted in an emission rate increase.

Similarly, while the permit does not make a non-applicability determination for Prevention of Significant Deterioration ("PSD"), the TSD references PSD. The TSD states that Units 1 through 6 were constructed before the applicability date for PSD. See TSD at page 12. However, PSD applies to modified sources as well as new sources [40 CFR 52.21(b)]. IDEM makes no determination, and conducts no analysis into whether the source was modified since the PSD applicability date. Therefore, IDEM should clarify that the permit shield does not shield the source from PSD or the requirements of Subparts D, Da or Dc. Otherwise, IDEM must conduct and document a thorough investigation into all historic physical and operational changes at the facility and determine that none resulted in an emission increase.

Response to Citizens Comment 12

As noted in the comment, the determinations included in the Technical Support Document (TSD) do not provide a permit shield. The non-applicability determinations stated in the TSD are intended to explain why requirements that might seem to be applicable are not included in the Part 70 permit. The determinations were based primarily on the information provided in the Part 70 application, with additional information obtained from the IDEM files including documents such as previous air permit applications and inspection reports. If an applicant requests that a non-applicability determination be included in the actual permit to have a permit shield for those provisions, then the OAQ requests more extensive documentation of construction times and any additional work performed on the included emission units.

If NSR or NSPS violations were to be found at the plant, appropriate enforcement action would be initiated by IDEM or U.S. EPA. As part of the Federal power plant NSR enforcement initiative, an initial onsite review of the IKEC files was conducted by an EPA contractor in December 1998 and requested documents were reviewed by the contractor and U.S. EPA Region V staff. No enforcement action was initiated for the Clifty Creek station at that time.

No requirements of the New Source Performance Standards (NSPS) Subparts D (Standards of Performance for Fossil-Fuel-Fired Steam Generators), Da (Standards of Performance for Electric Utility Steam Generating Units), Db (Standards of Performance for Industrial-Commercial-Institutional Steam Generating Units), and Dc (Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units) are included in the Part 70 permit. Units 1, 2, 3, 4, 5, and 6 were constructed before any of the applicability dates for these regulations, including the Subpart D applicability date of August 17, 1971, and the Subpart Da applicability date of September 18, 1978. In addition, Subpart Dc is not applicable to boilers with a maximum heat input capacity greater than 100 MMBtu/hr.

The commenter is correct in noting that Subpart Db is not applicable to electric utility steam generating units. However, the unique history of the station has resulted in comments during the public meetings questioning the status of the plant as an electric utility generating station. Therefore, for clarity, it is appropriate to include Subpart Db in the list of New Source Performance Standards not included in the Part 70 permit.

Ohio Valley Electric Corporation (OVEC) and its wholly-owned subsidiary, IKEC, were formed in 1952 by investor-owned electric utilities for the purpose of providing the electric power needed by the U.S. Atomic Energy Commission for a uranium enrichment plant located near Portsmouth, Ohio. Any excess energy was to be sold to the sponsoring power companies. Originally, the Department of Energy ("DOE") purchased essentially all of the electricity produced by the Clifty Creek generating station. However, the Portsmouth plant ended enriching operations in 2001, and DOE terminated its purchase agreement in 2003. Each of the OVEC/IKEC investing companies is currently entitled to its specified share of all net power and energy produced by the Clifty Creek station.

No change will be made to the original TSD. Changes to the permit or technical support material that occur after the public notice are documented in this Addendum to the Technical Support Document. This accomplishes the desired result of ensuring that these types of concerns are documented and part of the record regarding this permit decision.

There has been no change to the permit in response to this comment.

Citizens Comment 13

The permit must incorporate, and the public must be allowed to review and comment on the Preventive Maintenance Plans (PMPs).

The draft permit requires the source to “prepare and maintain Preventive Maintenance Plans (PMPs) within ninety days after issuance of this permit....” See Condition B.10. This requirement is pursuant to the monitoring requirements in Part 70 and 326 IAC 2-7-5 and 2-7-6, in addition to the PMP requirement in 326 IAC 1-6-3. In other words, in addition to requiring the mandatory PMPs, IDEM is relying on the PMPs as a method to ensure compliance under Part 70. However, IDEM did not require the PMPs with the application, nor does IDEM intend to review the PMPs to ensure that they are sufficient before issuing the permit. This violates Part 70 for a number of reasons. First, the PMPs must be provided in the application, rather than 90 days after permit issuance, in accordance with 40 CFR 70.5(a)(2) (a complete application must contain sufficient information to determine all applicable requirements), 40 CFR 70.5(c) (application cannot “omit information needed to determine the applicability of, or impose, any applicable requirement...”), and 40 CFR 70.5(c)(3)(vi) (application must include any “work practice standards”). The PMPs were not included with the application, nor provided in the public review documents, in violation of Part 70.

Second, IDEM must determine that the permit requirements (including the PMPs) assure compliance with all applicable requirements before issuing the permit [40 CFR 70.6(a)(1), 70.7(a)(iv)]. IDEM cannot possibly rely on the Plan for its conclusion that the facility will comply with all requirements, when IDEM has not yet reviewed the Plan. See *Environmental Defense Center, Inc. v. EPA*, 344 F.3d 832, 855-56 (9th Cir.2003) (“[P]rograms that are designed by regulated parties must, in every instance, be subject to meaningful review by an appropriate regulating entity to ensure that each such program [complies with the relevant statutory standard].”); *In re RockGen Energy Center*, 8 E.A.D. 536, 553-54 (EAB 1999) (remanding permit requirement for a startup/shutdown plan that was not reviewed by agency before permit issuance).

Third, because compliance with the Plan constitutes a Permit requirement, the Plan must be subject to public notice and comment. The public cannot comment on the sufficiency of the Permit, which incorporates the Plan, when the Plan is not part of the permit record [40 CFR 70.7(h)]; see e.g., *Waterkeeper Alliance v. EPA*, 399 F.3d 486, 503-04 (2nd Cir. 2005) (invalidating EPA regulation that allowed Nutrient Management Plans to be submitted after public comment and after a NPDES permit was issued); *In re RockGen Energy Center*, 8 E.A.D. at 553-54 (remanding permit requirement for a startup/shutdown plan that was not subject to public notice and review).

Therefore, IDEM must require all PMPs to be provided in the application, must review any such plan to determine that the plan will ensure compliance, and provide the plan(s) for public notice and comment before IDEM can issue the permit.

Response to Citizens Comment 13

There is no authority in the Part 70 program that requires the source to submit its on-site preventive maintenance plan as part of its Title V permit application. Further, 326 IAC 2-7-4(c)(9) requires only that the Title V permit applicant confirm in its application that it maintains a preventive maintenance plan (as

described in 326 IAC 1-6-3) and that, upon request, the preventive maintenance plan be forwarded to IDEM for review and approval.

There has been no change to the permit in response to this comment.

Citizens Comment 14

The draft permit must be modified to comply with the credible evidence rule.

The U.S. EPA and citizen suit litigants have the authority to bring enforcement actions “on the basis of *any information available* to the Administrator.” [42 U.S.C. § 7413] (emphasis added). This has been interpreted to mean any “credible evidence” that a court would accept. *Sierra Club v. Pub. Serv. Co. of Colorado, Inc.*, 894 F.Supp. 1455 (D.Colo. 1995) (neither CAA nor its implementing regulations limit the evidence of compliance or noncompliance to the methods set forth in a permit); Environmental Protection Agency, Credible Evidence Revisions, 62 Fed. Reg. 8314 (Feb. 24, 1997); U.S. EPA Region 9 Title V Permit Review Guidelines, Sept. 9 1999, page III-46. U.S. EPA has stated that this means that “any credible evidence can be used to show a violation of or, conversely, demonstrate compliance with an emissions limit.” *Id.* Permit language may not exclude the use of any data that may provide credible evidence. *Id.*

The draft permit correctly provides that “nothing in this permit shall preclude the use... of any credible evidence or information...” See Condition B.25. However, the draft permit then impermissibly limits this credible evidence provision. The draft permit states that any credible evidence can be used only to determine “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.” In other words, the only credible evidence that is allowed is that which relates specifically to the performance test or compliance test method established in the permit. This is contrary to the credible evidence rule. The credible evidence rule provides that any credible evidence can be use to demonstrate compliance or non-compliance regardless of what performance or compliance method is required in the permit. *Sierra Club*, 894 F.Supp. 1455 (credible evidence non limited to the methods set forth in a permit).

Response to Citizens Comment 14

The language in B.25 is the language contained in 40 CFR 52.33 as amended by the credible evidence revisions on February 24, 1997. (62 FR 8314) The credible evidence rule was designed to permit demonstrations of non-compliance or compliance with an emission limitation through means other than a performance or compliance test.

There has been no change to the permit in response to this comment.

Citizens Comment 15

Section C.20 must be modified to remove the reference to “Clean Units.”

The draft permit requires reporting of projects at the source that have the potential to increase emissions. See Condition C.20(c). However, the draft permit exempts “projects at a Clean Unit” from this requirement. This violates federal law, which is binding and preempts any conflicting state law. The United States District Court for the District of Columbia decided in *New York v. EPA*, that the “Clean Unit” provisions of the 2002 PSD rule changes are illegal and void. 413 F.3d 3, 40 (D.C. Cir. 2005). Therefore, section C.20(c) should be modified to remove the exemption for Clean Units.

Response to Citizens Comment 15

IDEM agrees that a source risks violating federal law if it relies on the Indiana "Clean Unit" exemption. For this reason IDEM agrees to delete the reference to the exemption as follows.

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

- (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~~, 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:

Citizens Comment 16

The permit must ensure compliance with the PM2.5 NAAQS.

Clifty Creek is located in an area designated as non-attainment for PM2.5. The permit should contain a limit on PM2.5 sufficient to ensure that the emissions from Clifty Creek are not causing or contributing to non-attainment. IDEM cannot rely on EPA guidance providing for the use of PM10 as a surrogate. PM10 is not representative of PM2.5. That was EPA's basis for promulgating a PM2.5 standard in addition to a PM10 standard. Indeed, because Jefferson County, Madison Township, is attainment or non-classified for PM10, but non-attainment for PM2.5, it is clear that compliance with PM10 NAAQS is not representative of compliance with PM2.5 NAAQS. IDEM must model the PM2.5 emission from Clifty Creek, determine if Clifty Creek is causing or contributing to a NAAQS violation, and, if so, set limits for the facility to ensure that it is not causing or contributing to a NAAQS violation.

Response to Citizens Comment 16

U.S. EPA, in the Federal Register Notice 70 FR 943 dated January 5, 2005, has designated Jefferson County, Madison Township, as nonattainment for PM2.5. On March 7, 2005, the Indiana Attorney General's Office, on behalf of IDEM, filed a law suit with the Court of Appeals for the District of Columbia Circuit challenging U.S. EPA's designation of nonattainment areas without sufficient data. On April 5, 2005, the U.S. EPA issued a memorandum entitled Implementation of New Source Review Requirements in PM2.5 Nonattainment Areas (www.epa.gov/ttn/oarpg/ramain.html). In order to ensure that sources are not potentially liable for a violation of the Clean Air Act, the OAQ is following the U.S. EPA's guidance to regulate PM10 emissions as a surrogate for PM2.5 emissions pursuant to the requirements of Emission Offset, 326 IAC 2-3. At this particular point in time there is no legal basis for IDEM to set limits for the facility based on modeling for PM2.5 in its vicinity nor is there an applicable requirement specifically regarding PM2.5. Title V permits cannot impose additional requirements on sources but, to facilitate compliance, consolidate all applicable requirements in a single document. *Public Citizen, Inc. v. EPA*, 343 F.3d 449, 453 (5th Cir. 2003), *see 42 U.S.C. § 7661a(a)*; *see also Virginia v. Browner*, 80 F.3^d 869, 873 (4th Cir. 1996).

Each state must propose revisions to its State Implementation Plan (SIP), stating how the nonattainment areas will be brought into compliance. On March 29, 2006, EPA announced a 90-day extension to the public comment period for the advanced notice of proposed rule making on how best to implement any new standards that may result from the recently proposed revisions to the particulate matter air quality standards. The public comment period now ends on July 10, 2006.

If Madison Township is ultimately determined to be an attainment area for PM2.5, reductions in PM2.5 will result from the SO₂ and NO_x reductions required by the Clean Air Interstate Rule (CAIR).

There has been no change to the permit in response to this comment.

Citizens Comment 17

We respectfully request that IDEM's response to these comments and a copy of the final permit be sent to the following:

David C. Bender
Garvey McNeil & McGillivray SC
634 W. Main St, Ste 101
Madison, WI 53703

John Blair
Valley Watch
800 Adams Avenue
Evansville, IN 47713

Richard Hill
Save the Valley, Inc.
P.O. Box 813
Madison, IN 47250

We also request that IDEM notify us of the date on which it proposes the Part 70 permit for Clifty Creek to the U.S. EPA pursuant to 42 U.S.C. 7661d.

Response to Citizens Comment 17

A copy of the final permit including the TSD Addendum will be sent as requested, and these individuals will be notified when the permit is proposed to EPA. In addition, notice of the issuance of the final permit will be sent to all of the individuals who have previously asked to be included on the interested parties list for Jefferson County.

On April 19, 2006, Sam Portanova of U.S. EPA Region 5 submitted the following comments on the proposed Part 70 permit.

EPA Comment 1

Condition D.1.10(b) describes what happens if SO₂ CEM data is used instead of coal sampling data. Does this mean that Clifty Creek has an SO₂ CEM system? The rest of D.1.10 is written as if coal sampling is the main method of SO₂ monitoring.

Response to EPA Comment 1

The installation of SO₂ continuous emissions monitoring systems (CEMS) was required by the Title IV Acid Rain Program. The CEMS are noted in the unit descriptions in Condition A.2 and in the description boxes at the beginning of Sections D.1, E, and F. At the time that the permit went to public notice, IKEC was still using fuel sampling and analysis to demonstrate compliance with the SO₂ requirements of 326 IAC 7. However, IKEC notified IDEM during the public comment period that the station was switching to the use of SO₂ CEMS data for 326 IAC 7, and the permit has been revised accordingly as shown later in this Addendum in the Response to IKEC Comment 12.

EPA Comment 2

Page 5 of the TSD states that conditions were established in a 1994 permit that limited the hours of operation for the station heating furnaces. This limit was taken so that emissions were below 25 tpy of SO₂ and 326 IAC 7 would not apply. The TSD explains that these conditions were removed because the sulfur content of No. 2 fuel oil is now typically 0.5% or less. Use of 0.5% sulfur content without a limit of hours of operation is calculated in the permit to be 19.4 tpy of SO₂.

Although 0.5% S is now typical, this on its own is not sufficient to establish an enforceable limit below 25 tpy. If the source uses fuel with a sulfur content of 0.7%, as was done in the past, SO₂ emissions would exceed the 25 tpy limit.

Response to EPA Comment 2

The typical sulfur content of "high sulfur" distillate fuel oil is currently 0.3% or less. The Part 70 application for the Clifty Creek station reported 0.3% sulfur content for the distillate oil that is used for startup of the main boilers. The same fuel supply is used for the small furnaces in the coal transfer stations. This sulfur content level is consistent with the 3,000 parts per million (ppm) stated by EPA as the current average sulfur content for No. 2 fuel oil in EPA420-R-04-007, "Final Regulatory Analysis: Control of Emissions from Nonroad Diesel Engines", dated May 2004. Therefore, the use of 0.5% sulfur content is believed to be an appropriately conservative approach in demonstrating that no fuel limit is needed for the 1.25 MMBtu/hr to 2.75 MMBtu/hr transfer station furnaces.

There has been no change in response to this comment.

On March 20, 2006, comments were received from Bryan Tabler of Barnes & Thornburg, representing IKEC.

IKEC Comment 1

Condition A.3(b)(2) 20,000 gallon Diesel Fuel Tank

The NSPS at 40 CFR Part 60, Subpart Kb (40 CFR 60.110(b) *et seq.*), does not apply because the vapor pressure of diesel fuel is less than 15.0 kPa. See 40 CFR 60.110(b)(2004). This provision, promulgated at 68 Fed. Reg. 59238 (Oct. 15, 2003), is the one in effect under Indiana law according to 326 IAC 1-1-3, and EPA's failure yet to approve it as a SIP provision has no impact on that effectiveness under Indiana law; it simply means that EPA, having itself made the NSPS inapplicable to this tank, has nothing to enforce under the SIP with respect to this particular tank. (There is no reason anyway why EPA should employ the Indiana SIP to enforce its own NSPS rather than proceeding directly under the NSPS.) The TSD, at page 17 of 22, is incorrect in saying that the old version remains in effect under state law. Nothing supports that, and 326 IAC 1-1-3 directly contradicts it by providing that references to the Code of Federal Regulations throughout Title 326 mean the July 2004 Code. See TSD at pages 9-10 and 17. This provision should be removed.

Condition D.5.1 Record Keeping Requirements (applicable to 20,000 gallon diesel fuel storage tank) This provision should be deleted.

Response to IKEC Comment 1

As explained in the TSD, 326 IAC 1-1-3 has been revised to incorporate the 2003 and 2004 changes to the Code of Federal Regulations, including 40 CFR 60, but the state revisions have not yet been approved as part of the State Implementation Plan (SIP) for Indiana. Therefore, 326 IAC 12 does not

currently include the 2003 revisions to the Applicability portion of Subpart Kb, and the record keeping requirement remains in effect as a State-only requirement until the updated version of 326 IAC 1-1-3 is approved by EPA. The IDEM Office of Legal Counsel and EPA have repeatedly affirmed that the current SIP language is enforceable, even in cases where a state rule has been revised to incorporate a federal rule change.

Region V EPA has sent the SIP revision to the Office of the Federal Register. If the update to the SIP becomes final before the Part 70 permit for Clifty Creek is issued, the condition will be revised before issuance. Otherwise, IKEC can submit an application for a permit modification once the SIP revision is approved.

IKEC Comment 2

Condition B.10 Preventive Maintenance Plan

The provisions of 326 IAC 1-6-3 do not apply to Clifty Creek Station, according to 326 IAC 1-6-1. Similarly, none of the rules at 326 IAC 2-7-5(1), 2-7-5(3), 2-7-5(13); 2-7-6(1), or 2-7-6(6) mandates that the Permit require a PMP for Clifty Creek Station. 326 IAC 2-7-5(13) requires that a Part 70 operating permit contain a provision requiring the Permittee to maintain on-site the PMP "required by" 326 IAC 2-7-4(c)(9). The latter section applies only to applications, not permits, and calls for a list of forms and attachments that:

shall include the following information **to the extent necessary to determine** applicable requirements ..., and compliance with applicable requirements and this rule, and compliance during the term of the permit:

* * *

(9) Confirmation [that the source has on-site a PMP described in 326 IAC 1-6-3].

* * *

Since a PMP is not "necessary to determine" applicable requirements or compliance with such requirements, it not called for in either the application or the Permit.

Moreover, the terms of 326 IAC 1-6-3 (which, as indicated above, do not apply to Clifty Creek Station) call for a PMP only for pollution control equipment, not the emitting facilities, and not "the source." This provision should be deleted.

Response to IKEC Comment 2

The Preventive Maintenance Plan requirement must be included in every applicable Part 70 permit pursuant to 326 IAC 2-7-5(13). 326 IAC 2-7-4(c) provides that the application for a Part 70 permit "...shall include the following information to the extent necessary to determine applicable requirements, including the requirement to pay fees, **compliance with applicable requirements and this rule**, and compliance during the term of the permit:..." . 326 IAC 2-7-4(c)(9) requires the application to include **confirmation that the source maintains a preventive maintenance plan as described in 326 IAC 1-6-3**. A source can not confirm the maintenance of a plan without the existence of a plan. 326 IAC 2-7-4(c)(9) refers to 326 IAC 1-6-3 for the components of a preventive maintenance plan, not for the authority to require a plan for Part 70 sources. This Preventive Maintenance Plan rule sets out the requirements for:

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

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

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

There has been no change in response to this comment.

IKEC Comment 3

Condition C.1 Particulate Emission Limitations for Processes with Process Weights Less Than One Hundred (100) Pounds per Hour

Clifty Creek Station is not a manufacturing process. It produces a single "product," electric energy. It does not transfer, convey or repair any other product, and 326 IAC 6-3 has no application to any activity at Clifty Creek Station. Accordingly, this provision should be removed from the Permit. This same comment applies to Particulate Conditions D.2.1, D.3.1, and D.6.1. Moreover, there is no way to determine mass particulate emissions from the operations covered by these sections of the Permit without major modifications of the facilities involved. These provisions should be deleted.

Response to IKEC Comment 3

The handling of coal, fly ash, and limestone is subject to 326 IAC 6-3. While the product is electricity, the plant cannot produce electricity without conveying and storing the fuel to be burned, the waste products from the combustion, and any other materials used in the production of electricity. The rule does not exclude conveyance of any material. Particulate Conditions C.1, D.2.1 for the coal handling, D.3.1 for the fly ash handling, and D.6.1 for the limestone and iron ore handling have not been removed or revised in response to this comment. Documentation of the use of the particulate control systems on the material handling operations can be used to certify compliance with the applicable mass particulate emissions limitations.

There has been no change in response to this comment.

IKEC Comment 4

Condition C.6 Motor Vehicle Fugitive Dust Sources

This purports to govern vehicle movement on public thoroughfares of which there are none at the permitted source. Vehicles outside Clifty Creek Station are not subject to the Permit, because they are not part of the source when they are on public roads. This should be deleted.

Response to IKEC Comment 4

IKEC is responsible for proper dust control from activities at the Clifty Creek plant, including from activities related to the receipt of materials or the removal of material from the plant. This includes minimizing mud tracked by vehicles from the site and loose material falling or blowing from trucks leaving the site, which could create a source of fugitive dust on the public road. Good housekeeping practices will allow compliance certification. There has been no change in response to this comment.

IKEC Comment 5

Condition C17 Response to Excursions or Exceedances

Except for subsection (e), the requirements imposed by Condition C.17 are not authorized by law and should be deleted. The law gives IKEC every incentive to avoid excursions and exceedances so that subsections (a) - (d) serve no legitimate purpose. Moreover, these provisions merely create unnecessary ambiguity and the opportunity to commit additional "deviations."

It is also unclear, under subsection (c), whether the Permit contemplates that IKEC or IDEM will make the "determination whether the Permittee has used acceptable procedures in response to an excursion or exceedance" The timeframe and procedures for such determinations are unclear, so that IKEC cannot be sure when (or whether) the "deviation" that triggers a reporting obligation under subsection (d) will be determined to have occurred. This makes timely and accurate reporting impossible.

Subsections C.17(a) - (d) should be deleted from the Permit.

Response to IKEC Comment 5

Condition C.17 is authorized by 326 IAC 2-7-5(1) which states, in part, that the following shall be included in each Part 70 permit: "Emission limitations and standards, including those operational requirements and limitations that assure compliance with all applicable requirements....at the time of a Part 70 permit issuance." The requirement to respond to excursions and exceedances is an operating requirement that ensures that a Part 70 Permittee will address any situation that may cause a monitoring parameter to fall outside the acceptable range. A timely and appropriate response to excursions and exceedances assures continuous compliance with the Permittee's applicable emission limitations.

IDEM makes the determination of whether the Permittee has used acceptable procedures in response to an excursion or exceedance. Because of this, it is in the Permittee's best interest to keep relatively detailed records as to its response measures. The time frame for responding to a deviation is based on the discovery of the deviation. For instance, if a source is required to check the pressure drop at a bag house once daily, the time for a source to respond is immediately after an out of range reading that triggered the response.

There has been no change in response to this comment.

IKEC Comment 6

Condition C.23 Ambient Monitoring

On May 19, 2005, the Commissioner waived the ambient monitoring requirements of 326 IAC 7-3 for Clifty Creek Station, and this provision of the Permit should either be deleted or amended to include an acknowledgement that the waiver has been issued and is in effect. The waiver is attached as *Exhibit A*.

Response to IKEC Comment 6

The waiver is included as Appendix A to this Addendum. Condition C.23 has been deleted as shown:

~~Ambient Monitoring Requirements [326 IAC 7-3]~~

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

- ~~(a) The Permittee shall operate continuous ambient sulfur dioxide air quality monitors and a meteorological data acquisition system according to a monitoring plan submitted to the commissioner for approval. The monitoring plan shall include requirements listed in 326 IAC 7-3-2(a)(1), 326 IAC 7-3-2(a)(2) and 326 IAC 7-3-2(a)(3).~~
- ~~(b) The Permittee and other operators subject to the requirements of this rule, located in the same county, may submit a joint monitoring plan to satisfy the requirements of this rule. [326 IAC 7-3-2(c)]~~
- ~~(c) The Permittee may petition the commissioner for an administrative waiver of all or some of the requirements of 326 IAC 7-3 if such owner or operator can demonstrate that ambient monitoring is unnecessary to determine continued maintenance of the sulfur dioxide ambient air quality standards in the vicinity of the source. A waiver shall be effective upon written approval by the commissioner. The commissioner may establish conditions in the approval of a waiver to assure compliance with the provisions of 326 IAC 7. Failure to continuously meet the requirements for obtaining a waiver or failure to comply with any condition contained in the approval of a waiver shall render void any waiver issued. [326 IAC 7-3-2(d)]~~

IKEC Comment 7

Condition D.1.2 Temporary Alternative Opacity Limitations

Clifty Creek Station qualifies for longer exemption periods than the draft Permit allows, and the exemption periods allowed are unreasonably short. The longer exemption periods in the previous operating permit remain in effect pursuant to 326 IAC 2-1.1-9.5(b) unless and until revoked by proper action under IC 13-15-7-1 and 4-21.5-3. See EPA's discussion of "supersession" and 326 IAC 2-1.1-9.5 at 67 Federal Register. 34844 (May 16, 2002).

Response to IKEC Comment 7

IDEM used the historical data from the Permittee's continuous opacity monitoring systems to determine the usual length of time required for startup for each boiler and what level of opacity resulted from various startups and shutdowns over the past several years. The data indicates that, with rare exceptions, the boilers can comply with the temporary alternative opacity limitations listed in the draft permit. These rare exceptions do not support allowing an extended period of opacity for all startups and shutdowns.

IC 13-15-7-1 (Criteria for revocation or modification of permit) provides that the commissioner or a designated staff member may revoke or modify a permit granted by the department under environmental management laws or IC 13-7 (before its repeal) for changes in circumstances relating to the permit that require either a temporary or permanent reduction in the discharge of contaminants, or for any other change, situation, or activity relating to the use of a permit that, in the judgment of the department, is not consistent with rules adopted by one (1) of the boards.

326 IAC 5-1-3(e) provides that the previously issued startup and shutdown conditions shall remain in effect until the department issues a final, effective Part 70 operating permit that incorporates startup and shutdown conditions that are at least as stringent as those conditions in the operating permit in effect as

of the effective date of the rule. 326 IAC 5-1-3(e) also requires IDEM to incorporate permit conditions that minimize the duration and extent of excess emissions, and specifically provides that such conditions may be more stringent than the operating permit conditions in effect as of the effective date of the rule. The Air Pollution Control Board adopted 326 IAC 5-1-3 before it was submitted to EPA for SIP approval. Therefore, this condition is consistent with the requirements of IC 13-15-7-1.

IC 4-21.5-3 (Adjudicative Proceedings) provides notification requirements for many actions that are or could be taken by state entities. Much of the wording of the statute is not relevant to the Part 70 permitting process. IDEM believes that the agency's actions regarding the Part 70 permit are in full compliance with the applicable requirements of IC 4-21.5-3, including IC 4-21.5-3-1 (Service of process; notice by publication), IC 4-21.5-3-4 (Notice required; licenses and personnel decisions; persons who must be notified; contents), and IC 4-21.5-3-5 (Notice required; certain licensing and other decisions; persons who must be notified; contents; effectiveness of order; stays). The draft Part 70 permit was mailed to the Permittee using the names and addresses provided by the Permittee for the responsible official and two additional source contacts, and was provided online and at the local library with a public notice published in the local newspaper.

326 IAC 2-1.1-9.5 (General provisions; term of permit) provides that any condition established in a permit issued pursuant to a permitting program approved into the state implementation plan shall remain in effect until the condition is modified in a subsequent permit action; or the emission unit to which the condition pertains permanently ceases operation. 67 FR 34844 is a final action by EPA to address program deficiencies in Indiana's Part 70 program. EPA discussion of 326 IAC 2-1.1-9.5 in 67 FR 34844 stated that "Subsequent permit action" in this rule refers to a permit action taken pursuant to Indiana's construction permit authority." The previous alternative opacity approval for the Clifty Creek station, known as a Temporary Opacity Exemption, was in the form of a letter issued by the OAQ Compliance Branch, and was not issued pursuant to the state or federal construction permit regulations in effect at that time.

The same Federal Register also states "Indiana revised 326 IAC 2-7-5(1) to remove rule language which allowed exceedances of emission limits during startups, shutdowns, and malfunctions on a case-by-case basis. This would have allowed the permitting authority to establish, through the Title V permitting process, limits which exceeded applicable requirements." The only enforceable means for IDEM OAQ to approve alternative opacity requirements for startup and shutdown periods is through 326 IAC 5-1-3. EPA approved 326 IAC 5-1-3(e) only with IDEM's agreement that the periods allowed for higher opacity readings during startups and shutdowns would be no longer than necessary as demonstrated by actual operating records for the individual units.

There has been no change in response to this comment.

IKEC Comment 8

Condition D.1.8 Transformer-Rectifier (T-R) Sets

No statute or rule authorizes imposition of this requirement and there is no logical basis for the 90% trigger. This provision should be deleted from the Permit.

Response to IKEC Comment 8

The Indiana legislature provided IDEM the authority to implement 326 IAC 2-7-5(3). IC 13-14-1-13 (Duties of the Department: Monitoring and Reporting) states the following: The Commissioner shall establish and administer monitoring and reporting requirements as necessary to carry out the duties and exercise the powers provided in the following:

- 1) Air pollution control laws.
- 2) Water pollution control laws.

3) Environmental management laws.

This statute clearly provides broader authority than just allowing the Commissioner to simply copy monitoring and reporting requirements that are specifically established in some other law.

Additionally, the provisions of 326 IAC 2-7-5(3) state that the Part 70 permits must include: "Monitoring and related record-keeping and reporting requirements which assure that all reasonable information is provided to evaluate continuous compliance with the applicable requirements." More specifically, 326 IAC 2-7-5(3)(A)(ii) provides that

"[w]here an applicable requirement does not require periodic testing or instrumental or noninstrumental monitoring...such periodic monitoring specifications sufficient to yield reliable data from the relevant time period that are representative of the source's compliance with the Part 70 permit as reported [under clause (C)]."

There are no other rules applicable to this source that already include the level of detailed monitoring and related record keeping and reporting requirements necessary to assure that all reasonable information is provided to evaluate continuous compliance; therefore, as required by 326 IAC 2-7-5(3), additional compliance monitoring, record keeping and reporting requirements must be included in the Part 70 permit.

The ESPs controlling the boilers' particulate emissions must operate properly in order for the boilers to maintain compliance with the applicable PM and opacity limits; therefore, IDEM believes it is reasonable and necessary to require the source to conduct compliance monitoring of the ESPs.

The compliance monitoring parameters established by this permit are consistent with how the source was operating at the time compliance was demonstrated by stack testing. Operation consistent with these parameters indicates that the source is operating as it was when stack testing verified compliance. Performing compliance monitoring, taking appropriate response steps if needed, and promptly returning the source to this operational state provides the information required by 326 IAC 2-7-5(3) to evaluate continuous compliance and the information required by 326 IAC 2-7-6(1) to assure compliance with the permit.

IKEC Comment 9

Condition D.1.9 Opacity Readings

This requirement that response actions be taken when average opacity exceeds 30% for three consecutive six-minute periods is not authorized by law and should be deleted. The provision amounts to IDEM's arbitrarily changing to 30% the 40% limit duly imposed by rule of the Air Pollution Control Board (326 IAC 5) without any regulatory or statutory authority. Moreover, the choice of a 30% trigger is without any legitimate basis, rendering this provision arbitrary, capricious and unreasonable. This requirement should be deleted from the Permit.

Response to IKEC Comment 9

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

During normal operations opacity from the boilers is significantly less than 25%, as evidenced by the results of IDEM-approved stack testing. Since the stack testing demonstrated compliance with the PM emissions when opacity levels were well below the opacity limits, it is appropriate for the Permittee to take

response steps when the observed opacity is significantly above the levels demonstrated during a compliant stack test.

Condition D.1.9 does not establish an opacity limit that is more stringent than the opacity limits established by 326 IAC 5-1. Rather, the condition requires the Permittee to take response steps when the opacity is above the level indicative of normal operating conditions. An opacity reading that is in compliance with 326 IAC 5-1, but above the level of opacity usually displayed during normal operating conditions, requires a response step but is not considered a violation. It is only a violation if the Permittee fails to take any response steps. IDEM has the authority to require such monitoring pursuant to 326 IAC 2-7-5(1) and 326 IAC 2-7-6(1).

There has been no change in response to this comment.

IKEC Comment 10

Condition D.1.11 Record Keeping Requirements

Subsection (a)(4) requires the keeping of records on "All ESP parametric monitoring readings." There is no basis for requiring either ESP parametric monitoring readings or for requiring records of such readings. Neither is an "applicable requirement." This provision should be removed from the Permit.

Response to IKEC Comment 10

See the Response to IKEC Comment 8.

The record keeping is necessary to demonstrate that the required compliance monitoring has been performed and that response steps have been taken if necessary. There has been no change in response to this comment.

IKEC Comment 11

Condition D.2.3 Compliance Determination Requirements

This provision, requiring operation of "baghouses for particulate control" at coal transfer points, is erroneously included. There are no baghouses associated with the coal unloading operation at the river bank. Other coal transfer points at which there *are* baghouses are totally enclosed, and the baghouses are not "for particulate control," as that phrase is used in the field of air pollution control. The baghouses are used to avoid buildup of coal dust inside the enclosures and are not required by any applicable requirement. There is no reason, and no legal basis, for requiring operation of the baghouses at all times the associated coal processing points or drop point conveyers are in operation, since any emissions can be eliminated by shutting down the baghouse (turning off the fan). This provision should be removed from the Permit.

Condition D.2.5 Broken or Failed Bag Detection

See the Comment regarding Condition D.2.3. This provision should not apply to the baghouses associated with coal handling because they are not required by the air pollution control laws or any applicable requirement. There is no legal basis for Condition D.2.5, and it should be removed. IDEM could replace it with a requirement that the fans be turned off until broken bags are replaced.

Response to IKEC Comment 11

As detailed in the Response to IKEC Comment 3, the coal handling is subject to 326 IAC 6-3. These units are not equipped with continuous emission monitoring systems to measure particulate matter

emissions, and the only demonstration of compliance with the particulate matter emission limitations is the operation of the control devices. The operations cannot continue indefinitely with the fans turned off because dust will accumulate in the enclosures and create an explosion hazard. There is no information to demonstrate that compliance with the particulate matter emission limitations could be achieved if the enclosures were ventilated without the use of the control devices. Therefore, no change has been made as a result of this comment.

IKEC Comment 12

On May 19, 2006, supplemental comments were received from Bryan Tabler of Barnes & Thornburg, representing IKEC.

These comments relate to Conditions D.1.7(d) (Sulfur Dioxide Emissions and Sulfur Content), D.1.10 (SO₂ Monitoring System Downtime), D.1.11(b) (Recordkeeping Requirements), and D.1.12(b) (Reporting Requirements).

IKEC's Acid Rain Permit already requires that Clifty Creek Station's sulfur dioxide emissions be measured by continuous emission monitoring systems (CEMS) and that it adhere to the requirements of 40 CFR Part 75 in that regard. Those federal rules contain elaborate provisions for data substitution in the event of CEMS downtime. IKEC is obligated by its Acid Rain Permit and 40 CFR Part 75 to follow the data substitution procedures in those rules. On May 17, 2006, IKEC sent IDEM the written notice of its intent to use CEMS as the means for determining compliance with its SO₂ emission limitations as authorized by 326 IAC 7-2-1(g). According to the last sentence of that provision, upon IKEC's giving that notice, "the other requirements of this rule shall not apply".

For those reasons, and some others set out below, IKEC respectfully requests that the last sentence of Condition D.1.7(d) be amended to read as follows (with proposed additions in bold):

Upon such notification, the other requirements of 326 IAC 7-2 **and of this Condition D.1.7** shall not apply. [326 IAC 7-2-1(g)]

Second, for the reasons above, the requirements of Condition D.1.10 of the proposed Permit are beyond IDEM's authority. The rules contain no provision for re-instituting coal sampling and analysis once the Permittee has given the notice described in 326 IAC 7-2-1(g). Since IKEC is already required by its Acid Rain Permit to employ the data substitution procedures of 40 CFR Part 75 in the event of CEMS downtime, IKEC respectfully requests that Condition D.1.10 be deleted.

In further support of the suggestions herein, we offer the following additional information:

- On May 11, 2006, IKEC announced its intention to install and have operational by 2010 flue gas desulfurization on all six units at Clifty Creek Station. At that point, sulfur content of coal going into the boilers will not provide any information useful for ascertaining sulfur dioxide emissions or compliance with applicable limits, and CEMS will be the only method available to provide continuous compliance information. Acceptance of the suggestions herein will enable IDEM to avoid having to modify the permit's SO₂ monitoring requirements when the CAIR rules must be complied with in 2010.

In the interim, the following considerations also support the foregoing comments.

- Clifty Creek Station maintains and operates in both stacks both primary and redundant certified CEMS for SO₂.
- The overall requirements of 40 CFR Part 75, including Subpart D, are geared toward providing worst-case SO₂ emission results or estimates.

- IKEC's SO₂ limit is 7.52 lbs. SO₂/mmBtus of heat input, while its actual emission rate is currently 1.0 to 3.0 lbs. SO₂/mmBtus, so that there is no real question about consistent compliance in any event.
- IKEC presently has SO₂ CEMS in each of two identical stacks, each of which serves virtually identical boilers burning coal from the same sources, so that the CEMS in one stack could realistically serve as a proxy for the other.

Third, Condition D.1.11(b) should be deleted because coal sampling and analysis data will no longer be necessary since CEMS will be used to demonstrate compliance with the SO₂ limit.

Fourth, Condition D.1.12(b) requires that IKEC report quarterly, not only its 30-day rolling weighted average SO₂ emission rate in pounds per million Btus, but records of daily average coal sulfur content, coal heat content, "weighing" factor, and daily average SO₂ emission rate. For the reasons above, this should be revised to provide that since IKEC has given notice under 326 IAC 7-2-1(g) that it will use CEMS data to determine compliance with the SO₂ emission limits applicable to the Clifty Creek Station under 326 IAC Article 7, IKEC need submit only CEMS data showing its 30-day rolling weighted average SO₂ emission rate in pounds of SO₂ per million Btus of heat input, and that the other categories of information listed in D.1.12(b) need not be submitted.

Response to IKEC Comment 12

These conditions and D.1.6 (Continuous Emissions Monitoring) have been revised as shown below to reflect the Permittee's change to the use of CEMS data as the compliance demonstration method for 326 IAC 7. If additional revisions are needed for implementation of the flue gas desulfurization (FGD) project, the conditions can be changed in the permit modification that will be required to incorporate the permit conditions for the FGD project in the Part 70 permit.

As noted by the heading and rule cites, Condition D.1.10 (SO₂ Monitoring System Downtime) is a Part 70 compliance monitoring provision included pursuant to 326 IAC 2-7-5 and 2-7-6. IDEM has determined that for SO₂ emissions, which are prone to variability based on coal sulfur values, the Part 75 data substitution procedures may not be as representative as coal sampling and analysis to show compliance with a short term limit when the CEMS is down for a long period of time. Therefore, the Part 75 data substitution procedures cannot be used to demonstrate compliance with 326 IAC 7-4-12 for coal boilers. The condition does allow the substitution of data from the hour before and the hour after the downtime for downtime less than twenty-four hours.

Conditions D.1.6, D.1.7, D.1.10, D.1.11, and D.1.12 have been revised as shown:

D.1.6 Continuous Emissions Monitoring [326 IAC 3-5]

- (a) Pursuant to 326 IAC 3-5 (Continuous Monitoring of Emissions), continuous emission monitoring systems for Boilers 1 through 6 shall be calibrated, maintained, and operated for measuring opacity **and SO₂**, which meet all applicable performance specifications of 326 IAC 3-5-2.

D.1.7 Sulfur Dioxide Emissions and Sulfur Content [326 IAC 3] [326 IAC 7-2] [326 IAC 7-4-6]

- (a) Pursuant to 326 IAC 7-2-1(c), the Permittee shall demonstrate that the sulfur dioxide emissions from Units 1 through 6 do not exceed the limit specified in Condition D.1.3 (Sulfur Dioxide (SO₂)) and 326 IAC 7-4-6. **Compliance with these limits shall be determined using SO₂ CEMS data.**
- (b) ~~Pursuant to 326 IAC 7-2-1(e) and 326 IAC 3-7, coal sampling and analysis data shall be collected as follows:~~

- (1) ~~Coal sampling shall be performed using the methods specified in 326 IAC 3-7-2(a), and sample preparation and analysis shall be performed as specified in 326 IAC 3-7-2(c), (d), and (e); or~~
- (2) ~~Pursuant to 326 IAC 3-7-3, manual or other non-ASTM automatic sampling and analysis procedures may be used upon a demonstration, submitted to the department for approval, that such procedures provide sulfur dioxide emission estimates representative either of estimates based on coal sampling and analysis procedures specified in 326 IAC 3-7-2 or of continuous emissions monitoring.~~
- (c) ~~Pursuant to 326 IAC 3-7-5(a), the Permittee shall develop a standard operating procedure (SOP) to be followed for sampling, handling, analysis, quality control, quality assurance, and data reporting of the information collected pursuant to 326 IAC 3-7-2 through 326 IAC 3-7-4. In addition, any revision to the SOP shall be submitted to IDEM, OAQ.~~
- (d) ~~Upon written notification to IDEM by a facility owner or operator, continuous emission monitoring data collected and reported pursuant to 326 IAC 3-5 may be used as the means for determining compliance with the emission limitations in 326 IAC 7. Upon such notification, the other requirements of 326 IAC 7-2 shall not apply. [326 IAC 7-2-1(g)]~~

D.1.10 SO₂ Monitoring System Downtime [326 IAC 2-7-6] [326 IAC 2-7-5(3)]

~~Whenever the automatic coal sampling system is malfunctioning or down for repairs or adjustments for twenty-four (24) hours or more, the following shall be used to provide information related to SO₂ emissions:~~

- (a) ~~Fuel sampling shall be conducted as specified in 326 IAC 3-7-2(b). Fuel sample preparation and analysis shall be conducted as specified in 326 IAC 3-7-2(c), 326 IAC 3-7-2(d), and 326 IAC 3-7-2(e). Pursuant to 326 IAC 3-7-3, manual or other non-ASTM automatic sampling and analysis procedures may be used upon a demonstration, submitted to the department for approval, that such procedures provide sulfur dioxide emission estimates representative either of estimates based on coal sampling and analysis procedures specified in 326 IAC 3-7-2 or of continuous emissions monitoring.~~
- (b) ~~If during the life of this permit the Permittee notifies the IDEM that, pursuant to 326 IAC 7-2-1(g), continuous emission monitoring data will be used instead of fuel sampling and analysis, then whenever the SO₂ continuous emission monitoring system is malfunctioning or down for repairs or adjustments, the following shall be used to provide information related to SO₂ emissions:~~

Whenever the SO₂ continuous emission monitoring system (CEMS) is malfunctioning or down for repairs or adjustments, the following shall be used to provide information related to SO₂ emissions:

- (1)(a) If the CEMS system 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)(b) If the CEMS system is down for twenty-four (24) hours or more, fuel sampling shall be conducted as specified in part (a) of this condition, above. **as follows:**

Fuel sampling shall be conducted as specified in 326 IAC 3-7-2(b). Fuel sample preparation and analysis shall be conducted as specified in 326 IAC 3-7-2(c), 326 IAC 3-7-2(d), and 326 IAC 3-7-2(e). Pursuant to 326 IAC 3-7-3, manual or other non-ASTM automatic sampling and analysis procedures may be used upon a

demonstration, submitted to the department for approval, that such procedures provide sulfur dioxide emission estimates representative either of estimates based on coal sampling and analysis procedures specified in 326 IAC 3-7-2 or of continuous emissions monitoring.

D.1.11 Record Keeping Requirements

- (b) To document compliance with SO₂ conditions D.1.3, D.1.7, and D.1.10, the Permittee shall maintain records in accordance with (1) ~~and (2)~~ below. Records shall be complete and sufficient to establish compliance with the SO₂ limits as required in conditions D.1.3 and D.1.7. **The Permittee shall maintain records in accordance with (2) and (3) below during SO₂ CEMS malfunction or downtime.**
- (1) ~~All fuel sampling and analysis~~ **SO₂ continuous emissions monitoring** data, pursuant to **326 IAC 3-5-6 and 326 IAC 7-2-1(g)**, ~~and data collected in accordance with Condition D.1.10.~~
- (2) ~~Actual fuel usage since last compliance determination period.~~
- All fuel sampling and analysis data collected for SO₂ CEMS downtime, in accordance with Condition D.1.10.**
- (3) Actual fuel usage during each SO₂ CEMS downtime.**
- (c) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

D.1.12 Reporting Requirements

- (a) A quarterly report of opacity exceedances **and a quarterly summary of the information to document compliance with the SO₂ requirements of Condition D.1.3** 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) To document compliance with Condition D.1.3, a quarterly report of the thirty (30) day rolling weighted average sulfur dioxide emission rate in pounds per million BTUs, and records of the daily average coal sulfur content, coal heat content, weighing factor, and daily average sulfur dioxide emission rate in pounds per million BTUs shall be submitted to the address listed in Section C - General Reporting Requirements, of this permit, within thirty (30) days after the end of the quarter being reported. [326 IAC 7-2-1(e)(1)]~~
- ~~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).

Upon further review, the IDEM Office of Air Quality (OAQ) has made the following additional changes to the permit (bolded language has been added, the language with a line through it has been deleted). The Table of Contents has been modified to reflect these changes, and has been corrected as needed to correctly match the condition names and rule cites shown in the rest of the permit.

Revision 1

The telephone and facsimile numbers for the OAQ Compliance Section and the Northwest Regional Office have been updated in Condition B.11 and the Emergency Occurrence Report form.

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

(b)

- (4) For each emergency lasting one (1) hour or more, the Permittee notified IDEM, OAQ, within four (4) daytime business hours after the beginning of the emergency, or after the emergency was discovered or reasonably should have been discovered;

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

Telephone Number: 317-233-~~5674~~ **0178** (ask for Compliance Section)

Facsimile Number: 317-233-~~5967~~ **6865**.

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE BRANCH
100 North Senate Avenue
Indianapolis, Indiana 46204-2251
Phone: 317-233-~~5674~~ **0178**
Fax: 317-233-~~5967~~ **6865**

PART 70 OPERATING PERMIT EMERGENCY OCCURRENCE REPORT

9 This is an emergency as defined in 326 IAC 2-7-1(12)

- C The Permittee must notify the Office of Air Quality (OAQ), within four (4) business hours (1-800-451-6027 or 317-233-~~5674~~ **0178**, ask for Compliance Section); and
- C The Permittee must submit notice in writing or by facsimile within two (2) working days (Facsimile Number: 317-233-~~5967~~ **6865**), and follow the other requirements of 326 IAC 2-7-16

Revision 2

Upon further review, IDEM has decided to remove (e) concerning nonroad engines from B.18 Permit Amendment or Modification. 40 CFR 89, Appendix A specifically indicates that states are not precluded from regulating the use and operation of nonroad engines, such as regulations on hours of usage, daily mass emission limits, or sulfur limits on fuel; nor are permits regulating such operations precluded, once the engine is no longer new.

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

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

Revision 3

The unit descriptions in Condition A.2 have been revised for clarity as shown; the same changes have also been made in the description boxes in Section D.1, Section D.2, Section E, and Section F.

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

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

- (a) Five (5) wet-bottom pulverized coal-fired boilers identified as Units 1 through 5, with construction completed in 1955, each with a rated capacity of 1,869 million Btu per hour (MMBtu/hr). Units 1 through 5 each have a selective catalytic reduction (SCR) system and over-fire air system for NO_x control, and each unit exhausts through a “**cold-side**” electrostatic precipitator (ESP) for control of particulate matter. SO₃ flue gas conditioning systems are utilized as needed on Units 1 through 5 to maintain opacity and particulate limits. Units 1, 2, and 3 exhaust to stack 1. Units 4 and 5 exhaust to stack 2. No. 2 fuel oil is combusted during startup and stabilization periods. Used oil generated at facilities within the OVEC-IKEC system may be combusted as supplemental fuel for energy recovery. Stacks 1 and 2 have continuous emissions monitoring systems (CEMS) for nitrogen oxides (NO_x) and sulfur dioxide (SO₂) and continuous opacity monitoring (COM) systems.
- (b) One (1) wet-bottom pulverized coal-fired boiler identified as Unit 6, with construction completed in 1956, with a rated capacity of 1,869 million Btu per hour (MMBtu/hr). NO_x emissions are reduced by an over-fire air system. Unit 6 exhausts to stack 2 through a “**hot-side**” electrostatic precipitator (ESP) for control of particulate matter. No. 2 fuel oil is combusted during startup and stabilization periods. Used oil generated at facilities within the OVEC-IKEC system may be combusted as supplemental fuel for energy recovery. Stack 2 has continuous emissions monitoring systems (CEMS) for nitrogen oxides (NO_x) and sulfur dioxide (SO₂) and a continuous opacity monitoring (COM) system.
- (c) Coal handling facilities with a maximum design transfer rate of 2400 tons per hour, and coal storage systems, including the following:
 - (1) facilities installed in the 1950's, including coal **conveyors and transfer house** facilities, coal unloading stations 1 and 4 using clamshell barge unloaders, coal pile unloading, and coal piles; and
 - (2) facilities installed in 1993 to allow increased use of subbituminous coal to reduce SO₂ emissions, including transfer stations B1, B2, B3 and B4, and conveyors 5B1, B12, B23, B34 E, and B34 W.

Revision 4

The Clifty Creek station has had some history of smoldering coal problems upon barge delivery. This has been noted in calls to the OAQ Compliance Branch and also at the 2006 public meeting. Smoke from coal burning without any pollution control could violate the applicable opacity limit and is not allowed under the state open burning regulations. In response to the complaint history, a reporting requirement has been added to Section D.2, as shown.

D.2.7 Reporting Requirements

The Permittee shall report all incidents of smoldering coal observed on a barge docked at a coal unloading station within four (4) daytime business hours after the initial observation. Notification shall be made to one of the following:

**Telephone Number: 1-800-451-6027 (ask for Office of Air Quality, Compliance Section), or
Telephone Number: 317-233-0178 (ask for Compliance Section); or
Facsimile Number: 317-233-6865.**

Revision 5

Condition D.2.2 has been revised; a change to the fugitive dust control plan requires a permit modification.

D.2.2 Fugitive Particulate Matter Emission Limitations [326 IAC 6-5]

Pursuant to CP 077-2716, issued March 16, 1993, and 326 IAC 6-5 (Fugitive Particulate Matter Emission Limitations), fugitive dust emissions from the coal handling shall comply with the plan submitted December 7, 1992, as revised March 4, 2002. This plan requires that:

- (a) For the unloading stations, the hoppers at stations 1 and 4 shall be enclosed on three sides. Water and/or dust suppressant chemicals shall be applied as needed to minimize visible emissions.
- (b) For the conveyors, the top and at least one side shall be enclosed.
- (c) For the transfer stations, the foam and wetting systems will promote a reduction in emissions. Modified chutes will be provided at coal drop points.

~~The control plan shall be updated at the time of reapplication for the source's operation permit or as required in 326 IAC 2. [326 IAC 6-5-8]~~

Revision 6

The signature box on the cover page has been updated.

Operation Permit No.: T077-7168-00001	
Issued by: Paul Dubenetzky, Assistant Commissioner Nisha Sizemore, Permits Branch Chief Office of Air Quality	Issuance Date: Expiration Date:

Revision 7

326 IAC 9-1 has been approved as part of the Indiana State Implementation Plan (SIP) and is therefore federally enforceable. Condition C.4 has been revised as shown.

C.4 Incineration [326 IAC 4-2] [326 IAC 9-1-2]

The Permittee shall not operate an incinerator or incinerate any waste or refuse except as provided in 326 IAC 4-2 and 326 IAC 9-1-2. ~~326 IAC 9-1-2 is not federally enforceable.~~



INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

We make Indiana a cleaner, healthier place to live.

Mitchell E. Daniels, Jr.
Governor

Thomas W. Easterly
Commissioner

100 North Senate Avenue
Indianapolis, Indiana 46204
(317) 232-8603
(800) 451-6027
www.IN.gov/idem

May 19, 2005

Mr. Donald T. Fulkerson
Environmental Affairs Director
Indiana-Kentucky Electric Corp.
3932 U.S. Route 23
P.O. Box 468
Piketon, OH 45661

Dear Mr. Fulkerson:

Re: Clifty Creek Generating Station
Request to discontinue SO₂
monitoring

IDEM hereby grants your request to discontinue the North Madison SO₂ monitoring site and the Liberty Ridge meteorological site, both of which are sited for the Clifty Creek Generating Station. Both of these monitoring sites were previously required by Title 326, section 7-3-2 of the Indiana Administrative Code. Pursuant to 326 IAC 7-2-3(d), you have made a demonstration that ambient monitoring is unnecessary to determine continued maintenance of the sulfur dioxide ambient air quality standards in the vicinity of this source.

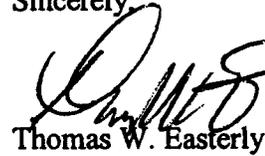
IDEM's determination is made on the following grounds: IKEC presented graphs showing SO₂ monitoring and emissions data from 1990 to 2000. This information showed declining emissions and a corresponding decrease in monitored values. OAQ did its own analysis, using our emissions inventory data, Acid Rain data from EPA, and monitoring information, which showed Clifty Creek emissions dropping by approximately 85% since the mid-1980's and significant improvements in air quality values. Based on the monitoring record of over 20 years, the last exceedance was of the three-hour standard in 1986. Since major emissions decreases in 1995, monitored values have remained well below the National Ambient Air Quality Standards. Over the past 5 to 6 years, monitored values have remained at about 20% of the standard.

In this case, it appears that the large decreases in emissions due to programs such as Acid Rain have resulted in improvements to the air quality around the facility. Since IKEC has a long record of Continuous Emissions Monitoring systems (CEMs) data concurrent with the ambient monitoring data, which will continue, future emissions can be compared to past emissions and assessments made of the corresponding ambient air impacts. Therefore, as long as the facility maintains its present configuration, there will be adequate data to determine its impacts upon air quality in the surrounding area.

ATTACHMENT A

The effective date for this approval to discontinue monitoring will be immediately upon the issuance of this letter.

Sincerely,

A handwritten signature in black ink, appearing to read 'Tom Easterly', with a long horizontal flourish extending to the right.

**Thomas W. Easterly
Commissioner**

**cc: Bryan Tabler, Esq., Barnes & Thornburg
Anthony Sullivan, Esq., Barnes & Thornburg
Linda Runkle, IDEM OLC**

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

Source Background and Description

Source Name: Indiana-Kentucky Electric Corporation - Clifty Creek Station
Source Location: S.R. 56 West, Madison, Indiana 47250
County: Jefferson
SIC Code: 4911
Operation Permit No.: T077-7168-00001
Permit Reviewer: Vickie Cordell

The Office of Air Quality (OAQ) has reviewed a Part 70 permit application from Indiana-Kentucky Electric Corporation - Clifty Creek Station, relating to the operation of a stationary electric utility generating station.

Permitted Emission Units and Pollution Control Equipment

The Clifty Creek Station consists of the following permitted emission units and pollution control devices:

- (a) Five (5) wet-bottom pulverized coal-fired boilers identified as Units 1 through 5, with construction completed in 1955, each with a rated capacity of 1,869 million Btu per hour (MMBtu/hr). Units 1 through 5 each have a selective catalytic reduction (SCR) system and over-fire air system for NO_x control, and each unit exhausts through an electrostatic precipitator (ESP) for control of particulate matter. SO₃ flue gas conditioning systems are utilized as needed on Units 1 through 5 to maintain opacity and particulate limits. Units 1, 2, and 3 exhaust to stack 1. Units 4 and 5 exhaust to stack 2. No. 2 fuel oil is combusted during startup and stabilization periods. Used oil generated at facilities within the OVEC-IKEC system may be combusted as supplemental fuel for energy recovery. Stacks 1 and 2 have continuous emissions monitoring systems (CEMS) for nitrogen oxides (NO_x) and sulfur dioxide (SO₂) and continuous opacity monitoring (COM) systems.
- (b) One (1) wet-bottom pulverized coal-fired boiler identified as Unit 6, with construction completed in 1956, with a rated capacity of 1,869 million Btu per hour (MMBtu/hr). NO_x emissions are reduced by an over-fire air system. Unit 6 exhausts to stack 2 through an electrostatic precipitator (ESP) for control of particulate matter. No. 2 fuel oil is combusted during startup and stabilization periods. Used oil generated at facilities within the OVEC-IKEC system may be combusted as supplemental fuel for energy recovery. Stack 2 has continuous emissions monitoring systems (CEMS) for nitrogen oxides (NO_x) and sulfur dioxide (SO₂) and a continuous opacity monitoring (COM) system.
- (c) Coal handling facilities with a maximum design transfer rate of 2400 tons per hour, and coal storage systems, including the following:
 - (1) facilities installed in the 1950's, including coal transfer facilities, coal unloading stations 1 and 4 using clamshell barge unloaders, coal pile unloading, and coal piles; and
 - (2) facilities installed in 1993 to allow increased use of subbituminous coal to reduce SO₂ emissions, including transfer stations B1, B2, B3 and B4, and conveyors 5B1, B12, B23, B34 E, and B34 W.
- (d) Dry fly ash handling and disposal facilities, including the following:

- (1) Dry fly ash handling system installed in 1990 and 1991, including pneumatic conveyance to two (2) main silos with a maximum design transfer rate of 40 tons per hour, rotary and dry unloaders with a maximum design unloading rate of 250 tons per hour for each silo, and transportation by truck via in-plant haul roads to onsite disposal area or for transportation offsite.
 - (2) Two (2) additional dry fly ash storage silos (a.k.a. truck bins) installed in 1994 and 1995 for unmarketable fly ash, including pneumatic conveyance to silos with a maximum design transfer rate of 40 tons per hour, rotary unloaders with a maximum design unloading rate of 250 tons per hour for each silo, and transportation by truck via in-plant haul roads to onsite disposal area.
- (e) Wet process bottom ash handling, with hydroveyors conveying ash to storage ponds.

Unpermitted Emission Units and Pollution Control Equipment

Based on the information submitted in the Part 70 permit application, IDEM has determined that there are no unpermitted emission units operating at this source.

Insignificant Activities

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

- (1) Space heaters, process heaters, or boilers using the following fuels: Fuel oil-fired combustion sources with heat input equal to or less than two million (2,000,000) Btu per hour and firing fuel containing less than five-tenths (0.5) percent sulfur by weight.
- (2) A gasoline fuel transfer and dispensing operation handling less than or equal to 1,300 gallons per day, such as filling of tanks, locomotives, automobiles, having a storage capacity less than or equal to 10,500 gallons.
- (3) A petroleum fuel, other than gasoline, dispensing facility having a storage capacity less than or equal to 10,500 gallons, and dispensing less than or equal to 230,000 gallons per month.
- (4) The following VOC and HAP storage containers: Vessels storing lubricating oils, hydraulic oils, machining oils, and machining fluids.
- (5) Cleaners and solvents having a vapor pressure equal to or less than 2 kPa; 15 mm Hg; or 0.3 psi measured at 38 degrees C (100°F).
- (6) Closed loop heating and cooling systems.
- (7) Any of the following structural steel and bridge fabrication activities: Using 80 tons or less of welding consumables.
- (8) Activities associated with the treatment of wastewater streams with an oil and grease content less than or equal to 1% by volume.
- (9) Replacement or repair of electrostatic precipitators, bags in baghouses and filters in other air filtration equipment.
- (10) Heat exchanger cleaning and repair.

- (11) Process vessel degreasing and cleaning to prepare for internal repairs.
- (12) Paved and unpaved roads and parking lots with public access.
- (13) Coal bunker and coal scale exhausts and associated dust collector vents.
- (14) Asbestos abatement projects regulated by 326 IAC 14-10.
- (15) Blowdown for any of the following: sight glass; boiler; compressors; pumps; and cooling tower.
- (16) On-site fire and emergency response training approved by the department.
- (17) Other emergency equipment as follows: Stationary fire pumps.
- (18) A laboratory as defined in 326 IAC 2-7-1(21)(D).
- (19) 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, SO₂ 5 pounds per hour or 25 pounds per day, NO_x 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:
 - (a) Four (4) No. 2 fuel oil fired coal transfer station heaters, installed in 1993:
 - One (1) with 1.25 MMBtu/hr heat input capacity for Station 2;
 - One (1) with 1.75 MMBtu/hr heat input capacity for Station 5; and
 - Two (2) with 2.75 MMBtu/hr heat input capacity for Stations B3 and B4.
 - (b) Six (6) 25,000 gallon No. 2 fuel oil storage tanks that supply fuel to the Unit 1 through 6 boilers during start-up and periods of low load for flame stabilization, installed in the 1950's. The total annual throughput of these tanks is approximately 150,000 to 200,000 gallons.
 - (c) Four (4) 5,000 gallon No. 2 fuel oil storage tanks to supply the heaters for coal transfer Stations 2, 5, B3, and B4. The total annual throughput for these tanks is approximately 75,000 gallons.
 - (d) One (1) 20,000 gallon diesel fuel storage tank installed in 1995 for refueling equipment working in the coal yard. The annual throughput is approximately 150,000 gallons.
 - (e) Limestone/iron ore flux handling facility, including limestone storage area, dump hopper, conveyor, and enclosed surge bin, installed in 1994, with a maximum design throughput rate of 300,000 lb/hr.

Note: The coal bunker and coal scale exhausts and associated dust collector vents indicated as insignificant activities in the Title V application are included in the Title V permit as part of the overall coal handling activities.

Existing Approvals

The Clifty Creek Station has been constructed or has been operating under previous approvals including, but not limited to, the following:

- (1) OP 39-09-91-0069, issued on April 8, 1988, for Unit 1;
- (2) OP 39-09-91-0070, issued on April 8, 1988, for Unit 2;
- (3) OP 39-09-91-0071, issued on April 8, 1988, for Unit 3;
- (4) OP 39-09-91-0072, issued on April 8, 1988, for Unit 4;
- (5) OP 39-09-91-0073, issued on April 8, 1988, for Unit 5;
- (6) OP 39-09-91-0074, issued on April 8, 1988, for Unit 6;
- (7) OP 39-09-91-0075, issued on April 8, 1988, for fuel and ash handling operations;
- (8) Registration, issued April 18, 1989, for dry fly ash handling and onsite disposal;
- (9) CP 077-2716, issued March 16, 1993, for additional coal handling facilities, four (4) coal transfer station heaters, and four (4) 5,000 gallon fuel oil storage tanks;
- (10) Amendment to CP 077-2716, issued January 21, 1994;
- (11) Registration CP 077-3463, issued February 18, 1994, for two (2) additional dry fly ash storage silos;
- (12) Exemption CP 077-3528, issued February 18, 1994, for the iron ore/limestone fluxing facility;
- (13) Exemption CP 077-4360, issued March 1, 1995, for one (1) 20,000 gallon diesel storage tank and one (1) 1,000 gallon gasoline storage tank;
- (14) EPA Agreed Order A-26, entered October 26, 1973, for upgraded particulate control and opacity monitoring;
- (15) Amendment 1 to Agreed Order, dated August 20, 1974;
- (16) Amendment 2 to Agreed Order, dated September 26, 1975; and
- (17) Amendment 3 to Agreed Order, dated August 16, 1978.

Consent Order EPA-5-98-IN-10, dated March 20, 1998, expired on March 20, 2001; therefore, no requirements from that Order have been incorporated into this Part 70 permit.

All terms and conditions of previous permits issued pursuant to permitting programs approved into the state implementation plan have been either incorporated as originally stated, revised, or deleted by this permit. All previous registrations and permits are superseded by this permit.

The following terms and conditions from previous approvals have been determined to be no longer applicable; therefore, they were not incorporated into this Part 70 permit:

- (a) Operation Condition 4 from CP 077-2716, issued March 16, 1993, that the coal handling facility shall comply with 326 IAC 12 and 40 CFR 60 Subpart Y (Standards of Performance for Coal Preparation Plants).

Reason not incorporated: This condition was originally included in CP 077-2716 because the 1992 permit application for additional coal handling facilities included coal crushing and screening. However, IKEC has certified that all of the coal delivered to the Clifty Creek Station is already crushed and no crushing or screening is performed at the station. Therefore, Subpart Y is not applicable.

- (b) Operation Conditions 7 and 8 from the Amendment to CP 077-2716, issued January 21, 1994, as follows:

That for the station heating furnaces, the hours of operation shall be limited to 4380 hours per year based on a twelve month rolled on a monthly basis.

That a log of information necessary to document compliance with condition 7 shall be maintained. These records shall be kept for at least the past 24 month period and made available upon request to the Office of Air Management. A quarterly summary shall be submitted to:

Department of Environmental Management
Office of Air Management
Compliance Data Section
100 North Senate Avenue
P.O. Box 6015
Indianapolis, Indiana 46205-6015

within 30 days after the end of the quarter being reported in the format attached.

Reason not incorporated: These conditions, as amended, were intended to limit the SO₂ emissions from the coal handling station heaters to less than 25 tons per year so that 326 IAC 7 did not apply. The limit on the hours of operation, half of the total hours in a year, was calculated at that time to result in 13.8 tons per year of SO₂ from the heaters, with a fuel sulfur content of 0.7% for No. 2 fuel oil. However, due to increased regulation of air emissions since 1994, the sulfur content of No. 2 fuel oil is now typically 0.5% or less. The Part 70 application for the Clifty Creek Station shows a sulfur content of 0.3% for the No. 2 oil combusted in the boilers during startup and stabilization periods. Using the more conservative value of 0.5% sulfur and the current SO₂ emission factor from AP-42, the potential to emit of SO₂ for the four heaters combined is 19.4 tons per year (see TSD Appendix C). Therefore, there is no need to limit the hours of operation of these units.

- (c) All construction conditions from all previously issued permits.

Reason not incorporated: All facilities previously permitted have already been constructed; therefore, the construction conditions are no longer necessary as part of the operating permit. Any facilities that were previously permitted but have not yet been constructed would need new pre-construction approval before beginning construction.

- (d) Conditions that existed only in previous operation permits and are not currently required by applicable state or federal requirements.

Note: Special Particulate Emission Limitation:

Pursuant to Amendment No. 2 to the Agreed Order entered October 26, 1973, Air Pollution Control Board vs. Indiana-Kentucky Electric Corporation (IKEC), and dated September 26, 1975, the particulate matter (PM) emissions from each boiler (Units 1 through 5) shall not exceed 0.236 pound per million Btu heat input (lb/MMBtu).

The original Agreed Order required installation of an electrostatic precipitator (ESP) for Unit 6, upgrading of the ESP for Unit 5, and subsequent upgrading of the ESPs on Units 1 through 4 if the Unit 5 ESP improvements were determined to be a success. However, the particulate emission reduction following the upgrade was determined to be insufficient, and the condition of the Agreed Order was revised to instead require installation of ESPs on Units 1 through 5 and compliance with an emissions limit that was determined to prevent violation of the National Ambient Air Quality Standards (NAAQS) for particulate. The supporting documentation is included in Appendix B of this TSD

This limit is more stringent than the value that would be derived using the stack configuration information for the stacks in use on June 8, 1972 and the equation in 326 IAC 6-2-3(a); therefore, compliance with this limit is deemed compliance with 326 IAC 6-2.

Enforcement Issue

There are no enforcement actions pending.

Recommendation

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

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

An administratively complete Part 70 permit application for the purposes of this review was received on November 14, 1996.

A notice of completeness letter was mailed to the source on December 30, 1996.

Potential To Emit

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

Pollutant	Potential To Emit (tons/year)
PM	greater than 100
PM-10	greater than 100
SO ₂	greater than 100
VOC	greater than 100
CO	greater than 100
NO _x	greater than 100

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

HAP's	Potential To Emit (tons/year)
Acetaldehyde	less than 10
Arsenic	less than 10
Benzene	less than 10
Benzyl chloride	less than 10
Cyanide	less than 10
Hydrogen chloride	greater than 10
Hydrogen fluoride	greater than 10
Isophorone	less than 10
Manganese	less than 10
Methane	greater than 10
Methyl chloride	less than 10
Selenium	less than 10
TOTAL	greater than 25

Note: Only HAPS with Potential to Emit of 1 ton per year or more are listed.

- (a) The potential to emit (as defined in 326 IAC 2-1.1-1(16)) of SO₂, NO_x, CO, PM-10, and VOC are equal to or greater than 100 tons per year. Therefore, the source is subject to the provisions of 326 IAC 2-7.
- (b) The potential to emit (as defined in 326 IAC 2-1.1-1(16)) of any single HAP is equal to or greater than ten (10) tons per year and the potential to emit (as defined in 326 IAC 2-7-1(29)) of a combination of HAPs is greater than or equal to twenty-five (25) tons per year. Therefore, the source is subject to the provisions of 326 IAC 2-7.
- (c) Fugitive Emissions
 Since this type of operation is one of the twenty-eight (28) listed source categories under 326 IAC 2-2, the fugitive emissions are counted toward determination of PSD and Emission Offset applicability.

Actual Emissions

The following table shows the actual emissions from the source. This information reflects the 2003 OAQ emission data.

Pollutant	Actual Emissions (tons/year)
PM	1,462
PM-10	543
PM-2.5	309
SO ₂	32,755
VOC	136
CO	971
NO _x	21,889

Limited Potential to Emit / Source Status

This existing source is a major stationary source because it is in one of the 28 listed source categories and at least one regulated pollutant is emitted at a rate of 100 tons per year or more. The source would be subject to PSD review for any future significant modifications.

County Attainment Status

The source is located in Jefferson County.

Pollutant	Status
PM-10	attainment
PM-2.5	nonattainment
SO ₂	unclassifiable
1-hour Ozone	attainment
8-hour Ozone	attainment
CO	attainment
Lead	attainment

- (a) Volatile organic compounds (VOC) and Nitrogen Oxides (NO_x) are regulated under the Clean Air Act (CAA) for the purposes of attaining and maintaining the National Ambient Air Quality Standards (NAAQS) for ozone. Therefore, VOC and NO_x emissions are considered when evaluating the rule applicability relating to ozone. Jefferson County has been designated as attainment or unclassifiable for ozone. Therefore, VOC and NO_x emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2.
- (b) U.S. EPA, in the Federal Register Notice 70 FR 943 dated January 5, 2005, has designated Jefferson County, Madison Township, as nonattainment for PM2.5. On March 7, 2005 the Indiana Attorney General's Office, on behalf of IDEM, filed a law suit with the Court of Appeals for the District of Columbia Circuit challenging U.S. EPA's designation of nonattainment areas without sufficient data. However, in order to ensure that sources are not potentially liable for a violation of the Clean Air Act, the OAQ is following the U.S. EPA's guidance to regulate PM10 emissions as a surrogate for PM2.5 emissions pursuant to the requirements of Emission Offset, 326 IAC 2-3.
- (c) Jefferson County has been classified as attainment or unclassifiable for all other criteria pollutants.
- (d) Since this source is classified as a fossil fuel fired steam electric plant 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.

Part 70 Permit Conditions

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

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

Federal Rule Applicability

40 CFR 60 (New Source Performance Standards)

Units 1, 2, 3, 4, 5, and 6

No requirements of the New Source Performance Standards (NSPS) Subparts D, Db, and Dc (Standards of Performance for Fossil-Fuel-Fired Steam Generators and Standards of Performance for Industrial-Commercial-Institutional Steam Generating Units) are included in the Part 70 permit for the boilers, Units 1, 2, 3, 4, 5, and 6. These units were constructed before the earliest applicability date of August 17, 1971.

Coal Handling

No requirements of 40 CFR 60.252, Subpart Y (Standards of Performance for Coal Preparation Plants) are included in the Part 70 permit for the coal transfer and processing facilities because no coal is crushed, screened, or otherwise processed on site. Coal is only conveyed and stored.

Limestone Handling

No requirements of 40 CFR 60, Subpart OOO (Standards of Performance for Nonmetallic Mineral Processing Plants) are included in the Part 70 permit for the limestone handling for the fluxing facilities because the limestone is not crushed on site, only conveyed and stored.

Storage Tanks

No requirements of 40 CFR 60 Subpart Kb (Standards of Performance for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction, or Modification Commenced After July 23, 1984), as revised in 2003, are included in the Part 70 permit for the 20,000 gallon diesel storage tank due to the low vapor pressure of diesel fuel. 40 CFR 60.110b Subpart Kb 60.110b states that the subpart does not apply to storage vessels with a capacity greater than or equal to 151 m³ storing a liquid with a maximum true vapor pressure less than 3.5 kilopascals (kPa) or with a capacity greater than or equal to 75 m³ but less than 151 m³ storing a liquid with a maximum true vapor pressure less than 15.0 kPa. The capacity of the tank is over 75 m³ but the vapor pressure of diesel fuel is less than 1 kPa.

No requirements of 40 CFR 60 Subpart K (Standards of Performance for Storage Vessels for Petroleum Liquids for which Construction, Reconstruction, or Modification Commenced After June 11, 1973, and prior to May 19, 1978) are included in the Part 70 permit for the six (6) 25,000 gallon fuel oil storage tanks. These tanks were installed at the time of the original plant construction in the 1950's. In addition, the tanks would be exempt from Subpart Kb as revised in 2003 due to the low vapor pressure of No. 2 fuel oil.

No requirements of 40 CFR 60 Subpart Kb (Standards of Performance for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for Which Construction,

Reconstruction, or Modification Commenced After July 23, 1984) are included in the Part 70 permit for the additional storage tanks, including four (4) 5,000 gallon fuel oil storage tanks included in CP 077-2716 issued March 16, 1993; and one (1) 1,000 gallon gasoline storage tank included in exemption 077-4360 issued March 1, 1995, because they are each less than 75 cubic meters (m³) (equivalent to 19,815 gallons). In addition, the tanks would be exempt from Subpart Kb as revised in 2003 due to the low vapor pressure of No. 2 fuel oil.

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

There are no National Emission Standards for Hazardous Air Pollutants (NESHAPs) (326 IAC 14 and 40 CFR Part 63) requirements included in the Part 70 permit.

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

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

Title IV Emissions Allowances

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

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

State Rule Applicability - Entire Source

326 IAC 1-5-2 (Emergency Reduction Plans)

The Permittee prepared and submitted a written emergency reduction plan (ERP) consistent with safe operating procedures on October 18, 1989. The ERP was approved by IDEM, OAQ, on February 21, 1990.

326 IAC 2-6 (Emission Reporting)

This source is subject to 326 IAC 2-6 (Emission Reporting), because it has the potential to emit more than one hundred (100) tons per year) of SO₂, NO_x, CO, PM-10, and VOC. Pursuant to this rule, the owner/operator of the source must annually submit an emission statement for the source. The annual statement must be received by July 1 of each year and contain the minimum requirement as specified in 326 IAC 2-6-4. The submittal should cover the period defined in 326 IAC 2-6-2(8) (Emission Statement Operating Year).

326 IAC 4-2 and 326 IAC 9-1-2 (Incineration)

The Permittee shall not operate an incinerator or incinerate any waste or refuse except as provided in 326 IAC 4-2 and 326 IAC 9-1-2. 326 IAC 9-1-2 is not federally enforceable.

326 IAC 5-1 (Opacity)

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 non-overlapping integrated averages for a continuous opacity monitor) in a six (6) hour period

326 IAC 6-4 (Fugitive Dust Emissions)

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

326 IAC 6-4-4 Motor Vehicle Fugitive Dust Sources)

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

326 IAC 7-3 (Ambient Monitoring)

- (a) The Permittee shall operate continuous ambient sulfur dioxide air quality monitors and a meteorological data acquisition 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. A waiver shall be effective upon written approval by the commissioner. The commissioner may establish conditions in the approval of a waiver to assure compliance with the provisions of 326 IAC 7. Failure to continuously meet the requirements for obtaining a waiver or failure to comply with any condition contained in the approval of a waiver shall render void any waiver issued. [326 IAC 7-3-2(d)]

326 IAC 10-4 (NO_x Budget Trading Program)

Pursuant to 326 IAC 10-4-2(16) each of the following units is considered an "electricity generating unit (EGU)" because it commenced operation before January 1, 1997, and served a generator during 1995 or 1996 that had a nameplate capacity greater than twenty-five (25) megawatts that produced electricity for sale under a firm contract to the electric grid: Unit 1, Unit 2, Unit 3, Unit 4, Unit 5, and Unit 6. Pursuant to 326 IAC 10-4-1(a)(1), an "EGU" is a NO_x budget unit. Because this source meets the criteria of having one (1) or more NO_x budget units, it is a NO_x budget source. The Permittee shall be subject to the requirements of this rule. The NO_x budget permit is in section F of the Part 70 permit. The Technical Support Document for the NO_x budget permit is provided as Appendix A to this Technical Support Document.

Pursuant to 326 IAC 10-4-12(c), the Permittee has installed the appropriate monitoring systems and completed all certification tests as required by 326 IAC 10-4-12(b)(1) through (3) on or before May 1, 2003.

The requirements of 326 IAC 2-7-20(a) and (c) do not apply to emission trades of SO₂ or NO_x in accordance with 326 IAC 21 or 326 IAC 10-4; therefore, no pre-notification of a trade under one of these rules is required.

State Rule Applicability - Individual Facilities

Coal fired boilers, identified as Units 1 to 6

326 IAC 2-2 (Prevention of Significant Deterioration)

Units 1 through 6 were completed in 1955 and 1956, prior to the initial applicability date for federal Prevention of Significant Deterioration regulation, January 6, 1975.

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

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

- (a) When building a new fire in a boiler, opacity may exceed the applicable limit established in 326 IAC 5-1-2 for a period not to exceed thirty (30) minutes (five (5) six (6)-minute averaging periods) or until the flue gas temperature reaches two hundred fifty (250) degrees Fahrenheit at the inlet of the electrostatic precipitator, whichever occurs first. Operation of the electrostatic precipitator is not required during these times. [326 IAC 5-1-3(e)(2)]
- (b) When shutting down a boiler, opacity may exceed the applicable limit established in 326 IAC 5-1-2; however, opacity levels shall not exceed sixty percent (60%) for any six (6)-minute averaging period. Opacity in excess of the applicable limit established in 326 IAC 5-1-2 shall not continue for more than two (2) six (6)-minute averaging periods in any twenty-four (24) hour period. [326 IAC 5-1-3(a)]
- (c) When removing ashes from the fuel bed or furnace in a boiler or blowing tubes, opacity may exceed the applicable limit established in 326 IAC 5-1-2; however, opacity levels shall not exceed sixty percent (60%) for any six (6)-minute averaging period and opacity in excess of the applicable limit shall not continue for more than one (1) six (6)-minute averaging period in any sixty (60) minute period. The averaging periods shall not be permitted for more than three (3) six (6)-minute averaging periods in a twelve (12) hour period. [326 IAC 5-1-3(b)]

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

Most of the old State operating permits for utilities with coal-fired boilers included alternative opacity limits for periods of startup and shutdown. These pre-existing alternative limits, also known as opacity exemptions, were not federally enforceable. The

Title V permits for these sources include federally enforceable conditions to address opacity during startup and shutdown. These requirements were determined on a case-by-case basis for each unit by the OAQ Compliance branch using the Quarterly Excess Opacity Emissions Reports from each source. The State is bound by the provisions in 326 IAC 5-1-3(e) to establish conditions which, among other things, "limit the duration and extent of excess emissions to the greatest degree practicable," and "minimize the duration and extent of excess emissions."

326 IAC 6-2 (Particulate Emission Limitations for Sources of Indirect Heating)

Pursuant to Amendment No. 2 to the Agreed Order entered October 26, 1973, Air Pollution Control Board vs. Indiana-Kentucky Electric Corporation (IKEC), and dated September 26, 1975, the particulate matter (PM) emissions from each boiler (Units 1 through 6) shall not exceed 0.236 pound per million Btu heat input (lb/MMBtu).

This limit is more stringent than the value that would be derived using the stack configuration information for the stacks in use on June 8, 1972 and the equation in 326 IAC 6-2-3(a); therefore, compliance with this limit is deemed compliance with 326 IAC 6-2.

326 IAC 7-4-6 (Sulfur Dioxide (SO₂))

Pursuant to 326 IAC 7-4-6 (Sulfur Dioxide Emission Limitations for Jefferson County), the SO₂ emissions from Units 1 through 6 shall not exceed 7.52 pounds per million Btu (lbs/MMBtu), demonstrated on a thirty (30) day rolling weighted average.

326 IAC 7-2; 326 IAC 7-4-6; 326 IAC 3 (Sulfur Dioxide Emissions and Sulfur Content)

- (a) Pursuant to 326 IAC 7-2-1(c), the Permittee shall demonstrate that the sulfur dioxide emissions from Units 1 through 6 do not exceed the limit specified in Condition D.1.3 (Sulfur Dioxide (SO₂)) and 326 IAC 7-4-6.
- (b) Pursuant to 326 IAC 7-2-1(e) and 326 IAC 3-7, coal sampling and analysis data shall be collected as follows:
 - (1) Coal sampling shall be performed using the methods specified in 326 IAC 3-7-2(a), and sample preparation and analysis shall be performed as specified in 326 IAC 3-7-2(c), (d), and (e); or
 - (2) Pursuant to 326 IAC 3-7-3, manual or other non-ASTM automatic sampling and analysis procedures may be used upon a demonstration, submitted to the department for approval, that such procedures provide sulfur dioxide emission estimates representative either of estimates based on coal sampling and analysis procedures specified in 326 IAC 3-7-2 or of continuous emissions monitoring.
- (c) Pursuant to 326 IAC 3-7-5(a), the Permittee shall develop a standard operating procedure (SOP) to be followed for sampling, handling, analysis, quality control, quality assurance, and data reporting of the information collected pursuant to 326 IAC 3-7-2 through 326 IAC 3-7-4. In addition, any revision to the SOP shall be submitted to IDEM, OAQ.
- (d) Upon written notification to IDEM by a facility owner or operator, continuous emission monitoring data collected and reported pursuant to 326 IAC 3-5 may be used as the means for determining compliance with the emission limitations in 326 IAC 7. Upon such notification, the other requirements of 326 IAC 7-2 shall not apply. [326 IAC 7-2-1(g)]

326 IAC 3-5 (Continuous Emissions Monitoring)

- (a) Pursuant to 326 IAC 3-5 (Continuous Monitoring of Emissions), continuous emission monitoring systems for Boilers 1 through 6 shall be calibrated, maintained, and operated

for measuring opacity, which meet all applicable 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, 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, or 40 CFR 75.

Coal transfer and storage facilities

326 IAC 2-2 (Prevention of Significant Deterioration)

The original coal handling systems for Units 1 through 6, including coal conveying equipment, storage systems, transfer and loading systems, were constructed in the 1950's, prior to the initial applicability date for federal Prevention of Significant Deterioration regulation, January 6, 1975. The 1993 addition of coal conveyors and transfer stations is not subject to PSD requirements because the PTE of the modification is less than 25 tons per year of particulate and less than 15 tons per year of PM-10.

326 IAC 6-3-2 (Particulate)

Pursuant to 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes), for the coal processing 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.

326 IAC 6-5 (Fugitive Particulate Matter Emission Limitations)

Pursuant to CP 077-2716, issued March 16, 1993, and 326 IAC 6-5 (Fugitive Particulate Matter Emission Limitations), fugitive dust emissions from the coal handling shall comply with the plan submitted December 7, 1992, as revised March 4, 2002. This plan requires that:

- (a) For the unloading stations, the hoppers at stations 1 and 4 shall be enclosed on three sides. Water and/or dust suppressant chemicals shall be applied as needed to minimize visible emissions.
- (b) For the conveyors, the top and at least one side shall be enclosed.
- (c) For the transfer stations, the foam and wetting systems will promote a reduction in emissions. Modified chutes will be provided at coal drop points.

The control plan shall be updated at the time of reapplication for the source's operation permit or as required in 326 IAC 2. [326 IAC 6-5-8]

Fly ash handling

326 IAC 2-2 (Prevention of Significant Deterioration)

The dry fly ash handling facilities installed in 1989 and 1994 are not subject to PSD requirements because the PTE of particulate is less than 25 tons per year and the PTE of PM-10 is less than 15 tons per year.

326 IAC 6-3-2 (Particulate)

- (a) Pursuant to 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes), the particulate emission rate from the fly ash conveying system shall not exceed 42.5 pounds per hour when operating at a process weight rate of 40 tons per hour, and the particulate emission rate from the silo unloading shall not exceed 50.6 pounds per hour when operating at a process weight rate of 93.75 tons per hour. 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 any ash transfer 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.

326 IAC 6-5 (Fugitive Particulate Matter Emission Limitations)

Pursuant to the Registration issued April 18, 1989, and 326 IAC 6-5 (Fugitive Particulate Matter Emission Limitations), fugitive dust emissions from the fly ash handling shall comply with the plan submitted March 9, 1989, and revised November 15, 1993. This plan requires that:

- (a) For intermediate storage, use of pneumatic conveyance to silos equipped with separators to collect the fly ash, ash fluidizing system to help unload the ash, and bag filter systems for dust control.
- (b) For unloading from silos into trucks:
- (1) Area under the silos where the unloaders are located is totally enclosed, except for the openings for the vehicles to enter and exit. The truck entrance and exit points are equipped with spray curtains.
 - (2) For on-site fly ash disposal: Use of rotary unloaders that condition fly ash with water and use flexible chute extensions to load ash into open-type trucks for transport to disposal area.
 - (3) For fly ash sold for off site use: Use of dry unloaders equipped with telescoping chutes with bellows-type shrouds which are connected to vent fans and piping to pull displaced air and fugitive fly ash emissions from the receiving vessel back into the silos.
- (c) For transportation from silo area:
- (1) To on-site disposal: Use of trucks which are covered while in motion and which go through a truck wash and hose down area as they exit the silo area. In-plant haul roads in silo area and to onsite disposal area are paved and are periodically swept/vacuumed. Truck routes on the surface of the disposal area are treated as needed with a combination of water and/or dust-suppressant chemicals.
 - (2) For ash sold for use off site: The majority of fly ash hauled off-site is in closed, dry bulk container trucks. If conditioned fly ash is purchased for off site use, it is hauled in covered dump trucks which are washed prior to leaving site.

- (d) At on-site disposal area:
- (1) Dumping, placement and compaction of conditioned (moistened) fly ash, with a combination of watering, dust-suppressant chemicals and/or temporary cover used to further control fugitive dust if necessary.
 - (2) Size of the open (uncovered) or working face of each phase of the disposal area will be limited as much as possible.

Wet process bottom ash handling and storage

326 IAC 6-3-2 (Particulate)

326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes) does not apply to the ash handling because all of the ash is always handled wet and enclosed in the hydroveyor system until discharged into a storage pond; therefore, there are no particulate emissions from these operations.

326 IAC 6-4-2 (Fugitive Dust Emission Limitations)

Pursuant to 326 IAC 6-4-2:

- (a) Any ash storage pond 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:

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

Where

N = Fraction of fugitive dust that is respirable dust;

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

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

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

- (b) Pursuant to 326 IAC 6-4-6(6) (Exceptions), fugitive dust from a source caused by adverse meteorological conditions will be considered an exception to this rule (326 IAC 6-4) and therefore not in violation.

Limestone/iron ore fluxing facilities

326 IAC 6-3-2 (Particulate)

Pursuant to 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes), the particulate emission rate from the limestone and iron ore handling drop points shall not exceed 7.13 pounds per hour when operating at a process weight rate of 4566.2 pounds per hour. The pounds per hour limitation was calculated using the following equation:

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

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

20,000 Gallon Diesel Storage Tank

326 IAC 12 (New Source Performance Standards)

The federal New Source Performance Standards are incorporated into 326 IAC 12 by reference in accordance with 326 IAC 1-1-3. 326 IAC 1-1-3 has been revised to incorporate the 2003 and 2004 changes to the Code of Federal Regulations, including 40 CFR 60, but the state revisions have not yet been approved as part of the State Implementation Plan (SIP) for Indiana. Therefore, 326 IAC 12 does not currently include the 2003 revisions to the Applicability portion of Subpart Kb, and the record keeping requirement remains in effect as a State-only requirement until the updated version of 326 IAC 1-1-3 is approved by EPA.

It is noted that the 1995 exemption erroneously stated that there was no NSPS applicable. However, 40 CFR 60.110b and 40 CFR 60.116b as currently incorporated into 326 IAC 12 actually require record keeping, as follows:

326 IAC 12 (Record Keeping Requirements)

Pursuant to 326 IAC 1-1-3, 326 IAC 12 and 40 CFR 60.116b (2002 version):

- (a) The Permittee shall keep copies of the record required by paragraph (b) of this section for the life of the source.
- (b) The Permittee of each storage vessel as specified in 40 CFR 60.110b(a) (2002 version) shall keep readily accessible records showing the dimension of the storage vessel and an analysis showing the capacity of the storage vessel.

These requirements are incorporated by reference from the July 1, 2002 version of 40 CFR 60 Subpart Kb and are no longer federally enforceable.

Testing Requirements

Coal fired boilers, identified as Units 1 to 6

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 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 may be conducted in the common stacks (Stack 1 shared by Units 1, 2, and 3, and Stack 2 shared by Units 4, 5, and 6). Testing shall be conducted with all units exhausting to the common stack in operation, or as otherwise approved by OAQ. Testing shall be conducted in accordance with Section C - Performance Testing.

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

Compliance Requirements

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

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

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

1. The six (6) coal fired boilers, identified as Units 1 through 6, have applicable compliance monitoring conditions as specified below:

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

- (a) The ability of the ESP to control particulate emissions shall be monitored once per 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 or 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 or Exceedances, shall be considered a deviation from this permit.

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

- (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 or 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, adjustment of flue gas conditioning rate, and ESP T-R sets being returned to service.

- (b) Opacity readings in excess of thirty percent (30%) but not exceeding the opacity limit for the unit are not a deviation from this permit. Failure to take response steps in accordance with Section C - Response to Excursions or 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.

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

SO₂ Monitoring System Downtime [326 IAC 2-7-6] [326 IAC 2-7-5(3)]

Whenever the automatic coal sampling system is malfunctioning or down for repairs or adjustments for twenty-four (24) hours or more, the following shall be used to provide information related to SO₂ emissions:

- (a) Fuel sampling shall be conducted as specified in 326 IAC 3-7-2(b). Fuel sample preparation and analysis shall be conducted as specified in 326 IAC 3-7-2(c), 326 IAC 3-7-2(d), and 326 IAC 3-7-2(e). Pursuant to 326 IAC 3-7-3, manual or other non-ASTM automatic sampling and analysis procedures may be used upon a demonstration, submitted to the department for approval, that such procedures provide sulfur dioxide emission estimates representative either of estimates based on coal sampling and analysis procedures specified in 326 IAC 3-7-2 or of continuous emissions monitoring.
- (b) If during the life of this permit the Permittee notifies the IDEM that, pursuant to 326 IAC 7-2-1(g), continuous emission monitoring data will be used instead of fuel sampling and analysis, then whenever the SO₂ continuous emission monitoring system is malfunctioning or down for repairs or adjustments, the following shall be used to provide information related to SO₂ emissions:
 - (1) If the CEM system 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 CEM system is down for twenty-four (24) hours or more, fuel sampling shall be conducted as specified in part (a) of this condition, above.

Note: At the time of the Title V permit review, IKEC has not elected to use the SO₂ continuous emission monitors at Clifty Creek to demonstrate compliance with 326 IAC 7.

2. The coal transfer facilities have applicable compliance monitoring conditions as specified below:

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

- (a) Visible emission notations of the coal unloading station 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 transfer points baghouse exhausts shall be performed once per day during normal daylight operations when transferring coal. A trained employee shall record whether emissions are normal or abnormal.
- (c) If abnormal emissions are observed from the coal unloading station or at any baghouse exhaust, the Permittee shall take reasonable response steps in accordance with Section C - Response to Excursions or Exceedances. Observation of visible emissions that do not violate 326 IAC 6-4 (Fugitive Dust Emissions) or an applicable opacity limit is not a deviation from this permit. Failure to take response steps in accordance with Section C - Response to Excursions or Exceedances, shall be considered a deviation from this permit.
- (d) 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.
- (e) 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.
- (f) 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.

Note: IKEC has agreed to perform visible emission notations of the coal handling exhaust points on a daily basis, rather than weekly, instead of the standard compliance monitoring requirement to record pressure drop readings for the coal handling baghouses.

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

- (a) For a single compartment baghouse controlling emissions from a process operated continuously, a failed unit and the associated process shall 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).
- (b) For a single compartment baghouse controlling emissions from a batch process, the feed to the process shall be shut down immediately until the failed unit has been repaired or replaced. The emission unit shall be shut down no later than the completion of the processing of the material in the line. 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).

Bag failure can be indicated by a significant drop in the baghouse's pressure reading with abnormal visible emissions, by an opacity violation, or by other means such as gas temperature, flow rate, air infiltration, leaks, dust traces or triboflows.

3. The fly ash handling and disposal operations have applicable compliance monitoring conditions as specified below:

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

- (a) Visible emission notations of the fly ash disposal area(s) shall be performed at least once per day during normal daylight operations. A trained employee shall record whether emissions are normal or abnormal.
- (b) 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.
- (c) Visible emission notations of the fly ash transfer points bag filter system exhausts shall be performed at least once per day during normal daylight operations when transferring ash. A trained employee shall record whether emissions are normal or abnormal.
- (d) If visible emissions are observed crossing the property line or boundaries of the property, right-of-way, or easement on which the source is located, the Permittee shall take reasonable response steps in accordance with Section C - Response to Excursions or Exceedances.
- (e) If abnormal emissions are observed from the ash silo unloading station openings or at any bag filter system exhaust, the Permittee shall take reasonable response steps in accordance with Section C - Response to Excursions or 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 or 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.

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

- (a) For a single compartment baghouse controlling emissions from a process operated continuously, failed units and the associated process shall be shut down immediately until the failed units have been repaired or replaced. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions).
- (b) For a single compartment baghouse controlling emissions from a batch process, the feed to the process shall be shut down immediately until the failed units have been repaired or replaced. The emission unit shall be shut down no later than the completion of the processing of the material in the line. 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).

Bag failure can be indicated by a significant drop in the baghouse's pressure reading with abnormal visible emissions, by an opacity violation, or by other means such as gas temperature, flow rate, air infiltration, leaks, dust traces or triboflows.

4. The bottom ash handling and disposal operations have an applicable compliance monitoring condition, as follows:

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

- (a) Visible emission notations of the ash storage pond area(s) shall be performed at least once per day during normal daylight operations. A trained employee shall record whether emissions are normal or abnormal.
- (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 or Exceedances. Failure to take response steps in accordance with Section C - Response to Excursions or 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.

These monitoring conditions are necessary because the facilities and associated control devices must function properly to ensure compliance with the PM and opacity limits and fugitive dust control requirements.

Conclusion

The operation of this electric utility generating station shall be subject to the conditions of the attached proposed **Part 70 Permit No. T077-7168-00001**.

TSD Appendix A

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT Office of Air Quality

Technical Support Document (TSD) for the NO_x Budget Permit

Source Background and Description

Source Name: Indiana Kentucky Electric Corporation - Clifty Creek Station
Source Location: S.R. 56 West, Madison, Indiana 47250
County: Jefferson
SIC Code: 4911
Operated By: Indiana Kentucky Electric Corporation
Owned By: Indiana Kentucky Electric Corporation
ORIS Code: 983
Operation Permit No.: T077-7168-00001

NO_x Budget Permit Application and Rule Applicability

A complete Nitrogen Oxides (NO_x) Budget Permit Application for this NO_x budget source was received on September 13, 2002. The Office of Air Quality (OAQ) has reviewed a NO_x budget permit application from Indiana Kentucky Electric Corporation under 326 IAC 10-4-7 for the operation of the NO_x budget source. The NO_x budget source includes all NO_x Budget Units at the source, including opt-in units, if applicable. The following units at the source are NO_x Budget Units:

- (a) Five (5) wet-bottom pulverized coal-fired boilers identified as Units 1 through 5, with construction completed in 1955, each with a rated capacity of 1,869 million Btu per hour (MMBtu/hr). Units 1 through 5 each have a selective catalytic reduction (SCR) system and over-fire air system for NO_x control, and each unit exhausts through an electrostatic precipitator (ESP) for control of particulate matter. SO₃ flue gas conditioning systems are utilized as needed on Units 1 through 5 to maintain opacity and particulate limits. Units 1, 2, and 3 exhaust to stack 1. Units 4 and 5 exhaust to stack 2. No. 2 fuel oil is combusted during startup and stabilization periods. Used oil generated at facilities within the OVEC-IKEC system may be combusted as supplemental fuel for energy recovery. Stacks 1 and 2 have continuous emissions monitoring systems (CEMS) for nitrogen oxides (NO_x) and sulfur dioxide (SO₂) and continuous opacity monitoring (COM) systems.
- (b) One (1) wet-bottom pulverized coal-fired boiler identified as Unit 6, with construction completed in 1956, with a rated capacity of 1,869 million Btu per hour (MMBtu/hr). NO_x emissions are reduced by an over-fire air system. Unit 6 exhausts to stack 2 through an electrostatic precipitator (ESP) for control of particulate matter. No. 2 fuel oil is combusted during startup and stabilization periods. Used oil generated at facilities within the OVEC-IKEC system may be combusted as supplemental fuel for energy recovery. Stack 2 has continuous emissions monitoring systems (CEMS) for nitrogen oxides (NO_x) and sulfur dioxide (SO₂) and a continuous opacity monitoring (COM) system.

Pursuant to 326 IAC 10-4-2(16), Boilers 1, 2, 3, 4, 5, and 6 are each considered an "electricity generating unit (EGU)" because they commenced operation before January 1, 1997 and each unit served a generator during 1995 or 1996 that had a nameplate capacity greater than twenty-five (25) megawatts that produced electricity for sale under a firm contract to the electric grid. Pursuant to 326 IAC 10-4-1(a)(1), an "EGU" is a NO_x budget unit. Because this source meets the criteria of having one (1) or more NO_x budget units, it is a NO_x budget source.

The NO_x budget permit is in Section F of the Part 70 permit.

The requirements of 326 IAC 2-7-20(a) and (c) do not apply to emission trades of SO₂ or NO_x in accordance with 326 IAC 21 or 326 IAC 10-4; therefore, no pre-notification of a trade under one of these rules is required.

Pursuant to 326 IAC 10-4-7, the NO_x budget permit shall be a complete and segregable portion of the Part 70 permit and the NO_x budget portion of the Part 70 permit shall be administered in accordance with 326 IAC 2-7, except as provided otherwise by 326 IAC 10-4-7.

Program Description

On October 27, 1998, the U.S. EPA promulgated final federal rules requiring 22 states and the District of Columbia to submit state implementation plan (SIP) revisions to reduce the regional transport of ozone. The federal rule focused on reducing NO_x emissions in the affected states. In the federal rule, the U.S. EPA established a NO_x emission "budget" for each of the affected states and the District of Columbia. The "budget" represents a reduction from emissions in the year 2007 that the U.S. EPA believes will reduce the transport of NO_x emissions and will assist downwind areas in meeting ozone air quality standards. The states must demonstrate compliance with the "budget" by implementing control measures to reduce NO_x emissions beginning May 31, 2004. While the rule does not mandate which sources will have to reduce emissions, the rule did provide options that would result in a 65% reduction of NO_x emissions from utility boilers and a 60% reduction from large industrial (non-utility) boilers and turbines. IDEM developed the NO_x Budget Trading Program in 326 IAC 10-4 in response to this mandate. The NO_x reductions that will be achieved by this rule will result in significant air quality improvements throughout the state of Indiana, and will be especially important in those areas of the state where ozone levels exceed or regularly approach state and federal air quality health standards.

The Nitrogen Oxides Budget Trading Program is a regional cap and trade program among all the states subject to the NO_x SIP call. Electricity generating units (EGUs) and non-electricity generating units (non-EGUs) are allocated allowances for tons of NO_x that they are allowed to emit during the ozone season. IDEM allocates NO_x allowances for the affected units, and owners or operators of these units are able to buy, sell, or trade allowances, as necessary, to demonstrate compliance with the unit's NO_x emissions cap. Because this program is a regional program administered by U.S. EPA, sources are able to buy, sell or trade allowances across state boundaries and between different types of units and sources. More information about the NO_x SIP Call can be found at: <http://www.epa.gov/airmarkets/fednox/index.html> and <http://www.in.gov/idem/air/standard/Sip/index.html>.

326 IAC 10-4 (NO_x Budget Trading Program) Requirements

- (a) Pursuant to 326 IAC 10-4-4(b), the owners and operators and, to the extent applicable, the NO_x authorized account representative of the NO_x budget source and each NO_x budget unit at the source shall comply with the monitoring requirements of 40 CFR 75 and 326 IAC 10-4-12. The emissions measurements recorded and reported in accordance with 40 CFR 75 and 326 IAC 10-4-12 shall be used to determine compliance by each unit with the NO_x budget emissions limitation under 326 IAC 10-4-4(c).
- (b) Pursuant to 326 IAC 10-4-4(c), the owners and operators of the NO_x budget source and each NO_x budget unit at the source shall hold NO_x allowances available for compliance deductions under 326 IAC 10-4-10(j), as of the NO_x 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_x 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_x budget trading program, or a change in regulatory status of a NO_x budget opt-in unit.
- (c) Pursuant to 326 IAC 10-4-4(d), the owners and operators of each NO_x budget unit that has excess emissions in any ozone control period shall do the following:
- (1) Surrender the NO_x allowances required for deduction under 326 IAC 10-4-10(k)(5).
 - (2) Pay any fine, penalty, or assessment or comply with any other remedy imposed under 326 IAC 10-4-10(k)(7).
- (d) Pursuant to 326 IAC 10-4-4(e)(1), unless otherwise provided, the owners and operators of the NO_x budget source and each NO_x budget unit at the source shall keep either on site at the source or at a central location within Indiana for those owners or operators with unattended sources, each of the following documents for a period of five (5) years:
- (1) The account certificate of representation for the NO_x authorized account representative for the source and each NO_x 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_x authorized account representative.
 - (2) All emissions monitoring information, in accordance with 40 CFR 75 and 326 IAC 10-4-12, provided that to the extent that 40 CFR 75 and 326 IAC 10-4-12 provide for a three (3) year period for record keeping, the three (3) year period shall apply.
 - (3) Copies of all reports, compliance certifications, and other submissions and all records made or required under the NO_x budget trading program.
 - (4) Copies of all documents used to complete a NO_x budget permit application and any other submission under the NO_x budget trading program or to demonstrate compliance with the requirements of the NO_x 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 the 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.
- (e) Pursuant to 326 IAC 10-4-4(e)(2), the NO_x authorized account representative of the NO_x budget source and each NO_x budget unit at the source shall submit the reports and compliance certifications required under the NO_x budget trading program, including those under 326 IAC 10-4-8, 326 IAC 10-4-12, or 326 IAC 10-4-13.

Monitoring

The NO_x Budget Trading Program references monitoring and reporting requirements from the Acid Rain program at 40 CFR Part 75. These provisions require, for most sources, the use of continuous emissions monitors (CEMs). A CEM is a system composed of various equipment that continuously measures the amount of nitrogen oxides emitted into the atmosphere in exhaust gases from the NO_x budget unit's stack.

Excepted monitoring systems under 40 CFR Part 75, Appendix E are allowed for gas-fired peaking units and oil-fired peaking units as defined in 40 CFR 72.2. The excepted monitoring system methodology involves performing stack tests to determine the average NO_x emissions rate from a unit at four, equally-spaced load levels, in accordance with specific US EPA test methods, to establish a "load curve". The "load curve" correlates emissions to heat input rate such that emissions can be estimated based on the actual hourly heat input.

NO_x Emissions Allocations

- (a) Pursuant to 326 IAC 10-4-7(e), this NO_x budget permit is deemed to incorporate automatically, upon recordation by the U.S. EPA under 326 IAC 10-4-10, 326 IAC 10-4-11, or 326 IAC 10-4-13, every allocation, transfer, or deduction of a NO_x allowance to or from the compliance accounts of the NO_x budget units or the overdraft account of the NO_x budget source covered by this permit. The allocations for each ozone season and transaction information can be found at: <http://www.epa.gov/airmarkets/tracking/factsheet.html>. In addition, IDEM, OAQ posts proposed allocations prior to submitting them to the U.S. EPA on the following web site: <http://www.in.gov/idem/air/standard/Sip/index.html>.
- (b) The following requirements from 326 IAC 10-4-4(c) apply to NO_x allowances:
- (1) Each ton of NO_x emitted in excess of the NO_x budget emissions limitation shall constitute a separate violation of the Clean Air Act (CAA) and 326 IAC 10-4.
 - (2) NO_x allowances shall be held in, deducted from, or transferred among NO_x allowance tracking system accounts in accordance with 326 IAC 10-4-9 through 11, 326 IAC 10-4-13, and 326 IAC 10-4-14.
 - (3) A NO_x allowance shall not be deducted, in order to comply with the requirements under 326 IAC 10-4-4(c)(1), for an ozone control period in a year prior to the year for which the NO_x allowance was allocated.
 - (4) A NO_x allowance allocated under the NO_x budget trading program is a limited authorization to emit one (1) ton of NO_x in accordance with the NO_x budget trading program. No provision of the NO_x budget trading program, the NO_x budget permit application, the NO_x budget permit, or an exemption under 326 IAC 10-4-3 and no provision of law shall be construed to limit the authority of the U.S. EPA or IDEM, OAQ to terminate or limit the authorization.
 - (5) A NO_x allowance allocated under the NO_x budget trading program does not constitute a property right.
 - (6) Upon recordation by the U.S. EPA under 326 IAC 10-4-10, 326 IAC 10-4-11, or 326 IAC 10-4-13, every allocation, transfer, or deduction of a NO_x allowance to or from a NO_x 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_x budget permit of the NO_x budget unit by operation of law without any further review.

Other Record Keeping and Reporting Requirements

Pursuant to 326 IAC 10-4-7(g), except as provided in 326 IAC 10-7-4(e), IDEM, OAQ shall revise

the NO_x budget permit, as necessary, in accordance with the permit modification and revision provisions under 326 IAC 2-7.

Pursuant to 326 IAC 10-4-7(b)(1)(C), for permit renewal, the NO_x authorized account representative shall submit a complete NO_x budget permit application covering the NO_x budget units at the source in accordance with 326 IAC 2-7-4(a)(1)(D) with the Part 70 permit renewal.

Submissions

The NO_x authorized account representative for each NO_x budget source on behalf of which a submission is made must sign and certify every report or other submission required by the NO_x budget permit. The NO_x authorized account representative must include the following certification statement in every submission: "I am authorized to make this submission on behalf of the owners and operators of the NO_x budget sources or NO_x budget units for which the submission is made. I certify under penalty of law that I have personally examined, and am familiar with, the statements and information submitted in this document and all its attachments. Based on my inquiry of those individuals with primary responsibility for obtaining the information, I certify that the statements and information are to the best of my knowledge and belief true, accurate, and complete. I am aware that there are significant penalties for submitting false statements and information or omitting required statements and information, including the possibility of fine or imprisonment."

Recommendation

The staff recommends to the Commissioner that the NO_x budget permit be approved.

Unless otherwise stated, information used in this review was derived from the application.

Additional Information

Questions regarding the NO_x budget permit can be directed to Madhurima Moulik at the Indiana Department of Environmental Management (IDEM), Office of Air Quality (OAQ), 100 North Senate Avenue, Indianapolis, Indiana 46204 or by telephone at (317) 233-0868 or toll free at 1-800-451-6027 extension 3-0868.

The source will be inspected by IDEM's compliance inspection staff. Persons seeking to obtain information regarding the source's compliance status or to report any potential violation of any permit condition should contact Dan Hancock at the Office of Air Quality (OAQ) address or by telephone at (317)233-8429 or toll free at 1-800-451-6027 extension 3-8429.

Copies of the Code of Federal Regulations (CFR) referenced in the permit may be obtained from:

Indiana Department of Environmental Management

Office of Air Quality

100 North Senate Avenue

Indianapolis, Indiana 46204

or

The Government Printing Office

Washington, D.C. 20402

or

on the Government Printing Office web site at

<http://www.access.gpo.gov/nara/cfr/index.html>

Technical Support Document Appendix B

Supporting Documentation for Special Emission Limitation

**Indiana-Kentucky Electric Corporation - Clifty Creek Station
S.R. 56 West, Madison, Indiana 47250**

T077-7168-00001

RECEIVED

OCT 22 1973
STATE OF INDIANA
AIR POLLUTION CONTROL
BOARD

AIR POLLUTION CONTROL BOARD)
OF THE STATE OF INDIANA)
)
Plaintiff)
)
vs.)
)
INDIANA-KENTUCKY ELECTRIC CORPORATION)
MADISON, INDIANA)
)
Respondent)

CAUSE NO. A-26

AGREED FINDINGS OF FACT

1. That the Air Pollution Control Board (the "Board") is an agency of the State of Indiana duly empowered to hold administrative hearings to determine whether or not air pollution exists and to enter an order requiring the taking of such action as is indicated by the circumstances to cause the abatement of such condition.
2. That the Board has jurisdiction over both the subject matter and the parties to this action.
3. That pursuant to the provisions of IC 1971, 13-1-1, and IC 1971, 13-7-11-2, notice is issued and service of same is being waived by the resident agent:

Mr. Eugene Cooper
409 North Jefferson Street
Madison, Indiana 47250

4. That Indiana-Kentucky Electric Corporation ("IKEC") operates a fossil-fired steam electric power generating plant in Jefferson County, Indiana, known as the Clifty Creek Plant.
5. That the Clifty Creek Plant consists of six coal-fired steam boilers connected to three stacks. Each boiler is connected to a mechanical collector and an electrostatic precipitator to control particulate emissions.
6. That when the Clifty Creek Plant is operating at design capacity, particulates may on occasion be emitted in

quantities which, unless other action is taken, will exceed limits prescribed by the Board, in Regulations APC 3 and APC 4R, for emissions from particulate sources; although no determination has yet been made by the Board, or by any other agency having jurisdiction, that such emissions cause, or will cause, any violation of primary ambient standards for particulates to occur.

7. That to determine compliance with the ambient air quality standards, IKEC proposes to install a monitoring system on or before February 1, 1974. The data developed from this monitoring system is to be evaluated by February 1, 1975.
8. That Board Regulation APC 14 specifies ambient air quality standards and the Board's Plan of Implementation sets control strategies to achieve compliance with such ambient standards.
9. That in view of the delays in initiating a compliance program for the Clifty Creek Plant it is not reasonable under current circumstances to expect that compliance will be achieved with Regulation APC 4R by January 1, 1975. The staff of the Board has advised the Board that a reasonable program based on sound engineering judgment, taking into account the complexity and size of the project, is set forth below:
 - A. Installation of an electrostatic precipitator on Unit No. 6 by December 31, 1975.
 - B. Attempt to upgrade the electrostatic precipitator on Unit No. 5 through use of such techniques as pulsed power and improvement of gas flow. A report requesting determination is to be made to the Board by February 1, 1975 as to the adequacy of such upgrading.
 - C. If such upgrading is found adequate a similar program of upgrading is to be applied to Units No. 1 through 4 by December 31, 1975.
 - D. If such upgrading is found to be inadequate, IKEC will submit for Board approval an alternate compliance plan as provided in paragraph 4(B)(3) in the Order below.

10. That, subject to the provisions of paragraph 11 below, the addition of interim dates to the above schedules, for the purpose of monitoring the progress of said schedules, is a reasonable requirement and that it is appropriate under Section 3(a)(1) of Regulation APC 19 that this provisional permit, containing the timetable for compliance with APC 3 and 4R included below, be issued at this time.
11. That IKEC or its several agents, employees, and/or contractors may not be able, despite diligent effort, to complete the design, fabrication, construction, installation and/or implementation of any of the actions by the respective dates specified herein as a result of intervening factors or conditions beyond the reasonable control of IKEC such as (but not limited to) act of God, fire, flood, explosion, strike, act of the elements, action by governmental authorities, delays in the receipt of material or equipment, and failure of equipment.

ORDER

Therefore, based upon and subject to the above Agreed Findings of Fact, the Air Pollution Control Board of the State of Indiana hereby orders:

1. That the respondent, IKEC, shall install adequate particulate emission controls on all its boilers at the Clifty Creek Plant or convert them to another fuel such that operations at the plant will comply with Regulations APC 3 and APC 4R in the manner herein provided.
2. That plans and specifications for said controls or conversions be submitted in accordance with the schedule set forth in paragraph 4 below to the Board for its review.
3. That IKEC shall install a monitoring system to measure the ambient air quality with respect to particulate matter in the area affected by the Clifty Creek Plant emissions on the following schedule:

- A. Complete installation by February 1, 1974;
 - B. Complete data gathering by December 1, 1974; and
 - C. Evaluate data developed by the monitoring system and submit a report to the Board by February 1, 1975.
4. That IKEC shall take action in accordance with the following schedule:
- A. Unit No. 6
 - (1) Submit plans and specifications for an electrostatic precipitator to the Board within 30 days after the date of issuance of this Order;
 - (2) Publish an invitation for proposals for the installation of such precipitator within 20 days of approval of plans by the Board;
 - (3) Award a contract for the installation of such precipitator within 120 days of approval of plans by the Board;
 - (4) Complete design work and commence the installation of such precipitator by June 30, 1974;
 - (5) Complete installation of such precipitator by December 1, 1975; and
 - (6) Start-up of such precipitator and achieve compliance by December 31, 1975.
 - B. Unit No. 5
 - (1) Upgrade to a significant extent the efficiency of the existing electrostatic precipitator through techniques such as pulsed power supply system and improvement of gas flows according to the following schedule:
 - (a) Submit detailed plan of experimentation to the Board by October 1, 1973;

- (b) Start testing by October 15, 1973; and
 - (c) Hold evaluation meeting with the staff of the Board by May 1, 1974 to evaluate the preliminary results of the plan of experimentation.
- (2) Report to the Board on the results of its efforts to upgrade said unit and request a ruling by the Board as to whether the application of upgrading techniques would be adequate for Units No. 1 through 4 by February 1, 1975;
 - (3) Should said upgrading techniques be ruled inadequate by the Board by February 15, 1975, submit an alternate compliance plan for approval by May 1, 1975;
 - (4) Award a contract for such alternate plan, if required, by September 1, 1975;
 - (5) Commence installation of any facilities involved in such alternate plan by November 1, 1975;
 - (6) Complete installation of any facilities involved in such alternate plan by March 1, 1976; and
 - (7) Commence start-up if any facilities are involved in such alternate plan, or commence implementation of alternate plan, by May 1, 1976.
- C. Units No. 1 through 4
- (1) If the Board rules that upgrading of these units, using techniques similar to those used for Unit No. 5, is adequate, complete any equipment installation required for such upgrading by December 1, 1975;
 - (2) Complete such upgrading, if approved, by December 31, 1975;
 - (3) If such upgrading is ruled inadequate by March 1, 1975, submit an alternate plan and specifications for approval by July 1, 1975;

- (4) Award contracts for such alternate plan, if required, by November 1, 1975;
 - (5) Commence installation of any facilities involved in such alternate plan by February 1, 1976;
 - (6) Complete installation of any facilities involved in such alternate plan by June 1, 1976; and
 - (7) Commence start-up if facilities are involved in such alternate plan, or commence implementation of such alternate plan, by July 1, 1976.
5. That beginning 30 days after the date of this Order, bi-monthly progress reports toward meeting the dates set forth in paragraph 4 above shall be submitted to the Board accompanied by notifications of any acts or events beyond the control of IKEC (including but not limited to the failure of the United States Atomic Energy Commission to renew its contract with Ohio Valley Electric Corporation for the supply of power) which may contribute to IKEC's inability to meet the dates in this Order and such applications for further variances and/or provisional permits as IKEC deems necessary or appropriate in the light of the data reflected in, or accompanying, such progress reports.
 6. That the Board hereby grants variances from Regulations APC 3 and 4R and issues a provisional operating permit for particulates pursuant to Section 3(a)(1) of Regulation APC 19 for such time as the schedules set forth in this Order are being met or, if such schedules are not being met, for such extension period or periods as to which IKEC has submitted justification satisfactory to the Board. Approval by the Board of any extension request shall not be unreasonably withheld.
 7. That Regulations APC 3 and APC 4R are deemed by the Board to apply to total plant emission limitations to be achieved no later than July 1, 1976.
 8. That should some delay be occasioned in taking the actions and making the improvements in accordance with the times prescribed in this Order due to acts or circumstances beyond the reasonable control of IKEC, IKEC is entitled to reopen this matter and obtain reasonable extensions to compensate for any such delay, provided the Company has used its best efforts to take the actions specified in the Order.

9. That the Board hereby reserves jurisdiction to take such action after January 1, 1975, including the issuance of further orders, as it deems necessary to assure that operations at the Clifty Creek Plant are in compliance with such pollution regulations relating to particulate matter as are then applicable to the Clifty Creek Plant.

AIR POLLUTION CONTROL BOARD
OF THE STATE OF INDIANA

By *Quayle Hunt*
Acting Tech Sec.

ENTERED:

DATE *Oct 26, 1973*

The undersigned agrees to the above Agreed Findings of Fact; agrees to use its best efforts to take the actions specified in the above Order in the manner therein prescribed; and waives any notice and opportunity for hearing on the above Order of the Board, without prejudice, however, to any right which IKEC may have to assert that any further order of, or inaction by, the Board is unlawful or an unreasonable exercise of discretion by the Board.

INDIANA-KENTUCKY ELECTRIC
CORPORATION

B. *[Signature]*

DATE October 19, 1973

STATE OF INDIANA



INDIANAPOLIS 46206

AIR POLLUTION CONTROL BOARD

1230 WEST MICHIGAN STREET

(317) 633-4462x 4420

CERTIFIED MAIL

Mr. Ralph D. Dunlevy, Vice-President
Indiana-Kentucky Electric Corporation
Post Office Box 18
Bowling Green Station
New York, New York 10004

Dear Mr. Dunlevy:

Re: Indiana-Kentucky Electric Corp.
Madison, Indiana
Cause No. A-26

This is to advise you that the Air Pollution Control Board of the State of Indiana took the following action at its meeting on July 24, 1974:

"The Recommended Agreed Amendment to the Order in the matter of the Air Pollution Control Board of the State of Indiana vs. Indiana-Kentucky Electric Corporation, Madison, Indiana, which was signed by Ralph D. Dunlevy, on behalf of Indiana-Kentucky Electric Corporation, and Ralph C. Pickard on behalf of the Air Pollution Control Board, was considered. The Board adopted the following resolutions:

RESOLVED, That the Board accept the Recommended Agreed Amendment to the Order in said cause and adopt the Recommended Agreed Amendment to the Order as the Board's Final Order and Determination.

RESOLVED, That the Final Amendment to the Order be issued against the Indiana-Kentucky Electric Corporation, Madison, Indiana.

A copy of the signed Recommended Agreed Amendment to the Order is enclosed and made a part hereof.

Dated at Indianapolis, Indiana this 2nd day of October, 1974.

Very truly yours,

A handwritten signature in cursive script, appearing to read "Ralph C. Pickard".
Ralph C. Pickard
Technical Secretary

MSM/lt

Enclosure

cc: Jefferson County Health Department
Environmental Protection Agency

OCT 10 1974

BEFORE THE
AIR POLLUTION CONTROL BOARD
OF THE STATE OF INDIANA

In the Matter of)
)
INDIANA-KENTUCKY ELECTRIC CORPORATION) Cause No. A-26
MADISON, INDIANA)
)
Respondent)

AMENDMENT TO THE ORDER
ENTERED OCTOBER 26, 1973

WHEREAS, the Air Pollution Control Board has considered the request by Indiana-Kentucky Electric Corporation (the Respondent) in letters dated May 16, 1974 and April 22, 1974 for an amendment to Paragraphs 4.A(3) and (4) of the Order issued by the Board in this Cause, and

WHEREAS, the Board finds the submitted justification satisfactory, and in view of the nature and extent of the damage to the Clifty Creek Station of the Respondent caused by tornadoes on April 3, 1974 and

WHEREAS, this Amendment will only delay two interim increment dates and not the date for final compliance

IT IS, therefore, ORDERED:

That Paragraphs 4A(3) and (4) of such Order entered October 26, 1973 are amended to read as follows:

- (3) Award contract for the fabrication and supply of such precipitator by August 15, 1974
- (4) Complete design work and commence the installation of such precipitator by February 1, 1975

Date 10/1/74

By Ralph C. Pickard
Ralph C. Pickard
TECHNICAL SECRETARY
AIR POLLUTION CONTROL BOARD

Date 8/20/74

By Ralph Danlevy
Ralph Danlevy, Vice President
INDIANA-KENTUCKY ELECTRIC

BEFORE THE
AIR POLLUTION CONTROL BOARD
OF THE STATE OF INDIANA

In the Matter of)
INDIANA-KENTUCKY ELECTRIC)
CORPORATION)
MADISON, INDIANA,) CAUSE NO. A-26
Respondent)

AMENDMENT NO. 2 TO THE ORDER,
ENTERED OCTOBER 26, 1973,

WHEREAS, the Air Pollution Control Board (the Board) has promulgated Regulation APC 3, on October 14, 1974, and Regulation APC 4R, on June 8, 1972, (such Regulations as promulgated on such dates being hereinafter referred to as Regulations APC 3 and APC 4R) governing opacity limitations and emissions of particulate matter, respectively; and

WHEREAS, the Board entered an Order on October 26, 1973, in this Cause No. A-26, requiring Indiana-Kentucky Electric Corporation (IKEC) to take certain actions with respect to its fossil-fired steam electric generating plant located in Jefferson County, Indiana, known as the Clifty Creek Plant; and

WHEREAS, such Order was amended by an Order dated October 1, 1974, (the original order, as so amended, being hereinafter referred to as the Order); and

WHEREAS, the Board has concluded that the techniques applied by IKEC under paragraph 4.B., of the Order to upgrade the efficiency of the existing electrostatic precipitator on Unit No. 5, did not achieve sufficient improvement in performance to warrant the application of such techniques to Units 1 through 4; and

WHEREAS, the Board intends, by this amended Order, to establish an alternate compliance program for Units 1 through 5, and to effect certain other amendments to the Order;

IT IS, therefore, ORDERED, that the Order be amended as provided below, such amendments to have the same effect as if initially set forth in full, in the aforesaid Order, entered on October 26, 1973, in this Cause No. A-26:

1. That Paragraph 4.A. (5) and (6), of the Order be amended to read as follows:

"(5) Complete installation of such precipitator by August 15, 1977; and

(6) Start-up such precipitator and achieve compliance by September 15, 1977."

2. That Paragraph 4.B and 4.C of the Order be amended to read as follows:

"B. Units 1 through 5:

- (1) Submit, within 30 days of the receipt by IKEC of a copy of Amendment No. 2 to the Order executed on behalf of the Board, plans and specifications to the Board for electrostatic precipitators for each of Units 1 through 5, such precipitators having a design capability of reducing particulate emissions from the Plant to a level not in excess of .236 pounds of particulate matter per million Btu heat input, contemplating the burning of coal ranging in sulfur content from 2 percent to 4 percent by weight.

- (2) Publish within 20 days of notification of approval of such plans and specifications by the Board, an invitation for proposals for the fabrication, supply and erection of precipitators in accordance with the plans and specifications described in (1) above.
- (3) Award a contract or contracts for the fabrication and supply of precipitators for each of Units 1 through 5 within five months of approval of the plans and specifications by the Board.
- (4) In the case of each precipitator for Units 1 through 5, complete basic design work and commence the installation of such precipitator within seven months of the date of award of the contract for such precipitator; and
- (5) Complete installation of such precipitators, start-up such precipitators and achieve compliance in accordance with the following schedule:
 - (a) Within thirty-one months of the date of award in the case of the first unit scheduled to be completed;
 - (b) Within thirty-three months of the date of award in the case of the second unit scheduled to be completed;
 - (c) Within thirty-five months of the date of award in the case of the third unit scheduled to be completed;
 - (d) Within thirty-seven months of the date of award in the case of the fourth unit scheduled to be completed; and
 - (e) Within thirty-nine months of the date of award in the case of the fifth unit scheduled to be completed.

provided, however, that in the event that the compliance date specified for any of the units listed in clauses (a) through (e) of this subparagraph is not met, IKEC may continue to operate said unit after its scheduled compliance date, if the combined emissions from this unit and all other units operating after their scheduled compliance dates (whether or not installation has been completed) do not exceed .256 pounds of particulate matter per million Btu heat input.

- C. IKEC shall have the right, in connection with the installation of the precipitators covered in this paragraph 4, to relocate and modify equipment or facilities (including the present stacks), and to install new equipment or facilities (including one or more stacks), at the Plant provided that such action would not reasonably be expected to increase ambient levels of particulate matter in the vicinity of the Plant beyond those which would otherwise be expected to occur."
3. That Paragraph 7 of the Order be amended to read in its entirety as follows:
- "7. That Regulation APC 4R is deemed by the Board to apply to total plant emission limitations to be achieved no later than the date specified for achieving compliance in the case of the fifth unit in Paragraph 4.B(5)(e) above."
4. That the Order be amended by inserting a new Paragraph 8A to read as follows:
- "8A. IKEC shall be afforded an opportunity by the Board to present evidence in support of a timely application for an extension requested by IKEC under the provisions of paragraph 6 or 8 above either to the Board or before a hearing examiner appointed by the Board, prior to action by the Board on such application."

ENTERED:

Date 9/17/75

AIR POLLUTION CONTROL BOARD
OF THE STATE OF INDIANA

By Ralph C. Pickard
Ralph C. Pickard
Technical Secretary

Date 9/12/75

INDIANA-KENTUCKY ELECTRIC
CORPORATION

By Ralph D. Dunlevy
Ralph D. Dunlevy
Vice President

BEFORE THE
AIR POLLUTION CONTROL BOARD
OF THE STATE OF INDIANA

In the Matter of)
Indiana-Kentucky Electric Corporation) Cause No. A-26
Madison, Indiana)

Amendment No. 3 to the
Order Entered October 26, 1973
Findings of Fact

1. The State of Indiana Air Pollution Control Board (the Board) is an agency of the State of Indiana duly empowered pursuant to Indiana Code 13-1-1 and 13-7 to promulgate regulations related to the control of air pollution, to act on complaints of alleged air pollution, and to enter such orders and determinations as may be necessary to prevent or abate air pollution.
2. The Board has jurisdiction over both the subject matter and the parties to this action.
3. That pursuant to the provisions of IC 13-1-1 and IC 13-7-11-2, notice and service of same is waived by Respondent.
4. On October 26, 1973, the Air Pollution Control Board entered an Order in this case requiring Indiana-Kentucky Electric Corporation (IKEC) to take certain actions with respect to its fossil-fired steam electric generating plant located in Jefferson County, Indiana, known as the Clifty Creek Plant (the Plant). On October 2, 1974 and September 26, 1975, the Board issued amendments to the Order in certain particulars, requiring that Units 1-5 comply with APC-3 and APC-4R on the following dates:

First Unit	-	January 9, 1979
Second Unit	-	March 9, 1979
Third Unit	-	May 9, 1979
Fourth Unit	-	July 9, 1979
Fifth Unit	-	September 9, 1979

5. That on August 7, 1977, the President signed the Clean Air Act Amendments of 1977; which amendments provide that an existing enforcement order shall be void if it provides for the achieving of compliance with the applicable implementation plan beyond July 1, 1979, unless the Order is modified, before August 7, 1978, to achieve compliance prior to July 1, 1979 (Clean Air Act, Sec. 113(d)(12)).
6. That IKEC agreed to accelerate its schedule and bring the fourth and fifth units into compliance prior to July 1, 1979; however, IKEC cannot meet the compliance date contained in the State Implementation Plan.
7. That Units 1-5 at IKEC's Clifty Creek Plant are presently unable to comply with Indiana Air Pollution Control Board Regulations APC 3 (as approved in the Indiana Implementation Plan) and APC 4R, the applicable portions of the Indiana State Implementation Plan.
8. That the schedule contained in this Order is the most expeditious and practicable one which the Company can achieve and calls for the best practical control system available.
9. That the granting of this amendment, thereby effecting a Delayed Compliance Order, will result in a reduction in particulate emissions at a date earlier than that provided for in the Order entered October 26, 1975, as amended, and is therefore in the public interest.
10. That after a thorough investigation of all relevant facts, including public comment, it is determined that the schedule for compliance set forth in this Order is as expeditious as practicable and that the terms of this Order comply with Section 113(d) of the Clean Air Act.

Therefore, based upon and subject to the above Findings of Fact, the Air Pollution Control Board of the State of Indiana hereby orders:

1. That Paragraphs 4B and 4C of the Order entered October 26, 1973, as amended, be amended to require that final compliance be achieved with Regulations APC 3 (as approved in the Indiana Implementation Plan) and APC 4R and that proof of compliance be submitted to the Board according to the following schedule.

First Unit	-	January 9, 1979
Second Unit	-	March 9, 1979
Third Unit	-	May 9, 1979
Fourth Unit	-	June 30, 1979
Fifth Unit	-	June 30, 1979

2. Compliance test results and certification of compliance shall be submitted to the Board 60 days after completion of construction and tie-in of control equipment for the last unit. The Company shall notify the Board at least 10 days before any compliance test is conducted.
3. Nothing contained in this Order shall affect the responsibility of the Company to comply with other State or local regulations.
4. No later than 15 days after any date for compliance specified in the Order, the Company shall notify the Board in writing of its compliance, or noncompliance and reasons for noncompliance, with the requirement. If delay is anticipated in meeting any requirement of this Order, the Company shall immediately notify the Board in writing of the anticipated delay, reasons for the delay, and the estimated length of the delay.
5. During the period of this Order, until completion of the program set out in Paragraph 1, the Company shall use the best practicable system of emission reduction so as to maximize the reliability and efficiency of the existing controls at the Plant, minimize particulate matter emissions, avoid any imminent and substantial endangerment to the public health, and comply with the requirement of the applicable implementation plan to the extent it is able to do so.
6. The Company shall continue to operate the emission monitoring system in the vicinity of the Plant and report the data derived from the monitors to the Board on a quarterly basis. In-stack monitors shall be installed in accordance with the requirements of Regulation APC-8, as it applies to IKEC's Clifty Creek Plant.
7. The Company is notified that failure to achieve final compliance, as required under the Clean Air Act, may result in a requirement to pay a noncompliance penalty. In that event, the Company will be formally notified pursuant to Section 120(b)(3) of the Clean Air Act and any regulations promulgated under that Section.

8. All provisions of the Order entered on October 26, 1973, as amended, shall remain in effect except as specifically modified by this Order.
9. The Company hereby waives its right to file a petition for review of this Order under Section 307(b)(1) of the Clean Air Act.
10. This Order is effective upon its issuance.

Date: 6 Sept 78

Harry D. Williams
Harry D. Williams, Director
Air Pollution Control Division

Indiana-Kentucky Electric Corporation has reviewed this Order, consents to the terms and conditions of this Order, and believes it be a reasonable means by which its Clifty Creek Plant can achieve final compliance with Indiana Regulation APC-3 and APC-4R.

Date: 8/16/78

Ralph D. Dunlevy
Ralph D. Dunlevy, Sr. Vice President
Indiana-Kentucky Electric Corporation

Appendix C: Emissions Calculations
Coal Station Heaters
Commercial/Institutional/Residential Combustors (< 100 mmBtu/hr)
#1 and #2 Fuel Oil

Company Name: Indiana-Kentucky Electric Corporation
Clifty Creek Station
Address, City IN Zip: S.R. 56 West, Madison, Indiana 47250
Permit Number/Plt ID: T077-7168-00001
Reviewer: V. Cordell
Date: 20-Dec-05

Heat Input Capacity	Potential Throughput	S = Weight % Sulfur
MMBtu/hr	kgals/year	0.5
8.5	547.5	

Emission Factor in lb/kgal	Pollutant				
	PM*	SO2	NOx	VOC	CO
	2.0	71 (142.0S)	20.0	0.34	5.0
Potential Emission in tons/yr	0.5	19.4	5.5	0.1	1.4

Methodology

Weight % Sulfur reported in Part 70 application for No. 2 fuel oil is 0.3%; a standard value of 0.5% was used for more conservative calculation because the source is not required to use oil with the lower sulfur content.

1 gallon of No. 2 Fuel Oil has a heating value of 136,000 Btu.

Potential Throughput (kgals/year) = Heat Input Capacity (MMBtu/hr) x 8,760 hrs/yr x 1kgal per 1000 gallon x 1 gal per 0.136 MMBtu

Emission Factors are from AP 42, Tables 1.3-1, 1.3-2, and 1.3-3 (SCC 1-03-005-01/02/03) Supplement E 9/98 (as corrected in 4/28/00 Errata)

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

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

See page 2 for HAPs emission calculations.

Appendix C: Emissions Calculations
Coal Station Heaters
Commercial/Institutional/Residential Combustors (< 100 mmBtu/hr)
#1 and #2 Fuel Oil
HAPs Emissions

Company Name: Indiana-Kentucky Electric Corporation
Clifty Creek Station
Address, City IN Zip: S.R. 56 West, Madison, Indiana 47250
Permit Number/Plt ID: T077-7168-00001
Reviewer: V. Cordell

Date: 20-Dec-05

Heat Input Capacity

MMBtu/hr

8.5

	HAPs - Metals				
Emission Factor in lb/mmBtu	Arsenic 4.0E-06	Beryllium 3.0E-06	Cadmium 3.0E-06	Chromium 3.0E-06	Lead 9.0E-06
Potential Emission in tons/yr	1.49E-04	1.12E-04	1.12E-04	1.12E-04	3.35E-04

	HAPs - Metals (continued)			
Emission Factor in lb/mmBtu	Mercury 3.0E-06	Manganese 6.0E-06	Nickel 3.0E-06	Selenium 1.5E-05
Potential Emission in tons/yr	1.12E-04	2.23E-04	1.12E-04	5.58E-04

Methodology

1 gallon of No. 2 Fuel Oil has a heating value of 136,000 Btu.

Potential Throughput (kgals/year) = Heat Input Capacity (MMBtu/hr) x 8,760 hrs/yr x 1kgal per 1000 gallon
x 1 gal per 0.136 MMBtu

Emission Factors are from AP 42, Table 1.3-10, Supplement E 9/98
No data was available in AP-42 for organic HAPs.

Potential Emissions (tons/yr) = Capacity (mmBtu/hr) x Emission Factor (lb/mmBtu) x 8,760 hrs/yr / 2,000 lb/ton