INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

We Protect Hoosiers and Our Environment.

Mitchell E. Daniels Jr.
Governor

Thomas W. Easterly
Commissioner

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

TO: Interested Parties / Applicant

DATE: October 17, 2008

RE: Indian Kentucky Electric Corporation (Clifty Creek Station) / 077-26858-00001

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

Notice of Decision: Approval – Effective Immediately

Please be advised that on behalf of the Commissioner of the Department of Environmental Management, I have issued a decision regarding the enclosed matter. Pursuant to IC 13-17-3-4 and 326 IAC 2, this permit modification 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 13-15-7-3 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 Environmental Adjudication, 100 North Senate Avenue, Government Center North, Suite N 501E, Indianapolis, IN 46204, **within eighteen (18) days of the mailing of this notice**. The filing of a petition for administrative review is complete on the earliest of the following dates that apply to the filing:

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

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

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

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Pursuant to 326 IAC 2-7-18(d), any person may petition the U.S. EPA to object to the issuance of a Title V operating permit 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 impractible 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.

Enclosures
FNTV-PMOD.doc 3/27/08

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Mr. Donald T. Fulkerson
Environmental Affairs Director
Indiana-Kentucky Electric Corporation, Clifty Creek Station
P.O. Box 468
Piketon, OH 45661

October 17, 2008

Re: 077-26858-00001
First Minor Permit Modification to
Part 70 Permit No.: T 077-7168-00001

Dear Mr. Fulkerson:

Indiana-Kentucky Electric Corporation, Clifty Creek Station was issued a Part 70 Operating Permit on October 18, 2006 for a stationary electric utility generating station. Pursuant to the provisions of 326 IAC 2-7-12 a minor permit modification to this permit is hereby approved as described in the attached Technical Support Document.

The modification consists of the addition of the following:

> One (1) Dry Sorbent (Trona) Injection System, permitted to be constructed in 2008, consisting of two (2) silos to store dry Trona, identified as East Trona Silo 13 and West Trona Silo 45, each with a maximum storage capacity of 600 tons. Twenty (26) tons per hour of Trona is pneumatically transferred from trucks into the two silos through a totally enclosed system with particulate controlled by a bin filter dust collector on the top of each silo at a rate of 1950 acfm. The Trona is transferred from the silos through a totally enclosed pneumatic injection system into the Units 1 through 5 flue gas ducts between the existing SCRs and ESPs.

Additionally, IDEM, OAQ is revising certain sections or portions of the permit to accommodate regulatory and/or administrative changes.

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

This decision is subject to the Indiana Administrative Orders and Procedures Act – IC 4-21.5-3-5. If you have any questions on this matter, please contact Joe Sachse, OAQ, 100 North Senate Avenue, Indianapolis, Indiana, 46204-2251, or call at (800) 451-6027, and ask for Joe Sachse or extension (4-5378), or dial (317) 234-5378.

Sincerely/Original Signed By:

Tripurari P. Sinha, Ph. D., Section Chief
Permits Branch
Office of Air Quality

Attachments:
Updated Permit
Technical Support Document
PTE Calculations

ajs

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

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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.: T 077-7168-00001	
Original issued and signed by: Nisha Sizemore, Chief Permits Branch Office of Air Quality	Issuance Date: October 18, 2006 Expiration Date: October 18, 2011

First Acid Rain Permit Renewal No.: 077-18761-00001, issued on October 18, 2006
First Administrative Amendment No.: 077-23791-00001, issued on December 4, 2006
First Significant Permit Modification No.:077-24304-00001, issued March 31, 2008

First Minor Permit Modification No.: 077-26858-00001	
Issued by/Original Signed By: Matthew Stuckey, Branch Chief Permits Branch Office of Air Quality	Issuance Date: October 17, 2008 Expiration Date: October 18, 2011

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SECTION A SOURCE SUMMARY

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

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

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

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). SO_3 flue gas conditioning systems are utilized as needed on Units 1 through 5 to maintain opacity and particulate limits. 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.

Units 1 through 5 have the following emission controls:

- over-fire air system (NO_X control)
- selective catalytic reduction (SCR) system (NO_X control)
- “cold-side” electrostatic precipitator (ESP) (particulate control)
- flue gas desulfurization (FGD) system (SO_2 control), permitted to be constructed in 2008

(1) Prior to installation of the FGD System:
Units 1, 2, and 3 exhaust to Stack 1. Units 4 and 5 exhaust to Stack 2. Stacks 1 and 2 have continuous opacity monitoring systems (COMS) and continuous emissions monitoring systems (CEMS) for nitrogen oxides (NO_X) and sulfur dioxide (SO_2).

(2) After installation of the FGD System:
Units 1, 2, and 3 exhaust to Flue 13 of Stack 14. Units 4 and 5 exhaust to Flue 46 of Stack 14. Both Flue 13 and Flue 46 of Stack 14 have continuous emissions monitoring systems (CEMS) for nitrogen oxides (NO_X), sulfur dioxide (SO_2), and mercury (Hg). Continuous opacity monitoring systems (COMS) will be located in the combined unit ducts between the outlets of the electrostatic precipitators (ESPs) and the inlet to the flue gas desulfurization (FGD) system.

(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. 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.

Unit 6 has the following emission controls:

- over-fire air system (NO_X control)
- "hot-side" electrostatic precipitator (ESP) (particulate control)
- flue gas desulfurization (FGD) system (SO_2 control), permitted to be constructed in 2008

(1) Prior to installation of the FGD System:
Unit 6 exhausts to Stack 2. Stack 2 has a continuous opacity monitoring system (COMS) and continuous emissions monitoring systems (CEMS) for nitrogen oxides (NO_X) and sulfur dioxide (SO_2).

(2) After installation of the FGD System:
Units 6 exhausts to Flue 46 of Stack 14. Flue 46 of Stack 14 has continuous emissions monitoring systems (CEMS) for nitrogen oxides (NO_X), sulfur dioxide (SO_2), and mercury (Hg). Continuous opacity monitoring systems (COMS) will be located in the combined unit ducts between the outlets of the electrostatic precipitators (ESPs) and the inlet to the flue gas desulfurization (FGD) system.

The Flue Gas Desulfurization (FGD) System for Units 1 through 6, permitted to be constructed in 2008, consists of one (1) stack (Stack 14) with two flues (Flues 13 and 46), two (2) jet bubbling reactor (JBR) absorbers (JBRs 13 and 46), and associated limestone and gypsum material handling systems.

(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 SO_2 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 paved and unpaved 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 paved and unpaved haul roads to onsite disposal area.

(e) Wet process boiler slag handling, with hydroveyors conveying the boiler slag to a storage pond.

(f) One (1) Limestone Handling (LH) System, permitted to be constructed in 2008, with a maximum capacity of 1,000 tons per hour, consisting of one (1) barge unloader, one (1) barge unloading hopper and feeder, three (3) conveyors, two (2) transfer stations, and one (1) stacking tube and storage pile. Particulate emissions are controlled by partial to full enclosure and wet dust suppression.

(g) One (1) Limestone Processing (LP) System, permitted to be constructed in 2008, with a maximum transfer rate of 300 tons per hour, consisting of two (2) reclaim hoppers and feeders, one (1) reclaim conveyor, one (1) silo supply conveyor (a.k.a. transfer station), one (1) silo transfer conveyor, two (2) storage silos, two (2) ball mill feeders, two (2) wet ball mills, and one (1) emergency reclaim hopper and one (1) emergency conveyor (max cap of 10,000 TPY). Particulate emissions are controlled by partial to full enclosure and two (2) storage silo bin vent filter dust collectors. The Limestone Processing (LP) System is an affected source under the Standards of Performance for Nonmetallic Mineral Processing Plants (40 CFR Part 60, Subpart OOO).

(h) One (1) Gypsum Handling (GH) System, permitted to be constructed in 2008, with a maximum capacity of 150 tons per hour, consisting of one (1) collecting conveyor, one (1) transfer conveyor, two (2) transfer stations, one (1) radial stackout conveyor, one (1) emergency collecting conveyor, one (1) emergency transfer station, one (1) emergency stackout conveyor (max cap of 10,000 TPY), and transportation by truck via in-plant paved and unpaved haul roads to and within the onsite disposal area. Particulate emissions are controlled on the conveyors and transfer points by wet material and partial to full enclosure. Particulate emissions are controlled on the paved and unpaved haul roads by wet material, watering, sweeping, and speed reduction.

(i) One (1) Chloride Purge Stream (CPS) Wastewater Treatment Plant (WWTP) Filter Cake Handling System, permitted to be constructed in 2008, consisting of filter cake being loaded into trucks by a wheel loader, and transportation by truck via in-plant paved and unpaved haul roads to and within the onsite disposal area. Particulate emissions are controlled during loading of the filter cake into trucks by wet material and other precautionary measures. Particulate emissions are controlled on the paved and unpaved haul roads by wet material, watering, sweeping, and speed reduction.

Particulate emissions from handling and placement of Gypsum and CPS WWTP Filter Cake in onsite disposal area are controlled by wet material, watering, compacting, covering, and other precautionary measures.

(j) One (1) Dry Sorbent (Trona) Injection System, permitted to be constructed in 2008, consisting of two (2) silos to store dry Trona, identified as East Trona Silo 13 and West Trona Silo 45. Each silo has a usable storage capacity of approximately 600 tons. The Trona is delivered to the plant by totally enclosed dry-cement type trucks on an as-needed basis. The Trona is pneumatically transferred from the trucks into the silos through a totally enclosed system. The unloading rate for each truck is approximately 26 tons per hour. Both silos are fitted with bin vent filter systems designed to remove greater than 99 percent of the particulate in the exhaust air from the truck unloading process. A totally enclosed pneumatic system is also used to transfer the Trona from the silos for injection into the Units 1 through 5 flue gas ducts between the existing SCRs and ESPs.

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, SO_2 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]

(A) One (1) with 1.25 MMBtu/hr heat input capacity for Station 2;

(B) One (1) with 1.75 MMBtu/hr heat input capacity for Station 5; and

(C) Two (2) with 2.75 MMBtu/hr heat input capacity for Stations B3 and B4.

(2) 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, T 077-7168-00001, 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
MC 61-53, IGCN 1003
Indianapolis, Indiana 46204-2251

and

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

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

(c) The annual compliance certification report shall include the following:

(1) The appropriate identification of each term or condition of this permit that is the basis of the certification;

(2) The compliance status;

(3) Whether compliance was continuous or intermittent; and

(4) The methods used for determining the compliance status of the source, currently and over the reporting period consistent with 326 IAC 2-7-5(3).

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

B.10 Preventive Maintenance Plan [326 IAC 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
MC 61-53, IGCN 1003
Indianapolis, Indiana 46204-2251

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

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

(A) A description of the emergency;

(B) Any steps taken to mitigate the emissions; and

(C) Corrective actions taken.

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

(6) The Permittee immediately took all reasonable steps to correct the emergency.

(c) In any enforcement proceeding, the Permittee seeking to establish the occurrence of an emergency has the burden of proof.

(d) This emergency provision supersedes 326 IAC 1-6 (Malfunctions). This permit condition is in addition to any emergency or upset provision contained in any applicable requirement.

(e) The Permittee seeking to establish the occurrence of an emergency shall make records available upon request to ensure that failure to implement a PMP did not cause or contribute to an exceedance of any limitations on emissions. However, IDEM, OAQ, may require that the Preventive Maintenance Plans required under 326 IAC 2-7-4-(c)(9) be revised in response to an emergency.

(f) Failure to notify IDEM, OAQ, by telephone or facsimile of an emergency lasting more than one (1) hour in accordance with (b)(4) and (5) of this condition shall constitute a violation of 326 IAC 2-7 and any other applicable rules.

(g) If the emergency situation causes a deviation from a technology-based limit, the Permittee may continue to operate the affected emitting facilities during the emergency provided the Permittee immediately takes all reasonable steps to correct the emergency and minimize emissions.

(h) The Permittee shall include all emergencies in the Quarterly Deviation and Compliance Monitoring Report.

B.12 Permit Shield [326 IAC 2-7-15] [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
MC 61-53, IGCN 1003
Indianapolis, Indiana 46204-2251

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

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

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

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

(b) A timely renewal application is one that is:

(1) Submitted at least nine (9) months prior to the date of the expiration of this permit; and

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

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

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

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

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

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

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

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

and

United States Environmental Protection Agency, Region V
Air and Radiation Division, Regulation Development Branch – Indiana (AR-18J)
77 West Jackson Boulevard
Chicago, Illinois 60604-3590

in advance of the change by written notification at least ten (10) days in advance of the proposed change. The Permittee shall attach every such notice to the Permittee's copy of this permit; and

(5) The Permittee maintains records on-site, on a rolling five (5) year basis, which document all such changes and emission trades that are subject to 326 IAC 2-7-20(b), (c), or (e). The Permittee shall make such records available, upon reasonable request, for public review.

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

(b) The Permittee may make Section 502(b)(10) of the Clean Air Act changes (this term is defined at 326 IAC 2-7-1(36)) without a permit revision, subject to the constraint of 326 IAC 2-7-20(a). For each such Section 502(b)(10) of the Clean Air Act change, the required written notification shall include the following:

(1) A brief description of the change within the source;

(2) The date on which the change will occur;

(3) Any change in emissions; and

(4) Any permit term or condition that is no longer applicable as a result of the change.

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

(c) Emission Trades [326 IAC 2-7-20(c)]
The Permittee may trade 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 SO_2 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
MC 61-53, IGCN 1003
Indianapolis, Indiana 46204-2251

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

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

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

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

(b) The Permittee shall notify IDEM, OAQ of the actual test date at least fourteen (14) days prior to the actual test date. The notification submitted by the Permittee does not require certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

(c) Pursuant to 326 IAC 3-6-4(b), all test reports must be received by IDEM, OAQ not later than forty-five (45) days after the completion of the testing. An extension may be granted by IDEM, OAQ, if the Permittee submits to IDEM, OAQ, a reasonable written explanation not later than five (5) days prior to the end of the initial forty-five (45) day period.

Compliance Requirements [326 IAC 2-1.1-11]

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

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

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

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

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

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

(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
MC 61-53, IGCN 1003
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 twenty (120) days is not practicable, IDEM, OAQ may extend the retesting deadline.

(c) IDEM, OAQ reserves the authority to take any actions allowed under law in response to noncompliant stack tests.

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

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

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

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

(1) Indicate estimated actual emissions of all pollutants listed in 326 IAC 2-6-4(a);

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

The statement must be submitted to:

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

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

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

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

(a) Records of all required monitoring data, reports and support information required by this permit shall be retained for a period of at least five (5) years from the date of monitoring sample, measurement, report, or application. These records shall be physically present or electronically accessible at the source location for a minimum of three (3) years. The records may be stored elsewhere for the remaining two (2) years as long as they are available upon request. If the Commissioner makes a request for records to the Permittee, the Permittee shall furnish the records to the Commissioner within a reasonable time.

(b) Unless otherwise specified in this permit, all record keeping requirements not already legally required shall be implemented within ninety (90) days of permit issuance.

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

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

(A) A description of the project.

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

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

(i) Baseline actual emissions;

(ii) Projected actual emissions;

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

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

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

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

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

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

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

(b) The report required in (a) of this condition and reports required by conditions in Section D of this permit shall be submitted to:

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

(c) Unless otherwise specified in this permit, any notice, report, or other submission required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ, on or before the date it is due.

(d) Unless otherwise specified in this permit, all reports required in Section D of this permit shall be submitted within thirty (30) days of the end of the reporting period. All reports do require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

(e) The first report shall cover the period commencing on the date of issuance of this permit and ending on the last day of the reporting period. Reporting periods are based on calendar years, unless otherwise specified in this permit. For the purpose of this permit, "calendar year" means the twelve (12) month period from January 1 to December 31 inclusive.

(f) If the Permittee is required to comply with the recordkeeping provisions of (d) in Section C – General Record Keeping Requirements for any “project” (as defined in 326 IAC 2-2-1(qq) and/or 326 IAC 2-3-1(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 (d)(1) and (2) in Section C – General Record Keeping Requirements. The report shall contain all information and data describing the annual emissions for the emissions units during the calendar year that preceded the submission of report.

Reports required in this part shall be submitted to:

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

(g) If the Permittee is required to comply with the recordkeeping provisions of (d) in Section C – General Record Keeping Requirements for any “project” (as defined in 326 IAC 2-2-1(qq) and/or 326 IAC 2-3-1(ll) 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 (d)(1) and (2) in Section C – General Record Keeping Requirements.

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

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

Reports required in this part shall be submitted to:

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

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

(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). SO_3 flue gas conditioning systems are utilized as needed on Units 1 through 5 to maintain opacity and particulate limits. 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.

Units 1 through 5 have the following emission controls:

- over-fire air system (NO_X control)
- selective catalytic reduction (SCR) system (NO_X control)
- "cold-side" electrostatic precipitator (ESP) (particulate control)
- flue gas desulfurization (FGD) system (SO_2 control), permitted to be constructed in 2008

(1) Prior to installation of the FGD System:
Units 1, 2, and 3 exhaust to Stack 1. Units 4 and 5 exhaust to Stack 2. Stacks 1 and 2 have continuous opacity monitoring systems (COMS) and continuous emissions monitoring systems (CEMS) for nitrogen oxides (NO_X) and sulfur dioxide (SO_2).

(2) After installation of the FGD System:
Units 1, 2, and 3 exhaust to Flue 13 of Stack 14. Units 4 and 5 exhaust to Flue 46 of Stack 14. Both Flue 13 and Flue 46 of Stack 14 have continuous emissions monitoring systems (CEMS) for nitrogen oxides (NO_X), sulfur dioxide (SO_2), and mercury (Hg). Continuous opacity monitoring systems (COMS) will be located in the combined unit ducts between the outlets of the electrostatic precipitators (ESPs) and the inlet to the flue gas desulfurization (FGD) system.

(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. 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.

Unit 6 has the following emission controls:

- over-fire air system (NO_X control)
- "hot-side" electrostatic precipitator (ESP) (particulate control)
- flue gas desulfurization (FGD) system (SO_2 control), permitted to be constructed in 2008

(1) Prior to installation of the FGD System:
Unit 6 exhausts to Stack 2. Stack 2 has a continuous opacity monitoring system (COMS) and continuous emissions monitoring systems (CEMS) for nitrogen oxides (NO_X) and sulfur dioxide (SO_2).

(2) After installation of the FGD System:
Units 6 exhausts to Flue 46 of Stack 14. Flue 46 of Stack 14 has continuous emissions monitoring systems (CEMS) for nitrogen oxides (NO_X), sulfur dioxide (SO_2), and mercury (Hg). Continuous opacity monitoring systems (COMS) will be located in the combined unit ducts between the outlets of the electrostatic precipitators (ESPs) and the inlet to the flue gas desulfurization (FGD) system.

The Flue Gas Desulfurization (FGD) System for Units 1 through 6, permitted to be constructed in 2008, consists of one (1) stack (Stack 14) with two flues (Flues 13 and 46), two (2) jet bubbling reactor (JBR) absorbers (JBRs 13 and 46), and associated limestone and gypsum material handling systems.

(The information describing the process contained in this facility description box is descriptive

information and does not constitute enforceable conditions.)

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

D.1.1 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) The following operations are considered “startup conditions” pursuant to 326 IAC 1-2-76:

(1) Startup and firing of a boiler as part of a chemical cleaning operation; and

(2) Startup and firing of a boiler as part of a boiler floor refractory curing operation.

For each of these operations, opacity may exceed the applicable limit established in 326 IAC 5-1-3 for a period not to exceed thirty (30) minutes (five (5) six (6)-minute averaging periods).

D.1.3 Sulfur Dioxide (SO_2) [326 IAC 7-4-6]

Pursuant to 326 IAC 7-4-6 (Sulfur Dioxide Emission Limitations for Jefferson County), the SO_2 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]

(a) Prior to installation of the Flue Gas Desulfurization (FGD) System:
By December 31, 2009, 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. 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).

(b) After installation of the Flue Gas Desulfurization (FGD) System:
Within 180 days after startup of the Flue Gas Desulfurization (FGD) System, 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. Testing may be conducted in the common flues (Flue 13 shared by Units 1, 2, and 3; Flue 46 shared by Units 4, 5, and 6).

This testing shall be repeated by December 31 of every second calendar year following this valid compliance demonstration. 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 SO_2, 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 [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 (SO_2)) and 326 IAC 7-4-6. Compliance with these limits shall be determined using SO_2 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:

(i) the percentage of T-R sets in service on Units 1, 2, or 3 falls below ninety percent (90%); or

(ii) the number of combined fields in service for Units 4-6 (exhausting to stack 2) falls below 114 out of 128 (or 89.06%).

T-R set failure resulting in less than ninety percent (90%) availability under subparagraph (i) or less than 114 combined fields under subparagraph (ii) 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 SO_2 Monitoring System Downtime [326 IAC 2-7-6] [326 IAC 2-7-5(3)]

Whenever the primary SO_2 continuous emission monitoring system (CEMS) is malfunctioning or down for repairs or adjustments, the Permittee shall operate the secondary SO_2 CEMS.

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 SO_2 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 SO_2 limits as required in conditions D.1.3 and D.1.7.

(1) All SO_2 continuous emissions monitoring data, pursuant to 326 IAC 3-5-6 and 326 IAC 7-2-1(g).

(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 SO_2 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)]

(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 SO_2 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.

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

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

D.2.1 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:

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

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

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

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

D.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 week 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 week 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 baghouse shall be shut down immediately, and the Permittee shall repair the failed baghouse as soon as practicable and perform visible emissions notations of the transfer points twice daily until the failed baghouse has been repaired and placed back in operation.

(b) For a single compartment baghouse controlling emissions from a batch process, a failed baghouse shall be shut down immediately, and the Permittee shall repair the failed baghouse as soon as practicable and perform visible emissions notations of the transfer points twice daily until the failed baghouse has been repaired and placed back in operation.

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 – Visible Emissions Notations, the Permittee shall maintain weekly records of the visible emission notations of the coal transfer point baghouse exhausts. The Permittee shall include in its weekly record when a visible emission notation is not taken and the reason for the lack of visible emission notation, (e.g. the process did not operate that day).

(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)]

(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 paved and unpaved 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 paved and unpaved haul roads to onsite disposal area.

(e) Wet process boiler slag handling, with hydroveyors conveying the boiler slag to a storage pond.

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

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

D.3.1 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:

$E = 55.0\ P^{0.11} - 40$ where E = rate of emission in pounds per hour; and
P = 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 shall be performed at least once per day during normal daylight operations. Visible emission notations of the boiler slag storage pond area shall be performed at least once per week 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 – Visible Emissions Notations, the Permittee shall maintain daily records of the visible emission notations of the active fly ash disposal area, the ash silo unloading station openings, and the bag filter system exhausts. The Permittee shall include in its daily record when a visible emission notation is not taken and the reason for the lack of visible emission notation, (e.g. the process did not operate that day).

(b) To document compliance with Section C – Opacity and Condition D.3.4 – Visible Emissions Notations, the Permittee shall maintain weekly records of the visible emission notations of the active boiler slag storage pond area. The Permittee shall include in its weekly record when a visible emission notation is not taken and the reason for the lack of visible emission notation, (e.g. the process did not operate that day).

(c) 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)]

(f) One (1) Limestone Handling (LH) System, permitted to be constructed in 2008, with a maximum capacity of 1,000 tons per hour, consisting of one (1) barge unloader, one (1) barge unloading hopper and feeder, three (3) conveyors, two (2) transfer stations, and one (1) stacking tube and storage pile. Particulate emissions are controlled by partial to full enclosure and wet dust suppression.

(g) One (1) Limestone Processing (LP) System, permitted to be constructed in 2008, with a maximum transfer rate of 300 tons per hour, consisting of two (2) reclaim hoppers and feeders, one (1) reclaim conveyor, one (1) silo supply conveyor (a.k.a. transfer station), one (1) silo transfer conveyor, two (2) storage silos, two (2) ball mill feeders, two (2) wet ball mills, and one (1) emergency reclaim hopper and one (1) emergency conveyor (max cap of 10,000 TPY). Particulate emissions are controlled by partial to full enclosure and two (2) storage silo bin vent filter dust collectors. The Limestone Processing (LP) System is an affected source under the Standards of Performance for Nonmetallic Mineral Processing Plants (40 CFR Part 60, Subpart OOO).

(h) One (1) Gypsum Handling (GH) System, permitted to be constructed in 2008, with a maximum capacity of 150 tons per hour, consisting of one (1) collecting conveyor, one (1) transfer conveyor, two (2) transfer stations, one (1) radial stackout conveyor, one (1) emergency collecting conveyor, one (1) emergency transfer station, one (1) emergency stackout conveyor (max cap of 10,000 TPY), and transportation by truck via in-plant paved and unpaved haul roads to and within the onsite disposal area. Particulate emissions are controlled on the conveyors and transfer points by wet material and partial to full enclosure. Particulate emissions are controlled on the paved and unpaved haul roads by wet material, watering, sweeping, and speed reduction.

(i) One (1) Chloride Purge Stream (CPS) Wastewater Treatment Plant (WWTP) Filter Cake Handling System, permitted to be constructed in 2008, consisting of filter cake being loaded into trucks by a wheel loader, and transportation by truck via in-plant paved and unpaved haul roads to and within the onsite disposal area. Particulate emissions are controlled during loading of the filter cake into trucks by wet material and other precautionary measures. Particulate emissions are controlled on the paved and unpaved haul roads by wet material, watering, sweeping, and speed reduction.

Particulate emissions from handling and placement of Gypsum and CPS WWTP Filter Cake in onsite disposal area are controlled by wet material, watering, compacting, covering, and other precautionary measures.

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

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

D.4.1 Particulate PSD Minor Limits [326 IAC 2-2] [326 IAC 2-3]

(a) Particulate emissions from the Limestone Handling (LH) System shall be controlled by partial to full enclosure and wet dust suppression as specified in the Fugitive Dust Control Plan in Attachment A.

(b) Particulate emissions from the Limestone Processing (LP) System shall be controlled by partial to full enclosure and two (2) storage silo bin vent filter dust collectors as specified in the Fugitive Dust Control Plan in Attachment A.

(c) Particulate emissions on the conveyors and transfer points for the Gypsum Handling (GH) System shall be controlled by wet material and partial to full enclosure as specified in the Fugitive Dust Control Plan in Attachment A.

(d) Particulate emissions from loading of the filter cake into trucks for the Chloride Purge Stream (CPS) Wastewater Treatment Plant (WWTP) Filter Cake Handling System shall be controlled by wet material and other precautionary measures as specified in the Fugitive Dust Control Plan in Attachment A

(e) Particulate emissions on the paved and unpaved haul roads shall be controlled by wet material, watering, sweeping, and speed reduction as specified in the Fugitive Dust Control Plan in Attachment A.

(f) Fugitive particulate emissions from handling and placement of Gypsum and CPS WWTP Filter Cake in onsite disposal area shall be controlled by wet material, watering, compacting, covering, and other precautionary measures as specified in the Fugitive Dust Control Plan in Attachment A.

(g) The Permittee must comply with all requirements of the Fugitive Dust Control Plan in Attachment A.

Compliance with these requirements will ensure that the potential to emit from this modification is less than twenty-five (25) tons of PM per year and less than fifteen (15) tons of PM_{10} per year and therefore will render the requirements of 326 IAC 2-2 and 326 IAC 2-3 not applicable.

D.4.2 Particulate [326 IAC 6-3-2]

(a) Pursuant to 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes), allowable particulate emissions for the limestone handling operations shall not exceed 77.59 pounds per hour when operating at a process weight rate of 1,000 tons per hour.

(b) Pursuant to 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes), allowable particulate emissions for the limestone processing operations shall not exceed 63.00 pounds per hour when operating at a process weight rate of 300 tons per hour.

(c) Pursuant to 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes), allowable particulate emissions for the gypsum waste handling operations shall not exceed 55.44 pounds per hour when operating at a process weight rate of 150 tons per hour.

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

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

(e) 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.4.3 Fugitive Particulate Matter Emission Limitations [326 IAC 6-5]

Pursuant to 326 IAC 6-5 (Fugitive Particulate Matter Emission Limitations), fugitive dust emissions from the limestone handling, limestone processing, and gypsum waste handling operations shall comply with the Fugitive Dust Control Plan in Attachment A.

Compliance Determination Requirements

D.4.4 Particulate Control [326 IAC 2-7-6(6)]

(a) Except as otherwise provided by statute, rule, or in this permit, the enclosures, wet dust suppression systems, conveyor covers, and bin filter dust collector for particulate control shall be in operation and control emissions at all times the associated limestone handling, limestone processing, and/or gypsum waste handling operations are in operation.

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

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

D.4.5 Visible Emissions Notations [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]

(a) Visible Emission Notations:

(1) Visible emission notations of the limestone handling operations shall be performed once per day during normal daylight operations when handling limestone.

(2) Visible emission notations of the limestone processing operations shall be performed once per day during normal daylight operations when processing limestone.

(3) Visible emission notations of the gypsum waste handling operations shall be performed once per day during normal daylight operations when handling gypsum waste.

A trained employee shall record whether emissions are normal or abnormal.

(b) Visible emission notations of the control device exhausts shall be performed once per day during normal daylight operations when handling or processing limestone or gypsum waste. A trained employee shall record whether emissions are normal or abnormal.

(c) If abnormal emissions are observed from the limestone handling, limestone processing, and/or gypsum waste handling operations or at any control device 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.4.6 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.4.7 Record Keeping Requirements

(a) To document compliance with Section C – Opacity and Condition D.4.5, the Permittee shall maintain daily records of the visible emission notations of the limestone handling, limestone processing, and/or gypsum waste handling operations and control device exhausts. The Permittee shall include in its daily record when a visible emission notation is not taken and the reason for the lack of visible emission notation, (e.g. the process did not operate that day).

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

New Source Performance Standards (NSPS) Requirements [326 IAC 2-7-5(1)]

D.4.8 General Provisions Relating to New Source Performance Standards [326 IAC 12-1] [40 CFR Part 60, Subpart A]

(a) Pursuant to 40 CFR 60.1, the Permittee shall comply with the provisions of 40 CFR Part 60 Subpart A – General Provisions, which are incorporated by reference as 326 IAC 12-1 for the affected emission points of the Limestone Processing (LP) System except as otherwise specified in Table 1 of 40 CFR Part 60, Subpart OOO.

(b) Pursuant to 40 CFR 60.10, the Permittee shall submit all required notifications and reports to:

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

D.4.9 Standards of Performance for Nonmetallic Mineral Processing Plants [40 CFR Part 60, Subpart OOO] [326 IAC 12]

The Permittee which engages in nonmetallic mineral processing shall comply with the following provisions of 40 CFR Part 60, Subpart OOO (included as Attachment C of this permit):

(a) 40 CFR 60.670 (a)(1) and (d-f).

(b) Table 1: Applicability of Subpart A to Subpart OOO

(c) 40 CFR 60.671.

(d) 40 CFR 60.672, paragraphs (a)(1), (b), (d-g), and (h)(1).

(e) 40 CFR 60.673.

(f) 40 CFR 60.675.

(g) 40 CFR 60.676, paragraphs (a)(1), (a)(3-4), (f-h), (i)(1), and (j).

SECTION D.5 FACILITY OPERATION CONDITIONS

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

Insignificant Activities:

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

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

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

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

Pursuant to 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes), 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 pound 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 D.6 FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)] Dry Sorbent (Trona) Injection System

One (1) Dry Sorbent (Trona) Injection System, permitted to be constructed in 2008, consisting of two (2) silos to store dry Trona, identified as East Trona Silo 13 and West Trona Silo 45. Each silo has a usable storage capacity of approximately 600 tons. The Trona is delivered to the plant by totally enclosed dry-cement type trucks on an as-needed basis. The Trona is pneumatically transferred from the trucks into the silos through a totally enclosed system. The unloading rate for each truck is approximately 26 tons per hour. Both silos are fitted with bin vent filter systems designed to remove greater than 99 percent of the particulate in the exhaust air from the truck unloading process. A totally enclosed pneumatic system is also used to transfer the Trona from the silos for injection into the Units 1 through 5 flue gas ducts between the existing SCRs and ESPs.

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

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

D.6.1 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 Dry Sorbent (Trona) Injection System shall not exceed 36.38 pounds per hour when operating at a process weight rate of 26 tons per hour. The pound per hour limitation was calculated using the following equation:

(a) 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

Compliance Determination Requirements

D.6.2 Particulate Control [326 IAC 2-7-6(6)]

(a) Except as otherwise provided by statute, rule, or in this permit, the bin vent filter systems for particulate control shall be in operation and control emissions at all times the trucks are unloading into the Dry Sorbent (Trona) Injection System.

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

SECTION E TITLE IV CONDITIONS

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

(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). SO_3 flue gas conditioning systems are utilized as needed on Units 1 through 5 to maintain opacity and particulate limits. 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.

Units 1 through 5 have the following emission controls:

- over-fire air system (NO_X control)
- selective catalytic reduction (SCR) system (NO_X control)
- "cold-side" electrostatic precipitator (ESP) (particulate control)
- flue gas desulfurization (FGD) system (SO_2 control), permitted to be constructed in 2008

(1) Prior to installation of the FGD System:
Units 1, 2, and 3 exhaust to Stack 1. Units 4 and 5 exhaust to Stack 2. Stacks 1 and 2 have continuous opacity monitoring systems (COMS) and continuous emissions monitoring systems (CEMS) for nitrogen oxides (NO_X) and sulfur dioxide (SO_2).

(2) After installation of the FGD System:
Units 1, 2, and 3 exhaust to Flue 13 of Stack 14. Units 4 and 5 exhaust to Flue 46 of Stack 14. Both Flue 13 and Flue 46 of Stack 14 have continuous emissions monitoring systems (CEMS) for nitrogen oxides (NO_X), sulfur dioxide (SO_2), and mercury (Hg). Continuous opacity monitoring systems (COMS) will be located in the combined unit ducts between the outlets of the electrostatic precipitators (ESPs) and the inlet to the flue gas desulfurization (FGD) system.

(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. 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.

Unit 6 has the following emission controls:

- over-fire air system (NO_X control)
- "hot-side" electrostatic precipitator (ESP) (particulate control)
- flue gas desulfurization (FGD) system (SO_2 control), permitted to be constructed in 2008

(1) Prior to installation of the FGD System:
Unit 6 exhausts to Stack 2. Stack 2 has a continuous opacity monitoring system (COMS) and continuous emissions monitoring systems (CEMS) for nitrogen oxides (NO_X) and sulfur dioxide (SO_2).

(2) After installation of the FGD System:
Units 6 exhausts to Flue 46 of Stack 14. Flue 46 of Stack 14 has continuous emissions monitoring systems (CEMS) for nitrogen oxides (NO_X), sulfur dioxide (SO_2), and mercury (Hg). Continuous opacity monitoring systems (COMS) will be located in the combined unit ducts between the outlets of the electrostatic precipitators (ESPs) and the inlet to the flue gas desulfurization (FGD) system.

The Flue Gas Desulfurization (FGD) System for Units 1 through 6, permitted to be constructed in 2008, consists of one (1) stack (Stack 14) with two flues (Flues 13 and 46), two (2) jet bubbling reactor (JBR) absorbers (JBRs 13 and 46), and associated limestone and gypsum material handling systems.

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

Acid Rain Program

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

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

(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). SO_3 flue gas conditioning systems are utilized as needed on Units 1 through 5 to maintain opacity and particulate limits. 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.

Units 1 through 5 have the following emission controls:
- over-fire air system (NO_X control)
- selective catalytic reduction (SCR) system (NO_X control)
- "cold-side" electrostatic precipitator (ESP) (particulate control)
- flue gas desulfurization (FGD) system (SO_2 control), permitted to be constructed in 2008

(1) Prior to installation of the FGD System:
Units 1, 2, and 3 exhaust to Stack 1. Units 4 and 5 exhaust to Stack 2. Stacks 1 and 2 have continuous opacity monitoring systems (COMS) and continuous emissions monitoring systems (CEMS) for nitrogen oxides (NO_X) and sulfur dioxide (SO_2).

(2) After installation of the FGD System:
Units 1, 2, and 3 exhaust to Flue 13 of Stack 14. Units 4 and 5 exhaust to Flue 46 of Stack 14. Both Flue 13 and Flue 46 of Stack 14 have continuous emissions monitoring systems (CEMS) for nitrogen oxides (NO_X), sulfur dioxide (SO_2), and mercury (Hg). Continuous opacity monitoring systems (COMS) will be located in the combined unit ducts between the outlets of the electrostatic precipitators (ESPs) and the inlet to the flue gas desulfurization (FGD) system.

(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. 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.

Unit 6 has the following emission controls:
- over-fire air system (NO_X control)
- "hot-side" electrostatic precipitator (ESP) (particulate control)
- flue gas desulfurization (FGD) system (SO_2 control), permitted to be constructed in 2008

(1) Prior to installation of the FGD System:
Unit 6 exhausts to Stack 2. Stack 2 has a continuous opacity monitoring system (COMS) and continuous emissions monitoring systems (CEMS) for nitrogen oxides (NO_X) and sulfur dioxide (SO_2).

(2) After installation of the FGD System:
Units 6 exhausts to Flue 46 of Stack 14. Flue 46 of Stack 14 has continuous emissions monitoring systems (CEMS) for nitrogen oxides (NO_X), sulfur dioxide (SO_2), and mercury (Hg). Continuous opacity monitoring systems (COMS) will be located in the combined unit ducts between the outlets of the electrostatic precipitators (ESPs) and the inlet to the flue gas desulfurization (FGD) system.

The Flue Gas Desulfurization (FGD) System for Units 1 through 6, permitted to be constructed in 2008, consists of one (1) stack (Stack 14) with two flues (Flues 13 and 46), two (2) jet bubbling reactor (JBR) absorbers (JBRs 13 and 46), and associated limestone and gypsum material handling systems.

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

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

This NO_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
MC 61-53, IGCN 1003
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:

Phone:

Date:

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

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

☐ 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: _____

Phone: _____

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: _____

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

Phone: _____

Attach a signed certification to complete this report.

Indiana Department of Environmental Management
Office of Air Quality

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

Source Description and Location

Source Name:	Indiana – Kentucky Electric Corporation Clifty Creek Station
Source Location:	State Road 56 West, Madison, Indiana
County:	Jefferson
SIC Code:	4911
Operation Permit No.:	T 077-7168-00001
Operation Permit Issuance Date:	October 18, 2006
Minor Source Modification No.:	077-26832-00001
Minor Permit Modification No.:	000-26858-00001
Permit Reviewer:	Joe Sachse

Public Notice Information

On August 29, 2008, the Office of Air Quality (OAQ) had a notice published in The Madison Courier in Madison, Indiana, stating that the Indiana – Kentucky Electric Corporation - Clifty Creek Station had applied for a minor modification to their Part 70 Operating Permit issued on October 18, 2006 to the installation and operation of a sulfur trioxide (SO_3) mitigation system, a dry sorbent injection system designed to inject Trona into the flue gas between the existing selective catalytic reduction systems and cold-side electrostatic precipitators on Units 1 though 5. 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.

Other Changes

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

Upon further review, the OAQ has decided to make the following change to the permit (language deleted is shown in ~~strikeout~~ and language added is shown in **bold**):

Change No. 1:

The heading on pages 2-60 of Minor Permit Modification No.: 077-26858-00001 has been changed as follows:

IDEM Contact

Questions regarding this proposed permit can be directed to Joe Sachse at the Indiana Department Environmental Management, Office of Air Quality, 100 North Senate Avenue, Indianapolis, Indiana 46204-2251 or by telephone at (317) 234-5378 or toll free at 1-800-451-6027 extension 4-5378.

Indiana Department of Environmental Management
Office of Air Quality

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

Source Description and Location

Source Name:	Indiana – Kentucky Electric Corporation Clifty Creek Station
Source Location:	State Road 56 West, Madison, Indiana
County:	Jefferson
SIC Code:	4911
Operation Permit No.:	T 077-7168-00001
Operation Permit Issuance Date:	October 18, 2006
Minor Source Modification No.:	077-26832-00001
Minor Permit Modification No.:	000-26858-00001
Permit Reviewer:	Joe Sachse

Existing Approvals

The source was issued Part 70 Operating Permit No. T 077-7168-00001 on October 18, 2006. The source has since received the following approvals:

(a) First Acid Rain Permit Renewal No.: 077-18761-00001, issued on October 18, 2006;

(b) First Administrative Amendment No.: 077-23791-00001, issued on December 4, 2006;

(c) First Significant Permit Modification No.: 077-24304-00001, issued on March 31, 2008; and

County Attainment Status

The source is located in Jefferson County.

Pollutant	Designation
SO_2	Cannot be classified.
CO	Unclassifiable or attainment effective November 15, 1990.
O_3	Unclassifiable or attainment effective June 15, 2004, for the 8-hour ozone standard.[1]
PM_{10}	Unclassifiable effective November 15, 1990.
NO_2	Cannot be classified or better than national standards.
Pb	Not designated.

[1]Unclassifiable or attainment effective October 18, 2000, for the 1-hour ozone standard which was revoked effective June 15, 2005.
Basic nonattainment designation effective federally April 5, 2005, for the Madison Twp for $PM_{2.5}$.
The remainder of Jefferson County is unclassifiable or attainment effective April 5, 2005, for $PM_{2.5}$.

(a) Ozone Standards

(1) On October 25, 2006, the Indiana Air Pollution Control Board finalized a rule revision to 326 IAC 1-4-1 revoking the one-hour ozone standard in Indiana.

(2) On September 6, 2007, the Indiana Air Pollution Control Board finalized a temporary emergency rule to re-designate Allen, Clark, Elkhart, Floyd, LaPorte, and St. Joseph as attainment for the 8-hour ozone standard.

(3) On November 9, 2007, the Indiana Air Pollution Control Board finalized a temporary emergency rule to re-designate Boone, Clark, Elkhart, Floyd, LaPorte, Hamilton, Hancock, Hendricks, Johnson, Madison, Marion, Morgan, Shelby, and St. Joseph as attainment for the 8-hour ozone standard.

(4) Volatile organic compounds (VOC) and Nitrogen Oxides (NOx) are regulated under the Clean Air Act (CAA) for the purposes of attaining and maintaining the National Ambient Air Quality Standards (NAAQS) for ozone. Therefore, VOC and NOx emissions are considered when evaluating the rule applicability relating to ozone. Jefferson County has been designated as attainment or unclassifiable for ozone. Therefore, VOC and NOx emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2.

(b) $PM_{2.5}$
U.S. EPA, in the Federal Register Notice 70 FR 943 dated January 5, 2005, has designated Jefferson County Madison Township as nonattainment for $PM_{2.5}$. 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 New Source Review Rule for $PM_{2.5}$ promulgated on May 8th, 2008, and effective on July 15th 2008. Therefore, direct $PM_{2.5}$ and SO_2 emissions were reviewed pursuant to the requirements of Nonattainment New Source Review, 326 IAC 2-1.1-5. See the State Rule Applicability – Entire Source section.

(c) Other Criteria Pollutants
Jefferson County has been classified as attainment or unclassifiable in Indiana for CO, PM_{10}, NO_2, SO_2 and Lead. Therefore, these emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2.

(d) Since this source is classified as a fossil fuel-fired steam electric plant of more than 250 MMBtu/hr 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.

Source Status

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

Pollutant	**Emissions** (ton/yr)
PM	> 100
PM_{10}	> 100
$PM_{2.5}$	> 100
SO_2	> 100
VOC	> 100
CO	> 100
NO_X	> 100

(a) This existing source is a major stationary source, under PSD (326 IAC 2-2), because a regulated pollutant is emitted at a rate of 100 tons per year or more, and it is one of the twenty-eight (28) listed source categories, as specified in 326 IAC 2-2-1(gg)(1).

(b) This existing source is a major stationary source, under nonattainment new source review rules (326 IAC 2-1.1-5) since direct $PM_{2.5}$ and SO_2 are both emitted at a rate of 100 tons per year or more.

(c) These emissions are based upon the potential to emit stated in the Part 70 Operating Permit, T 077-7168-00001, issued on October 18, 2006.

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

Table 1: Source Status HAP PTE	
HAPs	**Potential To Emit** (ton/yr)
Acetaldehyde	< 10
Arsenic	< 10
Benzene	< 10
Benzyl Chloride	< 10
Cyanide	< 10
Hydrogen Chloride	**> 10**
Hydrogen Fluoride	**> 10**
Isophorone	< 10
Manganese	< 10
Methane	**> 10**
Methyl Chloride	< 10
Selenium	< 10
Total	**> 25**

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

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

Description of Proposed Modification

The Office of Air Quality (OAQ) has reviewed a modification application, submitted by Indiana-Kentucky Electric Corp. – Clifty Creek Station on August 4, 2008, relating to the installation and operation of a sulfur trioxide (SO3) mitigation system, a dry sorbent injection system designed to inject Trona into the flue gas between the existing selective catalytic reduction systems and cold-side electrostatic precipitators on Units 1 though 5. The system will be used on an as-needed basis to reduce the concentration of SO_3 in the flue gas in order to avoid a "blue plume condition" from the stack once the new flue gas desulfurization (FGD) system is operating. The following is a list of the proposed and modified emission units and pollution control devices:

One (1) Dry Sorbent (Trona) Injection System, permitted to be constructed in 2008, consisting of two (2) silos to store dry Trona, identified as East Trona Silo 13 and West Trona Silo 45. Each silo has a usable storage capacity of approximately 600 tons. The Trona is delivered to the plant by totally enclosed dry-cement type trucks on an as-needed basis. The Trona is pneumatically transferred from the trucks into the silos through a totally enclosed system. The unloading rate for each truck is approximately 26 tons per hour. Both silos are fitted with bin vent filter systems designed to remove greater than 99 percent of the particulate in the exhaust air from the truck unloading process. A totally enclosed pneumatic system is also used to transfer the Trona from the silos for injection into the Units 1 through 5 flue gas ducts between the existing SCRs and ESPs.

Enforcement Issues

There are no pending enforcement actions.

Emission Calculations

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

Permit Level Determination – Part 70

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

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

Table 2: PTE Before Controls of the Modification	
Pollutant	**Potential To Emit** (ton/yr)
CO	0.00
NO_X	0.00
PM	**8.09**
PM_{10}	**7.97**
$PM_{2.5}$	**7.94**
SO_2	0.00
VOC	0.00
HAPs	0.00

This source modification is subject to 326 IAC 2-7-10.5(d)(3) because the potential to emit PM and PM_{10} is less than twenty-five (25) tons per year and equal to or greater than five (5) tons per year before control.

Additionally, the modification will be incorporated into the Part 70 Operating Permit through a minor permit modification issued pursuant to 326 IAC 2-7-12(b), because the modification satisfies all of the requirements of 326 IAC 2-7-12(b)(1)(A)-(H).

Permit Level Determination – PSD or Emission Offset

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

	Potential to Emit (ton/yr)						
Process / Emission Unit	**PM**	**PM_{10}**	**$PM_{2.5}$**	**SO_2**	**VOC**	**CO**	**NO_X**
East Trona Silo 13	4.76	4.76	4.76	0.00	0.00	0.00	0.00
West Trona Silo 45	3.18	3.18	3.18	0.00	0.00	0.00	0.00
Fugitive (Paved Roads)	0.15	0.03	0.0042	0.00	0.00	0.00	0.00
Total for Modification	8.09	7.97	7.94	0.00	0.00	0.00	0.00
PSD Significant Levels	25	15	10	NA	NA	NA	NA

The source has stated that the projected emissions to baseline actual emissions from the precipitator will not increase.

(a) This modification to an existing major stationary source is not major because the emissions increases are less than the PSD significant levels. Therefore, pursuant to 326 IAC 2-2, the PSD requirements do not apply.

(b) This modification to an existing major stationary source is not major because the emissions increase is less than the Emission Offset and Nonattainment NSR significant levels. Therefore, pursuant to 326 IAC 2-3 and 326 IAC 2-1.1-5, the Emission Offset and Nonattainment NSR requirements do not apply.

Federal Rule Applicability Determination

(a) There are no New Source Performance Standards (NSPS)(326 IAC 12 and 40 CFR Part 60) applicable to this proposed modification.

(b) There are no National Emission Standards for Hazardous Air Pollutants (NESHAPs) (326 IAC 14, 326 IAC 20 and 40 CFR Part 63) applicable to this proposed modification.

(c) Pursuant to 40 CFR 64.2, Compliance Assurance Monitoring (CAM) is applicable to new or modified emission units that involve a pollutant-specific emission unit and meet the following criteria:

(1) has a potential to emit before controls equal to or greater than the Part 70 major source threshold for the pollutant involved;

(2) is subject to an emission limitation or standard for that pollutant; and

(3) uses a control device, as defined in 40 CFR 64.1, to comply with that emission limitation or standard.

The following table is used to identify the applicability of each of the criteria, under 40 CFR 64.1, to each new or modified emission unit involved:

CAM Applicability Analysis

Emission Unit	**Control Device Used**	**Emission Limitation** (Y/N)	**Uncontrolled PTE** (ton/yr)	**Controlled PTE** (ton/yr)	**Part 70 Major Source Threshold** (ton/yr)	**CAM Applicable** (Y/N)	**Large Unit** (Y/N)
East Trona Silo 13 PM	Y	Y	4.76	0.05	100	N	N
East Trona Silo 13 PM_{10}	Y	N	4.76	0.05	100	N	N
West Trona Silo 45 PM	Y	Y	3.18	0.03	100	N	N
West Trona Silo 45 PM_{10}	Y	N	3.18	0.03	100	N	N

Based on this evaluation, the requirements of 40 CFR Part 64, CAM are not applicable to any of the new emission units as part of this new source construction permit and permit modification.

State Rule Applicability Determination

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

326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes)
Pursuant to 326 IAC 6-3-2, the particulate emission rate from the Dry Sorbent (Trona) Injection System shall not exceed 36.38 pounds per hour when operating at a process weight rate of 26 tons per hour. The pound per hour limitation was calculated with the following equation:

(a) 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

The bin vent filter systems shall be in operation and control particulate emissions at all times the trucks are unloading into the Dry Sorbent (Trona) Injection System, in order to comply with this limit.

Compliance Determination and Monitoring Requirements

Permits issued under 326 IAC 2-7 are required to ensure that sources can demonstrate compliance with all applicable state and federal rules on a continuous basis. All state and federal rules contain compliance provisions; however, these provisions do not always fulfill the requirement for a 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 Determination Requirements are included in the permit. The Compliance Determination Requirements in Section D of the permit are those conditions that are found directly within state and federal rules and the violation of which serves as grounds for enforcement action.

If the Compliance Determination Requirements are not sufficient to demonstrate continuous compliance, they will be supplemented with Compliance Monitoring Requirements, also in 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 Determination Requirements applicable to this modification are as follows:

(a) The bin vent filter systems for particulate control shall be in operation and control emissions at all times the trucks are unloading into the Dry Sorbent (Trona) Injection System.

Proposed Changes

The changes listed below have been made to Part 70 Operating Permit No. 077-7168-00001. Deleted language appears as ~~strikethroughs~~ and new language appears in **bold**:

Modification No. 1:

The Dry Sorbent (Trona) Injection System was incorporated into the permit as follows:

...

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:

...

(j) One (1) Dry Sorbent (Trona) Injection System, permitted to be constructed in 2008, consisting of two (2) silos to store dry Trona, identified as East Trona Silo 13 and West Trona Silo 45. Each silo has a usable storage capacity of approximately 600 tons. The Trona is delivered to the plant by totally enclosed dry-cement type trucks on an as-needed basis. The Trona is pneumatically transferred from the trucks into the silos through a totally enclosed system. The unloading rate for each truck is approximately 26 tons per hour. Both silos are fitted with bin vent filter systems designed to remove greater than 99 percent of the particulate in the exhaust air from the truck unloading process. A totally enclosed pneumatic system is also used to transfer the Trona from the silos for injection into the Units 1 through 5 flue gas ducts between the existing SCRs and ESPs.

...

SECTION D.6 FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)] Dry Sorbent (Trona) Injection System

One (1) Dry Sorbent (Trona) Injection System, permitted to be constructed in 2008, consisting of two (2) silos to store dry Trona, identified as East Trona Silo 13 and West Trona Silo 45. Each silo has a usable storage capacity of approximately 600 tons. The Trona is delivered to the plant by totally enclosed dry-cement type trucks on an as-needed basis. The Trona is pneumatically transferred from the trucks into the silos through a totally enclosed system. The unloading rate for each truck is approximately 26 tons per hour. Both silos are fitted with bin vent filter systems designed to remove greater than 99 percent of the particulate in the exhaust air from the truck unloading process. A totally enclosed pneumatic system is also used to transfer the Trona from the silos for injection into the Units 1 through 5 flue gas ducts between the existing SCRs and ESPs.

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

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

D.6.1 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 Dry Sorbent (Trona) Injection System shall not exceed 36.38 pounds per hour when operating at a process weight rate of 26 tons per hour. The pound per hour limitation was calculated using the following equation:

(a) 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

Compliance Determination Requirements

D.6.2 Particulate Control [326 IAC 2-7-6(6)]

(a) Except as otherwise provided by statute, rule, or in this permit, the bin vent filter systems for particulate control shall be in operation and control emissions at all times the trucks are unloading into the Dry Sorbent (Trona) Injection System.

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

...

Conclusion and Recommendation

The construction of this proposed modification shall be subject to the conditions of the attached proposed Part 70 Minor Source Modification No. 077-26832-00001 and Minor Permit Modification No. 077-26858-00001. The staff recommends to the Commissioner that this Part 70 Minor Source and Minor Permit Modification be approved.

Source Name: Indiana-Kentucky Electric Corporation - Clifty Creek Station
Source Location: S.R. 56 West, Madison, Indiana 47250
Permit Number: MSM 077-26832-00001 & MPM 077-26858-00001
Permit Reviewer: Joe Sachse

Pneumatic Delivery Truck Unloading Emissions

Description (Units of Measure)	Trona Data
Storage Silo Bin Vent Filter (Baghouse) Emission Factor (gr/dscf)	0.01
Storage Silo Bin Vent Rate (cfm)	1950
Truck Unloading Time (hr)	1
No. Truck Unloads (1/yr)	950

Controlled Emissions (tpy) = (0.01 gr/dscf) * (lb/7000gr) * (tons/2000lb) * (1950 cf/min) * (60min/hr) * (hr/TU) * (950TU/yr) = **0.0794 tpy**
Uncontrolled Emissions (tpy) = Controlled Emissions / 0.01 = **7.94 tpy**

Notes:
TU = Number of Truck Unloads
Based on 99.9% baghouse efficiency

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Dry Sorbent (Trona) Injection System (TR)

Emission Unit	PM (tons/yr)	PM10 (tons/yr)	PM2.5 (tons/yr)	SO_2 (tons/yr)	VOC (tons/yr)	CO (tons/yr)	NOx (tons/yr)
East Trona Storage Silo 13 [1]	4.76	4.76	4.76	0.00	0.00	0.00	0.00
West Trona Storage Silo 45 [2]	3.18	3.18	3.18	0.00	0.00	0.00	0.00
Fugitive [3]	0.15	0.03	0.0042	0.00	0.00	0.00	0.00
TOTAL	**8.09**	**7.97**	**7.94**	**0.00**	**0.00**	**0.00**	**0.00**

Notes:
1. East Trona Storage Silo 13 has PTE 60% (Trona injected into 3/5 ducts)
2. West Trona Storage Silo 45 has PTE 40% (Trona injected into 2/5 ducts)
3. Fugitive emissions from 950 truck loads per year

Source Name: Indiana-Kentucky Electric Corporation - Clifty Creek Station
Source Location: S.R. 56 West, Madison, Indiana 47250
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Permit Reviewer: Joe Sachse

Paved Road Emissions - Trona

Trona Transported (tons)	24,700
Truck Capacity (tons)	26
Empty Truck Wt (tons)	14
Avg Vehicle Wt	27
Round Trips / Yr	950
Round Trip Distance	0.55

Emission Factor (EF) Equation [1]

EF (lb/ton) = [k * (sL/2) ^ 0.65 * (W/3) ^ 1.5 - C] * (1-P/4N)

k =	0.082	particle size multiplier for TSP
	0.016	particle size multiplier for PM_{10}
	0.0024	particle size multiplier for $PM_{2.5}$
sL =	0.282 [4]	silt loading (g/m^2)
W =	27	vehicle weight (tons)
P =	126	# days during averaging period with at least 0.01 in of precipitation (2004 LCD Louisville, KY (POR: 30 yrs))
N =	365	# days in averaging period
C =	0.00047	factor for exhaust, brake wear, and tire wear for TSP/PM_{10} (lb/VMT)
	0.00036	factor for exhaust, brake wear, and tire wear for $PM_{2.5}$ (lb/VMT) [3]

Control Efficiency Equation [2]

CE =	100-(0.8*p*d*t/i)	89.78%
p =	0.0049*r = 0.2205	potential avg hourly daytime evaporation rate (mm/hr)
r =	45	reading from table
d =	9.94	avg hr daytime traffic rate (h-1)
t =	1	time between applications (hr)
i =	0.1715	application intensity (L/m^2)

Uncontrolled Emissions Calculations

TSP EF (lbs/VMT)	PM_{10} EF	$PM_{2.5}$ EF	Vehicle	**TSP (tons/yr)**	**PM_{10} (tons/yr)**	**$PM_{2.5}$ (tons/yr)**
0.57	0.11	0.02	522	**0.15**	**0.03**	**0.0042**

Controlled Emissions Calculations

Control Method	Control Eff [2]	**TSP (tons/yr)**	**PM_{10} (tons/yr)**	**$PM_{2.5}$ (tons/yr)**
watering / flushing	89.78%	**0.0151**	**0.0029**	**0.0004**

Notes:
1. AP-42, Chapter 13.2.1 Paved Roads, November 2006
2. Water Flushing based on Air Pollution Control Manual, 1992, Air & Waste Management Assoc. p. 141, as referenced in Technical Background Documenton Control of Fugitive Dust at Cement Manufacturing Facilities, March 1998.
3. Revised $PM_{2.5}$ EF per AP-42, Chapter 13.2.1, November 2006
4. Field sampling at plant site performed on 09/29/2007 by OCS Environmental