

TO: Interested Parties / Applicant

RE: Indianapolis Power & Light Company – Harding Street Generating Station / SSM 097-21938-00033

FROM: Felicia A. Robinson
Manager of Environmental Planning

Notice of Decision: Approval - Effective Immediately

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

If you wish to challenge this decision, IC 4-21.5-3 and IC 13-15-6-1 require that you file a petition for administrative review. This petition may include a request for stay of effectiveness and must be submitted to the Office of Environmental Adjudication, 100 North Senate Avenue, Government Center North, Room 1049, Indianapolis, IN 46204, **within fifteen (15) calendar days of the receipt of this notice**. The filing of a petition for administrative review is complete on the earliest of the following dates that apply to the filing:

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

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

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

If you have technical questions regarding the enclosed documents, please contact the Indianapolis Office of Environmental Services, Air Permits at (317) 327-2234.

Enclosures



April 25, 2006

Mr. Edward Convery
Plant Manager
Indianapolis Power & Light Company – Harding Street Generating Station
3700 South Harding Street
Indianapolis, Indiana 46217

CERTIFIED MAIL 7000 0600 0023 5187 1578

RE: Significant Source Modification
No.: 097-21938-00033

Dear Mr. Convery:

The Indianapolis Power & Light Company – Harding Street Generating Station applied for a Part 70 Operating Permit on September 13, 1996. An application to modify the source was received on November 1, 2005. Pursuant to 326 IAC 2-7-10.5(f)(4), “any modification with a potential to emit greater than or equal to twenty-five (25) tons per year or more” of PM or PM10 qualifies as a Significant Source Modification. Pursuant to 326 IAC 2-7-10.5, the following emission units are approved for construction at the source:

- (a) Limestone transfer system to move limestone from truck(s)/loader(s) to the conveyor system, identified as T-1, with a maximum capacity to transfer 190,000 tons of limestone per year and using no control. Five (5) covered limestone conveyors, identified as T-2, with a maximum capacity to convey 190,000 tons of limestone per year and using no control. Two (2) 630 ton capacity limestone storage silos, identified as L-1 and L-2, using bin vents LC-1 and LC-2 as control, and exhausting to stack/vent LSV-1 and LSV-2. Two (2) weigh feeders which transfer limestone from the silos to the two (2) enclosed wet ball mills (grinding mills) for grinding limestone identified as BM-1 and BM-2. The wet ball mills (grinding mills) are located in a covered building. Under 40 CFR 60.670, Subpart OOO, T-2, L-1, L-2, BM-1 and BM-2 are each considered an affected facility.
- (b) Gypsum transfer, identified as T-3, with a maximum capacity to transfer 305,000 tons of gypsum per year and using no control. Five (5) covered gypsum conveyors, identified as T-4, with a maximum capacity to convey 305,000 tons of gypsum and using no control. Under 40 CFR 60.670, Subpart OOO, T-4 is considered an affected facility.
- (c) Coal transfer to an outdoor storage pile, identified as T-5, with a maximum capacity to transfer 2,500,000 tons of coal per year and using no control. Five (5) covered coal conveyors, identified as T-6, with a maximum capacity to convey 2,500,000 tons of coal per year and using no control. Under 40 CFR 60.250, Subpart Y, T-6 is considered an affected facility.

Pursuant to 326 IAC 2-7-10.5(l)(3), the Significant Source Modification, 097-21938-00033, will be incorporated into the Part 70 permit application and included in the Part 70 Operating Permit when issued. If there are no changes to the proposed construction of the emission units, the source may begin operating on the date that IDEM, OAQ and OES receives the affidavit of construction pursuant to 326 IAC 2-7-10.5(h). If there are any changes to the proposed construction, the source can not operate until an Operation Permit Validation Letter is issued.

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 Mr. Mark Caraher of my staff at (317) 327-2272 or mcaraher@indygov.org.



Air Quality Hotline: 317-327-4AIR | knozone.com

Department of Public Works
Office of Environmental Services

2700 Belmont Avenue
Indianapolis, IN 46221

317-327-2234
Fax 327-2274
TDD 327-5186
indygov.org/dpw

Sincerely,

ORIGINAL SIGNED BY:

Felicia A. Robinson
Manager of Environmental Planning
Office of Environmental Services

Attachments: Significant Source Modification 097-21938-00033
Technical Support Document & Addendum to Technical Support Document

MBC

Cc: Mindy Hahn, IDEM, OAQ
Matt Mosier, OES Compliance
Marion County Health Department
U.S. EPA
files



PART 70 SIGNIFICANT SOURCE MODIFICATION

**INDIANA DEPARTMENT OF ENVIRONMENTAL
 MANAGEMENT**
OFFICE OF AIR QUALITY
 and
INDIANAPOLIS OFFICE OF ENVIRONMENTAL SERVICES

**Indianapolis Power & Light Company –
 Harding Street Generating Station
 3700 South Harding Street
 Indianapolis, IN 46217**

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

This approval 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.

Source Modification No.: 097-21938-00033	
Issued by: ORIGINAL SIGNED BY: Felicia A. Robinson Manager of Environmental Planning Indianapolis Office of Environmental Services	Issuance Date: April 25, 2006



Department of Public Works
Office of Environmental Services

 2700 Belmont Avenue | 317-327-2234
 Indianapolis, IN 46221 | Fax 327-2274
 TDD 327-5186
 indygov.org/dpw

TABLE OF CONTENTS

A	SOURCE SUMMARY	4
A.1	General Information [326 IAC 2-7-4(c)] [326 IAC 2-7-5(15)]	
A.2	Part 70 Source Definition [326 IAC 2-7-1(22)]	
A.3	Emission Units and Pollution Control Equipment Summary [326 IAC 2-7-4(c)(3)] [326 IAC 2-7-5(15)]	
A.4	Part 70 Permit Applicability [326 IAC 2-7-2]	
B	GENERAL CONDITIONS	6
B.1	Definitions [326 IAC 2-7-1]	
B.2	Effective Date of the Permit [IC 13-15-5-3]	
B.3	Revocation of Permits [326 IAC 2-1.1-9(5)]	
B.4	Significant Source Modification [326 IAC 2-7-10.5(h)]	
C	SOURCE OPERATION CONDITIONS	8
C.1	Certification [326 IAC 2-7-4(f)] [326 IAC 2-7-6(1)] [326 IAC 2-7-5(3)(C)]	
C.2	Preventive Maintenance Plan [326 IAC 1-6-3] [326 IAC 2-7-5(1),(3)] [326 IAC 2-7-6(1) and (6)]	
C.3	Permit Amendment of Modification [326 IAC 2-7-11] [326 IAC 2-7-12]	
C.4	Opacity [326 IAC 5-1]	
C.5	Operation of Equipment [326 IAC 2-7-6(6)]	
C.6	Fugitive Dust Emissions [326 IAC 6-4]	
C.7	Stack Height [326 IAC 1-7]	
C.8	Performance Testing [326 IAC 3-6]	
	Compliance Requirements	
C.9	Compliance Requirements [326 IAC 2-1.1-11]	
	Compliance Monitoring Requirements	
C.10	Compliance Monitoring [326 IAC 2-1.1-11]	
C.11	Monitoring Methods [326 IAC 3][40 CFR 60][40 CFR 63]	
C.12	Instrument Specifications [326 IAC 2-1.1-11] [326 IAC 2-7-5(3)][326 IAC 2-7-6(1)]	
C.13	Response to Excursions or Exceedances [326 IAC 2-7-5] [326 IAC 2-7-6]	
C.14	Emergency Provisions [326 IAC 2-7-16]	
C.15	Deviations from Permit Requirements and Conditions [326 IAC 2-7-5(3)(C)(ii)]	
C.16	Actions Related to Noncompliance Demonstrated by a Stack Test [326 IAC 2-7-5][326 IAC 2-7-6]	
	Record Keeping and Reporting Requirements	
C.17	General Record Keeping Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]	
C.18	General Reporting Requirements [326 IAC 2-7-5(3)(C)]	
D.1	EMISSIONS UNIT OPERATION CONDITIONS – Limestone & Gypsum storage & transfer, T-1, T-2, L-1, L-2, T-3 & T-4	16
	Emission Limitations and Standards [326 IAC 2-7-5(1)]	
D.1.1	Particulate Matter (PM) [326 IAC 6.5-1-2(a)]	
D.1.2	PSD Minor Limit [326 IAC 2-2]	
D.1.3	Nonattainment New Source Review [326 IAC 2-1.1-5]	
D.1.4	Preventive Maintenance Plan [326 IAC 2-7-5(13)]	
	Compliance Determination Requirements	
D.1.5	Particulate Control	

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

- D.1.6 Visible Emissions Notations
- D.1.7 Parametric Monitoring

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

- D.1.8 Record Keeping Requirements

New Source Performance Standards (NSPS) Requirements [326 IAC 2-8-4(1)]

- D.1.9 General Provisions Relating to NSPS [40 CFR Part 60, Subpart A][326 IAC 12-1]
- D.1.10 New Source Performance Standards for Nonmetallic Mineral Processing Plants [40 CFR 60.670, Subpart OOO][326 IAC 12]

D.2 EMISSIONS UNIT OPERATION CONDITIONS - Coal Storage & Transfer, T-5 & T-6 27

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

- D.2.1 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

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

- D.2.2 Visible Emissions Notations

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

- D.2.3 Record Keeping Requirements

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

- D.2.4 General Provisions Relating to NSPS [40 CFR Part 60, Subpart A][326 IAC 12-1]
- D.2.5 Standards of Performance for Coal Preparation Plants [40 CFR 60.250, Subpart Y][326 IAC 12]

Certification	30
Emergency Occurrence Report	31
Quarterly Deviation and Compliance Monitoring Report	33
Affidavit of Construction	35

SECTION A SOURCE SUMMARY

This permit is based on information requested by the Indiana Department of Environmental Management (IDEM), Office of Air Quality (OAQ), and Indianapolis Office of Environmental Services (OES). The information describing the source contained in conditions A.1 and A.2 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)]

The Permittee owns and operates stationary electric utility generating station.

Responsible Official: Plant Manager
Source Address: 3700 South Harding Street, Indianapolis, IN 46217
Mailing Address: 3700 South Harding Street, Indianapolis, IN 46217
General Source Phone: (317) 261-3600
SIC Code: 4911
County Location: Marion
Source Location Status: Marion County
Nonattainment for ozone under the 8-hour standard
Nonattainment for PM_{2.5}; Attainment for all other criteria pollutants
Source Status: Part 70 Permit Program
Major Source, under PSD and Emission Offset Rules;
Major Source, Section 112 of the Clean Air Act
1 of 28 Source Categories

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

This electric utility generating station consists of two (2) plants:

- (a) **Plant 1** is located at 3700 South Harding Street, Indianapolis, Indiana 46217, and consists of utility boilers and natural gas and distillate oil fired gas turbines combustion units to produce electricity for sale; and
- (b) **Plant 2** is associated with a communications transmitter tower located at 4190 South Harding Street, Indianapolis, Indiana 46217, and consists of one (1) 81 horsepower diesel fired emergency generator identified as Generator # 1.

Since the two (2) plants are located on adjacent or contiguous properties, have the same SIC code and are under common control of the same entity, they will be considered one (1) source, as defined by 326 IAC 2-7-1(22). On January 22, 2002, Plant 2 received from OES an Exemption letter 097-15287-00420. However, Plant 2 is combined with Plant 1 under the source ID of 097-00033.

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

This stationary source is approved to construct, maintain, and operate the following emissions units and pollution control devices:

- (a) Limestone transfer from truck(s)/loader(s) to the conveyor system, identified as T-1, with a maximum capacity to transfer 190,000 tons of limestone per year and using no control. Five (5) covered limestone conveyors, identified as T-2, with a maximum capacity to convey 190,000 tons of limestone per year and using no control. Two (2) 630 ton capacity limestone storage silos, identified as L-1 and L-2, using bin vents LC-1 and LC-2 as control, and exhausting to stack/vent LSV-1 and LSV-2. Two (2) weigh feeders which transfer limestone from the silos to two (2) enclosed wet ball mills (grinding mills) for

grinding limestone, identified as BM-1 and BM-2. The ball mill grinding mills are located in a covered building. Under 40 CFR 60.670, Subpart OOO, T-2, L-1, L-2, BM-1 and BM-2 are each considered an affected facility.

- (b) Gypsum transfer, identified as T-3, with a maximum capacity to transfer 305,000 tons of gypsum per year and using no control. Five (5) covered gypsum conveyors, identified as T-4, with a maximum capacity to convey 305,000 tons of gypsum and using no control. Under 40 CFR 60.670, Subpart OOO, T-4 is considered an affected facility.
- (c) Coal transfer to an outdoor storage pile, identified as T-5, with a maximum capacity to transfer 2,500,000 tons of coal per year and using no control. Five (5) covered coal conveyors, identified as T-6, with a maximum capacity to convey 2,500,000 tons of coal per year and using no control. Under 40 CFR 60.250, Subpart Y, T-6 is considered an affected facility.

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

SECTION B GENERAL CONDITIONS

THIS SECTION OF THE PERMIT IS BEING ISSUED UNDER THE PROVISIONS OF 326 IAC 2-1.1 AND 40 CFR 52.780, WITH CONDITIONS LISTED BELOW.

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 Effective Date of the Permit [IC13-15-5-3]

Pursuant to IC 13-15-5-3, this permit becomes effective upon its issuance.

B.3 Revocation of Permits [326 IAC 2-1.1-9(5)][326 IAC 2-7-10.5(i)]

Pursuant to 326 IAC 2-1.1-9(5)(Revocation of Permits), the IDEM Commissioner or OES Administrator may revoke this permit if construction is not commenced within eighteen (18) months after receipt of this approval or if construction is suspended for a continuous period of one (1) year or more.

B.4 Significant Source Modification [326 IAC 2-7-10.5(h)]

This approval shall also become the approval to operate pursuant to 326 IAC 2-7-10.5(h) when, prior to start of operation, the following requirements are met:

- (a) The attached Affidavit of Construction shall be submitted to the Office of Air Quality (OAQ), Permit Administration & Development Section and the City of Indianapolis OES, Air Permits verifying that the emission units were constructed as proposed in the application. The emission units covered in the Significant Source Modification approval may begin operating on the date the Affidavit of Construction is postmarked or hand delivered to IDEM, OAQ and OES if constructed as proposed.
- (b) If actual construction of the emission units differs from the construction proposed in the application, the source may not begin operation until the permit has been revised pursuant to 326 IAC 2-7-11 or 326 IAC 2-12 and an Operation Permit Validation Letter is issued.
- (c) If construction is completed in phases; i.e., the entire construction is not done continuously, a separate affidavit must be submitted for each phase of construction. Any permit conditions associated with operation start up dates such as stack testing for New Source Performance Standards (NSPS) shall be applicable to each individual phase.
- (d) The Permittee shall receive an Operation Permit Validation Letter from IDEM, OAQ and /or OES and shall attach it to this document.
- (e) In the event that the Part 70 application is being processed at the same time as this application, the following additional procedures shall be followed for obtaining the right to operate:
 - (1) If the Part 70 draft permit has not gone on public notice, then the change/addition covered by the Significant Source Modification will be included in the Part 70 draft.
 - (2) If the Part 70 permit has gone through final EPA proposal and would be issued ahead of the Significant Source Modification, the Significant Source Modification will go through a concurrent 45 day EPA review. Then the Significant Source Modification will be incorporated into the final Part 70 permit at the time of issuance.

- (3) If the Part 70 permit has gone through public notice, but has not gone through final EPA review and would be issued after the Significant Source Modification is issued, then the Modification would be added to the proposed Part 70 permit, and the Part 70 permit will be issued after EPA review.

SECTION C SOURCE OPERATION CONDITIONS

Entire Source

C.1 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.
- (c) A responsible official is defined at 326 IAC 2-7-1(34).

C.2 Preventive Maintenance Plan [326 IAC 1-6-3] [326 IAC 2-7-5(1), (3)] [326 IAC 2-7-6(1) and (6)]

- (a) If required by specific condition(s) in Section D of this permit, the Permittee shall prepare and maintain Preventive Maintenance Plans (PMPs) within ninety (90) days after issuance of this permit, including the following information on each facility:-
 - (1) Identification of the individual(s) responsible for inspecting, maintaining, and repairing emission control devices;
 - (2) A description of the items or conditions that will be inspected and the inspection schedule for said items or conditions; and
 - (3) Identification and quantification of the replacement parts that will be maintained in inventory for quick replacement.

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

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

and

Indianapolis OES
Air Compliance
2700 South Belmont Avenue
Indianapolis, IN 46221

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

- (b) A copy of the PMPs shall be submitted to IDEM, OAQ, and OES upon request and within a reasonable time, and shall be subject to review and approval by IDEM, OAQ and OES.

IDEM, OAQ and OES 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 60/63 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.

C.3 Permit Amendment or Modification [326 IAC 2-7-11] [326 IAC 2-7-12]

- (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) Any application requesting an amendment or modification of this permit shall be submitted to:

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

and

City of Indianapolis
Office of Environmental Services
Air Quality Management Section
2700 South Belmont Avenue
Indianapolis Indiana 46221-2097

Any such application shall be certified by the “authorized individual” as defined by 326 IAC 2-1.1-1(1).

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

C.4 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 thirty percent (30%) in any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.
- (b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute non-overlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.

C.5 Operation of Equipment [326 IAC 2-7-6(6)]

Except as otherwise provided by statute or rule, or in this permit, all air pollution control equipment listed in this permit and used to comply with an applicable requirement shall be operated at all times that the emission units vented to the control equipment are in operation.

C.6 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).

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 by using good engineering practices (GEP) pursuant to 326 IAC 1-7-3.

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

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

- (a) Compliance testing on new emissions units shall be conducted within 60 days after achieving maximum production rate, but no later than 180 days after initial start-up, if specified in Section D of this approval. All testing shall be performed according to the provisions of 326 IAC 3-6 (Source Sampling Procedures), except as provided elsewhere in this permit, utilizing any applicable procedures and analysis methods specified in 40 CFR 51, 40 CFR 60, 40 CFR 61, 40 CFR 63, 40 CFR 75, or other procedures approved by IDEM, OAQ, and OES.

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

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

and

Indianapolis OES
Air Compliance
2700 South Belmont Ave.
Indianapolis, IN 46221

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

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

Compliance Requirements [326 IAC 2-1.1-11]

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

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 IDEM commissioner or the U.S. EPA.

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

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

Compliance with applicable requirements shall be documented as required by this permit. The Permittee shall be responsible for installing any necessary equipment and initiating any required monitoring related to that equipment. All monitoring and record keeping requirements not already legally required shall be implemented when operation begins.

C.11 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.12 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.13 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;
 - (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.14 Emergency Provisions [326 IAC 2-7-16]

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

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

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

Indiana Department of Environmental Management
Compliance Branch, Office of Air Quality
100 North Senate Avenue
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 for emission units identified in this permit in the Quarterly Deviation and Compliance Monitoring Report.

C.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 C - Emergency Provisions), the probable cause of such deviations, and any response steps or preventive measures taken shall be reported to:

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

and

Indianapolis OES
Air Compliance
2700 South Belmont Avenue
Indianapolis, IN 46221

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

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

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

C.16 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, and OES within thirty (30) days of receipt of the test results. The Permittee shall take appropriate action to minimize excess emissions from the affected emissions unit while the response actions are being implemented.
- (b) A retest to demonstrate compliance shall be performed within one hundred twenty (120) days of receipt of the original test results. Should the Permittee demonstrate to IDEM, OAQ, and OES that re-testing in one-hundred and twenty (120) days is not practicable, IDEM, OAQ, and OES may extend the re-testing deadline.
- (c) IDEM, OAQ, and OES reserve the authority to take any actions allowed under law in response to non-compliant stack tests.

The response action documents submitted pursuant to this condition do not require the certification by an “authorized individual” as defined by 326 IAC 2-1.1-1.

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

C.17 General Record Keeping Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

- (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 IDEM Commissioner or OES Administrator makes a

request for records to the Permittee, the Permittee shall furnish the records to the IDEM Commissioner or OES Administrator 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.18 General Reporting Requirements [326 IAC 2-7-5(3)(C)]

- (a) Reports required by conditions in Section D of this permit shall be submitted to:

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

and

Indianapolis OES
Air Compliance
2700 South Belmont Ave.
Indianapolis, IN 46221

- (b) Unless otherwise specified in this permit, any notice, report, or other submission required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ, and OES on or before the date it is due.
- (c) Unless otherwise specified in this permit, any quarterly report required in Section D of this permit shall be submitted within thirty (30) days of the end of the reporting period. The reports do not require the certification by an “authorized individual” as defined by 326 IAC 2-1.1-1(1).
- (d) 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.

SECTION D.1

EMISSIONS UNITS OPERATION CONDITIONS

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

- (a) Limestone transfer from truck(s)/loader(s) to the conveyor system, identified as T-1, with a maximum capacity to transfer 190,000 tons of limestone per year and using no control. Five (5) covered limestone conveyors, identified as T-2, with a maximum capacity to convey 190,000 tons of limestone per year and using no control. Two (2) 630 ton capacity limestone storage silos, identified as L-1 and L-2, using bin vents LC-1 and LC-2 as control, and exhausting to stack/vent LSV-1 and LSV-2. Two (2) weigh feeders which transfer limestone from the silos to the two (2) enclosed wet ball mills (grinding mills) for grinding limestone identified, as BM-1 and BM-2. The wet ball mills (grinding mills) are located in a covered building. Under 40 CFR 60.670, Subpart OOO, T-2, L-1, L-2, BM-1 and BM-2 are each considered an affected facility.
- (b) Gypsum transfer, identified as T-3, with a maximum capacity to transfer 305,000 tons of gypsum per year and using no control. Five (5) covered gypsum conveyors, identified as T-4, with a maximum capacity to convey 305,000 tons of gypsum and using no control. Under 40 CFR 60.670, Subpart OOO, T-4 is considered an affected facility.

(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 Matter (PM) [326 IAC 6.5-1-2(a)]

Pursuant to 326 IAC 6.5-1-2(a) (Particulate Matter Limitations Except Lake County), particulate matter (PM) emissions from each of the two (2) limestone storage silos, identified as L-1 and L-2, shall be limited to three hundredths (0.03) grain per dry standard cubic foot of exhaust air.

D.1.2 PSD Minor Limit [326 IAC 2-2]

- (a) PM₁₀ emissions from each limestone storage silo, identified as L-1 and L-2, shall not exceed 0.022 gr/dscf of exhaust air and shall each not exceed 0.19 pounds per hour. Compliance with these emission limits will ensure that the combined potential to emit from emission units T-1, T-2, L-1, L-2, T-3, T-4, T-5 and T-6 is limited to less than fifteen (15) tons of PM₁₀ per twelve (12) consecutive month period with compliance determined at the end of each month such that the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration (PSD) Requirements) are not applicable.
- (b) PM emissions from each limestone storage silo, identified as L-1 and L-2, shall not exceed 0.022 gr/dscf of exhaust air and shall each not exceed 0.19 pounds per hour. Compliance with these emission limits will ensure that the combined potential to emit from emission units T-1, T-2, L-1, L-2, T-3, T-4, T-5 and T-6 is limited to less than twenty five (25) tons of PM per twelve (12) consecutive month period with compliance determined at the end of each month such that the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration (PSD) Requirements) are not applicable.

D.1.3 Nonattainment New Source Review [326 IAC 2-1.1-5]

Compliance with the PM₁₀ emission limits in Condition D.1.2 renders the requirements of 326 IAC 2-1.1-5 (Air Quality Requirements) not applicable for PM_{2.5} emissions from emission units T-1, T-2, L-1, L-2, T-3, T-4, T-5 and T-6.

D.1.4 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

A Preventive Maintenance Plan, in accordance with Section C - Preventive Maintenance Plan, of this permit, is required for emission units T-2, L-1, L-2, T-4 and any control device.

Compliance Determination Requirements

D.1.5 Particulate Control

- (a) In order to comply with Condition D.1.1, D.1.2 and D.1.3, the bin vent filters identified as LC-1 and LC-2 for particulate control shall be in operation and control emissions from the limestone storage silos at all times that the limestone storage silos are loaded or unloaded.
- (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.1.6 Visible Emissions Notations

- (a) Visible emission notations of the limestone storage silo stack/vent LSV-1 and LSV-2 exhausts shall be performed once per day during normal daylight operations when exhausting to the atmosphere. A trained employee shall record whether emissions are normal or abnormal.
- (b) Visible emission notations of the five (5) covered limestone conveyors, identified as T-2 and of the five (5) covered gypsum conveyors, identified as T-4 shall be performed once per week during normal daylight operations. A trained employee shall record whether emissions are normal or abnormal.
- (c) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.
- (d) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.
- (e) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.
- (f) If abnormal emissions are observed or if visible emissions are observed crossing the property, right of way, or easement on which the source is located, the Permittee shall take reasonable response steps in accordance with Section C – Response to Excursions or Exceedances. Failure to take response steps in accordance with Section C - Response to Excursions or Exceedances shall be considered a deviation from this permit.

D.1.7 Parametric Monitoring

The Permittee shall record the pressure drop across LC-1 and LC-2, at least once per day when the limestone silos are loaded or unloaded. When for any one reading, the pressure drop is outside the normal range of 3.0 and 6.0 inches of water or a range established during the latest

stack test, the Permittee shall take reasonable response steps in accordance with Section C- Response to Excursions or Exceedances. A pressure reading that is outside the above mentioned range is not a deviation from this permit. Failure to take response steps in accordance with Section C - Response to Excursions or Exceedances shall be considered a deviation from this permit.

The instrument used for determining the pressure shall comply with Section C - Instrument Specifications, and shall be calibrated in accordance with the manufacturer's specifications. The specifications shall be available on site with the Preventive Maintenance Plan.

D.1.8 Broken or Failed Bag Detection

- (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 C - 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 emissions unit shall be shut down no later than the completion of the processing of the material in the line or in the emissions unit. 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 C - 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 Requirement [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

D.1.9 Record Keeping Requirements

- (a) To document compliance with Condition D.1.6, the Permittee shall maintain the following:
 - (1) records of daily visible emission notations of the limestone storage silo stack/vent LSV-1 and LSV-2 exhausts.
 - (2) records of weekly visible emission notations of the five (5) covered limestone conveyors, identified as T-2, and of the five (5) covered gypsum conveyors, identified as T-4.
- (b) To document compliance with Condition D.1.7, the Permittee shall maintain the following:
 - (1) Daily records of the total static pressure drop across LC-1 and LC-2 during normal operation when venting to the atmosphere.
- (c) 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.1.10 General Provisions Relating to NSPS [40 CFR Part 60, Subpart A][326 IAC 12-1]

- (a) The provisions of 40 CFR Part 60, Subpart A - General Provisions, which are incorporated by reference in 326 IAC 12-1, apply to the five (5) covered limestone

conveyors, identified as T-2, the two (2) limestone storage silos, identified as L-1 and L-2, the two (2) enclosed wet ball mills (grinding mills), identified as BM-1 and BM-2, and the five (5) covered gypsum conveyors, identified as T-4, as described in this section except when otherwise specified in 40 CFR Part 60, Subpart OOO.

- (b) Pursuant to 40 CFR 60.7, the Permittee shall submit all required notifications and reports to:

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

and

City of Indianapolis
Office of Environmental Services
Air Quality Management Section
2700 South Belmont Avenue
Indianapolis Indiana 46221-2097

D.1.11 New Source Performance Standards for Nonmetallic Mineral Processing Plants [40 CFR 60.670, Subpart OOO][326 IAC 12]

Pursuant to 40 CFR 60.670, Subpart OOO (New Source Performance Standards for Nonmetallic Mineral Processing Plants), the five (5) covered limestone conveyors, identified as T-2, the two (2) limestone storage silos, identified as L-1 and L-2, the two (2) enclosed wet ball mills (grinding mills), identified as BM-1 and BM-2, and the five (5) covered gypsum conveyors, identified as T-4, shall each comply with the following:

§ 60.670 Applicability and designation of affected facility.

(a)(1) Except as provided in paragraphs (a)(2), (b), (c), and (d) of this section, the provisions of this subpart are applicable to the following affected facilities in fixed or portable nonmetallic mineral processing plants: each crusher, grinding mill, screening operation, bucket elevator, belt conveyor, bagging operation, storage bin, enclosed truck or railcar loading station. Also, crushers and grinding mills at hot mix asphalt facilities that reduce the size of nonmetallic minerals embedded in recycled asphalt pavement and subsequent affected facilities up to, but not including, the first storage silo or bin are subject to the provisions of this subpart.

(2) The provisions of this subpart do not apply to the following operations: All facilities located in underground mines; and stand-alone screening operations at plants without crushers or grinding mills.

(b) An affected facility that is subject to the provisions of subpart F or I or that follows in the plant process any facility subject to the provisions of subparts F or I of this part is not subject to the provisions of this subpart.

(c) Facilities at the following plants are not subject to the provisions of this subpart:

(1) Fixed sand and gravel plants and crushed stone plants with capacities, as defined in §60.671, of 23 megagrams per hour (25 tons per hour) or less;

(2) Portable sand and gravel plants and crushed stone plants with capacities, as defined in §60.671, of 136 megagrams per hour (150 tons per hour) or less; and

(3) Common clay plants and pumice plants with capacities, as defined in §60.671, of 9 megagrams per hour (10 tons per hour) or less.

(d)(1) When an existing facility is replaced by a piece of equipment of equal or smaller size, as defined in §60.671, having the same function as the existing facility, the new facility is exempt from the provisions of §§60.672, 60.674, and 60.675 except as provided for in paragraph (d)(3) of this section.

(2) An owner or operator complying with paragraph (d)(1) of this section shall submit the information required in §60.676(a).

(3) An owner or operator replacing all existing facilities in a production line with new facilities does not qualify for the exemption described in paragraph (d)(1) of this section and must comply with the provisions of §§60.672, 60.674 and 60.675.

(e) An affected facility under paragraph (a) of this section that commences construction, reconstruction, or modification after August 31, 1983 is subject to the requirements of this part.

(f) Table 1 of this subpart specifies the provisions of subpart A of this part 60 that apply and those that do not apply to owners and operators of affected facilities subject to this subpart.

[51 FR 31337, Aug. 1, 1985, as amended at 62 FR 31359, June 9, 1997]

§ 60.671 Definitions.

All terms used in this subpart, but not specifically defined in this section, shall have the meaning given them in the Act and in subpart A of this part.

Bagging operation means the mechanical process by which bags are filled with nonmetallic minerals.

Belt conveyor means a conveying device that transports material from one location to another by means of an endless belt that is carried on a series of idlers and routed around a pulley at each end.

Bucket elevator means a conveying device of nonmetallic minerals consisting of a head and foot assembly which supports and drives an endless single or double strand chain or belt to which buckets are attached.

Building means any frame structure with a roof.

Capacity means the cumulative rated capacity of all initial crushers that are part of the plant.

Capture system means the equipment (including enclosures, hoods, ducts, fans, dampers, etc.) used to capture and transport particulate matter generated by one or more process operations to a control device.

Control device means the air pollution control equipment used to reduce particulate matter emissions released to the atmosphere from one or more process operations at a nonmetallic mineral processing plant.

Conveying system means a device for transporting materials from one piece of equipment or location to another location within a plant. Conveying systems include but are not limited to the following: Feeders, belt conveyors, bucket elevators and pneumatic systems.

Crusher means a machine used to crush any nonmetallic minerals, and includes, but is not limited to, the following types: jaw, gyratory, cone, roll, rod mill, hammermill, and impactor.

Enclosed truck or railcar loading station means that portion of a nonmetallic mineral processing plant where nonmetallic minerals are loaded by an enclosed conveying system into enclosed trucks or railcars.

Fixed plant means any nonmetallic mineral processing plant at which the processing equipment specified in §60.670(a) is attached by a cable, chain, turnbuckle, bolt or other means (except electrical connections) to any anchor, slab, or structure including bedrock.

Fugitive emission means particulate matter that is not collected by a capture system and is released to the atmosphere at the point of generation.

Grinding mill means a machine used for the wet or dry fine crushing of any nonmetallic mineral. Grinding mills include, but are not limited to, the following types: hammer, roller, rod, pebble and ball, and fluid energy. The grinding mill includes the air conveying system, air separator, or air classifier, where such systems are used.

Initial crusher means any crusher into which nonmetallic minerals can be fed without prior crushing in the plant.

Nonmetallic mineral means any of the following minerals or any mixture of which the majority is any of the following minerals:

(a) Crushed and Broken Stone, including Limestone, Dolomite, Granite, Traprock, Sandstone, Quartz, Quartzite, Marl, Marble, Slate, Shale, Oil Shale, and Shell.

(b) Sand and Gravel.

(c) Clay including Kaolin, Fireclay, Bentonite, Fuller's Earth, Ball Clay, and Common Clay.

(d) Rock Salt.

(e) Gypsum.

(f) Sodium Compounds, including Sodium Carbonate, Sodium Chloride, and Sodium Sulfate.

(g) Pumice.

(h) Gilsonite.

(i) Talc and Pyrophyllite.

(j) Boron, including Borax, Kernite, and Colemanite.

(k) Barite.

(l) Fluorospar.

(m) Feldspar.

(n) Diatomite.

(o) Perlite.

(p) Vermiculite.

(q) Mica.

(r) Kyanite, including Andalusite, Sillimanite, Topaz, and Dumortierite.

Nonmetallic mineral processing plant means any combination of equipment that is used to crush or grind any nonmetallic mineral wherever located, including lime plants, power plants, steel mills, asphalt concrete plants, portland cement plants, or any other facility processing nonmetallic minerals except as provided in §60.670 (b) and (c).

Portable plant means any nonmetallic mineral processing plant that is mounted on any chassis or skids and may be moved by the application of a lifting or pulling force. In addition, there shall be no cable, chain, turnbuckle, bolt or other means (except electrical connections) by which any piece of equipment is attached or clamped to any anchor, slab, or structure, including bedrock that must be removed prior to the application of a lifting or pulling force for the purpose of transporting the unit.

Production line means all affected facilities (crushers, grinding mills, screening operations, bucket elevators, belt conveyors, bagging operations, storage bins, and enclosed truck and railcar loading stations) which are directly connected or are connected together by a conveying system.

Screening operation means a device for separating material according to size by passing undersize material through one or more mesh surfaces (screens) in series, and retaining oversize material on the mesh surfaces (screens).

Size means the rated capacity in tons per hour of a crusher, grinding mill, bucket elevator, bagging operation, or enclosed truck or railcar loading station; the total surface area of the top screen of a screening operation; the width of a conveyor belt; and the rated capacity in tons of a storage bin.

Stack emission means the particulate matter that is released to the atmosphere from a capture system.

Storage bin means a facility for storage (including surge bins) or nonmetallic minerals prior to further processing or loading.

Transfer point means a point in a conveying operation where the nonmetallic mineral is transferred to or from a belt conveyor except where the nonmetallic mineral is being transferred to a stockpile.

Truck dumping means the unloading of nonmetallic minerals from movable vehicles designed to transport nonmetallic minerals from one location to another. Movable vehicles include but are not limited to: trucks, front end loaders, skip hoists, and railcars.

Vent means an opening through which there is mechanically induced air flow for the purpose of exhausting from a building air carrying particulate matter emissions from one or more affected facilities.

Wet mining operation means a mining or dredging operation designed and operated to extract any nonmetallic mineral regulated under this subpart from deposits existing at or below the water table, where the nonmetallic mineral is saturated with water.

Wet screening operation means a screening operation at a nonmetallic mineral processing plant which removes unwanted material or which separates marketable fines from the product by a washing process which is designed and operated at all times such that the product is saturated with water.

[51 FR 31337, Aug. 1, 1985, as amended at 62 FR 31359, June 9, 1997]

§ 60.672 Standard for particulate matter.

(a) On and after the date on which the performance test required to be conducted by §60.8 is completed, no owner or operator subject to the provisions of this subpart shall cause to be discharged into the atmosphere from any transfer point on belt conveyors or from any other affected facility any stack emissions which:

(1) Contain particulate matter in excess of 0.05 g/dscm (0.022 gr/dscf); and

(2) Exhibit greater than 7 percent opacity, unless the stack emissions are discharged from an affected facility using a wet scrubbing control device.

(b) On and after the sixtieth day after achieving the maximum production rate at which the affected facility will be operated, but not later than 180 days after initial startup as required under §60.11 of this part, no owner or operator subject to the provisions of this subpart shall cause to be discharged into the atmosphere from any transfer point on belt conveyors or from any other affected facility any fugitive emissions which exhibit greater than 10 percent opacity, except as provided in paragraphs (c), (d), and (e) of this section.

(c) On and after the sixtieth day after achieving the maximum production rate at which the affected facility will be operated, but not later than 180 days after initial startup as required under §60.11 of this part, no owner or operator shall cause to be discharged into the atmosphere from any crusher, at which a capture system is not used, fugitive emissions which exhibit greater than 15 percent opacity.

(d) Truck dumping of nonmetallic minerals into any screening operation, feed hopper, or crusher is exempt from the requirements of this section.

(e) If any transfer point on a conveyor belt or any other affected facility is enclosed in a building, then each enclosed affected facility must comply with the emission limits in paragraphs (a), (b) and (c) of this section, or the building enclosing the affected facility or facilities must comply with the following emission limits:

(1) No owner or operator shall cause to be discharged into the atmosphere from any building enclosing any transfer point on a conveyor belt or any other affected facility any visible fugitive emissions except emissions from a vent as defined in §60.671.

(2) No owner or operator shall cause to be discharged into the atmosphere from any vent of any building enclosing any transfer point on a conveyor belt or any other affected facility emissions which exceed the stack emissions limits in paragraph (a) of this section.

(f) On and after the sixtieth day after achieving the maximum production rate at which the affected facility will be operated, but not later than 180 days after initial startup as required under §60.11 of this part, no owner or operator shall cause to be discharged into the atmosphere from any baghouse that controls emissions from only an individual, enclosed storage bin, stack emissions which exhibit greater than 7 percent opacity.

(g) Owners or operators of multiple storage bins with combined stack emissions shall comply with the emission limits in paragraph (a)(1) and (a)(2) of this section.

[51 FR 31337, Aug. 1, 1985, as amended at 62 FR 31359, June 9, 1997; 65 FR 61778, Oct. 17, 2000]

§ 60.673 Reconstruction.

(a) The cost of replacement of ore-contact surfaces on processing equipment shall not be considered in calculating either the “fixed capital cost of the new components” or the “fixed capital cost that would be required to construct a comparable new facility” under §60.15. Ore-contact surfaces are crushing surfaces; screen meshes, bars, and plates; conveyor belts; and elevator buckets.

(b) Under §60.15, the “fixed capital cost of the new components” includes the fixed capital cost of all depreciable components (except components specified in paragraph (a) of this section) which are or will be replaced pursuant to all continuous programs of component replacement commenced within any 2-year period following August 31, 1983.

§ 60.675 Test methods and procedures.

(a) In conducting the performance tests required in §60.8, the owner or operator shall use as reference methods and procedures the test methods in appendix A of this part or other methods and procedures as specified in this section, except as provided in §60.8(b). Acceptable alternative methods and procedures are given in paragraph (e) of this section.

(b) The owner or operator shall determine compliance with the particulate matter standards in §60.672(a) as follows:

(1) Method 5 or Method 17 shall be used to determine the particulate matter concentration. The sample volume shall be at least 1.70 dscm (60 dscf). For Method 5, if the gas stream being sampled is at ambient temperature, the sampling probe and filter may be operated without heaters. If the gas stream is above ambient temperature, the sampling probe and filter may be operated at a temperature high enough, but no higher than 121 °C (250 °F), to prevent water condensation on the filter.

(2) Method 9 and the procedures in §60.11 shall be used to determine opacity.

(c)(1) In determining compliance with the particulate matter standards in §60.672 (b) and (c), the owner or operator shall use Method 9 and the procedures in §60.11, with the following additions:

(i) The minimum distance between the observer and the emission source shall be 4.57 meters (15 feet).

(ii) The observer shall, when possible, select a position that minimizes interference from other fugitive emission sources (e.g., road dust). The required observer position relative to the sun (Method 9, Section 2.1) must be followed.

(iii) For affected facilities using wet dust suppression for particulate matter control, a visible mist is sometimes generated by the spray. The water mist must not be confused with particulate matter emissions and is not to be considered a visible emission. When a water mist of this nature is present, the observation of emissions is to be made at a point in the plume where the mist is no longer visible.

(2) In determining compliance with the opacity of stack emissions from any baghouse that controls emissions only from an individual enclosed storage bin under §60.672(f) of this subpart, using Method 9, the duration of the Method 9 observations shall be 1 hour (ten 6-minute averages).

(3) When determining compliance with the fugitive emissions standard for any affected facility described under §60.672(b) of this subpart, the duration of the Method 9 observations may be reduced from 3 hours (thirty 6-minute averages) to 1 hour (ten 6-minute averages) only if the following conditions apply:

(i) There are no individual readings greater than 10 percent opacity; and

(ii) There are no more than 3 readings of 10 percent for the 1-hour period.

(4) When determining compliance with the fugitive emissions standard for any crusher at which a capture system is not used as described under §60.672(c) of this subpart, the duration of the Method 9 observations may be reduced from 3 hours (thirty 6-minute averages) to 1 hour (ten 6-minute averages) only if the following conditions apply:

(i) There are no individual readings greater than 15 percent opacity; and

(ii) There are no more than 3 readings of 15 percent for the 1-hour period.

(d) In determining compliance with §60.672(e), the owner or operator shall use Method 22 to determine fugitive emissions. The performance test shall be conducted while all affected facilities inside the building

are operating. The performance test for each building shall be at least 75 minutes in duration, with each side of the building and the roof being observed for at least 15 minutes.

(e) The owner or operator may use the following as alternatives to the reference methods and procedures specified in this section:

(1) For the method and procedure of paragraph (c) of this section, if emissions from two or more facilities continuously interfere so that the opacity of fugitive emissions from an individual affected facility cannot be read, either of the following procedures may be used:

(i) Use for the combined emission stream the highest fugitive opacity standard applicable to any of the individual affected facilities contributing to the emissions stream.

(ii) Separate the emissions so that the opacity of emissions from each affected facility can be read.

[54 FR 6680, Feb. 14, 1989, as amended at 62 FR 31360, June 9, 1997]

§ 60.676 Reporting and recordkeeping.

(a) Each owner or operator seeking to comply with §60.670(d) shall submit to the Administrator the following information about the existing facility being replaced and the replacement piece of equipment.

(1) For a crusher, grinding mill, bucket elevator, bagging operation, or enclosed truck or railcar loading station:

(i) The rated capacity in megagrams or tons per hour of the existing facility being replaced and

(ii) The rated capacity in tons per hour of the replacement equipment.

(2) For a screening operation:

(i) The total surface area of the top screen of the existing screening operation being replaced and

(ii) The total surface area of the top screen of the replacement screening operation.

(3) For a conveyor belt:

(i) The width of the existing belt being replaced and

(ii) The width of the replacement conveyor belt.

(4) For a storage bin:

(i) The rated capacity in megagrams or tons of the existing storage bin being replaced and

(ii) The rated capacity in megagrams or tons of replacement storage bins.

(f) The owner or operator of any affected facility shall submit written reports of the results of all performance tests conducted to demonstrate compliance with the standards set forth in §60.672 of this subpart, including reports of opacity observations made using Method 9 to demonstrate compliance with §60.672(b), (c), and (f), and reports of observations using Method 22 to demonstrate compliance with §60.672(e).

(h) The subpart A requirement under §60.7(a)(2) for notification of the anticipated date of initial startup of an affected facility shall be waived for owners or operators of affected facilities regulated under this subpart.

(i) A notification of the actual date of initial startup of each affected facility shall be submitted to the Administrator.

(1) For a combination of affected facilities in a production line that begin actual initial startup on the same day, a single notification of startup may be submitted by the owner or operator to the Administrator. The notification shall be postmarked within 15 days after such date and shall include a description of each affected facility, equipment manufacturer, and serial number of the equipment, if available.

(j) The requirements of this section remain in force until and unless the Agency, in delegating enforcement authority to a State under section 111(c) of the Act, approves reporting requirements or an alternative means of compliance surveillance adopted by such States. In that event, affected facilities within the State will be relieved of the obligation to comply with the reporting requirements of this section, provided that they comply with requirements established by the State.

[51 FR 31337, Aug. 1, 1985, as amended at 54 FR 6680, Feb. 14, 1989; 62 FR 31360, June 9, 1997; 65 FR 61778, Oct. 17, 2000]

SECTION D.2 EMISSIONS UNIT OPERATION CONDITIONS

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

- (c) Coal transfer to an outdoor storage pile, identified as T-5, with a maximum capacity to transfer 2,500,000 tons of coal per year and using no control. Five (5) covered coal conveyors, identified as T-6, with a maximum capacity to convey 2,500,000 tons of coal per year and using no control. Under 40 CFR 60.250, Subpart Y, T-6 is considered an affected facility.

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

A Preventive Maintenance Plan, in accordance with Section C - Preventive Maintenance Plan, of this permit, is required for emission unit T-5 and T-6 and any control device.

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

D.2.2 Visible Emissions Notations

- (a) Visible emission notations of each of the five (5) covered coal conveyors identified as T-6 shall be performed once per week during normal daylight operations when exhausting to the atmosphere. A trained employee shall record whether emissions are normal or abnormal.
- (b) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.
- (c) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.
- (d) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.
- (e) If abnormal emissions are observed or if visible emissions are observed crossing the property, right of way, or easement on which the source is located, the Permittee shall take reasonable response steps in accordance with Section C – Response to Excursions or Exceedances. Failure to take response steps in accordance with Section C - Response to Excursions or Exceedances shall be considered a deviation from this permit.

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

D.2.3 Record Keeping Requirements

- (a) To document compliance with Condition D.2.2, the Permittee shall maintain records of weekly visible emission notations of the five (5) covered coal conveyors identified as T-6.
- (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.2.4 General Provisions Relating to NSPS [40 CFR Part 60, Subpart A][326 IAC 12-1]

- (a) The provisions of 40 CFR Part 60, Subpart A - General Provisions, which are incorporated by reference in 326 IAC 12-1, apply to the five (5) covered coal conveyors, identified as T-6, as described in this section except when otherwise specified in 40 CFR Part 60, Subpart Y.
- (b) Pursuant to 40 CFR 60.7, the Permittee shall submit all required notifications and reports to:

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

and

City of Indianapolis
Office of Environmental Services
Air Quality Management Section
2700 South Belmont Avenue
Indianapolis Indiana 46221-2097

D.2.5 Standards of Performance for Coal Preparation Plants [40 CFR 60.250, Subpart Y][326 IAC 12]

Pursuant to 40 CFR 60.250, Subpart Y (Standards of Performance for Coal Preparation Plants), the five (5) covered coal conveyors, identified as T-6, shall each comply with the following:

§ 60.250 Applicability and designation of affected facility.

(a) The provisions of this subpart are applicable to any of the following affected facilities in coal preparation plants which process more than 181 Mg (200 tons) per day: Thermal dryers, pneumatic coal-cleaning equipment (air tables), coal processing and conveying equipment (including breakers and crushers), coal storage systems, and coal transfer and loading systems.

(b) Any facility under paragraph (a) of this section that commences construction or modification after October 24, 1974, is subject to the requirements of this subpart.

[42 FR 37938, July 25, 1977; 42 FR 44812, Sept. 7, 1977, as amended at 65 FR 61757, Oct. 17, 2000]

§ 60.251 Definitions.

As used in this subpart, all terms not defined herein have the meaning given them in the Act and in subpart A of this part.

(a) *Coal preparation plant* means any facility (excluding underground mining operations) which prepares coal by one or more of the following processes: breaking, crushing, screening, wet or dry cleaning, and thermal drying.

(b) *Bituminous coal* means solid fossil fuel classified as bituminous coal by ASTM Designation D388–77, 90, 91, 95, or 98a (incorporated by reference—see §60.17).

(c) *Coal* means all solid fossil fuels classified as anthracite, bituminous, subbituminous, or lignite by ASTM Designation D388–77, 90, 91, 95, or 98a (incorporated by reference—see §60.17).

(d) *Cyclonic flow* means a spiraling movement of exhaust gases within a duct or stack.

(e) *Thermal dryer* means any facility in which the moisture content of bituminous coal is reduced by contact with a heated gas stream which is exhausted to the atmosphere.

(f) *Pneumatic coal-cleaning equipment* means any facility which classifies bituminous coal by size or separates bituminous coal from refuse by application of air stream(s).

(g) *Coal processing and conveying equipment* means any machinery used to reduce the size of coal or to separate coal from refuse, and the equipment used to convey coal to or remove coal and refuse from the machinery. This includes, but is not limited to, breakers, crushers, screens, and conveyor belts.

(h) *Coal storage system* means any facility used to store coal except for open storage piles.

(i) *Transfer and loading system* means any facility used to transfer and load coal for shipment.

[41 FR 2234, Jan. 15, 1976, as amended at 48 FR 3738, Jan. 27, 1983; 65 FR 61757, Oct. 17, 2000]

§ 60.252 Standards for particulate matter.

(c) On and after the date on which the performance test required to be conducted by §60.8 is completed, an owner or operator subject to the provisions of this subpart shall not cause to be discharged into the atmosphere from any coal processing and conveying equipment, coal storage system, or coal transfer and loading system processing coal, gases which exhibit 20 percent opacity or greater.

[41 FR 2234, Jan. 15, 1976, as amended at 65 FR 61757, Oct. 17, 2000]

§ 60.254 Test methods and procedures.

(b) The owner or operator shall determine compliance with the particular matter standards in § 60.252 as follows:

(2) Method 9 and the procedures in §60.11 shall be used to determine opacity.

[54 FR 6671, Feb. 14, 1989]

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

**COMPLIANCE BRANCH
100 North Senate Avenue
Indianapolis, Indiana 46204-2251
Phone: 317-233-5674
Fax: 317-233-5967**

and

**Indianapolis Office of Environmental Services
Air Compliance
2700 South Belmont Avenue
Indianapolis, IN 46221**

**PART 70 SOURCE MODIFICATION
CERTIFICATION**

Source Name: Indianapolis Power & Light Company – Harding Street
Generating Station
Source Address: 3700 South Harding Street, Indianapolis, IN 46217
Mailing Address: 3700 South Harding Street, Indianapolis, IN 46217
Significant Source Modification No.: 097-21938-00033

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
and
INDIANAPOLIS OFFICE OF ENVIRONMENTAL SERVICES
AIR COMPLIANCE**

**PART 70 SOURCE MODIFICATION
EMERGENCY OCCURRENCE REPORT**

Source Name: Indianapolis Power & Light Company – Harding Street
Generating Station
Source Address: 3700 South Harding Street, Indianapolis, IN 46217
Mailing Address: 3700 South Harding Street, Indianapolis, IN 46217
Significant Source Modification No.: 097-21938-00033

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

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

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

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

Page 2 of 2

Date/Time Emergency started:
Date/Time Emergency was corrected:
Was the facility being properly operated at the time of the emergency? Y N
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: _____

A certification is not required for this report.

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

**PART 70 SOURCE MODIFICATION
 QUARTERLY DEVIATION AND COMPLIANCE MONITORING REPORT**

Source Name: Indianapolis Power & Light Company – Harding Street
 Generating Station
 Source Address: 3700 South Harding Street, Indianapolis, IN 46217
 Mailing Address: 3700 South Harding Street, Indianapolis, IN 46217
 Significant Source Modification No.: 097-21938-00033

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".	
<input type="checkbox"/> NO DEVIATIONS OCCURRED THIS REPORTING PERIOD.	
<input type="checkbox"/> 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.

Mail to: City of Indianapolis
Office of Environmental Services
2700 South Belmont
Indianapolis, IN 46221

and

IDEM, OAQ
Permit Administration & Development Section
100 North Senate Avenue
Indianapolis, IN 46204-2251

Company Name: Indianapolis Power & Light Company – Harding Street Generating Station
Mailing Address: 3700 South Harding Street, Indianapolis, Indiana 46217

Affidavit of Construction

I, _____, being duly sworn upon my oath, depose and say:
(Name of the Authorized Representative)

1. I live in _____ County, Indiana and being of sound mind and over twenty-one (21) years of age, I am competent to give this affidavit.
2. I hold the position of _____ for _____.
(Title) (Company Name)
3. By virtue of my position with _____, I have personal
(Company Name)
knowledge of the representations contained in this affidavit and am authorized to make
these representations on behalf of _____.
(Company Name)
4. I hereby certify that Indianapolis Power & Light Company – Harding Street Generating Station, located at 3700 South Harding Street, Indianapolis, Indiana, 46217, has constructed the Unit 70 FGD Scrubber material handling support in conformity with the requirements and intent of the permit application received by the Office of Environmental Services and the Office of Air Quality on November 1, 2005 and as permitted pursuant to the Significant Source Modification **No. 097-21938, Plant ID No. 097-00033** issued on _____.
5. Additional operations/facilities were constructed/substituted as described in the attachment to this document and were not made in accordance with the Significant Source Modification (Delete this statement if it does not apply.)
6. I hereby certify that _____ is subject to the Part 70 Permit Program
(Company Name)
and has submitted their Part 70 Operating Permit Application, which includes Unit 70 FGD Scrubber material handling support facilities.

Further Affiant said not.

I affirm under penalties of perjury that the representations contained in this Affidavit are true, to the best of my information and belief.

Signature

Date

STATE OF INDIANA)
SS)
COUNTY OF _____)

Subscribed and sworn to me, a notary public in and for _____ County and State of Indiana
on this _____ day of _____, 20_____.

My Commission expires:

Signature

Date

**Indiana Department of Environmental Management
Office of Air Quality
and
City of Indianapolis
Office of Environmental Services**

Addendum to the Technical Support Document
for a Part 70 Significant Source Modification

Source Name: Indianapolis Power & Light Company – Harding Street Generating Station
Source Location: 3700 South Harding Street, Indianapolis, IN 46217
County: Marion County
SIC Code: 4911
Significant Source Modification No.: 097-21938-00033
Permit Reviewer: M. Caraher

On March 3, 2006, the Office of Air Quality (OAQ) and the Office of Environmental Services (OES) had a notice published in the Indianapolis Star, Indianapolis, Indiana, stating that Indianapolis Power & Light Company – Harding Street Generating Station (hereafter, referred to as IPL) had applied for a Part 70 Significant Source Modification to the construct, limestone, gypsum and coal material handling support facilities for the Unit 70 Flue Gas Desulfurization (FGD) Scrubber project. The notice also stated that OAQ and OES proposed to issue a permit for this operation and provided information on how the public could review the proposed permit and other documentation. Finally, the notice informed interested parties that there was a period of thirty (30) days to provide comments on whether or not this permit should be issued as proposed.

On March 31, 2006, IPL submitted comments on the draft Part 70 Significant Source Modification. Upon further review, the OAQ and OES have decided to make the following revisions to the Part 70 Significant Source Modification. The TSD will remain as it originally appeared when published. Changes to the permit or technical support material that occur after the permit has published for public notice are documented in this Addendum to the Technical Support Document. This accomplishes the desired result of ensuring that these types of concerns are documented and part of the record regarding this permit decision. Bolded language has been added and the language with ~~strikeout~~ has been deleted.

The comments and responses, including changes to the permit, are as follows:

Comment # 1

Section D.1, Facility Description, (a) (page 16 of 36): In the next to last line of paragraph “a”, please change “ball mill grinding mills” to “wet ball mills (grinding mills)”.

Response to Comment # 1

The requested change to the description affects both Condition A.3 (Emission Units and Pollution Control Equipment Summary and (a) in the description box in Section D.1 of the Part 70 Significant Source Modification. Condition A.3 and the description box in Section D.1(a) are each revised as follows:

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

This stationary source is approved to construct, maintain, and operated the following emissions units and pollution control devices:

- (a) Limestone transfer from truck(s)/loader(s) to the conveyor system, identified as T-1, with a maximum capacity to transfer 190,000 tons of limestone per year and using no control. Five (5) covered limestone conveyors, identified as T-2, with a maximum capacity to convey 190,000 tons of limestone per year and using no control. Two (2) 630 ton capacity limestone storage silos, identified as L-1 and L-2, using bin vents LC-1 and LC-2 as control, and exhausting to stack/vent LSV-1 and LSV-2. Two (2) weigh feeders which transfer limestone from the silos to two (2) enclosed wet ball mills (grinding mills) for grinding limestone, identified as BM-1 and BM-2. The **wet ball mills (grinding mills)** ~~ball mill grinding mills~~ are located in a covered building. Under 40 CFR 60.670, Subpart OOO, T-2, L-1, L-2, BM-1 and BM-2 are each considered an affected facility.

SECTION D.1 EMISSIONS UNITS OPERATION CONDITIONS

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

- (a) Limestone transfer from truck(s)/loader(s) to the conveyor system, identified as T-1, with a maximum capacity to transfer 190,000 tons of limestone per year and using no control. Five (5) covered limestone conveyors, identified as T-2, with a maximum capacity to convey 190,000 tons of limestone per year and using no control. Two (2) 630 ton capacity limestone storage silos, identified as L-1 and L-2, using bin vents LC-1 and LC-2 as control, and exhausting to stack/vent LSV-1 and LSV-2. Two (2) weigh feeders which transfer limestone from the silos to the two (2) enclosed wet ball mills (grinding mills) for grinding limestone identified, as BM-1 and BM-2. The **wet ball mills (grinding mills)** ~~ball mill grinding mills~~ are located in a covered building. Under 40 CFR 60.670, Subpart OOO, T-2, L-1, L-2, BM-1 and BM-2 are each considered an affected facility.
- (b) Gypsum transfer, identified as T-3, with a maximum capacity to transfer 305,000 tons of gypsum per year and using no control. Five (5) covered gypsum conveyors, identified as T-4, with a maximum capacity to convey 305,000 tons of gypsum and using no control. Under 40 CFR 60.670, Subpart OOO, T-4 is considered an affected facility.

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

Comment # 2

Section D.1.7 Parametric Monitoring, first paragraph (page 17 & 18 of 36): For the limestone silos, IPL does not currently know the design or the manufacturer of the baghouses to be used. Thus, IPL cannot be assured that the “normal range of 3.0 and 6.0” specified in the permit would, in fact, be appropriate for the yet-to-be-designed baghouses. IPL again requests that the phrase, “or as recommended by the manufacturer” be inserted into the text as alternative to the 3 to 6 inch specification. IPL believes this would be advantageous to the possible alternative of having to reopen and modify the permit if, at a later date, it becomes clear that the 3.0 to 6.0 range is not appropriate for the selected baghouses. Please understand that IPL does not oppose taking the reading and keeping records, it just wants to make sure that the “target” is the correct one. Also, there is some possibility that the type of baghouses installed may not be designed for a pressure drop meter, such as sock baghouses. The ultimate goal of IPL is to build into this permit provision enough flexibility to allow the requirement to reflect the realities of the installed equipment, without having to reopen the permit.

IPL is recommending the following proposed language:

For a baghouse equipped with a pressure gauge, the Permittee shall record the pressure drop across LC-1 and LC-2, at least once per day when the limestone silos are loaded or unloaded. When for any one reading, the pressure drop is outside the normal range of 3.0 and 6.0 inches of water, a range established during the latest stack test, or as recommended by the manufacturer, the Permittee shall take reasonable response steps in accordance with Section C - Response to Excursions or Exceedances.

Response to Comment # 2

IPL must notify IDEM, OAQ and OES in writing if the manufacturer's recommended range is outside the normal range of 3.0 to 6.0 inches of water, if parametric monitoring should no longer be an applicable requirement or if a range established during the latest stack test that demonstrates compliance with an applicable emission limit indicates a different range than 3.0 to 6.0 inches of water. The appropriate permit amendment or modification will be made at that time. There is no change to Condition D.1.7.

Comment # 3

Technical Support Document, Testing Requirements Table, (Page 13 of 13): The table states that testing is required every 5 years for the enclosed wet ball mills that will be located inside a building. The ball mills are water-tight rotating mills containing water, limestone, and steel balls. The rotations cause the balls to breakup the limestone and create a fine limestone slurry. The slurry is then used in the FGD scrubber to react with sulfur dioxide, created during the coal combustion process. The limestone (calcium carbonate) slurry reacts with the sulfur dioxide (SO₂) to produce calcium sulfate and calcium sulfite. The calcium sulfite is converted into calcium carbonate which is gypsum. As noted previously, there are no vents or other emission sources for the wet ball mills on which to conduct opacity testing. The TSD correctly shows no potential air emissions from the enclosed wet ball mills located in a building. IPL requests that the testing requirement in the permit and the Technical Support Document be deleted. One, as a practical matter, cannot observe opacity where there is no emission point for that opacity.

If this request to delete opacity testing is determined not to be possible, based on interpretations of 40 CFR 60, Subpart 000, IPL requests that the permit or the Technical Support Document recognize the likely inability of IPL to strictly comply with opacity testing protocol for a system that has no emission point and is located within a building.

Response to Comment # 3

On November 3, 2005, the Indianapolis Power & Light Company – Harding Street Generating Station stated in the Unit 70 Flue Gas Desulfurization (FGD) Scrubber project application that 40 CFR 60, Subpart 000 is an applicable requirement for limestone crushing in the wet ball mills (grinding mills) to be installed at the source. OAQ and OES have verified that limestone crushing and limestone and gypsum material handling for the Unit 70 FGD Scrubber Project is subject to 40 CFR 60.670, Subpart 000 (New Source Performance Standards for Nonmetallic Mineral Processing Plants) because, as long as crushing or grinding occurs at a nonmetallic mineral processing plant, any affected facility listed in 40 CFR 60.670 is subject to Subpart 000. As a result, the wet ball mills (grinding mills) are subject to one (1) or more of the provisions of 40 CFR 60.672 as stated in Section D.1 of the Part 70 Significant Source Modification. 40 CFR 60.672(e) contains the provisions for affected facilities located inside an enclosed building. Following construction of Unit 70 FGD Scrubber Project crushing and handling facilities, stack testing required by the provisions of 40 CFR 60, Subpart 000 and 40 CFR 60, Subpart A shall be performed and completed pursuant to these provisions and pursuant to Condition C.8 (Performance Testing) of this Part 70 Significant Source Modification, 097-21938-00033. Therefore, there is no change to Part 70 Significant Source Modification, 097-21938-00033.

**Indiana Department of Environmental Management
Office of Air Quality
and
Indianapolis Office of Environmental Services**

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

Source Description and Location
--

Source Name:	Indianapolis Power & Light Company – Harding Street Generating Station
Source Location:	3700 South Harding Street, Indianapolis, IN 46217
County:	Marion County
SIC Code:	4911
Significant Source Modification No.:	097-21938-00033
Permit Reviewer:	M. Caraher

Source Definition

This electric utility generating station consists of two (2) plants:

- (a) **Plant 1** is located at 3700 South Harding Street, Indianapolis, Indiana 46217, and consists of utility boilers and natural gas and distillate oil fired gas turbines combustion units to produce electricity for sale; and
- (b) **Plant 2** is associated with a communications transmitter tower located at 4190 South Harding Street, Indianapolis, Indiana 46217, and consists of one (1) 81 horsepower diesel fired emergency generator identified as Generator # 1.

Since the two (2) plants are located on adjacent or contiguous properties, have the same SIC code and are under common control of the same entity, they will be considered one (1) source, as defined by 326 IAC 2-7-1(22). On January 22, 2002, Plant 2 received from OES an Exemption letter 097-15287-00420. However, Plant 2 is combined with Plant 1 under the source ID of 097-00033.

Existing Approvals

The source submitted an application for a Part 70 Operating Permit on September 13, 1996. At this time, this application is still under review. The source is operating under the following approvals:

- (a) Certificate of Operation 0033-1 through 0033-16, issued by the City of Indianapolis, ERMD on August 3, 1989, for Units 1 through 10, Units 50, 60 and 70 and Units GT1, GT2 and GT3; and
- (b) Construction Permit CP097-2206-00033, issued by IDEM, OAM August 27, 1992, for Unit GT4 and Unit GT5 installation; and
- (c) Construction Permit CP920033-01, issued by the City of Indianapolis, ERMD on September 22, 1992, for Unit GT4 and Unit GT5 installation; and
- (d) Exemption letter, issued by IDEM, OAM on April 19, 1996, for combustion of waste oil in Unit 70; and

- (e) SO₂ portion of Phase I Acid Rain Permit, issued by USEPA Region 5 on September 13, 1994. NO_x portion of Phase I Acid Rain Permit, issued by USEPA Region 5 on September 21, 1994. Permit administratively amended by USEPA Region 5 on May 31, 1995 to change compliance dates for nitrogen oxides compliance plans and to change requirements in NO_x averaging plans consistent with 40 CFR Part 76 (as promulgated on April 13, 1995); and
- (f) Phase II Acid Rain Permit (AR097-5106-00033), issued by the IDEM, OAM on December 31, 1997, for Unit 9, Unit 10, Unit 50, Unit 60, Unit 70, Unit GT4 and Unit GT5.
- (g) Administrative Amendment AAR-097-10326-00033 to the Phase II Acid Rain Permit, issued by IDEM, OAQ on June 17, 2002, for Unit 9, Unit 10, Unit 50, Unit 60, Unit 70, Unit GT4, Unit GT5 and Unit GT6; and
- (h) Exemption letter, issued the City of Indianapolis, ERMD on May 1, 1998, for Unit 50 and Unit 70 landfill gas combustion; and
- (i) Significant Source Modification 097-10952-00033, issued by the City of Indianapolis ERMD on August 17, 1999, for Unit GT6 installation; and
- (j) Minor Permit Modification 097-14666-00033, issued by the City of Indianapolis ERMD on November 9, 2001, which revised 097-10952-00033 to install a different gas turbine as Unit GT6; and
- (k) Exemption letter 097-15287-00420, issued by the City of Indianapolis OES on January 22, 2002, for an emergency generator located at 4190 South Harding Street and identified as Generator #1.
- (l) Interim Significant Source Modification Petition, 097-21938I-00033, issued by the City of Indianapolis OES on January 26, 2006, for limestone, gypsum and coal handling support facilities for Unit 70 Flue Gas Desulfurization (FGD) project.

County Attainment Status

The source is located in Marion County.

Pollutant	Status
PM2.5	nonattainment
PM10	attainment
SO ₂	maintenance attainment
NO ₂	attainment
8-hour Ozone	basic nonattainment
1-hour Ozone	maintenance attainment
CO	attainment
Lead	attainment

- (a) Volatile organic compounds (VOC) and nitrogen oxides (NO_x) are regulated under the Clean Air Act (CAA) for the purposes of attaining and maintaining the National Ambient Air Quality Standards (NAAQS) for ozone. Therefore, VOC and NO_x emissions are considered when evaluating the rule applicability relating to the ozone standards. Marion County has been designated as nonattainment for the 8-hour ozone standard. Therefore, VOC and NO_x emissions were reviewed pursuant to the requirements for Emission Offset, 326 IAC 2-3.
- (b) Marion County has been classified as nonattainment for PM2.5 in 70 FR 943 dated January 5, 2005. Until U.S. EPA adopts specific New Source Review rules for PM2.5

emissions, it has directed states to regulate PM10 emissions as a surrogate for PM2.5 emissions pursuant to the requirements of Emission Offset, 326 IAC 2-3.

- (c) Marion County has been classified as attainment or unclassifiable for PM10, SO₂, CO 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 two hundred fifty million (250,000,000) British thermal units per hour heat input,” it is considered one of the twenty-eight (28) listed source categories, as specified in 326 IAC 2-2-1(gg)(1).
- (e) Fugitive Emissions
 This type of operation is one of the twenty-eight (28) listed source categories under 326 IAC 2-2 or 326 IAC 2-3. In addition, there is an applicable New Source Performance Standard that was in effect on August 7, 1980, specifically 40 CFR Part 60, Subpart Y (Standards of Performance for Coal Preparation Plants). Therefore, 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 (tons/year)
PM	Greater than 250
PM10	Greater than 250
PM2.5	Greater than 250
SO ₂	Greater than 250
VOC	Greater than 100, less than 250
CO	Greater than 250
NO _x	Greater than 250
Lead	Greater than 5

- (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). This existing source is a major stationary source because, the potential to emit Lead or Lead compounds measured as elemental Lead is equal to or greater than 5 tons per year.
- (b) This existing source is a major stationary source under Emission Offset (326 IAC 2-3) because VOC and NO_x emissions, each in excess of 100 tons per year, are considered when evaluating the rule applicability for 8-hour ozone nonattainment. This existing source is a major stationary source under Emission Offset (326 IAC 2-3) because PM2.5 emissions are 100 tons per year or more. Marion County has been classified as nonattainment for PM2.5 in 70 FR 943 dated January 5, 2005. Until U.S. EPA adopts specific New Source Review rules for PM2.5 emissions, it has directed states to regulate PM10 emissions as a surrogate for PM2.5 emissions pursuant to the requirements of Emission Offset (326 IAC 2-3).
- (c) These emissions are based upon the Part 70 Operating Permit application received by IDEM and OES on September 13, 1996, the Minor Permit Modification, 097-14666-00033, issued by OES on November 9, 2001, and on the Exemption letter, 097-15287-00420, issued by OES on January 22, 2002 for an emergency generator identified as Generator #1 located at 4190 South Harding Street.

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:

HAPs	Potential To Emit (tons/year)
Polycyclic Organic Matter	0.74
Formaldehyde	20.2
Selenium Compounds	0.003
Hydrogen Chloride	287.0
Nickel	34.7
Arsenic	18.4
Beryllium	2.3
Cadmium	1.2
Chromium	42.4
Lead	13.8
Manganese	80.4
Mercury	0.5
Hydrogen Fluoride	101.3
TOTAL	602.9

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

Actual Emissions

The following table shows the actual emissions from the source. This information reflects the 2005 Office of air Quality (OAQ) and Indianapolis Office of Environmental Services (OES) emission data.

Pollutant	Actual Emissions (tons/year)
PM	475.1
PM10	112.8
SO ₂	44782.9
VOC	70.1
CO	493.8
NO _x	6228.2
HAP	Not reported

Description of Proposed Modification

This source has been operating under Certificate of Operation 0033-1 through 0033-16, issued by the City of Indianapolis, ERMD on August 3, 1989, and subsequent approvals (see **Existing Approvals** section of TSD). Indianapolis Power & Light Company – Harding Street Generating Station submitted its Part 70 Operating Permit application to IDEM, OAQ and OES on September 13, 1996. The Part 70 Operating Permit, 097-6566-00033, has not been issued.

IDEM, OAQ and OES have reviewed a significant source modification application, submitted by Indianapolis Power & Light Company - Harding Street Generating Station (hereafter, referred to as IPL) on November 3, 2005, relating to the construction of limestone, gypsum and coal material handling support facilities for the Unit 70 Flue Gas Desulfurization (FGD) Scrubber project.

Received limestone is transferred to either of two (2) silos each equipped with a bin vent filter. Limestone (a nonmetallic mineral) is ground with water in one of two new wet ball mills (grinding mills) to produce a slurry of calcium carbonate that is sprayed inside the FGD Scrubber. The

calcium carbonate reacts with the SO₂ and forms calcium sulfate (a.k.a. gypsum, a nonmetallic mineral) slurry. Gypsum is a byproduct of the FGD Scrubber operation. The slurry is piped to a dewatering system. The gypsum slurry is dewatered and a wet commercial grade gypsum is produced. Gypsum is normally stored inside a building to keep it "out of the elements" as it is a product and not a waste. An outside emergency pile is possible if for some reason, the indoor storage capacity is exceeded. This is not a desirable option for IPL as the gypsum needs to be kept out of rain and snow because of the low moisture content required by potential wall board manufacturers and other potential markets. Limestone and gypsum material handling is subject to 40 CFR 60.670, Subpart OOO (New Source Performance Standards for Nonmetallic Mineral Processing Plants) because, as long as crushing or grinding occurs at a nonmetallic mineral processing plant, any affected facility listed in 40 CFR 60.670 is subject to Subpart OOO.

The FGD Scrubber works best with a higher sulfur content coal than what is presently being utilized in Unit 70. The source will construct new separate coal handling conveyors for the higher sulfur content coal. However, the existing coal pulverizers at the source will be used for coal grinding. There will be no increase in the amount of coal stored, ground or burned at the source. The amount of coal handled in the new separate high sulfur coal handling facility is offset by the decrease in coal handled for Unit 70 in the existing coal handling facilities. However, coal conveying for the FGD Scrubber project is subject to 40 CFR 60.250, Subpart Y (Standards of Performance for Coal Preparation Plants) because any affected facility listed in 40 CFR 60.250(a) that commences construction after October 24, 1974 is subject to the provisions of Subpart Y.

The following is a list of the proposed emission unit(s) and pollution control device(s):

- (a) Limestone transfer from truck(s)/loader(s) to the conveyor system, identified as T-1, with a maximum capacity to transfer 190,000 tons of limestone per year and using no control. Five (5) covered limestone conveyors, identified as T-2, with a maximum capacity to convey 190,000 tons of limestone per year and using no control. Two (2) 630 ton capacity limestone storage silos, identified as L-1 and L-2, using bin vents LC-1 and LC-2 as control, and exhausting to stack/vent LSV-1 and LSV-2. Two (2) weigh feeders which transfer limestone from the silos to the two (2) enclosed wet ball mills (grinding mills) for grinding limestone, identified as BM-1 and BM-2. The ball mill grinding mills are located in a covered building. Under 40 CFR 60.670, Subpart OOO, T-2, L-1, L-2, BM-1 and BM-2 are each considered an affected facility.
- (b) Gypsum transfer, identified as T-3, with a maximum capacity to transfer 305,000 tons of gypsum per year and using no control. Five (5) covered gypsum conveyors, identified as T-4, with a maximum capacity to convey 305,000 tons of gypsum and using no control. Under 40 CFR 60.670, Subpart OOO, T-4 is considered an affected facility.
- (c) Coal transfer to an outdoor storage pile, identified as T-5, with a maximum capacity to transfer 2,500,000 tons of coal per year and using no control. Five (5) covered coal conveyors, identified as T-6, with a maximum capacity to convey 2,500,000 tons of coal per year and using no control. Under 40 CFR 60.250, Subpart Y, T-6 is considered an affected facility.

Enforcement Issues

There are no pending enforcement actions.

Stack Summary

Stack ID	Operation	Height (feet)	Diameter (feet)	Flow Rate (acfm)	Temperature (°F)
LSV-1	Limestone Storage Silo (L-1) bin vent	NA	NA	1000	Ambient

Stack ID	Operation	Height (feet)	Diameter (feet)	Flow Rate (acfm)	Temperature (°F)
LSV-2	Limestone Storage Silo (L-2) bin vent	NA	NA	1000	Ambient

Emission Calculations

See Appendix A (pages 1 through 3 of 3) of this 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.

Pollutant	Potential To Emit (tons/year)
PM	77.24
PM10	76.06
PM2.5	75.33
SO ₂	None
VOC	None
CO	None
NO _x	None

HAPs	Potential To Emit (tons/year)
None	NA
TOTAL	NA

This source modification is subject to 326 IAC 2-7-10.5(f)(4), whereby, “any modification with a potential to emit greater than or equal to twenty-five (25) tons per year or more” of PM or PM10 qualifies as a Significant Source Modification.

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 Significant Source Modification, and only to the extent that the effect of the control equipment is made practically enforceable in the permit.

Process/Emission Unit	Potential to Emit (tons/year)						Highest Single HAP / Combined HAP
	PM	PM10	SO ₂	VOC	CO	NO _x	
Limestone Transfer, T-1 & Limestone Covered Transfer, T-2	1.59	0.75	0.0	0.0	0.0	0.0	0.0 / 0.0
Limestone Storage Silos, L-1 & L-2	1.65	1.65	0.0	0.0	0.0	0.0	0.0 / 0.0

Potential to Emit (tons/year)							
Ball Mill grinders, BM-1 & BM-2	0.0	0.0	0.0	0.0	0.0	0.0	0.0 / 0.0
Gypsum Transfer, T-3 & Gypsum Covered Transfer, T-4	0.15	0.07	0.0	0.0	0.0	0.0	0.0 / 0.0
Coal Transfer, T-5 & Coal Covered Transfer, T-6	0.49	0.24	0.0	0.0	0.0	0.0	0.0 / 0.0
Total for Modification	3.89	2.71	0.0	0.0	0.0	0.0	0.0 / 0.0
PSD & Nonattainment New Source Review Significant Level	25	15	40	40	100	40	NA

- (a) This modification to an existing major stationary source is not major because the emissions increase is less than the PSD significant levels. Therefore, pursuant to 326 IAC 2-2, the PSD requirements do not apply.
- (b) Marion County has been designated as nonattainment for PM_{2.5} in 70 FR 943 dated January 5, 2005. According to the April 5, 2005 EPA memo titled “Implementation of New Source Review Requirements in PM_{2.5} Nonattainment Areas” authored by Steve Page, Director of OAQPS, until EPA promulgates the PM_{2.5} major NSR regulations, states should assume that a major stationary source’s PM₁₀ emissions represent PM_{2.5} emissions. IDEM will use the PM₁₀ nonattainment major NSR program as a surrogate to address the requirements of nonattainment major NSR for the PM_{2.5} NAAQS. A significant emissions increase would be a net emissions increase or the potential of fifteen (15) tons per year or greater of PM₁₀. IPL has limited the potential to emit of PM₁₀ from the modification to less than fifteen (15) tons per year. Therefore, assuming that PM₁₀ emissions represent PM_{2.5} emissions, 326 IAC 2-1.1-5 does not apply for PM_{2.5}.

This project has two (2) stack emission points, limestone storage silos L-1 and L-2 using bin vents LC-1 and LC-2 as control and exhausting to stack/vent LSV-1 and LSV-2. 40 CFR 60.670, Subpart OOO (New Source Performance Standards for Nonmetallic Mineral Processing Plants) applies to limestone and gypsum handling. Pursuant to 40 CFR 60.672(a)(1), particulate matter emissions from stacks shall not exceed 0.022 grains per dry standard cubic foot of exhaust air. At an exhaust air flow rate of 1000 dscf/min for each stack exhaust, this is equivalent to particulate matter emissions of 0.19 pounds per hour (0.022 gr/dscf x 1000 dscf/min x 60 min/hr x lb/7000 gr = 0.19 pounds per hour) for each bin vent stack exhaust.

Since this source is considered a major PSD and Emission Offset source and the unrestricted potential to emit of this modification is greater than twenty-five (25) tons of PM per year and fifteen (15) tons of PM₁₀ per year, this source has elected to limit the potential to emit of this modification as follows:

- (a) The PM emission rate from the two (2) limestone storage silos, identified as L-1 and L-2, shall each not exceed 0.022 gr/dscf of exhaust air and shall each not exceed 0.19 pounds per hour. The bin vent filters identified as LC-1 and LC-2 for particulate control shall be in operation and control emissions from the limestone storage silos at all times that the limestone storage silos are loaded or unloaded.
- (b) The PM₁₀ emissions from each limestone storage silo, identified as L-1 and L-2, shall not exceed 0.022 gr/dscf of exhaust air and shall each not exceed 0.19 pounds per hour. The bin vent filters identified as LC-1 and LC-2 for particulate control shall be in operation and control emissions from the limestone storage silos at all times that the limestone storage silos are loaded or unloaded.

Compliance with these emission limits will ensure that the combined potential to emit from emission unit T-1, T-2, L-1, L-2, T-3, T-4, T-5 and T-6 is less than twenty-five (25) tons of PM per year and less than fifteen (15) tons of PM10 per year and, therefore, will render the requirements of 326 IAC 2-2 and 326 IAC 2-3 not applicable.

Federal Rule Applicability Determination

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

(a) This source is subject to the New Source Performance Standards for Nonmetallic Mineral Processing Plants, Subpart OOO (40 CFR 60.670), which is incorporated by reference as 326 IAC 12. The emission units subject to this rule include the following:

- (1) Emission Unit T-2, five (5) covered limestone conveyors;
- (2) Emission Unit L-1 and L-2, two (2) limestone storage silos;
- (3) Emission Unit BM-1 and BM-2, two (2) enclosed wet ball mills (grinding mills) located in a covered building.
- (4) Emission Unit T-4, five (5) covered gypsum conveyors.

Nonapplicable portions of the NSPS will not be included in the permit. These units are each subject to the following portions of Subpart OOO:

- (1) 40 CFR 60.670
- (2) 40 CFR 60.671
- (3) 40 CFR 60.672(a)
- (4) 40 CFR 60.672(b)
- (5) 40 CFR 60.672(c)
- (6) 40 CFR 60.672(d)
- (7) 40 CFR 60.672(e)
- (8) 40 CFR 60.672(f)
- (9) 40 CFR 60.672(g)
- (10) 40 CFR 60.673
- (11) 40 CFR 60.675(a)
- (12) 40 CFR 60.675(b)
- (13) 40 CFR 60.675(c)
- (14) 40 CFR 60.675(d)
- (15) 40 CFR 60.675(e)
- (16) 40 CFR 60.676(a)
- (17) 40 CFR 60.676(f)
- (18) 40 CFR 60.676(h)(i)(1)
- (19) 40 CFR 60.676(j)

(b) This source is subject to the Standards of Performance for Coal Preparation Plants, Subpart Y (40 CFR 60.250), which is incorporated by reference as 326 IAC 12. The emission units subject to this rule include the following:

- (1) Emission Unit T-6, five (5) covered coal conveyors.

Nonapplicable portions of the NSPS will not be included in the permit. These units are each subject to the following portions of Subpart Y.

- (1) 40 CFR 60.250
- (2) 40 CFR 60.251
- (3) 40 CFR 60.252(c)
- (4) 40 CFR 60.254(a)
- (5) 40 CFR 60.254(b)(2)

- (c) 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 significant source modification.
- (d) Pursuant to 40 CFR 64.2, Compliance Assurance Monitoring (CAM) is applicable to new or modified emission units that involve a pollutant-specific emission unit and meet the following criteria:
 - (1) has a potential to emit before controls equal to or greater than the major source threshold for the pollutant involved;
 - (2) is subject to an emission limitation or standard for that pollutant; and
 - (3) uses a control device, as defined in 40 CFR 64.1, to comply with that emission limitation or standard.

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:

Emission Unit	Control Device Used	Emission Limitation (Y/N)	Uncontrolled PTE (tons/year)	Controlled PTE (tons/year)	Major Source Threshold (tons/year)	CAM Applicable (Y/N)	Large Unit (Y/N)
Limestone Storage Silo, L-1	Bin Vent Filter	Y	75.0	< 15 tpy PM10; & < 25 tpy PM	100	N	N
Limestone Storage Silo, L-2	Bin Vent Filter	Y			100	N	N

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

State Rule Applicability Determination

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

326 IAC 2-1.1-5 (Nonattainment New Source Review)

The construction and operation of limestone, gypsum and coal material handling support facilities for the Unit 70 Flue Gas Desulfurization (FGD) Scrubber source is not major under nonattainment NSR because it has the limited potential to emit of less than fifteen (15) tons of PM10 (as a surrogate for PM2.5). Therefore, the Nonattainment New Source Review requirements are not applicable.

326 IAC 2-2 and 2-3 (PSD and Emission Offset)

PSD and Emission Offset applicability is discussed under the Permit Level Determination - PSD and Emission Offset section.

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

The construction and operation of limestone, gypsum and coal material handling support facilities for the Unit 70 Flue Gas Desulfurization (FGD) Scrubber will emit less than ten (10) tons per year for a single HAP and less than twenty-five (25) tons per year for a combination of HAPs. With the construction and operation of these material handling facilities, this source did not construct or reconstruct a major HAP source after July 27, 1997. Therefore, 326 IAC 2-4.1 does not apply.

326 IAC 2-6 (Emission Reporting)

This source is subject to 326 IAC 2-6 (Emission Reporting) because it has the potential to emit more than one hundred (100) tons per year of PM₁₀, NO_x, CO and SO₂. Pursuant to this rule, the owner/operator of the source must annually submit an emission statement for the source. The annual statement must be received by July 1 of each year and contain the minimum requirement as specified in 326 IAC 2-6-4. The submittal should cover the period defined in 326 IAC 2-6-2(8)(Emission Statement Operating Year).

326 IAC 5-1 (Opacity Limitations)

Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary Exemptions), opacity shall meet the following, unless otherwise stated in the permit:

- (a) Opacity shall not exceed an average of thirty percent (30%) 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.

326 IAC 6.5 (Particulate Matter Limitations Except Lake County)

On September 1, 2005, 326 IAC 6-1 (Particulate Rules) was repealed as stated in the Indiana Register (28 IR 3454). All non-Lake County PM limitations have been placed into 326 IAC 6.5 (Particulate Matter Limitations Except Lake County). Marion County sources specifically listed in 326 IAC 6-1-12 (Particulate Rules: Marion County) are now listed in 326 IAC 6.5-6 (Marion County).

Sources or facilities located in Marion County which have the potential to emit greater than one hundred (100) tons per year of particulate or that have actual emissions greater than ten (10) tons per year and are not otherwise limited by 326 IAC 6.5-1-2(b) through (g) or 326 IAC 6.5-6 shall not exceed three hundredths (0.03) grains per dry standard cubic foot of exhaust. This source has the potential to emit one hundred (100) tons or more of particulate. Therefore, pursuant to 326 IAC 6.5-1-2(a), particulate matter emissions from each of the two (2) 630 ton capacity limestone storage silos, identified as L-1 and L-2, using bin vents LC-1 and LC-2 as control and exhausting to stack/vent LSV-1 and LSV-2, shall not exceed three hundredths (0.03) grains per dry standard cubic foot of exhaust air.

The bin vent filters identified as LC-1 and LC-2 for particulate control shall be in operation and control emissions from the limestone storage silos at all times that the limestone storage silos are in operation in order to comply with this limit.

326 IAC 6-3 (Particulate Emission Limitations for Manufacturing Processes)

Pursuant to 326 IAC 6-3-1(c), 326 IAC 6-3 shall not apply if an applicable particulate matter emission limitation established in 326 IAC 6.5-1 (Particulate Matter Limitations Except Lake County) or 326 IAC 12 (New Source Performance Standards) is more stringent than the particulate limitation established in 326 IAC 6-3. This source is subject to 326 IAC 6.5-1 (Particulate Matter Limitations Except Lake County) and 326 IAC 12 (New Source Performance Standards). Therefore, 326 IAC 6-3 (Particulate Emission Limitations for Manufacturing Processes) does not apply to this source.

326 IAC 6-4 (Fugitive Dust Emissions)

A source or sources generating fugitive dust shall be in violation of this rule (326 IAC 6-4) if any of the following criteria are violated:

- (a) A source or combination of sources which cause to exist fugitive dust concentrations greater than sixty-seven percent (67%) in excess of ambient upwind concentrations as determined by the following formula:

$$P = 100 (R-U)/U$$

P = Percentage increase

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

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

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

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

N = Fraction of fugitive dust that is respirable dust;

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

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

- (c) The ground level ambient air concentrations exceed fifty (50) micrograms per cubic meter above background concentrations for a sixty (60) minute period.
- (d) If fugitive dust is visible crossing the boundary or property line of a source. This subdivision may be refuted by factual data expressed in subdivisions (a), (b) or (c) of this section.

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

The addition of limestone, gypsum and coal material handling support facilities for the FGD Scrubber project does not have the potential to emit fugitive particulate matter of twenty five (25) tons per year or more (see TSD Appendix A). Therefore, 326 IAC 6-5 (Fugitive Particulate Matter Emission Limitations) does not apply.

326 IAC 7 (Sulfur Dioxide Rules)

The addition of limestone, gypsum and coal material handling support facilities for the FGD Scrubber project do not have the potential to emit sulfur dioxide of twenty five (25) tons per year or ten (10) pounds per hour of sulfur dioxide (see TSD Appendix A). Therefore, 326 IAC 7 (Sulfur Dioxide Rules) does not apply.

326 IAC 11 (Emission Limitations for Specific Types of Operations)

Limestone, gypsum and coal material handling support facilities (i.e., nonmetallic mineral processing plants) are not specifically identified in 326 IAC 11 (Emission Limitations for Specific Types of Operations). Therefore, 326 IAC 11 (Emission Limitations for Specific Types of Operations) does not apply to this new construction and operation.

326 IAC 12 (New Source Performance Standards)

See discussion under **Federal Rule Applicability Determination** section.

326 IAC 14 (Emission Standards for Hazardous Air Pollutants)

There are no provisions under 326 IAC 14 (and 40 CFR Part 61) for limestone, gypsum or coal material handling support facilities. Therefore, this new construction and operation is not subject to 326 IAC 14 (Emission Standards for Hazardous Air Pollutants).

326 IAC 20 (Hazardous Air Pollutants)

There are no provisions under 326 IAC 20 (and 40 CFR Part 63) for limestone, gypsum or coal material handling support facilities. This new construction and operation is not a constructed or reconstructed HAP source. Therefore, this new construction and operation is not subject to 326 IAC 20 (Hazardous Air Pollutants).

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 and OES, 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:

The bin vent filters identified as LC-1 and LC-2 for particulate control shall be in operation and control emissions from the limestone storage silos at all times that the limestone storage silos are in operation.

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

- (a) Visible emission notations of the limestone storage silo stack/vent LSV-1 and LSV-2 exhausts shall be performed once per day during normal daylight operations when exhausting to the atmosphere. A trained employee shall record whether emissions are normal or abnormal.
- (b) Visible emission notations of the five (5) covered limestone conveyors, identified as T-2 and of the five (5) covered gypsum conveyors, identified as T-4 shall be performed once per week during normal daylight operations. A trained employee shall record whether emissions are normal or abnormal.
- (c) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.
- (d) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.
- (e) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.
- (f) If abnormal emissions are observed or if visible emissions are observed crossing the property, right of way, or easement on which the source is located, the Permittee shall take reasonable response steps in accordance with Section C – Response to Excursions or Exceedances. Failure to take response steps in accordance with Section C - Response to Excursions or Exceedances shall be considered a deviation from this permit.
- (g) The Permittee shall record the pressure drop across LC-1 and LC-2, at least once per day when the limestone silos are in operation. When for any one reading, the pressure drop is

outside the normal range of 3.0 and 6.0 inches of water or a range established during the latest stack test, the Permittee shall take reasonable response steps in accordance with Section C- Response to Excursions or Exceedances. A pressure reading that is outside the above mentioned range is not a deviation from this permit. Failure to take response steps in accordance with Section C - Response to Excursions or Exceedances shall be considered a deviation from this permit.

These monitoring conditions are necessary because the bin vent filters for limestone storage and the conveyors must operate properly to ensure compliance with 6.5-1-2(a) (Particulate Matter Limitations Except Lake County), 326 IAC 2-2 (Prevention of Significant Deterioration) and 326 IAC 2-3 (Emission Offset), 40 CFR 60.250 and 40 CFR 60.670.

Testing Requirements

Emission Unit	Control Device	Timeframe for Testing	Pollutant	Frequency of Testing	Limit or Requirement
Five (5) covered limestone conveyors, T-2	None	60/180 days	Opacity	Once every 5 years	NSPS Subpart OOO: < 10 % Opacity
Limestone Storage Silo, L-1	Bin Vent filter	60/180 days	PM & Opacity	Once every 5 years	NSPS Subpart OOO: 0.022 gr/dscf & < 7 % Opacity
Limestone Storage Silo, L-2	Bin Vent filter	60/180 days	PM & Opacity	Once every 5 years	NSPS Subpart OOO: 0.022 gr/dscf & < 7 % Opacity
Ball Mill Grinders, BM-1 & BM-2	Enclosed	60/180 days	Opacity	Once every 5 years	NSPS Subpart OOO: < 15 % Opacity
Five (5) covered Gypsum conveyors, T-4	None	60/180 days	Opacity	Once every 5 years	NSPS Subpart OOO: < 10 % Opacity
Five covered coal conveyors, T-6	None	60/180 days	Opacity	Once every 5 years	NSPS Subpart Y: < 20 % Opacity

The testing limits and requirements are pursuant to 40 CFR 60.670, Subpart OOO (New Source Performance Standards for Nonmetallic Mineral Processing Plants) and 40 CFR 60.250, Subpart Y (Standards of Performance for Coal Preparation Plants).

Proposed Changes

The initial Part 70 Operating Permit for Indianapolis Power & Light Company – Harding Street Generating Station, 097-6566-00033, has not been issued. Therefore, this Significant Source Modification does not cause any revision or addition to a Part 70 Operating Permit for this source.

Conclusion and Recommendation

The construction of this proposed modification shall be subject to the conditions of the attached proposed Part 70 Significant Source Modification No. 097-21938-00033. The staff recommend to the Commissioner that this Part 70 Significant Source Modification be approved.

**Appendix A: Emission Calculations
Nonmetallic Mineral Transfer**

Company Name: Indianapolis Power & Light Company - Harding Street Generating Station
Address City IN Zip: 3700 South Harding Street, Indpls., IN 46217
Significant Source Modification No.: 097-21938-00033
Reviewer: M. Caraher
Date: January 26, 2006

The following calculations determine the amount of emissions created by loading and unloading of nonmetallic minerals and coal, based on 8760 hours of use and AP-42, Ch 13.2.4 (Fifth edition, 1/95).

$E_f = k \cdot (0.0032)^k \cdot (U/5)^{1.3} / (M/2)^{1.4}$
 where $k =$ (particle size multiplier)
 $U =$ mile/hr mean wind speed
 $M =$ % material moisture content
 $E_f =$ emission factor in pounds per ton

		Limestone	Gypsum	Coal	
amount transferred (tons/yr)		190000	305000	2500000	
k	PM	0.74	0.74	0.74	
	PM10	0.35	0.35	0.35	
	PM2.5	0.11	0.11	0.11	
U (mi/hr)		7.9	7.9	7.9	
M (%)		1	7	13.6	
Ef (lbs/ton) for PM		0.01133	0.00074	0.00029	
Ef (lbs/ton) for PM10		0.00536	0.00035	0.00014	
Ef (lbs/ton) for PM2.5		0.00168	0.00011	0.00004	
uncontrolled PTE					Totals
PM (tons/yr)		1.08	0.11	0.37	1.56
PM10 (tons/yr)		0.51	0.05	0.17	0.74
PM2.5 (tons/yr)		0.16	0.02	0.05	0.23

Derivation of emission factor(s) based on AP-42, Ch 13.2.4 (Fifth edition, 1/95).
 Material moisture content based on the IPL application & AP-42 Table 13.2.4-1.
 Uncontrolled PTE = amount transferred (tons/yr) x emission factor (lbs/ton) x ton/2000 lbs.

**Appendix A: Emission Calculations
Conveyor Transfer**

Company Name: Indianapolis Power & Light Company - Harding Street Generating Station
Address City IN Zip: 3700 South Harding Street, Indpls., IN 46217
Significant Source Modification No.: 097-21938-00033
Reviewer: M. Caraher
Date: January 26, 2006

The following calculations determine the amount of emissions created by loaconveyor transfer of nonmetallic minerals and coal, based on 8760 hours of use and AP-42, Ch 13.2.4 (Fifth edition, 1/95).

$$E_f = k \cdot (0.0032) \cdot (U/5)^{1.3} / (M/2)^{1.4}$$

where k = (particle size multiplier)
 U = mile/hr mean wind speed
 M = % material moisture content
 E_f = emission factor in pounds per ton

		Limestone	Gypsum	Coal	
amount transferred (tons/yr)		190000	305000	2500000	
number of conveyors		7	5	5	
k	PM	0.74	0.74	0.74	
	PM10	0.35	0.35	0.35	
	PM2.5	0.11	0.11	0.11	
U (mi/hr)		1	1	1	
M (%)		1	7	13.6	
E_f (lbs/ton) for PM		0.00077	0.00005	0.00002	
E_f (lbs/ton) for PM10		0.00036	0.00002	0.00001	
E_f (lbs/ton) for PM2.5		0.00011	0.00001	0.00000	
uncontrolled PTE					Totals
PM (tons/yr)		0.51	0.04	0.12	0.68
PM10 (tons/yr)		0.24	0.02	0.06	0.32
PM2.5 (tons/yr)		0.08	0.01	0.02	0.10

Derivation of emission factor(s) based on AP-42, Ch 13.2.4 (Fifth edition, 1/95).
 Material moisture content based on the IPL application & AP-42 Table 13.2.4-1.
 U = wind speed, set to 1mph as conveyors are enclosed (if set to zero, E_f = zero).
 Uncontrolled PTE = amount transferred (tons/yr) x emission factor (lbs/ton) x ton/2000 lbs.

**Appendix A: Emission Calculations
2 Limestone Storage Silos**

Company Name: Indianapolis Power & Light Company - Harding Street Generating Station
Address City IN Zip: 3700 South Harding Street, Indpls., IN 46217
Significant Source Modification No.: 097-21938-00033
Reviewer: M. Caraher
Date: January 26, 2006

Each Silo Storage Capacity (tons)
630

Maximum Annual Throughput (tons)
190000

Controlled Design Exhaust
0.01 gr/dscf

Air Flow Rate acfm (each)
1000

Bin Vent control eff (%)
99

	Pollutant							Combined HAP
	PM	PM10	PM2.5	SO2	NOx	VOC	CO	
Emission Factor in lbs/ton	0.79	0.79	0.79	0.00	0.00	0.00	0.00	0.00
Emission Factor in lbs/hr	17.12	17.12	17.12	0.00	0.00	0.00	0.00	0.00
Potential Emission in tons/yr	75.00	75.00	75.00	0.00	0.00	0.00	0.00	0.00
Potential Emission in tons/yr								
Materials Transfer	1.56	0.74	0.23					
Conveyer Transfer	0.68	0.32	0.10					
Total Project PTE in tons/yr	77.24	76.06	75.33					
FGD Project Limited Potential to Emit in tons/yr								
Materials Transfer	1.56	0.74	0.23					
Conveyer Transfer	0.68	0.32	0.10					
Silo Storage	1.65	1.65	1.65					
Total Project Limited PTE in tons/yr	3.89	2.71	1.98					

Potential Emissions in tons/yr = (2 silos x 1000 ft³/min x 0.01 gr/dscf x 60 min/hr x 1 lb/7000 gr x 8760 hr/yr x ton/2000 lbs) / (1 - control eff)

Emission Factor in lb/hr = PTE in tons/yr x 2000 lbs/ton x 1 yr/8760 hr

Emission Factor in lbs/ton = PTE in tons/yr x 2000 lbs/ton x yr/maximum annual throughput

Silo Storage Limited PTE = NSPS limit of 0.022 gr/dscf x exhaust air flow rate x 60 min/hr x 8760 hr/yr x ton/2000 lbs x lb/7000 gr x 2 silo exhausts