



Mitchell E. Daniels, Jr.
Governor

Thomas W. Easterly
Commissioner

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

TO: Interested Parties / Applicant
DATE: September 26, 2005
RE: Indianapolis Power and Light Company / 125-21340-00002
FROM: Paul Dubenetzky
Chief, Permits Branch
Office of Air Quality

Notice of Decision: Approval - Effective Immediately

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

If you wish to challenge this decision, IC 4-21.5-3 and IC 13-15-6-1 require that you file a petition for administrative review. This petition may include a request for stay of effectiveness and must be submitted to the Office of Environmental Adjudication, 100 North Senate Avenue, Government Center North, Room 1049, Indianapolis, IN 46204, **within eighteen (18) calendar days of the mailing of this notice**. The filing of a petition for administrative review is complete on the earliest of the following dates that apply to the filing:

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

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

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

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

Enclosures
FNPER.dot 1/10/05



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PART 70 SIGNIFICANT SOURCE MODIFICATION OFFICE OF AIR QUALITY

**Indianapolis Power & Light Company –
Petersburg Generating Station
6925 North State Road 57
Petersburg, Indiana 46567**

(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 approval.

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.

Significant Source Modification No.: 125-21340-00002

Issued by: Original Signed By:
Paul Dubenetzky, Assistant Commissioner
Office of Air Quality

Issuance Date: September 26, 2005

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SECTION A

SOURCE SUMMARY

This approval is based on information requested by the Indiana Department of Environmental Management (IDEM), Office of Air Quality (OAQ). The information describing the emission units contained in conditions A.1 through 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 approval pursuant to 326 IAC 2, or change other applicable requirements presented in the permit application.

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

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

Responsible Official:	Plant Manager
Source Address:	6925 North State Road 57, Petersburg, Indiana 46567
Mailing Address:	P.O. Box 436, Petersburg, Indiana 46567
General Source Phone Number:	(812) 354-7222
SIC Code:	4911
County Location:	Pike
Source Location Status:	Nonattainment for PM 2.5 Attainment for all other criteria pollutants
Source Status:	Part 70 Permit Program Major Source, under PSD Rules; Major Source, Section 112 of the Clean Air Act

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

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

- (a) One (1) pneumatic fly ash transfer system from Ash Silo 4 to Ash Silo 3, with a maximum throughput rate of 200 tons of fly ash per hour, with particulate emissions from Silo 3 controlled by a new baghouse B-10 exhausting through stack 10.
- (b) One (1) fly ash railcar loading operation from Ash Silo 3, with a maximum throughput rate of 200 tons of fly ash per hour, with an enclosed drop from Silo 3 to an air-fluidized enclosed loadout slide from the silo and a gasketed drop to enclosed railroad cars, with particulate emissions controlled by baghouse B-11 at the railcar loading point exhausting through stack 11.

A.3 Part 70 Permit Applicability [326 IAC 2-7-2]

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

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

SECTION B GENERAL CONSTRUCTION CONDITIONS

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

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

B.2 Effective Date of the Permit [IC 13-15-5-3]

Pursuant to IC 13-15-5-3, this approval 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 Commissioner may revoke this approval if construction is not commenced within eighteen (18) months after receipt of this approval or if construction is suspended for a continuous period of one (1) year or more.

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

This document 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, verifying that the emission units were constructed as proposed in the application. The emissions 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 if constructed as proposed.
- (b) If actual construction of the emissions units differs from the construction proposed in the application, the source may not begin operation until the source modification has been revised pursuant to 326 IAC 2-7-11 or 326 IAC 2-7-12 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 the Chief of the Permit Administration & Development Section and 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 Title V permit will issued after EPA review.

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

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

SECTION C

GENERAL OPERATION CONDITIONS

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 2-7-5(1),(3) and (13)] [326 IAC 2-7-6(1) and (6)] [326 IAC 1-6-3]

- (a) The Permittee shall prepare and maintain Preventive Maintenance Plans (PMPs) for the fly ash railcar loading system facilities when operation of these facilities begins, as described in 326 IAC 1-6-3. At a minimum, the PMPs shall include:
 - (1) Identification of the individual(s) responsible for inspecting, maintaining, and repairing emission control devices;
 - (2) A description of the items or conditions that will be inspected and the inspection schedule for said items or conditions; and
 - (3) Identification and quantification of the replacement parts that will be maintained in inventory for quick replacement.

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

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

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

- (b) A copy of the PMPs shall be submitted to IDEM, OAQ, upon request and within a reasonable time, and shall be subject to review and approval by IDEM, OAQ. IDEM, OAQ, may require the Permittee to revise its PMPs whenever lack of proper maintenance causes or contributes to any violation. The PMP does 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 the 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

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

- (c) The Permittee may implement administrative amendment changes addressed in the request for an administrative amendment immediately upon submittal of the request. [326 IAC 2-7-11(c)(3)]
- (d) No permit amendment or modification is required for the addition, operation or removal of a nonroad engine, as defined in 40 CFR 89.2.

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

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

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

C.6 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 unit vented to the control equipment is in operation.

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.

Compliance Requirements [326 IAC 2-1.1-11]

C.8 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. Any monitoring or testing shall be performed in accordance with 326 IAC 3 or other methods approved by the commissioner or the U. S. EPA.

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

C.9 Compliance Monitoring [326 IAC 2-7-5(3)] [326 IAC 2-7-6(1)]

If required by Section D, all monitoring and record keeping requirements shall be implemented when operation begins. The Permittee shall be responsible for installing any necessary equipment and initiating any required monitoring related to that equipment.

C.10 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.11 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, any analog instrument used to measure a parameter related to the operation of an air pollution control device, the instrument 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 alternative instrument specification will adequately ensure compliance with permit conditions requiring the measurement of the appropriate parameters.

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

C.12 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 the 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).
- (c) Such actions may include:
 - (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.
- (d) 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:
 - (1) monitoring results;
 - (2) review of operation and maintenance procedures and records; and

- (3) inspection of the control device, associated capture system, and the process.
- (e) Failure to take reasonable response steps shall be considered a deviation from the permit.
- (f) The Permittee shall maintain the following records:
 - (1) monitoring data;
 - (2) monitor performance data, if applicable; and
 - (3) corrective actions taken.

C.13 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 and the Southwest Regional Office, within four (4) daytime business hours after the beginning of the emergency, or after the emergency was discovered or reasonably should have been discovered;

IDEM, OAQ

Telephone No.: 1-800-451-6027 (ask for Office of Air Quality, Compliance Section) or,

Telephone No.: 317-233-5674 (ask for Compliance Section)

Facsimile No.: 317-233-5967

Southwest Regional Office

Telephone No.: 1-888-672-8323, or

Telephone No. 812-380-2305

Facsimile No.: 812-380-2304

- (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

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

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

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

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

- (6) The Permittee immediately took all reasonable steps to correct the emergency.
- (c) In any enforcement proceeding, the Permittee seeking to establish the occurrence of an emergency has the burden of proof.
- (d) This emergency provision supersedes 326 IAC 1-6 (Malfunctions). This permit condition is in addition to any emergency or upset provision contained in any applicable requirement.
- (e) The Permittee seeking to establish the occurrence of an emergency shall make records available upon request to ensure that failure to implement a PMP did not cause or contribute to an exceedance of any limitations on emissions. However, IDEM, OAQ, may require that the Preventive Maintenance Plans required under 326 IAC 2-7-4(c)(9) be revised in response to an emergency.
- (f) Failure to notify IDEM, OAQ, by telephone or facsimile of an emergency lasting more than one (1) hour in accordance with (b)(4) and (5) of this condition shall constitute a violation of 326 IAC 2-7 and any other applicable rules.
- (g) If the emergency situation causes a deviation from a technology-based limit, the Permittee may continue to operate the affected emitting facilities during the emergency provided the Permittee immediately takes all reasonable steps to correct the emergency and minimize emissions.
- (h) The Permittee shall include all emergencies in the Quarterly Deviation and Compliance Monitoring Report.

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

C.14 General Record Keeping Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-6]

- (a) Records of all required monitoring data, reports and support information required by this permit shall be retained for a period of at least five (5) years from the date of monitoring sample, measurement, report, or application. These records shall be physically present or electronically accessible at the source location for a minimum of three (3) years. The records may be stored elsewhere for the remaining two (2) years as long as they are available upon request. If the Commissioner makes a request for records to the Permittee, the Permittee shall furnish the records to the Commissioner within a reasonable time.
- (b) Unless otherwise specified in this permit, all record keeping requirements not already legally required shall be implemented within ninety (90) days of permit issuance.

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

C.15 General Reporting Requirements [326 IAC 2-7-5(3)(C)] [326 IAC 2-1.1-11] [326 IAC 2-2]

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

Indiana Department of Environmental Management
Compliance Data Section, Office of Air Quality
100 North Senate Avenue
Indianapolis, Indiana 46204
- (c) Unless otherwise specified in this permit, any notice, report, or other submission required by this permit shall be considered timely if the date postmarked on the envelope or

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

- (d) Unless otherwise specified in this permit, all reports required in Section D of this permit shall be submitted within thirty (30) days of the end of the reporting period. All reports do require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).
- (e) The first report shall cover the period commencing on the date of issuance of this permit and ending on the last day of the reporting period. Reporting periods are based on calendar years, unless otherwise specified in this permit. For the purpose of this permit "calendar year" means the twelve (12) month period from January 1 to December 31 inclusive.
- (f) The Permittee shall make the information required to be documented and maintained in accordance with (c) in Section C- General Record Keeping Requirements available for review upon a request for inspection by IDEM, OAQ. The general public may request this information from the IDEM, OAQ under 326 IAC 17.1.

SECTION D.1

FACILITY OPERATION CONDITIONS

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

- (a) One (1) pneumatic fly ash transfer system from Ash Silo 4 to Ash Silo 3, with a maximum throughput rate of 200 tons of fly ash per hour, with particulate emissions from Silo 3 controlled by a new baghouse B-10 exhausting through stack 10.
- (b) One (1) fly ash railcar loading operation from Ash Silo 3, with a maximum throughput rate of 200 tons of fly ash per hour, with an enclosed drop from Silo 3 to an air-fluidized enclosed loadout slide from the silo and a gasketed drop to enclosed railroad cars, with particulate emissions controlled by baghouse B-11 at the railcar loading point exhausting through stack 11.

(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 PSD Minor Limits [326 IAC 2-2]

In order to make the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration) not applicable, the Permittee shall comply with the following for the fly ash Silo 3 railcar loading operation:

- (a) PM emissions shall not exceed 5.68 pounds per hour.
- (b) PM10 emissions shall not exceed 3.40 pounds per hour.

Therefore, the emissions from the fly ash Silo 3 railcar loading operation are limited to less than 25 tons/yr for PM and less than 15 tons/yr for PM10, and the requirements of 326 IAC 2-2 (PSD) are not applicable.

D.1.2 Particulate [326 IAC 6-3-2]

Pursuant to 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes), particulate emissions from the fly ash Silo 3 railcar loading operation shall not exceed 58.5 lbs/hr when operating at a process weight rate of 200 tons/hr.

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

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

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

Compliance Determination Requirements

D.1.3 PM and PM10 Control

- (a) In order to comply with Conditions D.1.1 and D.1.2, the baghouses for particulate control shall be in operation and control emissions from the fly ash transfer system from Silo 4 to Silo 3, and from the Silo 3 railcar loading operation, at all times that the associated process is in operation.
- (b) In the event that bag failure is observed, 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] [326 IAC 2-7-5(1)]

D.1.4 Visible Emissions Notations

- (a) Visible emission notations of the stack exhaust from baghouse stacks 10 and 11 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 railcar loading drop point shall be performed at least once per day during normal daylight operations when transferring ash to a railcar. 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 at a baghouse exhaust or the railcar loading drop point, the Permittee shall take reasonable response steps in accordance with Section C - Response to Excursions or Exceedances. Observation of abnormal emissions that do not violate 326 IAC 6-4 (Fugitive Dust Emissions) or an applicable opacity limit is not a deviation from this permit. Failure to take response steps in accordance with Section C - Response to Excursions or Exceedances, shall be considered a deviation from this permit.

D.1.5 Parametric Monitoring

The Permittee shall record the pressure drop across each baghouse used in conjunction with the fly ash transfer system from Silo 4 to Silo 3, and from the Silo 3 railcar loading operation, at least once per shift when the corresponding ash transfer equipment is in operation. When for any one reading, the pressure drop across the baghouse is outside the normal range of 2.0 to 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.1.6 Broken or Failed Bag Detection

In the event that bag failure has been observed:

- (a) For single compartment baghouses controlling emissions from a process operated continuously, failed units and the associated process will be shut down immediately until the failed units have been repaired or replaced. Operations may continue only if the event

qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section C - Emergency Provisions).

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

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

D.1.7 Record Keeping Requirements

- (a) To document compliance with Condition D.1.4, the Permittee shall maintain records of visible emission notations of the baghouse stack exhausts and railcar loading drop point.
- (b) To document compliance with Condition D.1.5, the Permittee shall maintain records of the pressure drop across each baghouse.
- (c) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT OFFICE OF AIR QUALITY

PART 70 SOURCE MODIFICATION CERTIFICATION

Source Name: Indianapolis Power & Light Company – Petersburg Generating Station
Source Address: 6925 North State Road 57, Petersburg, Indiana 46567
Mailing Address: P.O. Box 436, Petersburg, Indiana 46567
Source Modification No.: 125-21340-00002

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

Please check what document is being certified:

- 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:

Date:

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

**PART 70 OPERATING PERMIT
EMERGENCY OCCURRENCE REPORT**

Source Name: Indianapolis Power & Light Company – Petersburg Generating Station
Source Address: 6925 North State Road 57, Petersburg, Indiana 46567
Mailing Address: P.O. Box 436, Petersburg, Indiana 46567
Source Modification No.: 125-21340-00002

This form consists of 2 pages

Page 1 of 2

<p>9 This is an emergency as defined in 326 IAC 2-7-1(12)</p> <ul style="list-style-type: none">• The Permittee must notify the Office of Air Quality (OAQ), within four (4) business hours (1-800-451-6027 or 317-233-5674, ask for Compliance Section); and• 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 Describe:
Type of Pollutants Emitted: TSP, PM-10, SO ₂ , VOC, NO _x , CO, Pb, other:
Estimated amount of pollutant(s) emitted during emergency:
Describe the steps taken to mitigate the problem:
Describe the corrective actions/response steps taken:
Describe the measures taken to minimize emissions:
If applicable, describe the reasons why continued operation of the facilities is necessary to prevent imminent injury to persons, severe damage to equipment, substantial loss of capital investment, or loss of product or raw materials of substantial economic value:

Form Completed by: _____

Title / Position: _____

Date: _____

Phone: _____

A certification is not required for this report.

Mail to: Permit Administration & Development Section
Office Of Air Quality
100 North Senate Avenue
Indianapolis, Indiana 46204

Indianapolis Power & Light Company - Petersburg Generating Station
P.O. Box 436
Petersburg, Indiana 46567

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 - Petersburg Generating Station, 6925 North State Road 57, Petersburg, Indiana 46567, completed construction of the fly ash railcar loading operation on _____ in conformity with the requirements and intent of the construction permit application received by the Office of Air Quality on June 23, 2005 and as permitted pursuant to Significant Source Modification Permit No. 125-21340-00002.

5. Additional (?operations/facilities) were constructed/substituted as described in the attachment to this document and
were not made in accordance with the construction permit. (Delete this statement if it does not apply.)

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

Name (typed or printed)

Indiana Department of Environmental Management Office of Air Quality

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

Source Background and Description

Source Name:	Indianapolis Power & Light Company – Petersburg Generating Station
Source Location:	6925 North State Road 57, Petersburg, Indiana 46567
County:	Pike
SIC Code:	4911
Operation Permit No.:	125-6565-00002
Operation Permit Issuance Date:	Pending
Significant Source Modification No.:	125-21340-00002
Permit Reviewer:	Vickie Cordell

The Office of Air Quality (OAQ) has reviewed a modification application from Indianapolis Power and Light Company – Petersburg Generating Station relating to the construction and operation of the following emission units and pollution control devices:

- (a) One (1) pneumatic fly ash transfer system from Ash Silo 4 to Ash Silo 3, with a maximum throughput rate of 200 tons of fly ash per hour, with particulate emissions from Silo 3 controlled by a new baghouse B-10 exhausting through stack 10.
- (b) One (1) fly ash railcar loading operation from Ash Silo 3, with a maximum throughput rate of 200 tons of fly ash per hour, with an enclosed drop from Silo 3 to an air-fluidized enclosed loadout slide from the silo and a gasketed drop to enclosed railroad cars, with particulate emissions controlled by baghouse B-11 at the railcar loading point exhausting through stack 11.

History

Indianapolis Power & Light Company - Petersburg Generating Station is an existing utility electric generating station and is an existing PSD major source. On June 23, 2005, the Permittee submitted an application to the OAQ requesting to construct and operate a new fly ash railcar loading operation for ash from the coal-fired boilers identified as Unit 3 and Unit 4. The Permittee applied for a Part 70 Permit (T125-6565-00002) on September 13, 1996 and the public notice period of this Title V permit ended October 8, 2004. The Part 70 permit has not yet been issued.

Enforcement Issue

There are no enforcement actions pending.

Air Pollution Control Justification as an Integral Part of the Process

The company submitted the following justification such that the baghouses B-10 and B-11 be considered as an integral part of the fly ash transfer and railcar loading processes:

- (a) The process can not operate without the control equipment.

The existing and proposed ash transfer system is “dry”. That is, air pressure is used to fluidize and “blow” ash from one location to another. The baghouses are integral parts of the pneumatic conveying system to prevent the release of the conveyed product with the

venting of the air used to convey it. Failure to retain the fly ash at the end of its conveyance would defeat the use of the system.

- (b) The control equipment serves a primary purpose other than pollution control.

The baghouses work to retain the fly ash from being blown into the atmosphere at the end of the pneumatic conveyance. Such a result would both defeat the ultimate purpose of the conveyance, i.e. to load the ash into enclosed rail cars for transport to distant markets, and would require the ash to be cleaned up and disposed at the current disposal cost of \$5/ton. Such a cleanup would be required even in the absence of environmental regulations as failure to do so would impede effective personnel operations in the area and expose employees to inhalation risks.

- (c) The control equipment has an overwhelming positive net economic effect.

The fly ash disposal cost at the IPL Petersburg Generating Station is approximately \$5/ton. Revenue from the sale of ash for use in concrete is anticipated to be minimal. For the purpose of this analysis, it will be assumed to be none. Despite an assumed zero revenue, the IPL avoided disposal cost of \$5/ton establishes a savings of \$5/ton for each ton of ash shipped by rail offsite for reuse. Rail transportation costs are paid by the user of the fly ash; therefore IPL does not incur shipping costs.

IDEM, OAQ has evaluated the justification and determined that the baghouses are NOT integral to the processing of a product. This determination was based on the following:

- (a) Pneumatic conveyance systems do require containment of the conveyed material for proper operation. However, this alone does not guarantee that the system is properly operated and maintained to prevent leaks.
- (b) The powdery consistency of fly ash could allow much of any material released from an elevated baghouse to remain airborne long enough to be carried offsite. Material that reached the ground onsite could be dispersed over a wide area and impractical to clean up, and re-entrainment would be likely to occur.
- (c) Avoidance of a \$5/ton disposal cost is not income and does not provide financial motivation to ensure that no fly ash escapes from any of the conveyance systems or transfer points. Avoiding possible cleanup of a wind-dispersed material with no monetary value is also not believed to be sufficient motivation to ensure proper operation and maintenance.

Therefore, the PTE before control was used to determine the level of permit required.

Stack Summary

Stack ID	Operation	Height (feet)	Dimensions (feet)	Flow Rate (acfm)	Temperature (°F)
10	Ash transfer to Silo 3	116.4	1.3 x 4 (rectangular)	11,180	ambient
11	Railcar loading from Silo 3	56.4	0.75 diam. (circular)	2,400	ambient

Recommendation

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

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

An application for the purposes of this review was received on June 23, 2005. Additional information was received on July 12, 2005; July 18, 2005; July 25, 2005, and July 28, 2005.

Potential To Emit of Modification

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

This table reflects the PTE of the modification **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	601.7
PM-10	210.8

HAPs*	Potential To Emit (tons/year)
Single (Manganese)	0.036
Combination	0.13

Particulate matter (PM), PM-10, and hazardous air pollutant (HAP) emissions calculations are attached as **Appendix A** to this TSD.

AP-42 Table 11.12-2 (Emission Factors for Concrete Batching) (October 2001 edition) provides PM and PM-10 emission factors for pneumatic conveyance to storage silo for cement supplements, including fly ash. IPL had a sample of the fly ash analyzed to determine the hazardous air pollutant content in parts per million (ppm). The concentration of each HAP in the fly ash sample is assumed to be the same as the concentration of the HAP in the particulate matter (PM) emissions.

The application states that Units 3 and 4 combined produce 700 tons of fly ash per day. Therefore, this is the maximum quantity of fly ash available for loading to railcars. However, because only half of the ash is produced by Unit 4, only 350 tons per day is available for transfer from Silo 4 to Silo 3. The existing baghouse on top of Silo 3 will be replaced with a larger baghouse as part of this project to assure that the capacity is adequate to control emissions from the ash conveyed from Unit 3 to Silo 3 and from Silo 4 to Silo 3.

The ash will drop from Silo 3 to an enclosed tube to convey the ash to the railcar loading station. The drop point from the silo is totally enclosed with no emission point at the drop. The tube has air blown in through small holes along the bottom to allow gravity to keep the ash flowing down to a gasketed drop chute into the railcars. A small baghouse-type dust collector on top of the loading unit will control particulate from the tube conveyance and the railcar loading drop. There are no known emission factors for fly ash using this conveyance method. The emission factor for pneumatic conveyance is believed to provide a conservative estimate of emissions from the railcar loading baghouse exhaust point.

Justification for Modification

This modification is being performed through a Part 70 Significant Source Modification pursuant to 326 IAC 2-7-10.5(f)(4) as the potential to emit PM/PM10 of this modification is greater than 25 tons/yr. This modification does not qualify for the Part 70 Minor Source Modification in the provision of 326 IAC 2-7-10.5(d)(4)(C) because the potential to emit of this modification before controls exceeds major source thresholds for federal permitting programs.

County Attainment Status

The source is located in Pike County.

Pollutant	Status
PM-10	Attainment
PM 2.5	Nonattainment
SO ₂	Attainment
NO ₂	Attainment
1-hour Ozone	Attainment
8-hour Ozone	Attainment
CO	Attainment
Lead	Attainment

- (a) Volatile organic compounds (VOC) are regulated under the Clean Air Act (CAA) for the purposes of attaining and maintaining the National Ambient Air Quality Standards (NAAQS) for ozone. Therefore, VOC emissions are considered when evaluating the rule applicability relating to ozone. Pike County has been designated as attainment or unclassifiable for ozone. Therefore, VOC emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2.
- (b) U.S. EPA in Federal Register Notice 70 FR 943 dated January 5, 2005 has designated Pike County as nonattainment for PM2.5. On March 7, 2005 the Indiana Attorney General's Office on behalf of IDEM filed a law suit with the Court of Appeals for the District of Columbia Circuit challenging U.S. EPA's designation of non-attainment areas without sufficient data. However, in order to ensure that sources are not potentially liable for violation of the Clean Air Act, the OAQ is following the U.S. EPA's guidance to regulate PM10 emissions as surrogate for PM2.5 emissions pursuant to the Non-attainment New Source Review requirements.
- (c) Pike County has been classified as attainment or unclassifiable in Indiana for all other criteria. Therefore, these emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2.
- (d) Fugitive Emissions
Since this type of operation is in one of the 28 listed source categories under 326 IAC 2-2, the fugitive particulate matter (PM) and volatile organic compound (VOC) emissions are counted toward determination of PSD applicability.

Source Status

Existing Source PSD Definition (emissions after controls, based upon 8760 hours of operation per year at rated capacity and/or as otherwise limited):

Pollutant	Emissions (tons/year)
PM-10	621
SO ₂	42,553
VOC	175
CO	1,252
NO _x	18,150

- (a) This existing source is a major stationary source because one or more regulated pollutants are emitted at a rate of 100 tons per year or more, and it is in one of the 28 listed source categories.
- (b) These emissions are based upon the 2003 emission inventory information of Indianapolis Power & Light Company - Petersburg Generating Station (Plant ID #125-00002).

Potential to Emit of Modification After Issuance

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

Process/facility	Potential to Emit (tons/year)				
	PM	PM-10	Lead	Beryllium	Total HAPs
PTE of the Silo 3 Fly Ash Railcar Loading Operation	24.9	14.9	0.00013	0.000018	0.0013
PSD Significant Thresholds	25	15	0.6	0.00004	NA

This table reflects the PM and PM-10 emissions as limited, and the after-control PTE of the HAPs.

This modification to an existing major stationary source is not major because the emission increase is less than the PSD significant levels. Therefore, pursuant to 326 IAC 2-2, the PSD requirements do not apply.

Federal Rule Applicability

- (a) There are no New Source Performance Standards (NSPS) (326 IAC 12 and 40 CFR Part 60) applicable to this modification.
- (b) Fly ash does not meet the definition of “nonmetallic mineral” in 40 CFR 60.671. Therefore, the New Source Performance Standards (NSPS) for Nonmetallic Mineral Processing Plants (40 CFR 60.670-676, Subpart OOO) are not applicable to the proposed fly ash railcar loading operation.
- (c) There are no National Emission Standards for Hazardous Air Pollutants (NESHAPs) (326 IAC 14, 326 IAC 20, 40 CFR 61, and 40 CFR Part 63) applicable to this modification.

- (d) This modification does involve a pollutant-specific emissions unit:
- (1) With the potential to emit before controls equal to or greater than one hundred (100) tons per year, and
 - (2) That is subject to an emission limit and has control devices (baghouses) that are necessary to meet that limit.

Therefore, the requirements of 40 CFR Part 64, Compliance Assurance Monitoring (CAM), are applicable to the proposed fly ash railcar loading operation. Since the post control emissions from this unit are less than the major source thresholds, the CAM requirements will be addressed in the source's first Part 70 renewal permit.

State Rule Applicability - Fly Ash Railcar Loading Operation

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

This source was constructed in 1967 and modified after 1980. This source is in 1 of 28 source categories defined in 326 IAC 2-2-1(p)(1) and is an existing PSD major source. The potential to emit of this modification is greater than 25 tons/yr for PM and greater than 15 tons/yr for PM10. In order to make the requirements of 326 IAC 2-2 (PSD) not applicable, the Permittee shall comply with the following emission limits for the fly ash Silo 3 railcar loading operation:

- (a) PM emissions shall not exceed 5.68 pounds per hour.
- (b) PM10 emissions shall not exceed 3.40 pounds per hour.

These conditions are equivalent to 24.9 tons/yr of PM emissions and 14.9 tons/yr PM10 emissions. The use of the baghouses ensures compliance with the limits above.

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 Alternative Opacity Limitations), opacity shall meet the following, unless otherwise stated in this permit:

- (a) Opacity shall not exceed an average of forty percent (40%) 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 6-3-2 (Particulate Emission Limitations for Manufacturing Processes)

The allowable particulate emissions from the fly ash Silo 3 railcar loading operation shall not exceed 58.5 lbs/hr when operating at a process weight rate of 200 tons/hr.

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

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

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

The potential to emit of PM from the proposed railcar loading operation AFTER CONTROL is less than the limit above:

$$200 \text{ tons/hr} \times 3.14 \text{ lb PM/ton} \times (1 - 0.99 \text{ control efficiency}) = 6.28 \text{ lbs PM/hr}$$

Therefore, this operation can comply with 326 IAC 6-3-2. Use of the baghouses is necessary to ensure compliance with this limit.

Compliance Requirements

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

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

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

1. The proposed fly ash transfer and railcar loading operations, which will have particulate emissions controlled by two baghouses, have applicable compliance monitoring conditions as specified below:
 - (a) Visible emissions notations of baghouse stacks 10 and 11 shall be performed once per shift during normal daylight operations. A trained employee will record whether emissions are normal or abnormal. Visible emission notations of the railcar loading drop point shall be performed at least once per shift during normal daylight operations when transferring ash to a railcar. A trained employee shall record whether emissions are normal or abnormal. For processes operated continuously "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time. In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions. A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process. The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when an abnormal emission is observed. Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports, shall be considered a deviation from this permit.
 - (b) The Permittee shall record the total static pressure drop across each baghouse used in conjunction with the fly ash transfer system from Silo 4 to Silo 3, and from the Silo 3 railcar loading operation, at least once per shift when the corresponding ash transfer equipment is in operation. When for any one reading, the pressure drop across the baghouse is outside the normal range of 2.0 to 6.0 inches of water or a range established during the latest stack test, the Permittee shall take reasonable response steps in accordance with Section C- Compliance Response

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

- (c) An inspection shall be performed each calendar quarter of all the baghouses controlling the exhaust from the fly ash transfer system from Silo 4 to Silo 3 and from the Silo 3 railcar loading operation. Inspections required by this condition shall not be performed in consecutive months. All defective bags shall be replaced. In the event that bag failure has been observed:
- (1) For multi-compartment units, the affected compartments will be shut down immediately until the failed units have been repaired or replaced. Within eight (8) business hours of the determination of failure, response steps according to the timetable described in the Compliance Response Plan shall be initiated. For any failure with corresponding response steps and timetable not described in the Compliance Response Plan, response steps shall be devised within eight (8) business hours of discovery of the failure and shall include a timetable for completion. If operations continue after bag failure is observed and it will be 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.
 - (2) For single compartment baghouses, failed units and the associated process will be shut down immediately until the failed units have been repaired or replaced. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit.

These monitoring conditions are necessary because the baghouses used to control particulate emissions from the fly ash railcar loading operations must operate properly to ensure compliance with 326 IAC 2-2 (PSD), 326 IAC 2-7-10.5 (Minor Source Modifications), and 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes).

Conclusion

The construction and operation of this proposed modification shall be subject to the conditions of the attached proposed Part 70 Significant Source Modification No. 125-21340-00002.

Indiana Department of Environmental Management Office of Air Quality

Addendum to the Technical Support Document for a Significant Source Modification

Source Name: Indianapolis Power & Light Company – Petersburg Generating Station
Source Location: 6925 North State Road 57, Petersburg, Indiana 46567
County: Pike
SIC Code: 4911
Significant Source Modification: SSM125-21340-00002
Operation Permit No.: T125-6565-00002 (issuance pending)
Permit Reviewer: Vickie Cordell

On August 10, 2005, the Office of Air Quality (OAQ) had a notice published in the Press-Dispatch in Petersburg, Indiana, stating that Indianapolis Power & Light (IPL) had applied for a Significant Source Modification to construct and operate a fly ash railcar loading operation. The notice also stated that OAQ proposed to issue a permit for this operation and provided information on how the public could review the proposed permit and other documentation. Finally, the notice informed interested parties that there was a period of thirty (30) days to provide comments on whether or not this permit should be issued as proposed.

Comments were received from IPL on September 8, 2005. The following is a summary of the comments. In the responses, additions to the permit are bolded for emphasis; the language with a line through it has been deleted. The Table of Contents in the permit has been modified to reflect these changes.

Comment 1:

IPL believes that IDEM is without statutory and/or regulatory authority to impose preventive maintenance plan requirements, compliance response plan requirements, or parametric monitoring requirements on Petersburg Generating Station and reserves the right to seek administrative and judicial review of all permit terms imposing such requirements. This encompasses the following sections within the permit:

1. C.2 - Preventive Maintenance Plan (page 7 of 20)
2. C.12 - Compliance Response Plan (page 9 of 20)
3. D.1.3 - Preventive Maintenance Plan (page 15 of 20)
4. D.1.5(f) - Visible Emissions Notations (page 16 of 20) – as it relates to the Compliance Response Plan
5. D.1.6 - Parametric Monitoring (page 16 of 20) – in the alternative, IPL requests that the language is modified to ‘once per day...’ records.
6. D.1.8(a) - Broken or Failed Bag Detection (pages 16 & 17 of 20) – as it relates to the Compliance Response Plan
7. D.1.9(b) – Record Keeping Requirements (page 17 of 20) - in the alternative, IPL requests that the language is modified to ‘once per day...’ records.
8. D.1.9(d) – Record Keeping Requirements (page 17 of 20) – as it references to Preventive Maintenance Plans

Responses to Comment 1:

1. 326 IAC 2-7-4(c)(9) requires each Part 70 source to maintain a preventive maintenance plan as described in 326 IAC 1-6-3. However, to address concerns expressed by numerous sources regarding routinely certifying compliance with this condition, the wording has been revised to remove the requirement to keep records associated with implementing the PMP. This condition and condition C.13, Emergency Provisions, have also been revised to clarify that if a source invokes the Emergency Provisions, adequate records must be available to show that failure to implement the PMP was not the cause of the emergency.

The Section D Record Keeping condition has also been changed accordingly, as shown later in this Addendum.

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

- (a) ~~If required by specific condition(s) in Section D of this permit, the~~ **The Permittee shall prepare and maintain Preventive Maintenance Plans (PMPs) for the fly ash railcar loading system facilities when operation of these facilities begins, as described in 326 IAC 1-6-3. including the following information on each facility. At a minimum, the PMPs shall include:**
- (1) Identification of the individual(s) responsible for inspecting, maintaining, and repairing emission control devices;
 - (2) A description of the items or conditions that will be inspected and the inspection schedule for said items or conditions; and
 - (3) Identification and quantification of the replacement parts that will be maintained in inventory for quick replacement.

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

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

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

- ~~(b) The Permittee shall implement the PMPs, including any required record keeping as necessary to ensure that failure to implement a PMP does not cause or contribute to an exceedance of any limitation on emissions or potential to emit.~~
- ~~(c)~~ **(b)** A copy of the PMPs shall be submitted to IDEM, OAQ, upon request and within a reasonable time, and shall be subject to review and approval by IDEM, OAQ. IDEM, OAQ, may require the Permittee to revise its PMPs whenever lack of proper maintenance causes or is the primary contributor to an exceedance of any limitation on emissions or potential to emit. The PMP does not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).
- ~~(d)~~ **(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.13 Emergency Provisions [326 IAC 2-7-16]

- (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.**

2. IDEM has reconsidered the requirement to develop and follow a Compliance Response Plan. The Permittee will still be required to take reasonable response steps when a compliance monitoring parameter is determined to be out of range or abnormal. Replacing the requirement to develop and follow a Compliance Response Plan with a requirement to take reasonable response steps, will assure that the control equipment is returned to proper operation as soon as practicable, while

still allowing the Permittee the flexibility to respond to situations that were not anticipated. The Section D conditions that refer to this condition have been revised to reflect the new condition title, and the following changes have been made to the Section C condition:

C.12 ~~Compliance Response Plan – Preparation, Implementation, Records, and Reports~~
Response to Excursions or Exceedances [326 IAC 2-7-5] [326 IAC 2-7-6]

- (a) ~~The Permittee is required to prepare a Compliance Response Plan (CRP) for each compliance monitoring condition of this permit. A CRP shall be submitted to IDEM upon request. The CRP shall be prepared within ninety (90) days after issuance of this permit by the Permittee, supplemented from time to time by the Permittee, maintained on-site, and comprised of:~~
- (1) ~~Reasonable response steps that may be implemented in the event that a response step is needed pursuant to the requirements of Section D of this permit; and an expected timeframe for taking reasonable response steps.~~
 - (2) ~~If, at any time, the Permittee takes reasonable response steps that are not set forth in the Permittee's current Compliance Response Plan and the Permittee documents such response in accordance with subsection (c) below, the Permittee shall amend its Compliance Response Plan to include such response steps taken.~~
- (b) ~~For each compliance monitoring condition of this permit, reasonable response steps shall be taken when indicated by the provisions of that compliance monitoring condition as follows:~~
- (1) ~~Reasonable response steps shall be taken as set forth in the Permittee's current Compliance Response Plan; or~~
 - (2) ~~If none of the reasonable response steps listed in the Compliance Response Plan is applicable or responsive to the excursion, the Permittee shall devise and implement additional response steps as expeditiously as practical. Taking such additional response steps shall not be considered a deviation from this permit so long as the Permittee documents such response steps in accordance with this condition.~~
 - (3) ~~If the Permittee determines that additional response steps would necessitate that the emissions unit or control device be shut down, and it will be ten (10) days or more until the unit or device will be shut down, then the Permittee shall promptly notify the IDEM, OAQ of the expected date of the shut down. The notification shall also include the status of the applicable compliance monitoring parameter with respect to normal, and the results of the response actions taken up to the time of notification.~~
 - (4) ~~Failure to take reasonable response steps shall be considered a deviation from the permit.~~
- (c) ~~The Permittee is not required to take any further response steps for any of the following reasons:~~
- (1) ~~A false reading occurs due to the malfunction of the monitoring equipment and prompt action was taken to correct the monitoring equipment.~~
 - (2) ~~The Permittee has determined that the compliance monitoring parameters established in the permit conditions are technically inappropriate, has previously submitted a request for a minor permit modification to the permit, and such request has not been denied.~~
 - (3) ~~An automatic measurement was taken when the process was not operating.~~

- ~~(4) The process has already returned or is returning to operating within "normal" parameters and no response steps are required.~~
- ~~(d) When implementing reasonable steps in response to a compliance monitoring condition, if the Permittee determines that an exceedance of an emission limitation has occurred, the Permittee shall report such deviations pursuant to Section B-Deviations from Permit Requirements and Conditions.~~
- ~~(f) Except as otherwise provided by a rule or provided specifically in Section D, all monitoring as required in Section D shall be performed when the emission unit is operating, except for time necessary to perform quality assurance and maintenance activities.~~
- (a) Upon detecting an excursion or exceedance, the Permittee shall restore operation of the emissions unit (including the 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).**
- (c) Such actions may include:**
- (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.**
- (d) 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:**
- (1) monitoring results;**
 - (2) review of operation and maintenance procedures and records; and**
 - (3) inspection of the control device, associated capture system, and the process.**
- (e) Failure to take reasonable response steps shall be considered a deviation from the permit.**
- (f) The Permittee shall maintain the following records:**
- (1) monitoring data;**
 - (2) monitor performance data, if applicable; and**
 - (3) corrective actions taken.**

3. IDEM believes that it is clear from the structure of 326 IAC 1-6-3 that the PMP requirement affects the entirety of the applicable facilities. In addition to preventive maintenance for the control devices, preventive maintenance should also be performed on the pneumatic conveyance system components and the air-fluidized loadout slide because lack of proper maintenance could result in the release of fly ash.

However, upon further review, IDEM has determined that it is not necessary to include a condition requiring a preventive maintenance plan in each individual Section D of the permit. Rather, a general condition will be placed in Section B of the permit, which will apply to the entire source. D.1.3 has been removed from the permit, subsequent conditions have been renumbered, and (a) in Section B has been revised as shown earlier in this Addendum.

~~D.1.3 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 these facilities and their control devices.~~

4. In Condition D.1.4(f) (Visible Emissions Notations), the references to the Compliance Response Plan and "Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports" have been replaced with "Section C - Response to Excursions or Exceedances". Language has also been added to clarify that observation of abnormal emissions at a baghouse stack exhaust or the railcar loading drop point is not a deviation from the permit.

D.1.54 Visible Emissions Notations

- (f) ~~The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when an abnormal emission is observed.~~ **If abnormal emissions are observed at a baghouse exhaust or the railcar loading drop point, the Permittee shall take reasonable response steps in accordance with Section C - Response to Excursions or Exceedances. Observation of abnormal emissions that do not violate 326 IAC 6-4 (Fugitive Dust Emissions) or an applicable opacity limit is not a deviation from this permit.** Failure to take response steps in accordance with Section C - ~~Compliance Response Plan - Preparation, Implementation, Records, and Reports~~ **Response to Excursions or Exceedances**, shall be considered a deviation from this permit.

5. The frequency of the pressure drop readings has been changed to once per day as requested. The IDEM, OAQ, has determined that this frequency is sufficient for compliance monitoring of most fly ash handling facilities. The description of the pressure drop has been revised for clarification, and the title of the referenced Section C condition has been updated. The wording regarding IDEM instrument approval and the specific calibration frequency have been deleted; the manufacturer's specifications should be used for instrument calibration.

D.1.65 Parametric Monitoring

The Permittee shall record the ~~total static~~ pressure drop across each baghouse used in conjunction with the fly ash transfer system from Silo 4 to Silo 3, and from the Silo 3 railcar loading operation, at least once per ~~shift~~ day when the corresponding ash transfer equipment is in operation. When for any one reading, the pressure drop across the baghouse is outside the normal range of 2.0 to 6.0 inches of water or a range established during the latest stack test, the Permittee shall take reasonable response steps in accordance with Section C - ~~Compliance Response Plan - Preparation, Implementation, Records, and Reports~~ **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 - ~~Compliance Response Plan - Preparation, Implementation, Records, and Reports~~ **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 - ~~Pressure Gauge and Other Instrument Specifications, of this permit, shall be subject to approval by IDEM, OAQ, and shall be calibrated at least once every six (6) months., and shall be calibrated in accordance with the manufacturer's specifications. The specifications shall be available on site with the Preventive Maintenance Plan.~~

6. Part (a) of the Broken or Failed Bag Detection condition, including the reference to "Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports", has been deleted. The wording regarding notification of IDEM has been moved to Condition D.1.4, PM and PM10 Control.

Although not specifically requested by this comment, the Baghouse Inspection condition (D.1.7) has also been removed, and subsequent conditions have been renumbered accordingly. Upon further review, IDEM has determined that it is the Permittee's responsibility to include routine control device inspection requirements in the applicable preventive maintenance plan. Since the Permittee is in the best position to determine the appropriate frequency of control device inspections and the details regarding which components of the control device should be inspected, the conditions requiring control device inspections have been removed from the permit.

The requirement to keep records of the inspections has also been removed, as shown in the next Response.

D.1.43 PM and PM10 Control

- (a) In order to comply with Conditions D.1.1 and D.1.2, the baghouses for particulate control shall be in operation and control emissions from the fly ash transfer system from Silo 4 to Silo 3, and from the Silo 3 railcar loading operation, at all times that the associated process is in operation.
- (b) In the event that bag failure is observed, 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.**

D.1.7 ~~Baghouse Inspections~~

~~An inspection shall be performed each calendar quarter of all the baghouses controlling the exhaust from the fly ash transfer system from Silo 4 to Silo 3 and from the Silo 3 railcar loading operation. Inspections required by this condition shall not be performed in consecutive months. All defective bags shall be replaced.~~

D.1.86 Broken or Failed Bag Detection

In the event that bag failure has been observed:

- (a) ~~For multi-compartment units, the affected compartments will be shut down immediately until the failed units have been repaired or replaced. Within eight (8) business hours of the determination of failure, response steps according to the timetable described in the Compliance Response Plan shall be initiated. For any failure with corresponding response steps and timetable not described in the Compliance Response Plan, response steps shall be devised within eight (8) business hours of discovery of the failure and shall include a timetable for completion. Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports, shall be considered a deviation from this permit. If operations continue after bag failure is observed and it will be 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.~~

7. Condition D.1.8 (formerly D.1.9) (Record Keeping Requirements) has been revised to reflect the changes detailed above.

D.1.97 Record Keeping Requirements

- (a) To document compliance with Condition D.1.5, the Permittee shall maintain records of visible emission notations of the baghouse stack exhausts and railcar loading drop point.
- (b) To document compliance with Condition D.1.6, the Permittee shall maintain ~~the once per shift~~ records of the inlet and outlet differential static pressure **drop across each baghouse** during normal operation of the baghouses.
- (c) ~~To document compliance with Condition D.1.7, the Permittee shall maintain records of the results of the inspections required under Condition D.1.7.~~
- (d) ~~To document compliance with Condition D.1.3 the Permittee shall maintain records of any additional inspections prescribed by the Preventive Maintenance Plan.~~
- (e) (c) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

Comment 2:

IPL requests that conditions C.15(f) and (g) (page 13 & 14 of 20) should be deleted from the permit. These conditions relate to PSD projects as described in 326 IAC 2-2-1(qq). Condition D.1.1 restricts potential emissions to levels that are below significant levels so that PSD is "not applicable". Therefore there is no reasonable possibility that PSD will be triggered, or that the project "may result in a significant emissions increase" under Condition C.14(c), or that emissions will increase "by a significant amount" under Condition C.15 (f)(1). Therefore, the requirements under Conditions C.15(f) and (g) do not apply and should be removed in order to eliminate unneeded confusion.

Response to Comment 2:

The wording in D.1.5(f) and (g) is general wording regarding NSR Reform requirements for major sources. However, the IDEM agrees to remove the language from this approval to remove a possible source of confusion.

C.15 General Reporting Requirements [326 IAC 2-7-5(3)(C)] [326 IAC 2-1.1-11] [326 IAC 2-2]

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

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

- (c) Unless otherwise specified in this permit, any notice, report, or other submission required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ, on or before the date it is due.
- (d) Unless otherwise specified in this permit, all reports required in Section D of this permit shall be submitted within thirty (30) days of the end of the reporting period. All reports do require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).
- (e) The first report shall cover the period commencing on the date of issuance of this permit and ending on the last day of the reporting period. Reporting periods are based on calendar years, unless otherwise specified in this permit. For the purpose of this permit "calendar year" means the twelve (12) month period from January 1 to December 31 inclusive.
- ~~(f) If the Permittee is required to comply with the recordkeeping provisions of (c) in Section C- General Record Keeping Requirements for any "project" (as defined in 326 IAC 2-2-1 (qq)), and the project meets the following criteria, then the Permittee shall submit a report to IDEM, OAQ:~~
- ~~(1) The annual emissions, in tons per year, from the project identified in (c)(1) in Section C- General Record Keeping Requirements exceed the baseline actual emissions, as documented and maintained under Section C- General Record Keeping Requirements (c)(1)(C)(i), by a significant amount, as defined in 326 IAC 2-2-1 (xx), for that regulated NSR pollutant, and~~
- ~~(2) The emissions differ from the preconstruction projection as documented and maintained under Section C- General Record Keeping Requirements (c)(1)(C)(ii).~~
- ~~(g) The report shall be submitted within sixty (60) days after the end of the year and contain the following:~~
- ~~(1) The name, address, and telephone number of the major stationary source.~~
- ~~(2) The annual emissions calculated in accordance with (c)(2) and (3) in Section C- General Record Keeping Requirements.~~
- ~~(3) The emissions calculated under the actual-to-projected actual test stated in 326 IAC 2-2-2(d)(3).~~
- ~~(4) Any other information that the Permittee deems fit to include in this report,~~

Reports required in this part shall be submitted to:

Indiana Department of Environmental Management
Air Compliance Section, Office of Air Quality
400 North Senate Avenue
Indianapolis, Indiana 46204

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

Comment 3:

IPL also respectfully suggests that once-per-day VE observations are sufficiently frequent for this small, baghouse-controlled operation. This encompasses the following sections within the permit:

D.1.5(a) & (b) - Visible Emissions Notations (page 16 of 20).

Response to Comment 3:

The IDEM, OAQ, agrees that once per day is sufficiently frequent for Visible Emissions Notations of the baghouse exhaust for most material handling operations. The condition has been revised as requested.

D.1.5 Visible Emissions Notations

- (a) Visible emission notations of the stack exhaust from baghouse stacks 10 and 11 shall be performed once per **shift 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 railcar loading drop point shall be performed at least once per **shift day** during normal daylight operations when transferring ash to a railcar. A trained employee shall record whether emissions are normal or abnormal.

Comment 4:

IPL requests that IDEM provide interpretation the phrase 'significant drop in baghouse's pressure' as found in Section D.1.8(b) - Broken or Failed Bag Detection (page 17 of 20).

In Section D.1.8(b) - Broken or Failed Bag Detection (page 17 of 20), IPL requests that the language that refers to 'if bag failure is determined by other means, such as gas temperatures, flow rates, air filtration, leaks, dust traces or triboflows...' needs to be removed since the monitoring requirements in the permit are adequate to indicate broken bags.

Response to Comment 4:

It is not possible for IDEM to provide an interpretation of the phrase "significant drop in baghouse pressure", because what is significant for one unit might not be for another. However, in this case the condition can be revised to eliminate the language of concern. The wording was included initially to provide examples of various indicators of baghouse failure, but if the Permittee does not believe this is useful then it can be removed.

Condition D.1.7 (formerly D.1.8) has also been revised to include new wording specifically for baghouses used to control emissions from a batch process.

Note that the previous part (a) of this condition regarding multi-compartment units was removed in the Response to Comment 1, above.

D.1.7 Broken or Failed Bag Detection

In the event that bag failure has been observed:

- ~~(b)(a)~~ For single compartment baghouses **on a process operated continuously**, ~~if failure is indicated by a significant drop in the baghouse's pressure readings with abnormal visible emissions or the failure is indicated by an opacity violation, or if bag failure is determined by other means, such as gas temperatures, flow rates, air infiltration, leaks, dust traces or triboflows, then failed units and the associated process will be shut down immediately until the failed units have been repaired or replaced. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section C - Emergency Provisions).~~
- (b) **For single compartment baghouses controlling emissions from a batch process, the feed to the process will be shut down immediately until the failed units have been repaired or replaced. The emission unit shall be shut down no later than the completion of the processing of the material in the line following the feed shut-off. Operations may continue only if the event qualifies as an emergency and the**

**Permittee satisfies the requirements of the emergency provisions of this permit
(Section B - Emergency Provisions)**

Comment 5:

In the Technical Support Document - Source Background and Description (page 1 of 7), IPL requests that the 'and' in Indianapolis Power and Light Company' is changed to '&' in 2 places.

IPL respectfully requests that the Technical Support Document – Compliance Requirements (page 7 & 8 of 8) reflect all the changes in the permit as requested above.

Response to Comment 5:

The OAQ prefers that the TSD reflect the permit that was on public notice; therefore, no change will be made to the original TSD. Changes to the permit or technical support material that occur after the public notice are documented in this Addendum to the Technical Support Document. This accomplishes the desired result of ensuring that these types of concerns are documented and part of the record regarding this permit decision.

The correction to the source name has been made to the Certification report form and the Emergency Occurrence Report form.

**PART 70 SOURCE MODIFICATION
CERTIFICATION**

Source Name: Indianapolis Power ~~and~~ & Light Company – Petersburg Generating Station

**PART 70 OPERATING PERMIT
EMERGENCY OCCURRENCE REPORT**

Source Name: Indianapolis Power ~~and~~ & Light Company – Petersburg Generating Station

Additional Revisions

Upon further review, the IDEM Office of Air Quality (OAQ) has made the following additional changes to the permit (bolded language has been added, the language with a line through it has been deleted). The Table of Contents has been modified to reflect these changes.

Revision 1

Condition B.4 (Significant Source Modification) requires submittal of the Affidavit of Construction upon completion of construction. The Affidavit has been added to the Permit, and listed at the end of the Table of Contents.

Revision 2

Condition C.11 has been revised to more accurately reflect the instrument requirements necessary for a valid reading.

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

- (a) ~~Whenever a condition in this permit requires the measurement of pressure drop across any part of the unit or its control device, the gauge employed~~ **When required by any condition of this permit, any analog instrument used to measure a parameter related to air pollution control performance** shall have a scale such that the expected ~~normal~~ **maximum reading for the normal range** shall be no less than twenty percent (20%) of full scale ~~and be accurate within plus or minus two percent (" 2%") of full scale reading.~~

- (b) The Permittee may request that the IDEM, OAQ, approve the use of ~~a pressure gauge or other~~ **an** instrument that does not meet the above specifications provided the Permittee can demonstrate an alternative pressure gauge or other instrument specification will adequately ensure compliance with permit conditions requiring the measurement of ~~pressure drop or other~~ **the appropriate** parameters.

Revision 3

The signature box on the cover page has been revised; Paul Dubenetzky is now Assistant Commissioner.

Significant Source Modification No.: 125-21340-00002	
Issued by: Paul Dubenetzky, Branch Chief Assistant Commissioner Office of Air Quality	Issuance Date:

Appendix A: Emission Calculations
Particulate Matter (PM)
From Fly Ash Silo 3 Railcar Loading System

Company Name: Indianapolis Power and Light Company - Petersburg Generating Station
Address City IN Zip: 6925 N State Road 57, Petersburg, IN 47567
Permit # / Plt ID: 125-21340-00002
Reviewer: Vickie Cordell
Date: 7/28/2005

Maximum throughput of fly ash loaded to railcars: 700 tons/day

PM, Before Control:

$$\frac{1.5 \times 700 \text{ tons/day} \times 3.14 \text{ lb PM/ton} \times 365 \text{ days/year}}{2,000 \text{ lbs/ton}} = 601.7 \text{ tons PM/yr before control}$$

PM, After Control:

$$601.7 \text{ tons PM/yr} \times (1 - 0.99 \text{ control efficiency}) = 6.0 \text{ tons PM/yr after control}$$

PM-10, Before Control:

$$\frac{1.5 \times 700 \text{ tons/day} \times 1.10 \text{ lb PM-10/ton} \times 365 \text{ days/year}}{2,000 \text{ lbs/ton}} = 210.8 \text{ tons PM-10/yr before control}$$

PM-10, After Control:

$$210.8 \text{ tons PM-10/yr} \times (1 - 0.99 \text{ control efficiency}) = 2.1 \text{ tons PM-10/yr after control}$$

Methodology

Emission factors for fly ash Before Control from AP-42 Table 11.12-2 (Emission Factors for Concrete Batching) (October 2001 edition) - pneumatic conveyance of cement supplement (including fly ash) to silo.

99% control efficiency for baghouses was provided in the application. This control efficiency is typical for baghouses.

Half of the total ash quantity can be transferred from Silo 4 to Silo 3, therefore the emission calculation is multiplied by 1.5.

Appendix A: Emission Calculations
Hazardous Air Pollutants (HAPs)
From Fly Ash Silo 3 Railcar Loading System

Company Name: Indianapolis Power and Light Company - Petersburg Generating Station
Address City IN Zip: 6925 N State Road 57, Petersburg, IN 47567
Permit # / Plt ID: 125-21340-00002
Reviewer: Vickie Cordell
Date: 7/28/2005

Hazardous Air Pollutant (HAP)	HAP Concentration in ppm ⁽¹⁾	Tons/year before control ⁽²⁾	Tons/year after control ⁽³⁾
Arsenic	52	3.1E-02	3.1E-04
Beryllium	3	1.8E-03	1.8E-05
Cadmium	4	2.4E-03	2.4E-05
Chromium	39	2.3E-02	2.3E-04
Cobalt	8	4.8E-03	4.8E-05
Lead	22	1.3E-02	1.3E-04
Manganese	59	3.6E-02	3.5E-04
Mercury	none detected	0.0E+00	0.0E+00
Nickel	32	1.9E-02	1.9E-04
TOTAL	not applicable	1.3E-01	1.3E-03

Methodology

- (1) IPL had a sample of the fly ash analyzed to determine the hazardous air pollutant content in parts per million (ppm). The concentration of each HAP in the fly ash sample is assumed to be the same as the concentration of the HAP in the particulate matter (PM) emissions.
- (2) (Tons/yr of PM before control) x (ppm of HAP in PM) = Tons/year of HAP before control
 Example:
 (601.7 tons PM/yr before control) x (52 parts Arsenic/10⁶ parts PM) = 0.031 tons/yr Arsenic before control
- (3) (Tons/yr of PM after control) x (ppm of HAP in PM) = Tons/year of HAP after control
 Example:
 (6.0 tons PM/yr after control) x (52 parts Arsenic/10⁶ parts PM) = 0.00031 tons/yr Arsenic after control