



INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

We Protect Hoosiers and Our Environment.

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(800) 451-6027 • (317) 232-8603 • www.idem.IN.gov

Michael R. Pence
Governor

Thomas W. Easterly
Commissioner

To: Interested Parties

Date: January 2, 2015

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

Source Name: Indianapolis Power & Light Company – Harding Street Station

Permit Level: Administrative Amendment

Permit Number: 097-35247-00033

Source Location: 3700 & 4190 S. Harding Street, Indianapolis, Indiana

Type of Action Taken: Changes that are administrative in nature

Notice of Decision: Approval

Please be advised that on behalf of the Commissioner of the Department of Environmental Management, I have issued a decision regarding the matter referenced above. Pursuant to 326 IAC 2, this approval was effective immediately upon submittal of the application.

The final decision is available on the IDEM website at: <http://www.in.gov/apps/idem/caats/>
To view the document, select Search option 3, then enter permit 35247.

If you would like to request a paper copy of the permit document, please contact IDEM's central file room:

Indiana Government Center North, Room 1201
100 North Senate Avenue, MC 50-07
Indianapolis, IN 46204
Phone: 1-800-451-6027 (ext. 4-0965)
Fax (317) 232-8659

(continues on next page)

If you wish to challenge this decision, IC 4-21.5-3-7 requires that you file a petition for administrative review. This petition may include a request for stay of effectiveness and must be submitted to the Office of Environmental Adjudication, 100 North Senate Avenue, Government Center North, Suite N 501E, Indianapolis, IN 46204, **within eighteen (18) calendar days from 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.



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Michael R. Pence
Governor

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Jennifer Hatfield
Indianapolis Power & Light Company - Harding Street Station
3700 South Harding Street
Indianapolis, IN 46217

January 2, 2015

Re: 097-35247-00033
Administrative Amendment to
Part 70 Renewal 097-29749-00033

Dear Jennifer Hatfield:

Indianapolis Power & Light Company - Harding Street Station was issued a Part 70 Permit Renewal No. 097-29749-00033 on August 11, 2011 for a stationary electric utility generating station located at 3700 South Harding Street, Indianapolis, Indiana 46217. On December 12, 2014, the Office of Air Quality (OAQ) received an application from the source requesting to remove the requirements associated with Units 3, 4, and GT3 from the permit because these units were retired on December 1, 2014.

Pursuant to 326 IAC 2-7-11(a)(7), this change to the permit is considered an administrative amendment because the permit is amended to change the descriptive information where the revision will not trigger a new applicable requirement or violate a permit term.

See Appendix A for the updated PTE of the source after removal of the emission units.

Proposed Changes:

Pursuant to 326 IAC 2-7-11(a), the permit is hereby administratively amended as follows with the deleted language as strikeouts and new language **bolded**:

Change 1: Descriptions of Units 3, 4 and GT3 are removed from Sections A.2, D.1, E.1, and G. The emission units are re-numbered accordingly. The requirements associated with Units 3 and 4 are removed from Sections D.1 and G.

Change 2: The description of Cooling Tower CT-7 is inserted into Section A.2. This emission unit was permitted in Minor Permit Modification No. 097-31253-00033, issued on March 22, 2012, but was not carried forward in subsequent permit actions. The emission units are re-numbered accordingly.

Change 3: The descriptions of diesel-fired black start engines, BSE-2 and BSE-3, are added to Section A.2. These emission units were permitted in Significant Permit Modification No. 097-33122-00033, issued on August 30, 2013, but were not carried forward in subsequent permit actions. The black start diesel-fired engines BSE-2 & BSE-3, are subject to the National Emission Standards for Hazardous Air Pollutants for Reciprocating Internal Combustion Engines (40 CFR 63, Subpart ZZZZ). The requirements were added in Section D.8.

Change 4: The Organic Solvent Degreasing Operations (326 IAC 8-3) Rules have been updated (effective March 1, 2013). The applicability and requirements of the rules have significantly changed and 326 IAC 8-3-5, 326 IAC 8-3-6, and 326 IAC 8-3-7 have been repealed. These changes were incorporated in Significant Permit Modification No. 097-33122-00033, issued on August 30, 2013, but were not carried forward in subsequent permit actions. Section D.7 is updated to reflect these changes.



Change 5: Part 70 Permit Renewal No. 097-29749-00033, issued on August 11, 2011, contained the following attachments: Attachment A: 40 CFR Part 63, Subpart ZZZZ; Attachment B: Acid Rain Permit AR 097-29749-00033; and Attachment C: Fugitive Dust Plan. Consistent numbering of the attachments was not used in all subsequent permit actions. The requirements of 40 CFR 63, Subpart DDDDD were added as an attachment to the permit in Significant Permit Modification 097-33352-00033, issued on October 9, 2013. The compliance extension for 40 CFR 63, Subpart UUUUU was added as an attachment to the permit in Significant Permit Modification 097-34265-00033, issued on May 12, 2014. Sections E.2.2 and E.3.2 are updated to reference the correct attachment.

Additional Changes:

IDEM, OAQ has made additional revisions to the permit as described below in order to update the language to match the most current version of the applicable rule, to eliminate redundancy within the permit, and to provide clarification regarding the requirements of these conditions.

Change 6: On October 27, 2010, the Indiana Air Pollution Control Board issued revisions to 326 IAC 2. These revisions resulted in changes to the rule sites listed in the permit. These changes are not changes to the underlining provisions. The change is only to site of these rules in Section A - General Information, Section A - Emission Units and Pollution Control Equipment Summary, Section A - Specifically Regulated Insignificant Activities, Section B - Preventative Maintenance Plan, Section B - Emergency Provisions, Section B - Operational Flexibility, Section C - Risk Management Plan, and the Facility Descriptions. IDEM, OAQ has clarified the rule sites for the Preventive Maintenance Plan.

Change 7: On October 27, 2010, the Indiana Air Pollution Control Board issued revisions to 326 IAC 2. These revisions included the incorporation of the U.S. EPA's definition of reasonable possibility. The permit previously sited to the EPA definition. Also, the revisions resulted in changes to other rule sites listed in the permit. Neither of these changes are changes to the underlining provisions. The change is only to site of these rules in Section C - General Reporting and Section C - General Recordkeeping.

Change 8: IDEM, OAQ has clarified the Permittee's responsibility with regards to record keeping.

Change 9: IDEM, OAQ has decided to clarify the Permittee's responsibility under CAM.

Change 10: IDEM, OAQ has clarified the interaction of the Quarterly Deviation and Compliance Monitoring Report and the Emergency Provisions.

Change 11: On November 3, 2011, the Indiana Air Pollution Control Board issued a revision to 326 IAC 2. The revision resulted in a change to the rule site of the "responsible official" definition.

Change 12: IDEM clarified Section C - Instrument Specifications to indicate that the analog instrument must be capable of measuring the parameters outside the normal range.

Change 13: IDEM added "where applicable" to the lists in Section C - General Record Keeping Requirements to more closely match the underlying rule.

Change 14: IDEM is changing the Section C - Compliance Monitoring Condition to clearly describe when new monitoring for new and existing units must begin.

A.1 General Information [326 IAC 2-7-4(c)][326 IAC 2-7-5(14)(15)][326 IAC 2-7-1(22)]

A.2 Emission Units and Pollution Control Equipment Summary
[326 IAC 2-7-4(c)(3)][326 IAC 2-7-5(14)(15)]

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

- ~~(a) One (1) Combustion Engineering Boiler number 9 identified as Unit 3. Unit 3 is a distillate oil fired unit with a design heat input capacity rated at 527.0 million Btu per hour and exhausting to Stack/Vent ID 3-1. Equipped with no add on air pollution control equipment. Installed in 1942.~~
- ~~(b) One (1) Combustion Engineering Boiler number 10 identified as Unit 4. Unit 4 is a distillate oil fired unit with a design heat input capacity rated at 527.0 million Btu per hour and exhausting to Stack/Vent ID 4-1. Equipped with no add on air pollution control equipment. Installed in 1947.~~

Before Conversion of Boiler number 50 to Natural Gas

- (ea) One (1) Combustion Engineering Boiler number 50 identified as Unit 5. Unit 5 is a pulverized coal tangentially fired unit with a design heat input capacity rated at 1017.0 million Btu per hour. Emissions are directed to one (1) cold side electrostatic precipitator identified as Control Equipment ID CE 50 and exhausting at Stack/Vent ID 5-1. SO3 injection is utilized as a flue gas conditioning agent for the electrostatic precipitator but the source is not required to perform gas conditioning. Also equipped with low NOX burners, neural net controls, separated overfire air (SOFA), and selective non-catalytic reduction technology (SNCR). These technologies were voluntarily installed. Distillate fuel oil is used as supplemental fuel and for firing during startup of Unit 5. Installation date for Unit 5 is 1958.

After Conversion of Boiler number 50 to Natural Gas

- (ea) One (1) 1,162 MMBtu/hr Combustion Engineering Boiler 50 identified as Unit 5, constructed in 1958, approved for modification in 2013 from coal to natural gas combustion only, and exhausting at Stack/Vent ID 5-1.

Before Conversion of Boiler number 60 to Natural Gas

- ~~(db) One (1) Combustion Engineering Boiler number 60 identified as Unit 6. Unit 6 is a pulverized coal tangentially fired unit with a design heat input capacity rated at 1017.0 million Btu per hour. Emissions are directed to one (1) cold side electrostatic precipitator identified as Control Equipment ID CE 60 and exhausting at Stack/Vent ID 6-1. SO3 injection is utilized as a flue gas conditioning agent for the electrostatic precipitator but the source is not required to perform gas conditioning. Also equipped with low NOX burners, neural net controls, separated overfire air (SOFA), and selective non-catalytic reduction technology (SNCR). These technologies were voluntarily installed. Distillate fuel oil is used as supplemental fuel and for firing during startup of Unit 6. Installation date for Unit 6 is 1961.~~

After Conversion of Boiler number 60 to Natural Gas

- (db) One (1) 1,162 MMBtu/hr Combustion Engineering Boiler 60 identified as Unit 6, constructed in 1961, approved for modification in 2013 from coal to natural gas combustion only, and exhausting at Stack/Vent ID 6-1.
- (ec) One (1) Combustion Engineering Boiler number 70 identified as Unit 7. Unit 7 is a pulverized coal tangentially fired unit with a design heat input capacity rated at 4123.0 million Btu per hour. Emissions are directed to one (1) cold side electrostatic precipitator identified as Control Equipment ID CE 70 and exhausting at Stack/Vent ID 7-1. SO3

injection is utilized as a flue gas conditioning agent for the electrostatic precipitator but the source is not required to perform gas conditioning. Unit 7 is equipped with low NOX burners, neural net controls, separated overfire air (SOFA), and selective catalytic reduction technology (SCR) and FGD scrubber. These technologies were voluntarily installed. When the FGD is in operation, Unit 7 exhausts to a separate wet stack. Distillate fuel oil and used oil are used as supplemental fuel and for firing during startup of Unit 7. Construction was commenced on Unit 7 prior to August 17, 1971 and completed in 1973.

- (d) One (1) Cooling Tower associated with Unit 7, identified as CT-7, approved for construction in 2012, with a capacity of 189,280 gallons circulating water per minute and maximum drift rate of 0.001%.**
- (fe)** One (1) General Electric Gas Turbine Engine number GT1 identified as Unit GT1. Unit GT1 is a distillate oil fired unit with a design heat input capacity rated at 299.0 million Btu per hour and exhausting at Stack/Vent ID GT1-1. Model number MS 5000. Equipped with no add on air pollution control equipment. Installation date for Unit GT1 is 1973.
- (gf)** One (1) General Electric Gas Turbine Engine number GT2 identified as Unit GT2. Unit GT2 is a distillate oil fired unit with a design heat input capacity rated at 299.0 million Btu per hour and exhausting at Stack/Vent ID GT2-1. Model number MS 5000. Equipped with no add on air pollution control equipment. Installation date for Unit GT2 is 1973.
- ~~**(h)** One (1) General Electric Gas Turbine Engine number GT3 identified as Unit GT3. Unit GT3 is a distillate oil fired unit with a design heat input capacity rated at 299.0 million Btu per hour and exhausting at Stack/Vent ID GT3-1. Model number MS 5000. Equipped with no add on air pollution control equipment. Installation date for Unit GT3 is 1973.~~
- (ig)** One (1) General Electric Gas Turbine Engine number GT4 identified as Unit GT4. Unit GT4 is a distillate oil fired and/or natural gas fired unit with a design heat input capacity rated at 875.0 million Btu per hour and exhausting at Stack/Vent ID GT4-1. Model number MS 7001. Water injection performed for NOX emission control. Installation date for Unit GT4 is 1994.
- (jh)** One (1) General Electric Gas Turbine Engine number GT5 identified as Unit GT5. Unit GT5 is a distillate oil fired and/or natural gas fired unit with a design heat input capacity rated at 867.0 million Btu per hour and exhausting at Stack/Vent ID GT5-1. Model number MS 7001. Water injection performed for NOX emission control. Installation date for Unit GT5 is 1995.
- (ki)** One (1) General Electric Gas Turbine Model number PG7241 identified as Unit GT6. Unit GT6 is a natural gas fired unit with a design heat input capacity rated at 1,660 MMBtu per hour and exhausting at Stack/Vent ID GT-6. NOX emissions will be controlled by dry low NOX burners. Installation date for Unit GT6 is 2002.
- (tj)** One (1) General Motors Reciprocating Internal Combustion Standby/Emergency Generator identified as Unit ST14. As an emergency generator, Unit ST14 will be operated less than 500 hours per year. Unit ST14 is distillate oil fired with a design heat input of 27.6 million Btu per hour. Equipped with no add on air pollution control equipment. Exhausting at Stack/Vent ID ST14-1. Installation date for Unit ST14 is 1967.
- (mk)** Coal material handling and storage system with a maximum annual capacity of 7.5 million tons per year and described as follows:

- (nl) Limestone transfer from trucks and loader vehicles to the conveyor system, identified as T-1, with a maximum capacity to transfer 230,000 tons of limestone per year and using no control. Constructed in 2006.
- (om) Five (5) covered limestone conveyors, identified as T-2, with a maximum capacity to convey 230,000 tons of limestone per year and using no control. Constructed in 2006. Under 40 CFR 60.670, Subpart OOO, T-2 is considered an affected facility.
- (pn) Two (2) 630 ton capacity limestone storage silos, identified as L7-1 and L7-2, using bin vents LC7-1 and LC7-2 as control, and exhausting to stack/vent LSV7-1 and LSV7-2. Maximum throughput of 230,000 tons of limestone per year. Constructed in 2006. Under 40 CFR 60.670, Subpart OOO, L7-1 and L7-2 are each considered an affected facility.
- (qo) Two (2) weigh feeders which transfer limestone from the silos to the two (2) enclosed wet ball mills (grinding mills) for grinding limestone, identified as BM7-1 and BM7-2. The ball mill grinding mills are located in a covered building. Constructed in 2006. Under 40 CFR 60.670, Subpart OOO, BM7-1 and BM7-2 are each considered an affected facility.
- (rp) Gypsum transfer, identified as T-3, with a maximum capacity to transfer 414,000 tons of gypsum per year and using no control. Constructed in 2006.
- (sq) Six (6) covered gypsum conveyors, identified as T-4, with a maximum capacity to convey 414,000 tons of gypsum and using no control. Constructed in 2006.
- (r) **One (1) Reciprocating Internal Combustion Engine identified as Unit BSE-2. Unit BSE-2 is a black start diesel-fired engine and not an emergency use engine. Unit BSE-2 has a design heat input of 6.65 million Btu per hour (475 horsepower) and exhausts to Stack/Vent GT2-1. Unit BSE-2 was installed in 1973.**
- (s) **One (1) Reciprocating Internal Combustion Engine identified as Unit BSE-3. Unit BSE-3 is a black start diesel-fired engine and not an emergency use engine. Unit BSE-3 has a design heat input of 6.65 million Btu per hour (475 horsepower) and exhausts to Stack/Vent GT3-1. Unit BSE-3 was installed in 1973.**

A.3 Specifically Regulated Insignificant Activities
[326 IAC 2-7-1(21)][326 IAC 2-7-4(c)][326 IAC 2-7-5(14)(15)]

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

- (d) Degreasing operations that do not exceed 145 gallons per 12 months, except if subject to 326 IAC 20-6. [326 IAC 8-3-2] [326 IAC 8-3-5]

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

- (a) A certification required by this permit meets the requirements of 326 IAC 2-7-6(1) if:

- (1) it contains a certification by a "responsible official" as defined by 326 IAC 2-7-1(3435), and

- (c) A "responsible official" is defined at 326 IAC 2-7-1(3435).

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

- (c) The annual compliance certification report shall include the following:
- (1) The appropriate identification of each term or condition of this permit that is the basis of the certification;
 - (2) The compliance status;
 - (3) Whether compliance was continuous or intermittent;
 - (4) The methods used for determining the compliance status of the source, currently and over the reporting period consistent with 326 IAC 2-7-5(3); and
 - (5) Such other facts, as specified in Sections D of this permit, as IDEM, OAQ may require to determine the compliance status of the source.

The submittal by the Permittee does require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(3435).

B.10 Preventive Maintenance Plan [326 IAC 2-7-5(1),(3) and (13)(12)] [326 IAC 2-7-6(1) and (6)] [326 IAC 1-6-3]

- (b) If required by specific condition(s) in Section D of this permit where no PMP was previously required, the Permittee shall prepare and maintain Preventive Maintenance Plans (PMPs) no later than ninety (90) days after issuance of this permit or ninety (90) days after initial start-up, whichever is later, including the following information on each facility:

The PMP extension notification does not require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(3435).

The Permittee shall implement the PMPs.

- (c) 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. The PMPs and their submittal do not require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(3435).

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

- (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:

- (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:

The notification which shall be submitted by the Permittee does not require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(3435).

- (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)(8) be revised in response to an emergency.

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

- (a) This permit may be modified, reopened, revoked and reissued, or terminated for cause. The filing of a request by the Permittee for a Part 70 Operating Permit modification, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay any condition of this permit.
[326 IAC 2-7-5(6)(C)] The notification by the Permittee does require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(3435).

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

- (a) The application for renewal shall be submitted using the application form or forms prescribed by IDEM, OAQ and shall include the information specified in 326 IAC 2-7-4. Such information shall be included in the application for each emission unit at this source, except those emission units included on the trivial or insignificant activities list contained in 326 IAC 2-7-1(21) and 326 IAC 2-7-1(40). The renewal application does require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(3435).

B.17 Permit Amendment or Modification [326 IAC 2-7-11][326 IAC 2-7-12] [40 CFR 72]

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

Any such application does require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(3435).

B.19 Operational Flexibility [326 IAC 2-7-20][326 IAC 2-7-10.5]

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

conditions is met:

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

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

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

The notification which shall be submitted is not considered an application form, report or compliance certification. Therefore, the notification by the Permittee does not require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(~~3435~~).

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

- (b) Any application requesting a change in the ownership or operational control of the source shall contain a written agreement containing a specific date for transfer of permit responsibility, coverage and liability between the current and new Permittee. The application shall be submitted to:

Any such application does require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(~~3435~~).

C.7 Asbestos Abatement Projects [326 IAC 14-10] [326 IAC 18] [40 CFR 61, Subpart M]

- (d) The notice to be submitted shall include the information enumerated in 326 IAC 14-10-3(3).

The notice shall include a signed certification from the owner or operator that the information provided in this notification is correct and that only Indiana licensed workers and project supervisors will be used to implement the asbestos removal project. The notifications do not require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(~~3435~~).

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

- (a) For performance testing required by this permit, a test protocol, except as provided elsewhere in this permit, shall be submitted to:

no later than thirty-five (35) days prior to the intended test date. The protocol submitted by the Permittee does not require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(3435).

- (b) The Permittee shall notify IDEM, OAQ of the actual test date at least fourteen (14) days prior to the actual test date. The notification submitted by the Permittee does not require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(3435).

C.10 Compliance Monitoring [326 IAC 2-7-5(3)][326 IAC 2-7-6(1)] [40 CFR 64][326 IAC 3-8]

(a) **For new units:**

Unless otherwise specified in the approval for the new emission unit(s), compliance monitoring for new emission units shall be implemented on and after the date of initial start-up.

(b) **For existing units:**

Unless otherwise specified in this permit, for all monitoring requirements not already legally required, the Permittee shall be allowed up to ninety (90) days from the date of permit issuance ~~or of initial start-up, whichever is later~~, to begin such monitoring. If, due to circumstances beyond the Permittee's control, any monitoring equipment required by this permit cannot be installed and operated no later than ninety (90) days after permit issuance ~~or the date of initial start-up, whichever is later~~, the Permittee may extend the compliance schedule related to the equipment for an additional ninety (90) days provided the Permittee notifies:

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

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

The notification which shall be submitted by the Permittee does require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(3435).

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

- (c) **For monitoring required by CAM, at all times, the Permittee shall maintain the monitoring, including but not limited to, maintaining necessary parts for routine repairs of the monitoring equipment.**

- (d) **For monitoring required by CAM, except for, as applicable, monitoring malfunctions, associated repairs, and required quality assurance or control activities (including, as applicable, calibration checks and required zero and span adjustments), the Permittee shall conduct all monitoring in continuous operation (or shall collect data at all required intervals) at all times that the pollutant-specific emissions unit is operating. Data recorded during monitoring malfunctions,**

associated repairs, and required quality assurance or control activities shall not be used for purposes of this part, including data averages and calculations, or fulfilling a minimum data availability requirement, if applicable. The owner or operator shall use all the data collected during all other periods in assessing the operation of the control device and associated control system. A monitoring malfunction is any sudden, infrequent, not reasonably preventable failure of the monitoring to provide valid data. Monitoring failures that are caused in part by poor maintenance or careless operation are not malfunctions.

C.12 Instrument Specifications [326 IAC 2-1.1-11] [326 IAC 2-7-5(3)] [326 IAC 2-7-6(1)]

- (a) When required by any condition of this permit, an analog instrument used to measure a parameter related to the operation of an air pollution control device shall have a scale such that the expected maximum reading for the normal range shall be no less than twenty percent (20%) of full scale. **The analog instrument shall be capable of measuring values outside of the normal range.**

C.14 Risk Management Plan [326 IAC 2-7-5(~~12~~)(11)] [40 CFR 68]

C.15 Response to Excursions or Exceedances [40 CFR 64][326 IAC 3-8] [326 IAC 2-7-5] [326 IAC 2-7-6]

- (I) Upon detecting an excursion where a response step is required by the D Section or an exceedance of a limitation, **not subject to CAM**, in this permit:
- (a) The Permittee shall take reasonable response steps to restore operation of the emissions unit (including any control device and associated capture system) to its normal or usual manner of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing excess emissions.
- (b) The response shall include minimizing the period of any startup, shutdown or malfunction. The response may include, but is not limited to, the following:
- (1) initial inspection and evaluation;
 - (2) recording that operations returned or are returning 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 normal or usual manner of operation.
- (c) A determination of whether the Permittee has used acceptable procedures in response to an excursion or exceedance will be based on information available, which may include, but is not limited to, the following:
- (1) monitoring results;
 - (2) review of operation and maintenance procedures and records; and/or
 - (3) inspection of the control device, associated capture system, and the process.

- (d) Failure to take reasonable response steps shall be considered a deviation from the permit.
- (e) The Permittee shall record the reasonable response steps taken.

(II)

(a) CAM Response to excursions or exceedances.

- (1) Upon detecting an excursion or exceedance, subject to CAM, the Permittee shall restore operation of the pollutant-specific 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. 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). Such actions may include initial inspection and evaluation, recording that operations returned to normal without operator action (such as through response by a computerized distribution control system), or 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.**
- (2) 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, monitoring results, review of operation and maintenance procedures and records, and inspection of the control device, associated capture system, and the process.**
- (b) If the Permittee identifies a failure to achieve compliance with an emission limitation, subject to CAM, or standard, subject to CAM, for which the approved monitoring did not provide an indication of an excursion or exceedance while providing valid data, or the results of compliance or performance testing document a need to modify the existing indicator ranges or designated conditions, the Permittee shall promptly notify the IDEM, OAQ and, if necessary, submit a proposed significant permit modification to this permit to address the necessary monitoring changes. Such a modification may include, but is not limited to, reestablishing indicator ranges or designated conditions, modifying the frequency of conducting monitoring and collecting data, or the monitoring of additional parameters.**
- (c) Based on the results of a determination made under paragraph (II)(a)(2) of this condition, the EPA or IDEM, OAQ may require the Permittee to develop and implement a QIP. The Permittee shall develop and implement a QIP if notified to in writing by the EPA or IDEM, OAQ.**
- (d) Elements of a QIP:
The Permittee shall maintain a written QIP, if required, and have it available for inspection. The plan shall conform to 40 CFR 64.8 b (2).**

- (e) **If a QIP is required, the Permittee shall develop and implement a QIP as expeditiously as practicable and shall notify the IDEM, OAQ if the period for completing the improvements contained in the QIP exceeds 180 days from the date on which the need to implement the QIP was determined.**
- (f) **Following implementation of a QIP, upon any subsequent determination pursuant to paragraph (II)(a)(2) of this condition the EPA or the IDEM, OAQ may require that the Permittee make reasonable changes to the QIP if the QIP is found to have:**
 - (1) **Failed to address the cause of the control device performance problems; or**
 - (2) **Failed to provide adequate procedures for correcting control device performance problems as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions.**
- (g) **Implementation of a QIP shall not excuse the Permittee from compliance with any existing emission limitation or standard, or any existing monitoring, testing, reporting or recordkeeping requirement that may apply under federal, state, or local law, or any other applicable requirements under the Act.**
- (h) **CAM recordkeeping requirements.**
 - (1) **The Permittee shall maintain records of monitoring data, monitor performance data, corrective actions taken, any written quality improvement plan required pursuant to paragraph (II)(a)(2) of this condition and any activities undertaken to implement a quality improvement plan, and other supporting information required to be maintained under this condition (such as data used to document the adequacy of monitoring, or records of monitoring maintenance or corrective actions). Section C - General Record Keeping Requirements of this permit contains the Permittee's obligations with regard to the records required by this condition.**
 - (2) **Instead of paper records, the owner or operator may maintain records on alternative media, such as microfilm, computer files, magnetic tape disks, or microfiche, provided that the use of such alternative media allows for expeditious inspection and review, and does not conflict with other applicable recordkeeping requirements.**

C.16 Actions Related to Noncompliance Demonstrated by a Stack Test [326 IAC 2-7-5][326 IAC 2-7-6]

The response action documents submitted pursuant to this condition do require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(3435).

C.17 Emission Statement [326 IAC 2-7-5(3)(C)(iii)][326 IAC 2-7-5(7)][326 IAC 2-7-19(c)][326 IAC 2-6]

The emission statement does require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(3435).

C.18 General Record Keeping Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-6] [326 IAC 2-2][326 IAC 2-3]

- (a) Records of all required monitoring data, reports and support information required by this

permit shall be retained for a period of at least five (5) years from the date of monitoring sample, measurement, report, or application. **Support information includes the following, where applicable:**

- (AA) All calibration and maintenance records.
- (BB) All original strip chart recordings for continuous monitoring instrumentation.
- (CC) Copies of all reports required by the Part 70 permit.

Records of required monitoring information include the following, where applicable:

- (AA) The date, place, as defined in this permit, and time of sampling or measurements.
- (BB) The dates analyses were performed.
- (CC) The company or entity that performed the analyses.
- (DD) The analytical techniques or methods used.
- (EE) The results of such analyses.
- (FF) The operating conditions as existing at the time of sampling or measurement.

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.

(c) If there is a reasonable possibility (as defined in ~~40 CFR 51.165(a)(6)(vi)(A), 40 CFR 51.165(a)(6)(vi)(B), 40 CFR 51.166(r)(6)(vi)(a), and/or 40 CFR 51.166(r)(6)(vi)(b)~~ **326 IAC 2-2-8 (b)(6)(A), 326 IAC 2-2-8 (b)(6)(B), 326 IAC 2-3-2 (l)(6)(A), and/or 326 IAC 2-3-2 (l)(6)(B)**) that a "project" (as defined in 326 IAC 2-2-1(~~qq oo~~) and/or 326 IAC 2-3-1(~~jj~~)) at an existing emissions unit, other than projects at a source with a Plantwide Applicability Limitation (PAL), which is not part of a "major modification" (as defined in 326 IAC 2-2-1(~~ee dd~~) and/or 326 IAC 2-3-1(~~z y~~)) may result in significant emissions increase and the Permittee elects to utilize the "projected actual emissions" (as defined in 326 IAC 2-2-1(~~pp~~) and/or 326 IAC 2-3-1(~~kk~~)), the Permittee shall comply with following:

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

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

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

(d) If there is a reasonable possibility (as defined in ~~40 CFR 51.165(a)(6)(vi)(A) and/or 40 CFR 51.166(r)(6)(vi)(a)~~ **326 IAC 2-2-8 (b)(6)(A) and/or 326 IAC 2-3-2 (l)(6)(A)**) that a "project" (as defined in 326 IAC 2-2-1(~~qq oo~~) and/or 326 IAC 2-3-1(~~jj~~)) at an existing emissions unit, other than projects at a source with a Plantwide Applicability Limitation (PAL), which is not part of a "major modification" (as defined in 326 IAC 2-2-1(~~ee dd~~) and/or 326 IAC 2-3-1(~~z y~~)) may result in significant emissions increase and the Permittee elects to utilize the "projected actual emissions" (as defined in 326 IAC 2-2-1(~~pp~~) and/or 326 IAC 2-3-1(~~kk~~)), the Permittee shall comply with following:

C.19 General Reporting Requirements [326 IAC 2-7-5(3)(C)] [326 IAC 2-1.1-11] [326 IAC 2-2] [~~40 CFR 64~~]**[326 IAC 3-8]**

(a) The Permittee shall submit the attached Quarterly Deviation and Compliance Monitoring Report or its equivalent. **Proper notice submittal under Section B – Emergency**

Provisions satisfies the reporting requirements of this paragraph. Any deviation from permit requirements, the date(s) of each deviation, the cause of the deviation, and the response steps taken must be reported except that a deviation required to be reported pursuant to an applicable requirement that exists independent of this permit, shall be reported according to the schedule stated in the applicable requirement and does not need to be included in this report. This report shall be submitted not later than thirty (30) days after the end of the reporting period. The Quarterly Deviation and Compliance Monitoring Report shall include a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(3435). A deviation is an exceedance of a permit limitation or a failure to comply with a requirement of the permit.

On and after the date by which the Permittee must use monitoring that meets the requirements of 40 CFR Part 64 and 326 IAC 3-8, the Permittee shall submit CAM reports to the IDEM, OAQ.

A report for monitoring under 40 CFR Part 64 and 326 IAC 3-8 shall include, at a minimum, the information required under paragraph (a) of this condition and the following information, as applicable:

- (1) Summary information on the number, duration and cause (including unknown cause, if applicable) of excursions or exceedances, as applicable, and the corrective actions taken;**
- (2) Summary information on the number, duration and cause (including unknown cause, if applicable) for monitor downtime incidents (other than downtime associated with zero and span or other daily calibration checks, if applicable); and**
- (3) A description of the actions taken to implement a QIP during the reporting period as specified in Section C-Response to Excursions or Exceedances. Upon completion of a QIP, the owner or operator shall include in the next summary report documentation that the implementation of the plan has been completed and reduced the likelihood of similar levels of excursions or exceedances occurring.**

The Permittee may combine the Quarterly Deviation and Compliance Monitoring Report and a report pursuant to 40 CFR 64 and 326 IAC 3-8.

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

- (1) The annual emissions, in tons per year, from the project identified in (c)(1) in Section C- General Record Keeping Requirements exceed the baseline actual emissions, as documented and maintained under Section C- General Record Keeping Requirements (c)(1)(C)(i), by a significant amount, as defined in 326 IAC 2-2-1 (xx-ww) and/or 326 IAC 2-3-1 (qq pp), for that regulated NSR pollutant, and**

SECTION D.1 EMISSIONS UNIT OPERATION CONDITIONS

Emissions Unit Description:

- ~~(a) One (1) Combustion Engineering Boiler number 9 identified as Unit 3. Unit 3 is a distillate oil fired unit with a design heat input capacity rated at 527.0 million Btu per hour and exhausting to Stack/Vent ID 3-1. Equipped with no add-on air pollution control equipment. Installed in 1942.~~
- ~~(b) One (1) Combustion Engineering Boiler number 10 identified as Unit 4. Unit 4 is a distillate oil fired unit with a design heat input capacity rated at 527.0 million Btu per hour and exhausting to Stack/Vent ID 4-1. Equipped with no add-on air pollution control equipment. Installed in 1947.~~

Before Conversion of Boiler number 50 to Natural Gas

- (ea) One (1) Combustion Engineering Boiler number 50 identified as Unit 5. Unit 5 is a pulverized coal tangentially fired unit with a design heat input capacity rated at 1017.0 million Btu per hour. Emissions are directed to one (1) cold side electrostatic precipitator identified as Control Equipment ID CE 50 and exhausting at Stack/Vent ID 5-1. SO₃ injection is utilized as a flue gas conditioning agent for the electrostatic precipitator but the source is not required to perform gas conditioning. Also equipped with low NOX burners, neural net controls, separated overfire air (SOFA), and selective non-catalytic reduction technology (SNCR). These technologies were voluntarily installed. Distillate fuel oil is used as supplemental fuel and for firing during startup of Unit 5. Installation date for Unit 5 is 1958.

After conversion of Boiler number 50 to Natural Gas

- (ea) One (1) 1,162 MMBtu/hr Combustion Engineering Boiler 50 identified as Unit 5, constructed in 1958, approved for modification in 2013 from coal to natural gas combustion only, and exhausting at Stack/Vent ID 5-1.

Before Conversion of Boiler number 60 to Natural Gas

- (db) One (1) Combustion Engineering Boiler number 60 identified as Unit 6. Unit 6 is a pulverized coal tangentially fired unit with a design heat input capacity rated at 1017.0 million Btu per hour. Emissions are directed to one (1) cold side electrostatic precipitator identified as Control Equipment ID CE 60 and exhausting at Stack/Vent ID 6-1. SO₃ injection is utilized as a flue gas conditioning agent for the electrostatic precipitator but the source is not required to perform gas conditioning. Also equipped with low NOX burners, neural net controls, separated overfire air (SOFA), and selective non-catalytic reduction technology (SNCR). These technologies were voluntarily installed. Distillate fuel oil is used as supplemental fuel and for firing during startup of Unit 6. Installation date for Unit 6 is 1961.

After conversion of Boiler number 60 to Natural Gas

- (db) One (1) 1,162 MMBtu/hr Combustion Engineering Boiler 60 identified as Unit 6, constructed in 1961, approved for modification in 2013 from coal to natural gas combustion only, and exhausting at Stack/Vent ID 6-1.
- (ec) One (1) Combustion Engineering Boiler number 70 identified as Unit 7. Unit 7 is a pulverized coal tangentially fired unit with a design heat input capacity rated at 4123.0 million Btu per hour. Emissions are directed to one (1) cold side electrostatic precipitator identified as Control Equipment ID CE 70 and exhausting at Stack/Vent ID 7-1. SO₃ injection is utilized as a flue gas conditioning agent for the electrostatic precipitator but the source is not required to perform gas conditioning. Unit 7 is equipped with low NOX burners, neural net controls,

separated overfire air (SOFA), and selective catalytic reduction technology (SCR) and FGD scrubber. These technologies were voluntarily installed. When the FGD is in operation, Unit 7 exhausts to a separate wet stack. Distillate fuel oil and used oil are used as supplemental fuel and for firing during startup of Unit 7. Construction was commenced on Unit 7 prior to August 17, 1971 and completed in 1973.

(fe) One (1) General Electric Gas Turbine Engine number GT1 identified as Unit GT1. Unit GT1 is a distillate oil fired unit with a design heat input capacity rated at 299.0 million Btu per hour and exhausting at Stack/Vent ID GT1-1. Model number MS 5000. Equipped with no add on air pollution control equipment. Installation date for Unit GT1 is 1973.

(gf) One (1) General Electric Gas Turbine Engine number GT2 identified as Unit GT2. Unit GT2 is a distillate oil fired unit with a design heat input capacity rated at 299.0 million Btu per hour and exhausting at Stack/Vent ID GT2-1. Model number MS 5000. Equipped with no add on air pollution control equipment. Installation date for Unit GT2 is 1973.

~~(h) One (1) General Electric Gas Turbine Engine number GT3 identified as Unit GT3. Unit GT3 is a distillate oil fired unit with a design heat input capacity rated at 299.0 million Btu per hour and exhausting at Stack/Vent ID GT3-1. Model number MS 5000. Equipped with no add on air pollution control equipment. Installation date for Unit GT3 is 1973.~~

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

D.1.1 Marion County [326 IAC 6.5-6][326 IAC 2-7-5]

- (a) Pursuant to 326 IAC 6.5-6 (Marion County), the Permittee shall comply with the following emission limitations for particulate (PM):

Unit ID	PM Limit (pounds PM per million Btu)	PM Limit (tons per year)
Unit 3 (Boiler number 9)	0.015	1.9
Unit 4 (Boiler number 10)	0.015	2.2
Unit 5 (Boiler number 50)	0.135	82.2
Unit 6 (Boiler number 60)	0.135	82.2
Unit 7 (Boiler number 70)	0.10	830.7
Unit GT1 (Gas Turbine GT1)	0.015	0.28
Unit GT2 (Gas Turbine GT2)	0.015	0.28
Unit GT3 (Gas Turbine GT3)	0.015	0.28

- (b) Pursuant to 326 IAC 6.5-6-1(b) (Marion County), the Permittee shall be considered in compliance with the tons per year emission limits if within five percent (5%) of the emission limit established pursuant to 326 IAC 6.5-6.
- ~~(c) Pursuant to 326 IAC 6.5 and 326 IAC 2-7-5, compliance with the PM tons per year limit for Units 3 and 4 shall be demonstrated by recording, on a monthly basis, the usage of oil in gallons per twelve (12) consecutive month period and using the PM limit established in D.1.1(a) or an emission factor as determined from the most recent IDEM approved PM stack test in the following formula to determine the PM emissions for each month. Compliance shall then be determined by summing the values obtained from the formula for the most recent 12 consecutive month period.~~

$$\text{PM emissions (tons/month)} = \frac{\text{Oil usage (gallons/month)} * \text{PM content (lb/MMBtu)} *}{\text{Heat content (MMBtu/gal)} * 1 \text{ ton/2000 lbs}}$$

~~Where: PM content = Limit contained in D.1.1(a) or an emission factor as determined from the most recent IDEM approved PM stack test; and
 Heat Content = 0.139 MMBtu/gal.~~

Condition D.1.1 shall cease to apply to Boiler 50 & Boiler 60 (Unit 5 & Unit 6) after Boiler 50 & Boiler 60 are converted to Natural Gas.

D.1.2 Sulfur Dioxide (SO₂) Emission Limitations: Marion County [326 IAC 7-4-2]

(a) Pursuant to 326 IAC 7-4-2 (Sulfur Dioxide Emission Limitations: Marion County), the Permittee shall comply with the following emission limitations in pounds per million Btu:

Unit ID	SO ₂ Limit (pounds per million Btu)
Unit 3 and Unit 4 (Boiler number 9 and Boiler number 10)	0.35
Unit 5 and Unit 6 (Boiler number 50 and Boiler number 60)	4.7
Unit 7 (Boiler number 70)	5.3
Unit GT1, and Unit GT2 and Unit GT3 (Gas Turbines GT1, and GT2 and GT3)	0.35

(b) As an alternative to the emission limitations listed above, pursuant to 326 IAC 7-4-2, Unit ~~3, 4, 5, 6 and Unit GT1, and GT2 and GT3~~ may comply with any one (1) of the sets of alternative emission limitations in pounds per million Btu as follows:

Alternative Scenario	Unit ID	SO ₂ Limit (pounds per million Btu)
1	Unit 5 and Unit 6 (Boiler number 50 and Boiler number 60)	5.2
	Unit 3, Unit 4 and Unit GT1, and GT2 and GT3 (Boiler number 9 and Boiler number 10 and Gas Turbines GT1, and GT2 and GT3)	0.0
2	Unit 5 and Unit 6 (Boiler number 50 and Boiler number 60)	5.0
	Unit 3 and Unit 4 (Boiler number 9 and Boiler number 10)	0.0
	Unit GT1, and GT2 and GT3 (Gas Turbines GT1, and GT2 and GT3)	0.4
3	Unit 5 and Unit 6 (Boiler number 50 and Boiler number 60)	4.1
	Unit 3 and Unit 4 (Boiler number 9 and Boiler number 10)	0.35
	Unit GT1, and GT2 and GT3 (Gas Turbines GT1, and GT2 and GT3)	0.3
4	Unit 5 and Unit 6 (Boiler number 50 and Boiler number 60)	3.9
	Unit 3, Unit 4 and GT1, and GT2 and GT3 (Boiler number 9 and Boiler number 10 and Gas Turbines GT1, and GT2 and GT3)	0.35

D.1.3 Startup, Shutdown and Other Opacity Limits [326 IAC 5-1-3] Reserved

- (a) Pursuant to 326 IAC 5-1-3 (Temporary Alternative Opacity Limitations), the following applies to Unit 3 and Unit 4:
- (1) When building a new fire in Unit 3 or Unit 4, or shutting down Unit 3 or Unit 4, opacity may exceed the applicable limit established in 326 IAC 5-1-2 and stated in Section C – Opacity. However, opacity levels shall not exceed sixty percent (60%) for any six (6) minute averaging period. Opacity in excess of the applicable limit established in 326 IAC 5-1-2 shall not continue for more than two (2) six (6) minute averaging periods in any twenty-four (24) hour period. [326 IAC 5-1-3(a)]
 - (2) When removing ashes from the fuel bed or furnace in a boiler or blowing tubes, opacity may exceed the applicable limit established in 326 IAC 5-1-2 and stated in Section C – Opacity. However, opacity levels shall not exceed sixty percent (60%) for any six (6) minute averaging period and opacity in excess of the applicable limit shall not continue for more than one (1) six (6) minute averaging period in any sixty (60) minute period. The averaging periods shall not be permitted for more than three (3) six (6) minute averaging periods in a twelve (12) hour period.
[326 IAC 5-1-3(b)]
- (b) If Unit 3 or Unit 4 cannot meet the opacity limitations of 326 IAC 5-1-3(a) or (b), the Permittee may submit a written request to IDEM, OAQ, for a temporary alternative opacity limitation in accordance with 326 IAC 5-1-3(d). The Permittee must demonstrate that the alternative limit is needed and justifiable.

D.1.9 Sulfur Dioxide Emissions (SO₂) and Sulfur Content [326 IAC 7-2][326 IAC 7-4-2][326 IAC 3-7-4]
Compliance for Unit 3, Unit 4 and Unit GT1, and Unit GT2 and Unit GT3 shall be determined as follows:

- (a) Pursuant to 326 IAC 7-2-1(c)(3), the Permittee shall demonstrate that the sulfur dioxide emissions do not exceed the equivalent of the SO₂ limitation(s) in pounds per million Btu for Unit 3, Unit 4 and Unit GT1, and Unit GT2 and Unit GT3 stated in Condition D.1.2 using a calendar month average.

D.1.13 Visible Emissions Notations [326 IAC 2-7-6(1)][326 IAC 2-7-5(1)] Reserved

- (a) Visible emission (VE) notations of Unit 3 and/or Unit 4 stack exhaust(s) shall be performed once per day during normal daylight operations when the given unit is operating for more than two (2) continuous daylight hours and combusting fuel oil. A trained employee shall record whether emissions are normal or abnormal.
- (b) If abnormal emissions are observed at Unit 3 and/or Unit 4 exhaust, the Permittee shall take reasonable response steps in accordance with Section C – Response to Excursions or Exceedances. Observation of abnormal emissions that do not violate 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.
- (c) “Normal” means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shutdown time.
- (d) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions

for the boilers.

D.1.16 Record Keeping Requirements

- (a) To document the compliance status with Section C - Opacity and Conditions D.1.1, ~~D.1.3~~, D.1.4, D.1.5, D.1.11, ~~D.1.13~~ and D.1.15, the Permittee shall maintain records in accordance with (1) through (8) below. Records shall be complete and sufficient to establish compliance with the limits established in Section C – Opacity and Conditions D.1.1, ~~D.1.3~~ and D.1.4:

- (1) Monthly and twelve (12) consecutive month distillate oil consumption in ~~Unit 3, Unit 4 and~~ Units GT1, and GT2 ~~and GT3~~;

- (c) To document the compliance status with Condition D.1.2 and D.1.9, the Permittee shall maintain records in accordance with (1) through (6) below. Records maintained for (1) through (6) shall be complete and sufficient to establish compliance with the SO₂ limit established in Condition D.1.2 for ~~Unit 3, Unit 4, Unit GT1, and Unit GT2 and Unit GT3~~.

D.2.15 Reporting Requirements

- (a) A quarterly summary of the information to document compliance status with Conditions D.2.4 and D.2.11 shall be submitted not later than thirty (30) days after the end of the quarter being reported. Section C - General Reporting contains the Permittee's obligation with regard to the reporting required by this condition. The report submitted by the Permittee does require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official," as defined by 326 IAC 2-7-1(3435).

SECTION D.3 EMISSIONS UNIT OPERATION CONDITIONS

Emissions Unit Description:

- (ki) One (1) General Electric Gas Turbine Model number PG7241 identified as Unit GT6. Unit GT6 is a natural gas fired unit with a design heat input capacity rated at 1,660 MMBtu per hour and exhausting at Stack/Vent ID GT-6. NO_x emissions will be controlled by dry low NO_x burners. Installation date for Unit GT6 is 2002.

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

D.3.8 Reporting Requirements

- (a) A quarterly summary of the information to document compliance with status Condition D.3.3(a) shall be submitted not later than thirty (30) days after the end of the quarter being reported. Section C - General Reporting contains the Permittee's obligation with regard to the reporting required by this condition. The report submitted by the Permittee does require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official," as defined by 326 IAC 2-7-1(3435).

SECTION D.4 EMISSIONS UNIT OPERATION CONDITIONS

Emissions Unit Description:

- (tj) One (1) General Motors Reciprocating Internal Combustion Standby/Emergency Generator identified as Unit ST14. As an emergency generator, Unit ST14 will be operated less than 500 hours per year. Unit ST14 is distillate oil fired with a design heat input of 27.6 million Btu per hour. Equipped with no add on air pollution control equipment. Exhausting at Stack/Vent ID ST14-1. Installation date for Unit ST14 is 1967.

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

SECTION D.5 FACILITY CONDITIONS

Facility Description [326 IAC 2-7-5(~~15~~)(14)]:

- (mk) Coal material handling and storage system with a maximum annual capacity of 7.5 million tons per year and described as follows:

SECTION D.6 FACILITY OPERATION CONDITIONS

Facility Description: [326 IAC 2-7-5(~~15~~)(14)]

- (nl) Limestone transfer from trucks and loader vehicles to the conveyor system, identified as T-1, with a maximum capacity to transfer 230,000 tons of limestone per year and using no control. Constructed in 2006.
- (om) Five (5) covered limestone conveyors, identified as T-2, with a maximum capacity to convey 230,000 tons of limestone per year and using no control. Constructed in 2006. Under 40 CFR 60.670, Subpart OOO, T-2 is considered an affected facility.
- (pn) Two (2) 630 ton capacity limestone storage silos, identified as L7-1 and L7-2, using bin vents LC7-1 and LC7-2 as control, and exhausting to stack/vent LSV7-1 and LSV7-2. Maximum throughput of 230,000 tons of limestone per year. Constructed in 2006. Under 40 CFR 60.670, Subpart OOO, L7-1 and L7-2 are each considered an affected facility.
- (qo) Two (2) weigh feeders which transfer limestone from the silos to the two (2) enclosed wet ball mills (grinding mills) for grinding limestone, identified as BM7-1 and BM7-2. The ball mill grinding mills are located in a covered building. Constructed in 2006. Under 40 CFR 60.670, Subpart OOO, BM7-1 and BM7-2 are each considered an affected facility.
- (rp) Gypsum transfer, identified as T-3, with a maximum capacity to transfer 414,000 tons of gypsum per year and using no control. Constructed in 2006.
- (sq) Six (6) covered gypsum conveyors, identified as T-4, with a maximum capacity to convey 414,000 tons of gypsum and using no control. Constructed in 2006.

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

SECTION D.7 FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)(14)]:

Insignificant Activities

- (d) Degreasing operations that do not exceed 145 gallons per 12 months, except if subject to 326 IAC 20-6. [326 IAC 8-3-2] [~~326 IAC 8-3-5~~]

D.7.2 Volatile Organic Compounds (VOC) [326 IAC 8-3-2] [~~326 IAC 8-3-5(a)~~]

- (a) Pursuant to 326 IAC 8-3-2 (Organic Solvent Degreaser Operations: Cold Cleaner Operation), for cold cleaning operations existing as of January 1, 1980, located in Marion County and which have potential emissions of one hundred (100) tons per year or greater of VOC, ~~the Permittee shall:~~ **the owner or operator of a cold cleaner degreaser shall ensure the following control equipment and operating requirements are met:**
- (1) Equip the ~~cleaner~~ **degreaser** with a cover;
 - (2) Equip the ~~cleaner~~ **degreaser** with a **facility device** for draining cleaned parts;
 - (3) Close the degreaser cover whenever parts are not being handled in the ~~cleaner~~ **degreaser**;
 - (4) Drain cleaned parts for at least fifteen (15) seconds or until dripping ceases;
 - (5) Provide a permanent, conspicuous label ~~summarizing that lists~~ **the operation requirements in subdivisions (3), (4), (6), and (7)**;
 - (6) Store waste solvent only in ~~covered~~ **closed** containers; ~~and not dispose~~
 - (7) **Prohibit the disposal or transfer** of waste solvent ~~or transfer it to another party,~~ in such a manner that **could allow** greater than twenty percent (20%) of the waste solvent (by weight) ~~can~~ **to** evaporate into the atmosphere.
- (b) **The owner or operator of a cold cleaner degreaser subject to this subsection shall ensure the following additional control equipment and operating requirements are met:**
- (1) **Equip the degreaser with one (1) of the following control devices if the solvent is heated to a temperature of greater than forty-eight and nine-tenths (48.9) degrees Celsius (one hundred twenty (120) degrees Fahrenheit):**
 - (A) **A freeboard that attains a freeboard ratio of seventy-five hundredths (0.75) or greater.**
 - (B) **A water cover when solvent used in insoluble in, and heavier than, water.**
 - (C) **A refrigerated chiller.**
 - (D) **Carbon adsorption.**
 - (E) **An alternative system of demonstrated equivalent or better control as those outlined in clauses (A) through (D) that is approved by the department. An alternative system shall be submitted to the U.S. EPA as a SIP revision.**

(2) Ensure the degreaser cover is designed so that it can be easily operated with one (1) hand if the solvent is agitated or heated.

(3) If used, solvent spray:

(A) must be a solid, fluid stream; and

(B) shall be applied at a pressure that does not cause excessive splashing.

~~(b) Pursuant to 326 IAC 8-3-5(a) (Cold Cleaner-Degreaser Operation and Control), for cold cleaner degreaser operations without remote solvent reservoirs constructed after July 1, 1990, the Permittee shall ensure that the following control equipment requirements are met:~~

~~(1) Equip the degreaser with a cover. The cover must be designed so that it can be easily operated with one (1) hand if:~~

~~(A) The solvent volatility is greater than two (2) kiloPascals (fifteen (15) millimeters of mercury or three-tenths (0.3) pounds per square inch) measured at thirty-eight degrees Celsius (38^oC) (one hundred degrees Fahrenheit (100^oF));~~

~~(B) The solvent is agitated; or~~

~~(C) The solvent is heated.~~

~~(2) Equip the degreaser with a facility for draining cleaned articles. If the solvent volatility is greater than four and three-tenths (4.3) kiloPascals (thirty-two (32) millimeters of mercury or six-tenths (0.6) pounds per square inch) measured at thirty-eight degrees Celsius (38^oC) (one hundred degrees Fahrenheit (100^oF)), then the drainage facility must be internal such that articles are enclosed under the cover while draining. The drainage facility may be external for applications where an internal type cannot fit into the cleaning system.~~

~~(3) Provide a permanent, conspicuous label which lists the operating requirements outlined in subsection (b).~~

~~(4) The solvent spray, if used, must be a solid, fluid stream and shall be applied at a pressure which does not cause excessive splashing.~~

~~(5) Equip the degreaser with one (1) of the following control devices if the solvent volatility is greater than four and three-tenths (4.3) kiloPascals (thirty-two (32) millimeters of mercury or six-tenths (0.6) pounds per square inch) measured at thirty-eight degrees Celsius (38^oC) (one hundred degrees Fahrenheit (100^oF)), or if the solvent is heated to a temperature greater than forty-eight and nine-tenths degrees Celsius (48.9^oC) (one hundred twenty degrees Fahrenheit (120^oF)):~~

~~(A) A freeboard that attains a freeboard ratio of seventy-five hundredths (0.75) or greater.~~

~~(B) A water cover when solvent is used is insoluble in, and heavier than, water.~~

~~(C) Other systems of demonstrated equivalent control such as a refrigerated chiller or carbon adsorption. Such systems shall be submitted to the U.S. EPA as a SIP revision.~~

~~(c) Pursuant to 326 IAC 8-3-5(b) (Cold Cleaner Degreaser Operation and Control), the owner or operator of a cold cleaning facility construction of which commenced after July 1, 1990, shall ensure that the following operating requirements are met:~~

- ~~(1) Close the cover whenever articles are not being handled in the degreaser.~~
- ~~(2) Drain cleaned articles for at least fifteen (15) seconds or until dripping ceases.~~
- ~~(3) Store waste solvent only in covered containers and prohibit the disposal or transfer of waste solvent in any manner in which greater than twenty percent (20%) of the waste solvent by weight could evaporate.~~

D.7.3 Material requirements for cold cleaner degreasers [326 IAC 8-3-8]

(a) Pursuant to 326 IAC 8-3-8, material requirements specified in this section for use in cold cleaner degreasers apply as follows:

- (1) Before January 1, 2015, in Clark, Floyd, Lake, and Porter counties.**
- (2) On and after January 1, 2015, anywhere in the state.**

(b) Material requirements are as follows:

- (1) No person shall cause or allow the sale of solvents for use in cold cleaner degreasing operations with a VOC composite partial vapor pressure, when diluted at the manufacturer's recommended blend and dilution, that exceeds one (1) millimeter of mercury (nineteen-thousandths (0.019) pound per square inch) measured at twenty (20) degrees Celsius (sixty-eight (68) degrees Fahrenheit) in an amount greater than five (5) gallons during any seven (7) consecutive days to an individual or business.**
- (2) No person shall operate a cold cleaner degreaser with a solvent that has a VOC composite partial vapor pressure that exceeds one (1) millimeter of mercury (nineteen-thousandths (0.019) pound per square inch) measured at twenty (20) degrees Celsius (sixty-eight (68) degrees Fahrenheit).**

(c) Record keeping requirements are as follows:

- (1) All persons subject to the requirements of subsection (b)(1) shall maintain all of the following records for each sale:**
 - (A) The name and address of the solvent purchaser.**
 - (B) The date of sale (or invoice/bill date of contract servicer indicating service date).**
 - (C) The type of solvent sold.**
 - (D) The volume of each unit of solvent sold.**
 - (E) The total volume of the solvent sold.**
 - (F) The true vapor pressure of the solvent measured in millimeters of mercury at twenty (20) degrees Celsius (sixty-eight (68) degrees Fahrenheit).**
- (2) All persons subject to the requirements of subsection (b)(2) shall maintain each of the following records for each purchase:**

- (A) The name and address of the solvent supplier.
- (B) The date of purchase (or invoice/bill date of contract servicer indicating service date).
- (C) The type of solvent purchased.
- (D) The total volume of the solvent purchased.
- (E) The true vapor pressure of the solvent measured in millimeters of mercury at twenty (20) degrees Celsius (sixty-eight (68) degrees Fahrenheit).

(d) All records required by subsection (c) shall be:

- (1) retained on-site or accessible electronically from the site for the most recent three (3) year period; and
- (2) reasonably accessible for an additional two (2) year period.

D.7.34 Particulate Control [326 IAC 2-7-6(6)]

D.7.45 Visible Emissions Notations [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]

D.7.56 Record Keeping Requirements

- (a) To document the compliance status with Condition D.7.45 - Visible Emission Notation, the Permittee shall maintain weekly records of the visible emission notations from Activated Carbon storage silo, identified as EU-7ACI. The Permittee shall include in its weekly record when a visible emission notation is not taken and the reason for the lack of a visible emission notation (e.g. the process did not operate that day).

SECTION D.8 EMISSIONS UNIT OPERATION CONDITIONS

Emissions Unit Description:

- (r) One (1) Reciprocating Internal Combustion Engine identified as Unit BSE-2. Unit BSE-2 is a black start diesel-fired engine and not an emergency use engine. Unit BSE-2 has a design heat input of 6.65 million Btu per hour (475 horsepower) and exhausts to Stack/Vent GT2-1. Unit BSE-2 was installed in 1973.
- (s) One (1) Reciprocating Internal Combustion Engine identified as Unit BSE-3. Unit BSE-3 is a black start diesel-fired engine and not an emergency use engine. Unit BSE-3 has a design heat input of 6.65 million Btu per hour (475 horsepower) and exhausts to Stack/Vent GT3-1. Unit BSE-3 was installed in 1973.

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

National Emission Standards for Hazardous Air Pollutants (NESHAP) Requirements [326 IAC 2-7-5(1)]

D.8.1 General Provisions Relating to National Emission Standards for Hazardous Air Pollutants (NESHAP) [40 CFR 63, Subpart A] [326 IAC 20-82]

The provisions of 40 CFR 63, Subpart A - General Provisions, which are incorporated by reference in 326 IAC 20-1-1, apply to the black start diesel-fired engines, identified as BSE-2 & BSE-3, except when otherwise specified in 40 CFR 63, Subpart ZZZZ.

D.8.2 NESHAP: Stationary Reciprocating Internal Combustion Engines [40 CFR Part 63, Subpart ZZZZ] [326 IAC 20-82]

The Permittee as an owner/operator of Stationary Compression Ignition Internal Combustion Engines shall comply with the following provisions of 40 CFR Part 63, Subpart ZZZZ (included as Attachment A of this permit):

1. 40 CFR 63.6580
2. 40 CFR 63.6585
3. 40 CFR 63.6590 (a)(1)(ii)
4. 40 CFR 63.6595 (a)(1)
5. 40 CFR 63.6595 (c)
6. 40 CFR 63.6602
7. 40 CFR 63.6605
8. 40 CFR 63.6625 (e),(h),(i)
9. 40 CFR 63.6640 (a),(b),(e)
10. 40 CFR 63.6645 (a)(5)
11. 40 CFR 63.6650
12. 40 CFR 63.6660
13. 40 CFR 63.6665
14. 40 CFR 63.6670
15. 40 CFR 63.6675
16. Table 2c(1)
17. Table 2d(4)
18. Table 6(9)
19. Table 8

SECTION E.1

TITLE IV CONDITIONS

Facility Description [326 IAC 2-7-5(15)(14)]:

- (a) ~~One (1) Combustion Engineering Boiler number 9 identified as Unit 3. Unit 3 is a distillate oil fired unit with a design heat input capacity rated at 527.0 million Btu per hour and exhausting to Stack/Vent ID 3-1. Equipped with no add on air pollution control equipment. Installed in 1942.~~
- (b) ~~One (1) Combustion Engineering Boiler number 10 identified as Unit 4. Unit 4 is a distillate oil fired unit with a design heat input capacity rated at 527.0 million Btu per hour and exhausting to Stack/Vent ID 4-1. Equipped with no add on air pollution control equipment. Installed in 1947.~~
- (ea) One (1) Combustion Engineering Boiler number 50 identified as Unit 5. Unit 5 is a pulverized coal tangentially fired unit with a design heat input capacity rated at 1017.0 million Btu per hour. Emissions are directed to one (1) cold side electrostatic precipitator identified as Control Equipment ID CE 50 and exhausting at Stack/Vent ID 5-1. SO₃ injection is utilized as a flue gas conditioning agent for the electrostatic precipitator but the source is not required to perform gas conditioning. Also equipped with low NO_x burners, neural net controls, separated overfire air (SOFA), and selective non-catalytic reduction technology (SNCR). These technologies were voluntarily installed. Distillate fuel oil is used as supplemental fuel and for firing during startup of Unit 5. Installation date for Unit 5 is 1958.
- (eb) One (1) Combustion Engineering Boiler number 60 identified as Unit 6. Unit 6 is a pulverized coal tangentially fired unit with a design heat input capacity rated at 1017.0 million Btu per hour. Emissions are directed to one (1) cold side electrostatic precipitator identified as Control Equipment ID CE 60 and exhausting at Stack/Vent ID 6-1. SO₃ injection is utilized as a flue gas conditioning agent for the electrostatic precipitator but the source is not required to perform gas conditioning. Also equipped with low NO_x burners, neural net controls, separated overfire air (SOFA), and selective non-catalytic reduction technology (SNCR). These technologies were

voluntarily installed. Distillate fuel oil is used as supplemental fuel and for firing during startup of Unit 6. Installation date for Unit 6 is 1961.

- (ec) One (1) Combustion Engineering Boiler number 70 identified as Unit 7. Unit 7 is a pulverized coal tangentially fired unit with a design heat input capacity rated at 4123.0 million Btu per hour. Emissions are directed to one (1) cold side electrostatic precipitator identified as Control Equipment ID CE 70 and exhausting at Stack/Vent ID 7-1. SO₃ injection is utilized as a flue gas conditioning agent for the electrostatic precipitator but the source is not required to perform gas conditioning. Unit 7 is equipped with low NO_x burners, neural net controls, separated overfire air (SOFA), and selective catalytic reduction technology (SCR) and FGD scrubber. These technologies were voluntarily installed. When the FGD is in operation, Unit 7 exhausts to a separate wet stack. Distillate fuel oil and used oil are used as supplemental fuel and for firing during startup of Unit 7. Construction was commenced on Unit 7 prior to August 17, 1971 and completed in 1973.
- (fe) One (1) General Electric Gas Turbine Engine number GT4 identified as Unit GT4. Unit GT4 is a distillate oil fired and/or natural gas fired unit with a design heat input capacity rated at 875.0 million Btu per hour and exhausting at Stack/Vent ID GT4-1. Model number MS 7001. Water injection performed for NO_x emission control. Installation date for Unit GT4 is 1994.
- (gf) One (1) General Electric Gas Turbine Engine number GT5 identified as Unit GT5. Unit GT5 is a distillate oil fired and/or natural gas fired unit with a design heat input capacity rated at 867.0 million Btu per hour and exhausting at Stack/Vent ID GT5-1. Model number MS 7001. Water injection performed for NO_x emission control. Installation date for Unit GT5 is 1995.
- (hg) One (1) General Electric Gas Turbine Model number PG7241 identified as Unit GT6. Unit GT6 is a natural gas fired unit with a design heat input capacity rated at 1,660 MMBtu per hour and exhausting at Stack/Vent ID GT6. NO_x emissions will be controlled by dry low NO_x burners. Installation date for Unit GT6 is 2002.

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

SECTION E.2

FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(~~15~~)(14)]:

E.2.2 NESHAP: Stationary Reciprocating Internal Combustion Engines [40 CFR Part 63, Subpart ZZZZ] [326 IAC 20-82]

The Permittee as an owner/operator of Stationary Compression Ignition Internal Combustion Engines shall comply with the following provisions of 40 CFR Part 63, Subpart ZZZZ (included as Attachment **BA** of this permit):

E.3.2 National Emission Standards for Hazardous Air Pollutants for Major Sources: Industrial, Commercial, and Institutional Boilers and Process Heaters [40 CFR Part 63, Subpart DDDDD] [326 IAC 20-95]

The Permittee shall comply with the following provisions of 40 CFR 63, Subpart DDDDD, (included as Attachment **CD** of this permit), which are incorporated by reference as 326 IAC 20-95, except as otherwise specified in 40 CFR 63, Subpart DDDDD:

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

ORIS Code: 990

- CAIR Permit for CAIR Units Under 326 IAC 24-1-1(a), 326 IAC 24-2-1(a) and 326 IAC 24-3-1(a)
- ~~(a) One (1) Combustion Engineering Boiler number 9 identified as Unit 3. Unit 3 is a distillate oil fired unit with a design heat input capacity rated at 527.0 million Btu per hour and exhausting to Stack/Vent ID 3-1. Equipped with no add-on air pollution control equipment. Installed in 1942.~~
 - ~~(b) One (1) Combustion Engineering Boiler number 10 identified as Unit 4. Unit 4 is a distillate oil fired unit with a design heat input capacity rated at 527.0 million Btu per hour and exhausting to Stack/Vent ID 4-1. Equipped with no add-on air pollution control equipment. Installed in 1947.~~
 - (ea) One (1) Combustion Engineering Boiler number 50 identified as Unit 5. Unit 5 is a pulverized coal tangentially fired unit with a design heat input capacity rated at 1017.0 million Btu per hour. Emissions are directed to one (1) cold side electrostatic precipitator identified as Control Equipment ID CE 50 and exhausting at Stack/Vent ID 5-1. SO₃ injection is utilized as a flue gas conditioning agent for the electrostatic precipitator but the source is not required to perform gas conditioning. Also equipped with low NO_x burners, neural net controls, separated overfire air (SOFA), and selective non-catalytic reduction technology (SNCR). These technologies were voluntarily installed. Distillate fuel oil is used as supplemental fuel and for firing during startup of Unit 5. Installation date for Unit 5 is 1958.
 - (eb) One (1) Combustion Engineering Boiler number 60 identified as Unit 6. Unit 6 is a pulverized coal tangentially fired unit with a design heat input capacity rated at 1017.0 million Btu per hour. Emissions are directed to one (1) cold side electrostatic precipitator identified as Control Equipment ID CE 60 and exhausting at Stack/Vent ID 6-1. SO₃ injection is utilized as a flue gas conditioning agent for the electrostatic precipitator but the source is not required to perform gas conditioning. Also equipped with low NO_x burners, neural net controls, separated overfire air (SOFA), and selective non-catalytic reduction technology (SNCR). These technologies were voluntarily installed. Distillate fuel oil is used as supplemental fuel and for firing during startup of Unit 6. Installation date for Unit 6 is 1961.
 - (ec) One (1) Combustion Engineering Boiler number 70 identified as Unit 7. Unit 7 is a pulverized coal tangentially fired unit with a design heat input capacity rated at 4123.0 million Btu per hour. Emissions are directed to one (1) cold side electrostatic precipitator identified as Control Equipment ID CE 70 and exhausting at Stack/Vent ID 7-1. SO₃ injection is utilized as a flue gas conditioning agent for the electrostatic precipitator but the source is not required to perform gas conditioning. Unit 7 is equipped with low NO_x burners, neural net controls, separated overfire air (SOFA), and selective catalytic reduction technology (SCR) and FGD scrubber. These technologies were voluntarily installed. When the FGD is in operation, Unit 7 exhausts to a separate wet stack. Distillate fuel oil and used oil are used as supplemental fuel and for firing during startup of Unit 7. Construction was commenced on Unit 7 prior to August 17, 1971 and completed in 1973.
 - (fg) One (1) General Electric Gas Turbine Engine number GT4 identified as Unit GT4. Unit GT4 is a distillate oil fired and/or natural gas fired unit with a design heat input capacity rated at 875.0 million Btu per hour and exhausting at Stack/Vent ID GT4-1. Model number MS 7001. Water injection performed for NO_x emission control. Installation date for Unit GT4 is 1994.
 - (gh) One (1) General Electric Gas Turbine Engine number GT5 identified as Unit GT5. Unit GT5 is a distillate oil fired and/or natural gas fired unit with a design heat input capacity rated at 867.0 million Btu per hour and exhausting at Stack/Vent ID GT5-1. Model number MS 7001. Water injection

performed for NO_x emission control. Installation date for Unit GT5 is 1995.

- (hi) One (1) General Electric Gas Turbine Model number PG7241 identified as Unit GT6. Unit GT6 is a natural gas fired unit with a design heat input capacity rated at 1,660 MMBtu per hour and exhausting at Stack/Vent ID GT-6. NO_x emissions will be controlled by dry low NO_x burners. Installation date for Unit GT6 is 2002.

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

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

- (b) The CAIR NO_x unit(s), CAIR SO₂ unit(s), and CAIR NO_x ozone season unit(s) subject to this CAIR permit are ~~Unit 3, Unit 4,~~ Unit 5, Unit 6, Unit 7, Unit GT4, Unit GT5, and Unit GT6.

QUARTERLY DEVIATION AND COMPLIANCE MONITORING REPORT

This report shall be submitted quarterly based on a calendar year. **Proper notice submittal under Section B – Emergency Provisions satisfies the reporting requirements of paragraph (a) of Section C - General Reporting.** Any deviation from the requirements of this permit, the date(s) of each deviation, the probable cause of the deviation, and the response steps taken must be reported. A deviation required to be reported pursuant to an applicable requirement that exists independent of the permit, shall be reported according to the schedule stated in the applicable requirement and does not need to be included in this report. Additional pages may be attached if necessary. If no deviations occurred, please specify in the box marked "No deviations occurred this reporting period".

All other conditions of the permit shall remain unchanged and in effect.

Please find attached the entire Part 70 Operating Permit as amended. The permit references the below listed attachments. Since these attachments have been provided in previously issued approvals for this source, IDEM OAQ has not included a copy of these attachments with this amendment:

- Attachment A: 40 CFR 63, Subpart ZZZZ, National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines
- Attachment B: Acid Rain Permit AR 097-29749-00033
- Attachment C: Fugitive Dust Control Plan
- Attachment D: 40 CFR 63, Subpart DDDDD, National Emission Standards for Hazardous Air Pollutants for Major Sources: Industrial, Commercial, and Institutional Boilers and Process Heaters
- Attachment E: 40 CFR 63, Subpart UUUUU Compliance Extension

Previously issued approvals for this source containing these attachments are available on the Internet at: <http://www.in.gov/ai/appfiles/idem-caats/>.

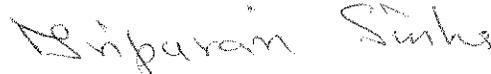
Federal rules under Title 40 of United States Code of Federal Regulations may also be found on the U.S. Government Printing Office's Electronic Code of Federal Regulations (eCFR) website, located on the Internet at: http://www.ecfr.gov/cgi-bin/text-idx?tpl=/ecfrbrowse/Title40/40tab_02.tpl.

A copy of the permit is available on the Internet at: <http://www.in.gov/ai/appfiles/idem-caats/>. For additional information about air permits and how the public and interested parties can participate, refer to the IDEM Permit Guide on the Internet at: <http://www.in.gov/idem/5881.htm>; and the Citizens' Guide to IDEM on the Internet at: <http://www.in.gov/idem/6900.htm>.

This decision is subject to the Indiana Administrative Orders and Procedures Act - IC 4-21.5-3-5.

If you have any questions on this matter, please contact Julie Mendez of my staff, at 317-234-1243 or 1-800-451-6027, and ask for extension 4-1243.

Sincerely,



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

Attachments: Updated Permit and Appendix A

TS/jm

cc: File - Marion County
Marion County Health Department
U.S. EPA, Region V
Compliance and Enforcement Branch



INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

We Protect Hoosiers and Our Environment.

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Michael R. Pence
Governor

Thomas W. Easterly
Commissioner

Part 70 Operating Permit Renewal
OFFICE OF AIR QUALITY

Indianapolis Power & Light Company - Harding Street Station.
3700 & 4190 S. Harding St.
Indianapolis, Indiana 46217

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

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

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

Operating Permit No.: T097-29749-00033	
Issued by: Original Signed Tripurari P. Sinha, Ph. D., Section Chief Permits Branch Office of Air Quality	Issuance Date: 08-11-2011 Expiration Date: 08-11-2016

- Minor Permit Modification No.: 097-31253-00033, issued on March 22, 2012
- Administrative Amendment No.: 097-32557-00033, issued on December 5, 2012
- Administrative Amendment No.: 097-33397-00033, issued on July 16, 2013
- Significant Permit Modification No. 097-33122-00033, issued on August 30, 2013
- Significant Permit Modification No.: 097-33352-00033, issued on October 9, 2013
- Significant Permit Modification No.: 097-34265-00033, issued on May 12, 2014

Administrative Amendment No.: 097-35247-00033	
Issued by:  Tripurari P. Sinha, Ph. D., Section Chief, Permits Branch Office of Air Quality	Issuance Date: January 2, 2015 Expiration Date: 08-11-2016



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- B.19 Operational Flexibility [326 IAC 2-7-20][326 IAC 2-7-10.5]
- B.20 Source Modification Requirement [326 IAC 2-7-10.5]
- B.21 Inspection and Entry [326 IAC 2-7-6][IC 13-14-2-2][IC 13-30-3-1][IC 13-17-3-2]
- B.22 Transfer of Ownership or Operational Control [326 IAC 2-7-11]
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- B.24 Credible Evidence [326 IAC 2-7-5(3)][326 IAC 2-7-6][62 FR 8314] [326 IAC 1-1-6]

C. SOURCE OPERATION CONDITIONS

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- C.1 Opacity [326 IAC 5-1]
- C.2 Open Burning [326 IAC 4-1] [IC 13-17-9]
- C.3 Incineration [326 IAC 4-2] [326 IAC 9-1-2]
- C.4 Fugitive Dust Emissions [326 IAC 6-4]
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- C.8 Performance Testing [326 IAC 3-6]

Compliance Requirements [326 IAC 2-1.1-11]

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

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- C.10 Compliance Monitoring [326 IAC 2-7-5(3)][326 IAC 2-7-6(1)] [40 CFR 64][326 IAC 3-8]
- C.11 Maintenance of Continuous Opacity Monitoring Equipment [326 IAC 2-7-5(3)(A)(iii)]
- C.12 Instrument Specifications [326 IAC 2-1.1-11] [326 IAC 2-7-5(3)]
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- C.13 Emergency Reduction Plans [326 IAC 1-5-2] [326 IAC 1-5-3]
- C.14 Risk Management Plan [326 IAC 2-7-5(11)] [40 CFR 68]
- C.15 Response to Excursions or Exceedances [40 CFR 64][326 IAC 3-8][326 IAC 2-7-5] [326 IAC 2-7-6]
- C.16 Actions Related to Noncompliance Demonstrated by a Stack Test [326 IAC 2-7-5]
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- C.17 Emission Statement [326 IAC 2-7-5(3)(C)(iii)][326 IAC 2-7-5(7)][326 IAC 2-7-19(c)]
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- C.18 General Record Keeping Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-6] [326 IAC 2-2]
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- C.19 General Reporting Requirements [326 IAC 2-7-5(3)(C)] [326 IAC 2-1.1-11] [326 IAC 2-2] [40 CFR 64]
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- C.20 Compliance with 40 CFR 82 and 326 IAC 22-1

D.1. EMISSIONS UNIT OPERATION CONDITIONS

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- D.1.0 Conversion of Existing Operation for Boiler 50 & Boiler 60 to Natural Gas
- D.1.1 Marion County [326 IAC 6.5-6][326 IAC 2-7-5]
- D.1.2 Sulfur Dioxide (SO₂) Emission Limitations: Marion County [326 IAC 7-4-2]
- D.1.3 Reserved
- D.1.4 Startup, Shutdown and Other Opacity Limits [326 IAC 5-1-3(e)(2)] [326 IAC 5-1-3(b)]

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- D.1.5 Testing Requirements [326 IAC 2-7-6(1),(6)][326 IAC 2-1.1-11]
- D.1.6 Operation of Electrostatic Precipitator [326 IAC 2-7-6(6)]
- D.1.7 Continuous Monitoring of Emissions [326 IAC 3-5][40 CFR 64]
- D.1.8 Sulfur Dioxide Emissions (SO₂) and Sulfur Content [326 IAC 7-2][326 IAC 7-4-2]
- D.1.9 Sulfur Dioxide Emissions (SO₂) and Sulfur Content [326 IAC 7-2][326 IAC 7-4-2][326 IAC 3-7-4]
- D.1.10 Compliance Schedule for National Emission Standard for Hazardous Air Pollutants: Coal- and Oil-Fired Electric Utility Steam Generating Units [40 CFR 63, Subpart UUUUU]

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- D.1.11 Electrostatic Precipitator Parametric Monitoring [326 IAC 2-7-6(1)][326 IAC 2-7-5(1)][40 CFR 64]
- D.1.12 Opacity Readings [326 IAC 2-7-6(1)][326 IAC 2-7-5(1)]
- D.1.13 Reserved
- D.1.14 NO_x and SO₂ Continuous Emission Monitoring Systems [326 IAC 2-7-6][326 IAC 2-7-5(3)][40 CFR 75]
- D.1.15 Particulate Matter (PM) Continuous Emission Monitoring System [326 IAC 2-7-5(3)(A)]

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

- D.1.16 Record Keeping Requirements
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D.2. EMISSIONS UNIT OPERATION CONDITIONS

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

- D.2.1 General Provisions Relating to NSPS [326 IAC 12][40 CFR Part 60, Subpart A]

- D.2.2 New Source Performance Standards (NSPS) [326 IAC 12][40 CFR 60, Subpart GG]
- D.2.3 Nitrogen Oxides (NO_x) – Best Available Control Technology (BACT) [326 IAC 2-2]
[Construction Permit 097-2206-00033]
- D.2.4 PSD Minor Limit [326 IAC 2-2][Construction Permit 097-2206-00033]
- D.2.5 Particulate Matter Limitations Except Lake County [326 IAC 6.5-1-2(a)]
- D.2.6 Sulfur Dioxide (SO₂) Emission Limitations [326 IAC 7-1.1-2]
- D.2.7 Opacity Limitations [326 IAC 2-2] [Construction Permit 097-2206-00033] [326 IAC 5-1]

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- D.2.8 Testing Requirements [326 IAC 2-7-6(1),(6)][326 IAC 2-1.1-11]
- D.2.9 New Source Performance Standard (NSPS) [326 IAC 12] [40 CFR Part 60, Subpart GG][40 CFR 64]
- D.2.10 Sulfur and Nitrogen Content [326 IAC 12] [40 CFR 60.334]
- D.2.11 Sulfur Dioxide Emissions (SO₂) and Sulfur Content [326 IAC 7-2][326 IAC 7-1.1-2]

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

- D.2.12 Sulfur and Nitrogen Content [326 IAC 12][40 CFR 60.334]
- D.2.13 Visible Emissions Notations [326 IAC 2-7-6(1)][326 IAC 2-7-5(1)]

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

- D.2.14 Record Keeping Requirements
- D.2.15 Reporting Requirements

D.3. EMISSIONS UNIT OPERATION CONDITIONS

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

- D.3.1 General Provisions Relating to NSPS [326 IAC 12] [40 CFR Part 60, Subpart A]
- D.3.2 New Source Performance Standards (NSPS) [326 IAC 12] [40 CFR 60, Subpart GG]
- D.3.3 PSD Minor Limit [326 IAC 2-2] [Minor Permit Modification 097-14666-00033]

Compliance Determination Requirements

- D.3.4 Continuous Emissions Monitoring [326 IAC 3-5] [Minor Permit Modification 097-14666-00033]
- D.3.5 Sulfur and Nitrogen Content [326 IAC 12] [40 CFR 60.334]

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

- D.3.6 Sulfur and Nitrogen Content [326 IAC 12] [40 CFR 60.334]

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

- D.3.7 Record Keeping Requirements
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SECTION D.4 EMISSIONS UNIT OPERATION CONDITIONS

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- D.4.1 Particulate Matter Limitations Except Lake County [326 IAC 6.5-1-2(a)]

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

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

- D.4.3 Record Keeping Requirements

SECTION D.5 FACILITY CONDITIONS

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- D.5.1 General Provisions Relating to NSPS [40 CFR Part 60, Subpart A][326 IAC 12-1]
- D.5.2 Standards of Performance for Coal Preparation Plants [40 CFR 60.250, Subpart Y]
[326 IAC 12]

SECTION D.6 FACILITY OPERATION CONDITIONS

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

- D.6.1 Particulate Matter (PM) [326 IAC 6.5-1-2(a)]
- D.6.2 PSD Minor Limit [326 IAC 2-2][326 IAC 2-1.1-5]

Compliance Determination Requirements

- D.6.3 Particulate Control

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

- D.6.4 Visible Emissions Notations
- D.6.5 Parametric Monitoring
- D.6.6 Broken or Failed Bag Detection

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

- D.6.7 Record Keeping Requirements

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

- D.6.8 General Provisions Relating to NSPS [40 CFR Part 60, Subpart A][326 IAC 12-1]
- D.6.9 New Source Performance Standards for Nonmetallic Mineral Processing Plants [40 CFR 60.670, Subpart OOO][326 IAC 12]

SECTION D.7 FACILITY OPERATION CONDITIONS

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

- D.7.1 Particulate Matter Limitations Except Lake County [326 IAC 6.5]
- D.7.2 Volatile Organic Compounds (VOC) [326 IAC 8-3-2]
- D.7.3 Material requirements for cold cleaner degreasers [326 IAC 8-3-8]

Compliance Determination Requirements

- D.7.4 Particulate Control [326 IAC 2-7-6(6)]

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

- D.7.5 Visible Emissions Notations [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]

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

- D.7.6 Record Keeping Requirements

SECTION D.8 EMISSIONS UNIT OPERATION CONDITIONS

National Emission Standards for Hazardous Air Pollutants (NESHAP) Requirements [326 IAC 2-7-5(1)]

- D.8.1 General Provisions Relating to National Emission Standards for Hazardous Air Pollutants (NESHAP) [40 CFR 63, Subpart A] [326 IAC 20-82]
- D.8.2 NESHAP: Stationary Reciprocating Internal Combustion Engines [40 CFR Part 63, Subpart ZZZZ] [326 IAC 20-82]

SECTION E.1 TITLE IV CONDITIONS

Acid Rain Program

- E.1.1 Acid Rain Permit [326 IAC 2-7-5(1)(C)][326 IAC 21][40 CFR 72 through 40 CFR 78]
- E.1.2 Title IV Emissions Allowances [326 IAC 2-7-5(4)][326 IAC 21]

SECTION E.2 FACILITY OPERATION CONDITIONS

National Emission Standards for Hazardous Air Pollutants (NESHAP) Requirements

[326 IAC 2-7-5(1)]

- E.2.1 General Provisions Relating to National Emission Standards for Hazardous Air Pollutants (NESHAP) [40 CFR 63, Subpart A] [326 IAC 20-82]
- E.2.2 NESHAP: Stationary Reciprocating Internal Combustion Engines [40 CFR Part 63, Subpart ZZZZ] [326 IAC 20-82]

SECTION E.3 EMISSIONS UNIT OPERATION CONDITIONS

National Emission Standards for Hazardous Air Pollutants (NESHAP) Requirements

[326 IAC 2-7-5(1)]

- E.3.1 General Provisions Relating to NESHAP [326 IAC 20-1][40 CFR Part 63, Subpart A]
- E.3.2 National Emission Standards for Hazardous Air Pollutants for Major Sources: Industrial, Commercial, and Institutional Boilers and Process Heaters [40 CFR Part 63, Subpart DDDDD] [326 IAC 20-95]

SECTION F [Reserved]

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

- G.1 Automatic Incorporation of Definitions [326 IAC 24-1-7(e)] [326 IAC 24-2-7(e)] [326 IAC 24-3-7(e)] [40 CFR 97.123(b)] [40 CFR 97.223(b)] [40 CFR 97.323(b)]
- G.2 Standard Permit Requirements [326 IAC 24-1-4(a)] [326 IAC 24-2-4(a)] [326 IAC 24-3-4(a)] [40 CFR 97.106(a)] [40 CFR 97.206(a)] [40 CFR 97.306(a)]
- G.3 Monitoring, Reporting, and Record Keeping Requirements [326 IAC 24-1-4(b)] [326 IAC 24-2-4(b)] [326 IAC 24-3-4(b)] [40 CFR 97.106(b)] [40 CFR 97.206(b)] [40 CFR 97.306(b)]
- G.4.1 Nitrogen Oxides Emission Requirements [326 IAC 24-1-4(c)] [40 CFR 97.106(c)]
- G.4.2 Sulfur Dioxide Emission Requirements [326 IAC 24-2-4(c)] [40 CFR 97.206(c)]
- G.4.3 Nitrogen Oxides Ozone Season Emission Requirements [326 IAC 24-3-4(c)] [40 CFR 97.306(c)]
- G.5 Excess Emissions Requirements [326 IAC 24-1-4(d)] [326 IAC 24-2-4(d)] [326 IAC 24-3-4(d)] [40 CFR 97.106(d)] [40 CFR 97.206(d)] [40 CFR 97.306(d)]
- G.6 Record Keeping Requirements [326 IAC 24-1-4(e)] [326 IAC 24-2-4(e)] [326 IAC 24-3-4(e)] [326 IAC 2-7-5(3)] [40 CFR 97.106(e)] [40 CFR 97.206(e)] [40 CFR 97.306(e)]
- G.7 Reporting Requirements [326 IAC 24-1-4(e)] [326 IAC 24-2-4(e)] [326 IAC 24-3-4(e)] [40 CFR 97.106(e)] [40 CFR 97.206(e)] [40 CFR 97.306(e)]
- G.8 Liability [326 IAC 24-1-4(f)] [326 IAC 24-2-4(f)] [326 IAC 24-3-4(f)] [40 CFR 97.106(f)] [40 CFR 97.206(f)] [40 CFR 97.306(f)]
- G.9 Effect on Other Authorities [326 IAC 24-1-4(g)] [326 IAC 24-2-4(g)] [326 IAC 24-3-4(g)] [40 CFR 97.106(g)] [40 CFR 97.206(g)] [40 CFR 97.306(g)]
- G.10 CAIR Designated Representative and Alternate CAIR Designated Representative [326 IAC 24-1-6] [326 IAC 24-2-6] [326 IAC 24-3-6] [40 CFR 97, Subpart BB] [40 CFR 97, Subpart BBB] [40 CFR 97, Subpart BBBB]

Certification

Emergency Occurrence Report

Quarterly Report - GT4 & GT5

Quarterly Report - GT6

Quarterly Deviation and Compliance Monitoring Report

Attachment A: 40 CFR 63, Subpart ZZZZ, National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines

Attachment B: Acid Rain Permit AR 097-29749-00033

Attachment C: Fugitive Dust Control Plan

IPL - Harding Street Station.
Indianapolis, Indiana

Administrative Amendment No. : 097-35247-00033
Amended by: Julie Mendez

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Permit Reviewer: James Mackenzie

Attachment D: 40 CFR 63, Subpart DDDDD, National Emission Standards for Hazardous Air Pollutants for Major Sources: Industrial, Commercial, and Institutional Boilers and Process Heaters

Attachment E: 40 CFR 63, Subpart UUUUU Compliance Extension

SECTION A

SOURCE SUMMARY

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

A.1 General Information [326 IAC 2-7-4(c)][326 IAC 2-7-5(14)][326 IAC 2-7-1(22)]

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

Source Address:	3700 & 4190 S. Harding St., Indianapolis, Indiana 46217
General Source Phone Number:	(317) 261-2006
SIC Code:	4911
County Location:	Marion
Source Location Status:	Attainment for all criteria pollutants
Source Status:	Part 70 Operating Permit Program Major Source, under PSD Rules Rule Major Source, Section 112 of the Clean Air Act 1 of 28 Source Categories

A.2 Emission Units and Pollution Control Equipment Summary [326 IAC 2-7-4(c)(3)][326 IAC 2-7-5(14)]

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

Before Conversion of Boiler number 50 to Natural Gas

- (a) One (1) Combustion Engineering Boiler number 50 identified as Unit 5. Unit 5 is a pulverized coal tangentially fired unit with a design heat input capacity rated at 1017.0 million Btu per hour. Emissions are directed to one (1) cold side electrostatic precipitator identified as Control Equipment ID CE 50 and exhausting at Stack/Vent ID 5-1. SO3 injection is utilized as a flue gas conditioning agent for the electrostatic precipitator but the source is not required to perform gas conditioning. Also equipped with low NOX burners, neural net controls, separated overfire air (SOFA), and selective non-catalytic reduction technology (SNCR). These technologies were voluntarily installed. Distillate fuel oil is used as supplemental fuel and for firing during startup of Unit 5. Installation date for Unit 5 is 1958.

After Conversion of Boiler number 50 to Natural Gas

- (a) One (1) 1,162 MMBtu/hr Combustion Engineering Boiler 50 identified as Unit 5, constructed in 1958, approved for modification in 2013 from coal to natural gas combustion only, and exhausting at Stack/Vent ID 5-1.

Before Conversion of Boiler number 60 to Natural Gas

- (b) One (1) Combustion Engineering Boiler number 60 identified as Unit 6. Unit 6 is a pulverized coal tangentially fired unit with a design heat input capacity rated at 1017.0 million Btu per hour. Emissions are directed to one (1) cold side electrostatic precipitator identified as Control Equipment ID CE 60 and exhausting at Stack/Vent ID 6-1. SO3 injection is utilized as a flue gas conditioning agent for the electrostatic precipitator but the source is not required to perform gas conditioning. Also equipped with low NOX burners, neural net controls, separated overfire air (SOFA), and selective non-catalytic reduction technology (SNCR). These technologies were voluntarily installed. Distillate fuel oil is used as supplemental fuel and for firing during startup of Unit 6. Installation date for Unit 6 is 1961.

After Conversion of Boiler number 60 to Natural Gas

- (b) One (1) 1,162 MMBtu/hr Combustion Engineering Boiler 60 identified as Unit 6, constructed in 1961, approved for modification in 2013 from coal to natural gas combustion only, and exhausting at Stack/Vent ID 6-1.
- (c) One (1) Combustion Engineering Boiler number 70 identified as Unit 7. Unit 7 is a pulverized coal tangentially fired unit with a design heat input capacity rated at 4123.0 million Btu per hour. Emissions are directed to one (1) cold side electrostatic precipitator identified as Control Equipment ID CE 70 and exhausting at Stack/Vent ID 7-1. SO₃ injection is utilized as a flue gas conditioning agent for the electrostatic precipitator but the source is not required to perform gas conditioning. Unit 7 is equipped with low NOX burners, neural net controls, separated overfire air (SOFA), and selective catalytic reduction technology (SCR) and FGD scrubber. These technologies were voluntarily installed. When the FGD is in operation, Unit 7 exhausts to a separate wet stack. Distillate fuel oil and used oil are used as supplemental fuel and for firing during startup of Unit 7. Construction was commenced on Unit 7 prior to August 17, 1971 and completed in 1973.
- (d) One (1) Cooling Tower associated with Unit 7, identified as CT-7, approved for construction in 2012, with a capacity of 189,280 gallons circulating water per minute and maximum drift rate of 0.001%.
- (e) One (1) General Electric Gas Turbine Engine number GT1 identified as Unit GT1. Unit GT1 is a distillate oil fired unit with a design heat input capacity rated at 299.0 million Btu per hour and exhausting at Stack/Vent ID GT1-1. Model number MS 5000. Equipped with no add on air pollution control equipment. Installation date for Unit GT1 is 1973.
- (f) One (1) General Electric Gas Turbine Engine number GT2 identified as Unit GT2. Unit GT2 is a distillate oil fired unit with a design heat input capacity rated at 299.0 million Btu per hour and exhausting at Stack/Vent ID GT2-1. Model number MS 5000. Equipped with no add on air pollution control equipment. Installation date for Unit GT2 is 1973.
- (g) One (1) General Electric Gas Turbine Engine number GT4 identified as Unit GT4. Unit GT4 is a distillate oil fired and/or natural gas fired unit with a design heat input capacity rated at 875.0 million Btu per hour and exhausting at Stack/Vent ID GT4-1. Model number MS 7001. Water injection performed for NOX emission control. Installation date for Unit GT4 is 1994.
- (h) One (1) General Electric Gas Turbine Engine number GT5 identified as Unit GT5. Unit GT5 is a distillate oil fired and/or natural gas fired unit with a design heat input capacity rated at 867.0 million Btu per hour and exhausting at Stack/Vent ID GT5-1. Model number MS 7001. Water injection performed for NOX emission control. Installation date for Unit GT5 is 1995.
- (i) One (1) General Electric Gas Turbine Model number PG7241 identified as Unit GT6. Unit GT6 is a natural gas fired unit with a design heat input capacity rated at 1,660 MMBtu per hour and exhausting at Stack/Vent ID GT-6. NOX emissions will be controlled by dry low NOX burners. Installation date for Unit GT6 is 2002.
- (j) One (1) General Motors Reciprocating Internal Combustion Standby/Emergency Generator identified as Unit ST14. As an emergency generator, Unit ST14 will be operated less than 500 hours per year. Unit ST14 is distillate oil fired with a design heat input of 27.6 million Btu per hour. Equipped with no add on air pollution control equipment. Exhausting at Stack/Vent ID ST14-1. Installation date for Unit ST14 is 1967.
- (k) Coal material handling and storage system with a maximum annual capacity of 7.5 million tons per year and described as follows:
 - (1) One (1) crusher house, consisting of the following equipment:
 - (i) Two (2) crushers constructed in 1958;
 - (ii) One (1) self cleaning static grizzly constructed in 1996; and
 - (iii) One (1) self cleaning static grizzly constructed in 2006.

- (2) One (1) covered conveyor system, constructed in 1931, consisting of the following equipment:
 - (i) No. 2 conveyor which transfers coal from the railcar receiving area to the crusher house;
 - (ii) No. 3 conveyor transfers coal from the crusher to No. 4 conveyor;
 - (iii) No. 4 conveyor transfers coal from the crusher to the cross-over conveyor;
 - (iv) Cross-over conveyor transfers coal from No. 4 conveyor to No. 5 conveyor or to conveyor 705 (which then transfers to conveyor 703 and to Unit 7); and
 - (v) No. 5 conveyor transfers coal from the cross-over conveyor to Unit 5 or Unit 6.

- (3) One (1) covered conveyor system, constructed in 1958 and consisting of the following equipment:
 - (i) Conveyors identified as 600A, 600B, 601, 602, 605, and 606. 600A and 600B conveyor transfers coal from the railcar receiving area to 601 and 602 conveyors which transfer coal to the crusher house; and
 - (ii) 605 conveyor transfers coal to 606 or 703 conveyors. 605 and 606 conveyors are located inside the building and transfer coal to five (5) conveyors which transfer coal to Unit 5's and Unit 6's coal bunkers.

- (4) One (1) covered conveyor system which became commercial in 1973 and consists of the following equipment:
 - (i) Conveyors identified as 701 and 702 transfer coal to either the crusher house or the low sulfur coal pile; and
 - (ii) Conveyors identified as 703 and 704 are the conveyors which transfer coal from 601, 602, and 605 conveyors to Unit 7's coal bunkers.

- (5) One (1) covered conveyor system, constructed in 2006 and consisting of the following equipment:
 - (i) Conveyors identified as 801 and 802 transfer coal to the outside high sulfur coal storage pile.

- (6) One (1) covered conveyor system, constructed in 2006 and consists of the following equipment subject to 40 CFR Part 60, Subpart Y:
 - (i) Conveyors identified as 803 and 804 transfer coal from the high sulfur storage pile to the crusher house.

- (l) Limestone transfer from trucks and loader vehicles to the conveyor system, identified as T-1, with a maximum capacity to transfer 230,000 tons of limestone per year and using no control. Constructed in 2006.

- (m) Five (5) covered limestone conveyors, identified as T-2, with a maximum capacity to convey 230,000 tons of limestone per year and using no control. Constructed in 2006. Under 40 CFR 60.670, Subpart OOO, T-2 is considered an affected facility.

- (n) Two (2) 630 ton capacity limestone storage silos, identified as L7-1 and L7-2, using bin vents LC7-1 and LC7-2 as control, and exhausting to stack/vent LSV7-1 and LSV7-2. Maximum throughput of 230,000 tons of limestone per year. Constructed in 2006. Under 40 CFR 60.670, Subpart OOO, L7-1 and L7-2 are each considered an affected facility.

- (o) Two (2) weigh feeders which transfer limestone from the silos to the two (2) enclosed wet ball mills (grinding mills) for grinding limestone, identified as BM7-1 and BM7-2. The ball mill grinding mills are located in a covered building. Constructed in 2006. Under 40 CFR 60.670, Subpart OOO, BM7-1 and BM7-2 are each considered an affected facility.

- (p) Gypsum transfer, identified as T-3, with a maximum capacity to transfer 414,000 tons of gypsum per year and using no control. Constructed in 2006.

- (q) Six (6) covered gypsum conveyors, identified as T-4, with a maximum capacity to convey 414,000 tons of gypsum and using no control. Constructed in 2006.
- (r) One (1) Reciprocating Internal Combustion Engine identified as Unit BSE-2. Unit BSE-2 is a black start diesel-fired engine and not an emergency use engine. Unit BSE-2 has a design heat input of 6.65 million Btu per hour (475 horsepower) and exhausts to Stack/Vent GT2-1. Unit BSE-2 was installed in 1973.
- (s) One (1) Reciprocating Internal Combustion Engine identified as Unit BSE-3. Unit BSE-3 is a black start diesel-fired engine and not an emergency use engine. Unit BSE-3 has a design heat input of 6.65 million Btu per hour (475 horsepower) and exhausts to Stack/Vent GT3-1. Unit BSE-3 was installed in 1973.

A.3 Specifically Regulated Insignificant Activities [326 IAC 2-7-1(21)][326 IAC 2-7-4(c)][326 IAC 2-7-5(14)]

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

- (a) Fuel oil fired combustion sources with heat input equal to or less than two (2) million Btu per hour and firing fuel containing less than five-tenths (0.5) percent sulfur by weight. [326 IAC 6.5-1-2(a)]
- (b) Gasoline generators not exceeding 110 horsepower. [326 IAC 6.5-1-2(a)]
- (c) Two (2) flyash silos identified as Unit 5/6 Flyash Silo and Unit 7 Flyash Silo for truck loading. Each silo is exhausted to a baghouse. [326 IAC 6.5-1-2(a)]
- (d) Degreasing operations that do not exceed 145 gallons per 12 months, except if subject to 326 IAC 20-6. [326 IAC 8-3-2]
- (e) One (1) 81 horsepower diesel fired emergency generator identified as Emission Unit ID Generator # 1, installed in 1988, associated with a communication transmitter tower located at 4190 S. Harding Street, Indianapolis, Indiana, 46217. [326 IAC 6.5-1-2(a)]
- (f) Grit blast existing steel stack liner [326 IAC 6.5-1-2(a)]
- (g) Primer existing steel stack liner with HVLP spray technology [326 IAC 6.5-1-2(a)]
- (h) One (1) emergency internal combustion engine used to power a fire pump, identified as FP-1, installed in 1993, with a maximum heat input capacity of 0.56 MMBtu/hr and a rating of 215 horsepower (bhp).
- (i) One (1) ponded ash screening operation and associated ash handling, identified as PAS-1, approved for construction in 2013, with a maximum throughput of 200 tons/hr.
- (j) One (1) activated carbon storage silo, identified as EU-7ACI, approved for construction in 2013, with a maximum hourly throughput of 1,337 lbs/hour, controlled by a fabric dust collector, identified as ACI-1, and exhausting to stack S-ACI1.

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

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

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

SECTION B

GENERAL CONDITIONS

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

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

B.2 Permit Term [326 IAC 2-7-5(2)][326 IAC 2-1.1-9.5][326 IAC 2-7-4(a)(1)(D)][IC 13-15-3-6(a)]

- (a) This permit, T097-29749-00033, is issued for a fixed term of five (5) years from the issuance date of this permit, as determined in accordance with IC 4-21.5-3-5(f) and IC 13-15-5-3. Subsequent revisions, modifications, or amendments of this permit do not affect the expiration date of this permit or of permits issued pursuant to Title IV of the Clean Air Act and 326 IAC 21 (Acid Deposition Control).
- (b) If IDEM, OAQ, upon receiving a timely and complete renewal permit application, fails to issue or deny the permit renewal prior to the expiration date of this permit, this existing permit shall not expire and all terms and conditions shall continue in effect, including any permit shield provided in 326 IAC 2-7-15, until the renewal permit has been issued or denied.

B.3 Term of Conditions [326 IAC 2-1.1-9.5]

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

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

B.4 Enforceability [326 IAC 2-7-7] [IC 13-17-12]

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

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

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

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

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

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

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

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

- (a) A certification required by this permit meets the requirements of 326 IAC 2-7-6(1) if:
 - (1) it contains a certification by a "responsible official" as defined by 326 IAC 2-7-1(35), and
 - (2) the certification states that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.

- (b) The Permittee may use the attached Certification Form, or its equivalent with each submittal requiring certification. One (1) certification may cover multiple forms in one (1) submittal.
- (c) A "responsible official" is defined at 326 IAC 2-7-1(35).

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

- (a) The Permittee shall annually submit a compliance certification report which addresses the status of the source's compliance with the terms and conditions contained in this permit, including emission limitations, standards, or work practices. All certifications shall cover the time period from January 1 to December 31 of the previous year, and shall be submitted no later than April 15 of each year to:

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

and

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

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

The submittal by the Permittee does require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(35).

B.10 Preventive Maintenance Plan [326 IAC 2-7-5(12)][326 IAC 1-6-3]

- (a) A Preventive Maintenance Plan meets the requirements of 326 IAC 1-6-3 if it includes, at a minimum:
 - (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.

The Permittee shall implement the PMPs.

- (b) If required by specific condition(s) in Section D of this permit where no PMP was previously required, the Permittee shall prepare and maintain Preventive Maintenance Plans (PMPs) no later than ninety (90) days after issuance of this permit or ninety (90) days after initial start-up, whichever is later, including the following information on each facility:
 - (1) Identification of the individual(s) responsible for inspecting, maintaining, and repairing emission control devices;
 - (2) A description of the items or conditions that will be inspected and the inspection schedule for said items or conditions; and
 - (3) Identification and quantification of the replacement parts that will be maintained in inventory for quick replacement.

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

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

The PMP extension notification does not require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(35).

The Permittee shall implement the PMPs.

- (c) 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. The PMPs and their submittal do not require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(35).
- (d) 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.

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

- (a) An emergency, as defined in 326 IAC 2-7-1(12), is not an affirmative defense for an action brought for noncompliance with a federal or state health-based emission limitation.
- (b) An emergency, as defined in 326 IAC 2-7-1(12), constitutes an affirmative defense to an action brought for noncompliance with a technology-based emission limitation if the affirmative defense of an emergency is demonstrated through properly signed, contemporaneous operating logs or other relevant evidence that describe the following:

- (1) An emergency occurred and the Permittee can, to the extent possible, identify the causes of the emergency;
- (2) The permitted facility was at the time being properly operated;
- (3) During the period of an emergency, the Permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards or other requirements in this permit;
- (4) For each emergency lasting one (1) hour or more, the Permittee notified IDEM, OAQ, within four (4) daytime business hours after the beginning of the emergency, or after the emergency was discovered or reasonably should have been discovered;

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

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

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

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

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

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

The notification which shall be submitted by the Permittee does not require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(35).

- (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)(8) 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.

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

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

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

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

- (a) All terms and conditions of permits established prior to T097-29749-00033 and issued pursuant to permitting programs approved into the state implementation plan have been either:
- (1) incorporated as originally stated,
 - (2) revised under 326 IAC 2-7-10.5, or
 - (3) deleted under 326 IAC 2-7-10.5.
- (b) Provided that all terms and conditions are accurately reflected in this permit, all previous registrations and permits are superseded by this Part 70 operating permit, except for permits issued pursuant to Title IV of the Clean Air Act and 326 IAC 21 (Acid Deposition Control)

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

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

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

- (a) This permit may be modified, reopened, revoked and reissued, or terminated for cause. The filing of a request by the Permittee for a Part 70 Operating Permit modification, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay any condition of this permit. [326 IAC 2-7-5(6)(C)] The notification by the Permittee does require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(35).
- (b) This permit shall be reopened and revised under any of the circumstances listed in IC 13-15-7-2 or if IDEM, OAQ determines any of the following:
- (1) That this permit contains a material mistake.
 - (2) That inaccurate statements were made in establishing the emissions standards or other terms or conditions.
 - (3) That this permit must be revised or revoked to assure compliance with an applicable requirement. [326 IAC 2-7-9(a)(3)]
- (c) Proceedings by IDEM, OAQ to reopen and revise this permit shall follow the same procedures as apply to initial permit issuance and shall affect only those parts of this permit for which cause to reopen exists. Such reopening and revision shall be made as expeditiously as practicable. [326 IAC 2-7-9(b)]
- (d) The reopening and revision of this permit, under 326 IAC 2-7-9(a), shall not be initiated before notice of such intent is provided to the Permittee by IDEM, OAQ at least thirty (30) days in advance of the date this permit is to be reopened, except that IDEM, OAQ may provide a shorter time period in the case of an emergency. [326 IAC 2-7-9(c)]

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

- (a) The application for renewal shall be submitted using the application form or forms prescribed by IDEM, OAQ and shall include the information specified in 326 IAC 2-7-4. Such information shall be included in the application for each emission unit at this source, except those emission units included on the trivial or insignificant activities list contained in 326 IAC 2-7-1(21) and 326 IAC 2-7-1(40). The renewal application does require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(35).

Request for renewal shall be submitted to:

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

- (b) A timely renewal application is one that is:
- (1) Submitted at least nine (9) months prior to the date of the expiration of this permit; and
 - (2) If the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ on or before the date it is due.
- (c) If the Permittee submits a timely and complete application for renewal of this permit, the source's failure to have a permit is not a violation of 326 IAC 2-7 until IDEM, OAQ takes final action on the renewal application, except that this protection shall cease to apply if, subsequent to the completeness determination, the Permittee fails to submit by the deadline specified, pursuant to 326 IAC 2-7-4(a)(2)(D), in writing by IDEM, OAQ any additional information identified as being needed to process the application.

B.17 Permit Amendment or Modification [326 IAC 2-7-11][326 IAC 2-7-12] [40 CFR 72]

- (a) Permit amendments and modifications are governed by the requirements of 326 IAC 2-7-11 or 326 IAC 2-7-12 whenever the Permittee seeks to amend or modify this permit.
- (b) Pursuant to 326 IAC 2-7-11(b) and 326 IAC 2-7-12(a), administrative Part 70 operating permit amendments and permit modifications for purposes of the acid rain portion of a Part 70 permit shall be governed by regulations promulgated under Title IV of the Clean Air Act. [40 CFR 72]
- (c) Any application requesting an amendment or modification of this permit shall be submitted to:
- Indiana Department of Environmental Management
Permit Administration and Support Section, Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251
- Any such application does require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(35).
- (d) The Permittee may implement administrative amendment changes addressed in the request for an administrative amendment immediately upon submittal of the request. [326 IAC 2-7-11(c)(3)]

B.18 Permit Revision Under Economic Incentives and Other Programs [326 IAC 2-7-5(8)][326 IAC 2-7-12(b)(2)]

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

B.19 Operational Flexibility [326 IAC 2-7-20][326 IAC 2-7-10.5]

- (a) The Permittee may make any change or changes at the source that are described in 326 IAC 2-7-20(b) or (c) without a prior permit revision, if each of the following conditions is met:
- (1) The changes are not modifications under any provision of Title I of the Clean Air Act;
 - (2) Any preconstruction approval required by 326 IAC 2-7-10.5 has been obtained;
 - (3) The changes do not result in emissions which exceed the limitations provided in this permit (whether expressed herein as a rate of emissions or in terms of total emissions);
 - (4) The Permittee notifies the:

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

and

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

in advance of the change by written notification at least ten (10) days in advance of the proposed change. The Permittee shall attach every such notice to the Permittee's copy of this permit; and
 - (5) The Permittee maintains records on-site, on a rolling five (5) year basis, which document all such changes and emission trades that are subject to 326 IAC 2-7-20(b) or (c). The Permittee shall make such records available, upon reasonable request, for public review.

Such records shall consist of all information required to be submitted to IDEM, OAQ in the notices specified in 326 IAC 2-7-20(b)(1) and (c)(1).
- (b) The Permittee may make Section 502(b)(10) of the Clean Air Act changes (this term is defined at 326 IAC 2-7-1(36)) without a permit revision, subject to the constraint of 326 IAC 2-7-20(a). For each such Section 502(b)(10) of the Clean Air Act change, the required written notification shall include the following:
- (1) A brief description of the change within the source;
 - (2) The date on which the change will occur;
 - (3) Any change in emissions; and
 - (4) Any permit term or condition that is no longer applicable as a result of the change.
- The notification which shall be submitted is not considered an application form, report or compliance certification. Therefore, the notification by the Permittee does not require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(35).

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

B.20 Source Modification Requirement [326 IAC 2-7-10.5]

A modification, construction, or reconstruction is governed by the requirements of 326 IAC 2.

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

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

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

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

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

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

Any such application does require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(35).

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

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

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

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

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

SECTION C SOURCE OPERATION CONDITIONS

Entire Source

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

C.1 Opacity [326 IAC 5-1]

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

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

C.2 Open Burning [326 IAC 4-1] [IC 13-17-9]

The Permittee shall not open burn any material except as provided in 326 IAC 4-1-3, 326 IAC 4-1-4 or 326 IAC 4-1-6. The previous sentence notwithstanding, the Permittee may open burn in accordance with an open burning approval issued by the Commissioner under 326 IAC 4-1-4.1.

C.3 Incineration [326 IAC 4-2] [326 IAC 9-1-2]

The Permittee shall not operate an incinerator except as provided in 326 IAC 4-2 or in this permit. The Permittee shall not operate a refuse incinerator or refuse burning equipment except as provided in 326 IAC 9-1-2 or in this permit.

C.4 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.5 Fugitive Particulate Matter Emission Limitations [326 IAC 6-5]

Pursuant to 326 IAC 6-5 (Fugitive Particulate Matter Emission Limitations), fugitive particulate matter emissions shall be controlled according to the plan submitted on March 20, 2007. The plan is included as Attachment C.

C.6 Stack Height [326 IAC 1-7]

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

C.7 Asbestos Abatement Projects [326 IAC 14-10] [326 IAC 18] [40 CFR 61, Subpart M]

- (a) Notification requirements apply to each owner or operator. If the combined amount of regulated asbestos containing material (RACM) to be stripped, removed or disturbed is at least 260 linear feet on pipes or 160 square feet on other facility components, or at least thirty-five (35) cubic feet on all facility components, then the notification requirements of 326 IAC 14-10-3 are mandatory. All demolition projects require notification whether or not asbestos is present.
- (b) The Permittee shall ensure that a written notification is sent on a form provided by the Commissioner at least ten (10) working days before asbestos stripping or removal work or before demolition begins, per 326 IAC 14-10-3, and shall update such notice as necessary, including, but not limited to the following:

- (1) When the amount of affected asbestos containing material increases or decreases by at least twenty percent (20%); or
- (2) If there is a change in the following:
 - (A) Asbestos removal or demolition start date;
 - (B) Removal or demolition contractor; or
 - (C) Waste disposal site.
- (c) The Permittee shall ensure that the notice is postmarked or delivered according to the guidelines set forth in 326 IAC 14-10-3(2).
- (d) The notice to be submitted shall include the information enumerated in 326 IAC 14-10-3(3).

All required notifications shall be submitted to:

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

The notice shall include a signed certification from the owner or operator that the information provided in this notification is correct and that only Indiana licensed workers and project supervisors will be used to implement the asbestos removal project. The notifications do not require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(35).

- (e) **Procedures for Asbestos Emission Control**
The Permittee shall comply with the applicable emission control procedures in 326 IAC 14-10-4 and 40 CFR 61.145(c). Per 326 IAC 14-10-1, emission control requirements are applicable for any removal or disturbance of RACM greater than three (3) linear feet on pipes or three (3) square feet on any other facility components or a total of at least 0.75 cubic feet on all facility components.
- (f) **Demolition and Renovation**
The Permittee shall thoroughly inspect the affected facility or part of the facility where the demolition or renovation will occur for the presence of asbestos pursuant to 40 CFR 61.145(a).
- (g) **Indiana Licensed Asbestos Inspector**
The Permittee shall comply with 326 IAC 14-10-1(a) that requires the owner or operator, prior to a renovation/demolition, to use an Indiana Licensed Asbestos Inspector to thoroughly inspect the affected portion of the facility for the presence of asbestos. The requirement to use an Indiana Licensed Asbestos inspector is not federally enforceable.

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

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

- (a) For performance testing required by this permit, a test protocol, except as provided elsewhere in this permit, shall be submitted to:

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

no later than thirty-five (35) days prior to the intended test date. The protocol submitted by the Permittee does not require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(35).

- (b) The Permittee shall notify IDEM, OAQ of the actual test date at least fourteen (14) days prior to the actual test date. The notification submitted by the Permittee does not require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(35).
- (c) Pursuant to 326 IAC 3-6-4(b), all test reports must be received by IDEM, OAQ not later than forty-five (45) days after the completion of the testing. An extension may be granted by IDEM, OAQ if the Permittee submits to IDEM, OAQ a reasonable written explanation not later than five (5) days prior to the end of the initial forty-five (45) day period.

Compliance Requirements [326 IAC 2-1.1-11]

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

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

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

C.10 Compliance Monitoring [326 IAC 2-7-5(3)][326 IAC 2-7-6(1)] [40 CFR 64][326 IAC 3-8]

-
- (a) For new units:

Unless otherwise specified in the approval for the new emission unit(s), compliance monitoring for new emission units shall be implemented on and after the date of initial start-up.

- (b) For existing units:

Unless otherwise specified in this permit, for all monitoring requirements not already legally required, the Permittee shall be allowed up to ninety (90) days from the date of permit issuance to begin such monitoring. If, due to circumstances beyond the Permittee's control, any monitoring equipment required by this permit cannot be installed and operated no later than ninety (90) days after permit issuance the Permittee may extend the compliance schedule related to the equipment for an additional ninety (90) days provided the Permittee notifies:

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

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

The notification which shall be submitted by the Permittee does require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(35).

- (c) For monitoring required by CAM, at all times, the Permittee shall maintain the monitoring, including but not limited to, maintaining necessary parts for routine repairs of the monitoring equipment.
- (d) For monitoring required by CAM, except for, as applicable, monitoring malfunctions, associated repairs, and required quality assurance or control activities (including, as applicable, calibration checks and required zero and span adjustments), the Permittee shall conduct all monitoring in continuous operation (or shall collect data at all required intervals) at all times that the pollutant-

specific emissions unit is operating. Data recorded during monitoring malfunctions, associated repairs, and required quality assurance or control activities shall not be used for purposes of this part, including data averages and calculations, or fulfilling a minimum data availability requirement, if applicable. The owner or operator shall use all the data collected during all other periods in assessing the operation of the control device and associated control system. A monitoring malfunction is any sudden, infrequent, not reasonably preventable failure of the monitoring to provide valid data. Monitoring failures that are caused in part by poor maintenance or careless operation are not malfunctions.

C.11 Maintenance of Continuous Opacity Monitoring Equipment [326 IAC 2-7-5(3)(A)(iii)]

- (a) The Permittee shall install, calibrate, maintain, and operate all necessary continuous opacity monitoring systems (COMS) and related equipment, for Unit 7 Bypass stack, Unit 5 and Unit 6. For a boiler, the COM shall be in operation in accordance with 326 IAC 3-5 and 40 CFR Part 60 at all times that the forced draft fan is in operation.
- (b) All COMS shall meet the performance specifications of 40 CFR 60, Appendix B, Performance Specification No. 1, and are subject to monitor system certification requirements pursuant to 326 IAC 3-5.
- (c) In the event that a breakdown of a COMS occurs, a record shall be made of the times and reasons of the breakdown and efforts made to correct the problem.
- (d) Whenever a COMS is malfunctioning or is down for maintenance or repairs for a period of twenty-four (24) hours or more and a backup COMS is not in line within twenty-four (24) hours of shutdown or malfunction or the primary COMS, the Permittee shall provide a certified opacity reader, who may be an employee of the Permittee or an independent contractor, to self-monitor the emissions from the emission unit stack.
 - (1) Visible emission readings shall be performed in accordance with 40 CFR 60, Appendix A, Method 9, for a minimum of five (5) consecutive six (6) minute averaging periods beginning not later than twenty-four (24) hours after the start of the malfunction or down time; provided, however, that if such 24-hour period ends during the period beginning two (2) hours before sunset and ending two (2) hours after sunrise, then such visible emissions readings shall begin within four (4) hours of sunrise on the day following the expiration of such 24-hour period.
 - (2) Method 9 opacity readings shall be repeated for a minimum of five (5) consecutive six (6) minute averaging periods at least twice per day during daylight operations, with at least four (4) hours between each set of readings, until a COMS is in online.
 - (3) Method 9 readings are not required on stacks with operating scrubbers.
 - (4) Method 9 readings may be discontinued once a COM is online.
 - (5) Any opacity exceedances determined by Method 9 readings shall be reported with the Quarterly Opacity Exceedances Reports.
- (e) Nothing in this permit shall excuse the Permittee from complying with the requirements to operate a continuous opacity monitoring system pursuant to 326 IAC 3-5 and 40 CFR 60.

C.12 Instrument Specifications [326 IAC 2-1.1-11] [326 IAC 2-7-5(3)] [326 IAC 2-7-6(1)]

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

instrument specification will adequately ensure compliance with permit conditions requiring the measurement of the parameters.

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

C.13 Emergency Reduction Plans [326 IAC 1-5-2] [326 IAC 1-5-3]

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

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

C.14 Risk Management Plan [326 IAC 2-7-5(11)] [40 CFR 68]

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

C.15 Response to Excursions or Exceedances [40 CFR 64][326 IAC 3-8][326 IAC 2-7-5] [326 IAC 2-7-6]

- (I) Upon detecting an excursion where a response step is required by the D Section or an exceedance of a limitation, not subject to CAM, in this permit:
 - (a) The Permittee shall take reasonable response steps to restore operation of the emissions unit (including any control device and associated capture system) to its normal or usual manner of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing excess emissions.
 - (b) The response shall include minimizing the period of any startup, shutdown or malfunction. The response may include, but is not limited to, the following:
 - (1) initial inspection and evaluation;
 - (2) recording that operations returned or are returning 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 normal or usual manner of operation.
 - (c) A determination of whether the Permittee has used acceptable procedures in response to an excursion or exceedance will be based on information available, which may include, but is not limited to, the following:
 - (1) monitoring results;
 - (2) review of operation and maintenance procedures and records; and/or
 - (3) inspection of the control device, associated capture system, and the process.
 - (d) Failure to take reasonable response steps shall be considered a deviation from the permit.
 - (e) The Permittee shall record the reasonable response steps taken.
- (II)
 - (a) CAM *Response to excursions or exceedances*.

- (1) Upon detecting an excursion or exceedance, subject to CAM, the Permittee shall restore operation of the pollutant-specific 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. 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). Such actions may include initial inspection and evaluation, recording that operations returned to normal without operator action (such as through response by a computerized distribution control system), or 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.
 - (2) 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, monitoring results, review of operation and maintenance procedures and records, and inspection of the control device, associated capture system, and the process.
- (b) If the Permittee identifies a failure to achieve compliance with an emission limitation, subject to CAM, or standard, subject to CAM, for which the approved monitoring did not provide an indication of an excursion or exceedance while providing valid data, or the results of compliance or performance testing document a need to modify the existing indicator ranges or designated conditions, the Permittee shall promptly notify the IDEM, OAQ and, if necessary, submit a proposed significant permit modification to this permit to address the necessary monitoring changes. Such a modification may include, but is not limited to, reestablishing indicator ranges or designated conditions, modifying the frequency of conducting monitoring and collecting data, or the monitoring of additional parameters.
 - (c) Based on the results of a determination made under paragraph (II)(a)(2) of this condition, the EPA or IDEM, OAQ may require the Permittee to develop and implement a QIP. The Permittee shall develop and implement a QIP if notified to in writing by the EPA or IDEM, OAQ.
 - (d) Elements of a QIP:
The Permittee shall maintain a written QIP, if required, and have it available for inspection. The plan shall conform to 40 CFR 64.8 b (2).
 - (e) If a QIP is required, the Permittee shall develop and implement a QIP as expeditiously as practicable and shall notify the IDEM, OAQ if the period for completing the improvements contained in the QIP exceeds 180 days from the date on which the need to implement the QIP was determined.
 - (f) Following implementation of a QIP, upon any subsequent determination pursuant to paragraph (II)(a)(2) of this condition the EPA or the IDEM, OAQ may require that the Permittee make reasonable changes to the QIP if the QIP is found to have:
 - (1) Failed to address the cause of the control device performance problems; or
 - (2) Failed to provide adequate procedures for correcting control device performance problems as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions.
 - (g) Implementation of a QIP shall not excuse the Permittee from compliance with any existing emission limitation or standard, or any existing monitoring, testing, reporting or recordkeeping requirement that may apply under federal, state, or local law, or any other applicable requirements under the Act.
 - (h) *CAM recordkeeping requirements.*

- (1) The Permittee shall maintain records of monitoring data, monitor performance data, corrective actions taken, any written quality improvement plan required pursuant to paragraph (II)(a)(2) of this condition and any activities undertaken to implement a quality improvement plan, and other supporting information required to be maintained under this condition (such as data used to document the adequacy of monitoring, or records of monitoring maintenance or corrective actions). Section C - General Record Keeping Requirements of this permit contains the Permittee's obligations with regard to the records required by this condition.
- (2) Instead of paper records, the owner or operator may maintain records on alternative media, such as microfilm, computer files, magnetic tape disks, or microfiche, provided that the use of such alternative media allows for expeditious inspection and review, and does not conflict with other applicable recordkeeping requirements.

C.16 Actions Related to Noncompliance Demonstrated by a Stack Test [326 IAC 2-7-5][326 IAC 2-7-6]

- (a) When the results of a stack test performed in conformance with Section C - Performance Testing, of this permit exceed the level specified in any condition of this permit, the Permittee shall submit a description of its response actions to IDEM, OAQ, no later than seventy-five (75) days after the date of the test.
- (b) A retest to demonstrate compliance shall be performed no later than one hundred eighty (180) days after the date of the test. Should the Permittee demonstrate to IDEM, OAQ that retesting in one hundred eighty (180) days is not practicable, IDEM, OAQ may extend the retesting deadline.
- (c) IDEM, OAQ reserves the authority to take any actions allowed under law in response to noncompliant stack tests.

The response action documents submitted pursuant to this condition do require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(35).

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

C.17 Emission Statement [326 IAC 2-7-5(3)(C)(iii)][326 IAC 2-7-5(7)][326 IAC 2-7-19(c)][326 IAC 2-6]

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

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

The statement must be submitted to:

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

The emission statement does require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(35).

C.18 General Record Keeping Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-6] [326 IAC 2-2][326 IAC 2-3]

- (a) Records of all required monitoring data, reports and support information required by this permit

shall be retained for a period of at least five (5) years from the date of monitoring sample, measurement, report, or application. Support information includes the following, where applicable:

- (AA) All calibration and maintenance records.
- (BB) All original strip chart recordings for continuous monitoring instrumentation.
- (CC) Copies of all reports required by the Part 70 permit.

Records of required monitoring information include the following, where applicable:

- (AA) The date, place, as defined in this permit, and time of sampling or measurements.
- (BB) The dates analyses were performed.
- (CC) The company or entity that performed the analyses.
- (DD) The analytical techniques or methods used.
- (EE) The results of such analyses.
- (FF) The operating conditions as existing at the time of sampling or measurement.

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, for all record keeping requirements not already legally required, the Permittee shall be allowed up to ninety (90) days from the date of permit issuance or the date of initial start-up, whichever is later, to begin such record keeping.
- (c) If there is a reasonable possibility (as defined in 326 IAC 2-2-8 (b)(6)(A), 326 IAC 2-2-8 (b)(6)(B), 326 IAC 2-3-2 (l)(6)(A), and/or 326 IAC 2-3-2 (l)(6)(B)) that a "project" (as defined in 326 IAC 2-2-1 (oo) and/or 326 IAC 2-3-1 (jj)) at an existing emissions unit, other than projects at a source with a Plantwide Applicability Limitation (PAL), which is not part of a "major modification" (as defined in 326 IAC 2-2-1 (dd) and/or 326 IAC 2-3-1 (y)) may result in significant emissions increase and the Permittee elects to utilize the "projected actual emissions" (as defined in 326 IAC 2-2-1 (pp) and/or 326 IAC 2-3-1 (kk)), the Permittee shall comply with following:
 - (1) Before beginning actual construction of the "project" (as defined in 326 IAC 2-2-1 (oo) and/or 326 IAC 2-3-1 (jj)) at an existing emissions unit, document and maintain the following records:
 - (A) A description of the project.
 - (B) Identification of any emissions unit whose emissions of a regulated new source review pollutant could be affected by the project.
 - (C) A description of the applicability test used to determine that the project is not a major modification for any regulated NSR pollutant, including:
 - (i) Baseline actual emissions;
 - (ii) Projected actual emissions;
 - (iii) Amount of emissions excluded under section 326 IAC 2-2-1 (pp)(2)(A)(iii) and/or 326 IAC 2-3-1 (kk)(2)(A)(iii); and
 - (iv) An explanation for why the amount was excluded, and any netting calculations, if applicable.
- (d) If there is a reasonable possibility (as defined in 326 IAC 2-2-8 (b)(6)(A) and/or 326 IAC 2-3-2 (l)(6)(A)) that a "project" (as defined in 326 IAC 2-2-1 (oo) and/or 326 IAC 2-3-1 (jj)) at an existing emissions unit, other than projects at a source with a Plantwide Applicability Limitation (PAL), which is not part of a "major modification" (as defined in 326 IAC 2-2-1 (dd) and/or 326 IAC 2-3-1 (y)) may result in significant emissions increase and the Permittee elects to utilize the "projected actual

emissions" (as defined in 326 IAC 2-2-1(pp) and/or 326 IAC 2-3-1(kk)), the Permittee shall comply with following:

- (1) Monitor the emissions of any regulated NSR pollutant that could increase as a result of the project and that is emitted by any existing emissions unit identified in (1)(B) above; and
- (2) Calculate and maintain a record of the annual emissions, in tons per year on a calendar year basis, for a period of five (5) years following resumption of regular operations after the change, or for a period of ten (10) years following resumption of regular operations after the change if the project increases the design capacity of or the potential to emit that regulated NSR pollutant at the emissions unit.

C.19 General Reporting Requirements [326 IAC 2-7-5(3)(C)] [326 IAC 2-1.1-11] [326 IAC 2-2] [40 CFR 64] [326 IAC 3-8]

- (a) The Permittee shall submit the attached Quarterly Deviation and Compliance Monitoring Report or its equivalent. Proper notice submittal under Section B – Emergency Provisions satisfies the reporting requirements of this paragraph. Any deviation from permit requirements, the date(s) of each deviation, the cause of the deviation, and the response steps taken must be reported except that a deviation required to be reported pursuant to an applicable requirement that exists independent of this permit, shall be reported according to the schedule stated in the applicable requirement and does not need to be included in this report. This report shall be submitted not later than thirty (30) days after the end of the reporting period. The Quarterly Deviation and Compliance Monitoring Report shall include a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(35). A deviation is an exceedance of a permit limitation or a failure to comply with a requirement of the permit.

On and after the date by which the Permittee must use monitoring that meets the requirements of 40 CFR Part 64 and 326 IAC 3-8, the Permittee shall submit CAM reports to the IDEM, OAQ.

A report for monitoring under 40 CFR Part 64 and 326 IAC 3-8 shall include, at a minimum, the information required under paragraph (a) of this condition and the following information, as applicable:

- (1) Summary information on the number, duration and cause (including unknown cause, if applicable) of excursions or exceedances, as applicable, and the corrective actions taken;
- (2) Summary information on the number, duration and cause (including unknown cause, if applicable) for monitor downtime incidents (other than downtime associated with zero and span or other daily calibration checks, if applicable); and
- (3) A description of the actions taken to implement a QIP during the reporting period as specified in Section C-Response to Excursions or Exceedances. Upon completion of a QIP, the owner or operator shall include in the next summary report documentation that the implementation of the plan has been completed and reduced the likelihood of similar levels of excursions or exceedances occurring.

The Permittee may combine the Quarterly Deviation and Compliance Monitoring Report and a report pursuant to 40 CFR 64 and 326 IAC 3-8.

- (b) The address for report submittal is:

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

- (c) Unless otherwise specified in this permit, any notice, report, or other submission required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ on or before the date it is due.
- (d) 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.
- (e) If the Permittee is required to comply with the recordkeeping provisions of (d) in Section C - General Record Keeping Requirements for any "project" (as defined in 326 IAC 2-2-1 (oo) and/or 326 IAC 2-3-1 (jj)) at an existing emissions unit other than Electric Utility Steam Generating Unit, and the project meets the following criteria, then the Permittee shall submit a report to IDEM, OAQ:
 - (1) The annual emissions, in tons per year, from the project identified in (c)(1) in Section C- General Record Keeping Requirements exceed the baseline actual emissions, as documented and maintained under Section C- General Record Keeping Requirements (c)(1)(C)(i), by a significant amount, as defined in 326 IAC 2-2-1 (ww) and/or 326 IAC 2-3-1 (pp), 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).
- (f) The report for project at an existing emissions unit shall be submitted no later than sixty (60) days after the end of the year and contain the following:
 - (1) The name, address, and telephone number of the major stationary source.
 - (2) The annual emissions calculated in accordance with (d)(1) and (2) in Section C - General Record Keeping Requirements.
 - (3) The emissions calculated under the actual-to-projected actual test stated in 326 IAC 2-2-2(d)(3) and/or 326 IAC 2-3-2(c)(3).
 - (4) Any other information that the Permittee wishes to include in this report such as an explanation as to why the emissions differ from the preconstruction projection.

Reports required in this part shall be submitted to:

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

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

preceded the submission of report.

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

Stratospheric Ozone Protection

C.20 Compliance with 40 CFR 82 and 326 IAC 22-1

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

SECTION D.1 EMISSIONS UNIT OPERATION CONDITIONS

Emissions Unit Description:

Before Conversion of Boiler number 50 to Natural Gas

- (a) One (1) Combustion Engineering Boiler number 50 identified as Unit 5. Unit 5 is a pulverized coal tangentially fired unit with a design heat input capacity rated at 1017.0 million Btu per hour. Emissions are directed to one (1) cold side electrostatic precipitator identified as Control Equipment ID CE 50 and exhausting at Stack/Vent ID 5-1. SO₃ injection is utilized as a flue gas conditioning agent for the electrostatic precipitator but the source is not required to perform gas conditioning. Also equipped with low NOX burners, neural net controls, separated overfire air (SOFA), and selective non-catalytic reduction technology (SNCR). These technologies were voluntarily installed. Distillate fuel oil is used as supplemental fuel and for firing during startup of Unit 5. Installation date for Unit 5 is 1958.

After conversion of Boiler number 50 to Natural Gas

- (a) One (1) 1,162 MMBtu/hr Combustion Engineering Boiler 50 identified as Unit 5, constructed in 1958, approved for modification in 2013 from coal to natural gas combustion only, and exhausting at Stack/Vent ID 5-1.

Before Conversion of Boiler number 60 to Natural Gas

- (b) One (1) Combustion Engineering Boiler number 60 identified as Unit 6. Unit 6 is a pulverized coal tangentially fired unit with a design heat input capacity rated at 1017.0 million Btu per hour. Emissions are directed to one (1) cold side electrostatic precipitator identified as Control Equipment ID CE 60 and exhausting at Stack/Vent ID 6-1. SO₃ injection is utilized as a flue gas conditioning agent for the electrostatic precipitator but the source is not required to perform gas conditioning. Also equipped with low NOX burners, neural net controls, separated overfire air (SOFA), and selective non-catalytic reduction technology (SNCR). These technologies were voluntarily installed. Distillate fuel oil is used as supplemental fuel and for firing during startup of Unit 6. Installation date for Unit 6 is 1961.

After conversion of Boiler number 60 to Natural Gas

- (b) One (1) 1,162 MMBtu/hr Combustion Engineering Boiler 60 identified as Unit 6, constructed in 1961, approved for modification in 2013 from coal to natural gas combustion only, and exhausting at Stack/Vent ID 6-1.
- (c) One (1) Combustion Engineering Boiler number 70 identified as Unit 7. Unit 7 is a pulverized coal tangentially fired unit with a design heat input capacity rated at 4123.0 million Btu per hour. Emissions are directed to one (1) cold side electrostatic precipitator identified as Control Equipment ID CE 70 and exhausting at Stack/Vent ID 7-1. SO₃ injection is utilized as a flue gas conditioning agent for the electrostatic precipitator but the source is not required to perform gas conditioning. Unit 7 is equipped with low NOX burners, neural net controls, separated overfire air (SOFA), and selective catalytic reduction technology (SCR) and FGD scrubber. These technologies were voluntarily installed. When the FGD is in operation, Unit 7 exhausts to a separate wet stack. Distillate fuel oil and used oil are used as supplemental fuel and for firing during startup of Unit 7. Construction was commenced on Unit 7 prior to August 17, 1971 and completed in 1973.
- (e) One (1) General Electric Gas Turbine Engine number GT1 identified as Unit GT1. Unit GT1 is a distillate oil fired unit with a design heat input capacity rated at 299.0 million Btu per hour and exhausting at Stack/Vent ID GT1-1. Model number MS 5000. Equipped with no add on air pollution control equipment. Installation date for Unit GT1 is 1973.
- (f) One (1) General Electric Gas Turbine Engine number GT2 identified as Unit GT2. Unit GT2 is

a distillate oil fired unit with a design heat input capacity rated at 299.0 million Btu per hour and exhausting at Stack/Vent ID GT2-1. Model number MS 5000. Equipped with no add on air pollution control equipment. Installation date for Unit GT2 is 1973.

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

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

D.1.0 Conversion of Existing Operation for Boiler 50 & Boiler 60 to Natural Gas

- (a) After the startup of Boiler 50 & Boiler 60 to natural gas, the Permittee shall discontinue the use of coal in Boiler 50 & Boiler 60, identified as Unit 5 & Unit 6.
- (b) Within thirty (30) days after the date Boiler 50 & Boiler 60 are converted to natural gas, the Permittee shall provide a notification to IDEM indicating the date Boiler 50 & Boiler 60 were converted to natural gas.

D.1.1 Marion County [326 IAC 6.5-6][326 IAC 2-7-5]

- (a) Pursuant to 326 IAC 6.5-6 (Marion County), the Permittee shall comply with the following emission limitations for particulate (PM):

Unit ID	PM Limit (pounds PM per million Btu)	PM Limit (tons per year)
Unit 5 (Boiler number 50)	0.135	82.2
Unit 6 (Boiler number 60)	0.135	82.2
Unit 7 (Boiler number 70)	0.10	830.7
Unit GT1 (Gas Turbine GT1)	0.015	0.28
Unit GT2 (Gas Turbine GT2)	0.015	0.28

- (b) Pursuant to 326 IAC 6.5-6-1(b) (Marion County), the Permittee shall be considered in compliance with the tons per year emission limits if within five percent (5%) of the emission limit established pursuant to 326 IAC 6.5-6.

Condition D.1.1 shall cease to apply to Boiler 50 & Boiler 60 (Unit 5 & Unit 6) after Boiler 50 & Boiler 60 are converted to Natural Gas.

D.1.2 Sulfur Dioxide (SO₂) Emission Limitations: Marion County [326 IAC 7-4-2]

- (a) Pursuant to 326 IAC 7-4-2 (Sulfur Dioxide Emission Limitations: Marion County), the Permittee shall comply with the following emission limitations in pounds per million Btu:

Unit ID	SO ₂ Limit (pounds per million Btu)
Unit 5 and Unit 6 (Boiler number 50 and Boiler number 60)	4.7
Unit 7 (Boiler number 70)	5.3
Unit GT1 and Unit GT2 (Gas Turbines GT1 and GT2)	0.35

- (b) As an alternative to the emission limitations listed above, pursuant to 326 IAC 7-4-2, Unit 5, 6 and Unit GT1 and GT2 may comply with any one (1) of the sets of alternative emission limitations in pounds per million Btu as follows:

Alternative Scenario	Unit ID	SO ₂ Limit (pounds per million Btu)
1	Unit 5 and Unit 6 (Boiler number 50 and Boiler number 60)	5.2
	Unit GT1 and GT2 (Gas Turbines GT1 and GT2)	0.0
2	Unit 5 and Unit 6 (Boiler number 50 and Boiler number 60)	5.0
	Unit GT1 and GT2 (Gas Turbines GT1 and GT2)	0.4
3	Unit 5 and Unit 6 (Boiler number 50 and Boiler number 60)	4.1
	Unit GT1 and GT2 (Gas Turbines GT1 and GT2)	0.3
4	Unit 5 and Unit 6 (Boiler number 50 and Boiler number 60)	3.9
	GT1 and GT2 (Gas Turbines GT1 and GT2)	0.35

- (1) IDEM, OAQ shall be notified prior to the reliance by the Permittee on any one (1) of the sets of alternative emission limitations as listed in the Table above.
 - (2) A log of hourly operating status for each boiler shall be maintained and made available to IDEM, OAQ upon request. A daily summary indicating which boilers were in service during the day shall be submitted to IDEM, OAQ quarterly. In addition, records of the daily average sulfur content, heat content, and sulfur dioxide emission rate for each day in which an alternative set of emission limitations is used shall be submitted to IDEM, OAQ quarterly.
 - (3) For the purposes of 326 IAC 7-2-1(c)(1), during thirty (30) day periods in which the Permittee relies on more than one (1) set of alternative emission limitations, a separate thirty (30) day rolling weighted average for each set of limitations shall be determined. Each thirty (30) day rolling average shall be based on data from the previous thirty (30) operational days within the last ninety (90) days for that set of limitations. If the Permittee does not operate thirty (30) days under any one (1) set of limitations within the last ninety (90) days, the rolling weighted average shall be based on all operational days within the last ninety (90) days for that set of limitations.
- (c) Condition D.1.2 Sulfur Dioxide (SO₂) Emission Limitations, shall not apply to Boiler 50 & Boiler 60 after Boiler 50 & Boiler 60 are converted to Natural Gas.

D.1.3 Reserved

D.1.4 Startup, Shutdown and Other Opacity Limits [326 IAC 5-1-3(e)(2)] [326 IAC 5-1-3(b)]

- (a) Pursuant to 326 IAC 5-1-3 (Temporary Alternative Opacity Limitations), the following applies to Unit 5, Unit 6 and Unit 7 Bypass Stack:
 - (1) When building a new fire in Unit 5 or Unit 6, opacity may exceed the applicable limitation established in 326 IAC 5-1-2 for a period not to exceed a total of twenty-five (25) six (6)-minute averaged periods (2.5 hours) during the startup period, or until the flue gas temperature entering the electrostatic precipitator reaches two hundred and fifty (250) degrees Fahrenheit at the inlet of the electrostatic precipitator, whichever occurs first. [326 IAC 5-1-3(e)(2)]
 - (2) When building a new fire in Unit 7 Bypass Stack, opacity may exceed the applicable

- limitation established in 326 IAC 5-1-2 for a period not to exceed a total of fifty (50) six (6)-minute averaged periods (5.0 hours) during the startup period, or until the flue gas temperature entering the electrostatic precipitator reaches two hundred and fifty (250) degrees Fahrenheit at the inlet of the electrostatic precipitator, whichever occurs first. [326 IAC 5-1-3(e)(2)]
- (3) When shutting down Unit 5, Unit 6 and/or Unit 7 Bypass Stack, opacity may exceed the applicable limitation established in 326 IAC 5-1-2 for a period not to exceed a total of ten (10) six (6)-minute averaging periods (1.0 hours) for each Unit. [326 IAC 5-1-3(e)(2)]
 - (4) Operation of the electrostatic precipitator for each Unit is not required during these times. [326 IAC 5-1-3(e)]
- (b) When removing ashes from the fuel bed or furnace in a boiler or blowing tubes, opacity may exceed the applicable limit established in 326 IAC 5-1-2. However, opacity levels shall not exceed sixty percent (60%) for any six (6)-minute averaging period and opacity in excess of the applicable limit shall not continue for more than one (1) six (6)-minute averaging periods in any sixty (60) minute period. The averaging periods shall not be permitted for more than three (3) six (6)-minute averaging periods in a twelve (12) hour period. [326 IAC 5-1-3(b)]
 - (c) If a facility cannot meet the opacity limitations in (a) and (b) of this condition, the Permittee may submit a written request to IDEM, OAQ, for a temporary alternative opacity limitation in accordance with 326 IAC 5-1-3(d). The Permittee must demonstrate that the alternative limit is needed and justifiable.
 - (d) Condition D.1.4(a), (b) and (c) - Temporary Alternative Opacity Limitations, shall not apply to Boiler 50 & Boiler 60 after Boiler 50 & Boiler 60 are converted to Natural Gas.

Compliance Determination Requirements

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

- (a) Compliance with the PM limitation in Condition D.1.1(a) for Boilers 50 and 60, identified as Units 5 and 6, shall be determined by a performance stack test conducted utilizing methods as approved by the Commissioner. This test shall be repeated by December 31 of every second calendar year following the most recent valid compliance demonstration.
- (b) Condition D.1.5 Testing Requirements, shall not apply to Boiler 50 & Boiler 60 after the conversion of Boiler 50 & Boiler 60 to Natural Gas.

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

- (a) Except as otherwise provided by statute or rule or in this permit, the electrostatic precipitators (ESPs) shall be operated at all times that Boilers 50, 60 and 70, identified as Unit 5, 6 and 7, are in operation.
- (b) Condition D.1.6 Operation of Electrostatic Precipitator, shall not apply to Boiler 50 & Boiler 60 after the conversion of Boiler 50 & Boiler 60 to Natural Gas.

D.1.7 Continuous Monitoring of Emissions [326 IAC 3-5][40 CFR 64]

- (a) Pursuant to 326 IAC 3-5 (Continuous Monitoring of Emissions), continuous opacity monitoring systems for Unit 5, Unit 6 and Unit 7 Bypass Stack shall be calibrated, maintained, and operated for measuring opacity, which meets the performance specifications of 326 IAC 3-5-2.
- (b) Pursuant to Commissioner's Order #2008-02, in lieu of the requirement to monitor opacity in the stack exhaust from the scrubbed stack of Unit 7, in accordance with 326 IAC 3-5-1(c)(2)(A), the Permittee shall comply with the following alternative monitoring plan.

Compliance with PM limitations in Condition D.1.1 shall be demonstrated using a certified PM

CEMS installed and certified in accordance with US EPA Performance Specification 11 (PS-11) and operated in accordance with Procedure 2 of Appendix F to 40 CFR 60.

- (c) Condition D.1.7 Continuous Monitoring of Emissions, shall not apply to Boiler 50 & Boiler 60 after the conversion of Boiler 50 & Boiler 60 to Natural Gas.

D.1.8 Sulfur Dioxide Emissions (SO₂) and Sulfur Content [326 IAC 7-2][326 IAC 7-4-2]

Compliance for Unit 5, Unit 6 and Unit 7 shall be determined as follows:

- (a) Pursuant to 326 IAC 7-2-1(c), the Permittee shall demonstrate that the sulfur dioxide emissions do not exceed the equivalent of the SO₂ limitation(s) in pounds per million Btu for Unit 5, Unit 6 and Unit 7 stated in Condition D.1.2, using a thirty (30) day rolling weighted average.
- (b) The Permittee shall demonstrate compliance with these requirements through the operation of a continuous emissions monitor.
- (c) Condition D.1.8(a) and (b), shall not apply to Boiler 50 & Boiler 60 after the conversion of Boiler 50 & Boiler 60 to natural Gas.

D.1.9 Sulfur Dioxide Emissions (SO₂) and Sulfur Content [326 IAC 7-2][326 IAC 7-4-2][326 IAC 3-7-4]

Compliance for Unit GT1 and Unit GT2 shall be determined as follows:

- (a) Pursuant to 326 IAC 7-2-1(c)(3), the Permittee shall demonstrate that the sulfur dioxide emissions do not exceed the equivalent of the SO₂ limitation(s) in pounds per million Btu for Unit GT1 and Unit GT2 stated in Condition D.1.2 using a calendar month average.
- (b) Pursuant to 326 IAC 7-2-1(e) and 326 IAC 3-7-4, fuel sampling and analysis data shall be collected as follows:
 - (1) The Permittee may rely upon vendor analysis of fuel delivered, if accompanied by a vendor certification [326 IAC 3-7-4(b)]; or,
 - (2) The Permittee shall perform sampling and analysis of fuel oil samples in accordance with 327 IAC 3-7-4(a).
 - (A) Oil samples shall be collected from the tanker truck load prior to transferring fuel to the storage tank; or
 - (B) Oil samples shall be collected from the storage tank immediately after each addition of fuel to the tank; or
 - (C) Oil samples shall be collected from the transfer pipe as oil is being unloaded from the tanker truck load and is being transferred to the storage tank.
- (c) Pursuant to 326 IAC 7-2-1(d), compliance or noncompliance with the emission limitations contained in 326 IAC 7-4 may be determined by a stack test conducted in accordance with 326 IAC 3-6 utilizing procedures outlined in 40 CFR 60, Appendix A, Method 6, 6A, 6C or 8.
- (d) A determination of noncompliance, pursuant to either 326 IAC 7-2-1(d) or 326 IAC 7-2-1(e), shall not be refuted by evidence of compliance pursuant to the other method.
- (e) Upon written notification to IDEM by the Permittee, continuous emission monitoring data collected and reported pursuant to 326 IAC 3-5 may be used as the means for determining compliance with the emission limitations in 326 IAC 7. Upon such notification, the other requirements of 326 IAC 7-2 shall not apply. [326 IAC 7-2-1(g)]

D.1.10 Compliance Schedule for National Emission Standard for Hazardous Air Pollutants: Coal- and Oil-Fired Electric Utility Steam Generating Units [40 CFR 63, Subpart UUUUU]

Pursuant to Indiana Code § 13-14-6 and in order to secure compliance with 40 CFR 63, Subpart UUUUU, Indianapolis Power & Light Company, Harding Street is subject to the following order:

- (1) Indianapolis Power & Light Company shall submit a status report with fifteen (15) days of completion of the following milestones indicating the actual dates of completion:
 - (a) The dates on-site construction of new generation or conversion to firing natural gas identified in Attachment E for Harding Street Units 5 and 6 are initiated, and
 - (b) The date on-site construction of new generation or conversion to firing natural gas identified in Attachment E for Harding Street Units 5 and 6 are completed.
 - (c) The dates on-site construction for the installation of the emission control equipment and upgrades identified in Attachment E for Harding Street Unit 7 are initiated, and
 - (d) The dates on-site construction for the installation of the emission control equipment and upgrades identified in Attachment E for Harding Street Unit 7 are completed.
 - (e) The dates by which final compliance with 40 CFR 63, Subpart UUUUU for Harding Street Units 5, 6 and 7 are achieved.
- (2) Units 5, 6 and 7 shall comply with the standards set forth in 40 CFR 63, Subpart UUUUU no later than April 16, 2016.

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

D.1.11 Electrostatic Precipitator Parametric Monitoring [326 IAC 2-7-6(1)][326 IAC 2-7-5(1)][40 CFR 64]

- (a) The ability of the ESP's to control particulate emissions shall be monitored once per day, when the Units are in operation, by measuring and recording the primary and secondary voltages and the currents of the transformer-rectifier (T-R) sets.
- (b) Reasonable response steps shall be taken in accordance with Section C - Response to Excursions or Exceedances whenever the percentage of T-R sets in service falls below 90 percent and when the Unit is deemed to be in its normal or usual manner of operation. T-R set failure resulting in less than 90 percent availability is not a deviation from this permit. Failure to take response steps in accordance with Section C - Response to Excursions or Exceedances shall be considered a deviation from this permit.
- (c) The requirements in (a) and (b) above do not apply to Unit 7 when exhausting through the scrubbed stack.
- (d) Condition D.1.10 - Electrostatic Precipitator Parametric Monitoring, shall not apply to Boiler 50 & Boiler 60 after the conversion of Boiler 50 & Boiler 60 to natural Gas.

D.1.12 Opacity Readings [326 IAC 2-7-6(1)][326 IAC 2-7-5(1)]

- (a) Except during periods of startup and shutdown, appropriate response steps shall be taken whenever opacity exceeds twenty-five percent (25%) for three (3) consecutive six (6) minute averaging periods for Unit 5 or Unit 6. Appropriate response steps shall be taken in accordance with Section C - Response to Excursions or Exceedances such that the cause(s) of the excursion are identified and corrected and opacity levels are brought back below twenty five percent (25%). Examples of expected response steps include, but are not limited to, boiler loads being reduced and ESP T-R sets being returned to service.
- (b) Except during periods of startup and shutdown, appropriate response steps will be taken whenever opacity exceeds twenty percent (20%) for three (3) consecutive six (6) minute averaging periods for

Unit 7 Bypass Stack. Appropriate response steps shall be taken in accordance with Section C - Response to Excursions or Exceedances such that the cause(s) of the excursion are identified and corrected and opacity levels are brought back below twenty percent (20%). Examples of expected response steps include, but are not limited to, boiler loads being reduced and ESP T-R sets being returned to service.

- (c) Opacity readings in excess of the levels set forth in subparagraphs (a) and (b) of this Condition but not exceeding the opacity limit for the Unit specified are not a deviation from this permit. Failure to take response steps in accordance with Section C - Response to Excursions or Exceedances, shall be considered a deviation from this permit.
- (d) The Permittee may request that the IDEM, OAQ approve a different opacity trigger level than the one specified in (a), (b) and (c) of this condition, provided the Permittee can demonstrate, through stack testing or other appropriate means, that a different opacity trigger level is appropriate for monitoring compliance with the applicable particulate matter mass emission limits.
- (e) Condition D.1.11 - Opacity Readings, shall no longer apply to Boiler 50 & Boiler 60 after the conversion of Boiler 50 & Boiler 60 to natural Gas.

D.1.13 Reserved

D.1.14 NO_x and SO₂ Continuous Emission Monitoring Systems [326 IAC 2-7-6][326 IAC 2-7-5(3)][40 CFR 75]

- (a) The Permittee shall install, certify, calibrate, maintain and operate continuous emission monitoring systems (CEMS) and related equipment measuring NO_x and SO₂ emissions from Unit 5, Unit 6 and Unit 7.
 - (1) These continuous emission monitoring systems shall meet all applicable performance specifications of 40 CFR 60 or any other relevant performance specification, and certification requirements pursuant to 326 IAC 3-5-3.
 - (2) In the event that a breakdown of a continuous emission monitoring system occurs, a record shall be made of the times and reasons of the breakdown and efforts made to correct the problem.
- (b) Whenever the SO₂ continuous emission monitoring systems (CEMS) on Units 5 or 6 is malfunctioning or down for repairs or adjustments and a backup CEMS is not brought on-line for more than 24 hours, the following shall be used to provide information related to SO₂ emissions:
 - (1) Conduct fuel sampling as specified in 326 IAC 3-7-2(b). Fuel sample preparation and analysis shall be conducted as specified in 326 IAC 3-7-2(c), 326 IAC 3-7-2(d), and 326 IAC 3-7-2(e). Pursuant to 326 IAC 3-7-3, manual or other non-ASTM automatic sampling and analysis procedures may be used upon a demonstration, submitted to the department for approval, that such procedures provide sulfur dioxide emission estimates representative of either of estimates based on coal sampling and analysis procedures specified in 326 IAC 3-7-2 or of continuous emission monitoring;

or
 - (2) Comply with the relevant requirements of 40 CFR Part 75 Subpart D - Missing Data Substitution Procedures.
- (c) Whenever the SO₂ continuous emissions monitoring system (CEMS) on Unit 7 is malfunctioning or down for repairs or adjustment and a backup CEMS is not brought on-line, the following shall be used to provide information related to SO₂ emissions:
 - (1) If the CEMS is down for less than twenty-four (24) hours and a back-up CEMS is not brought on-line, the Permittee shall substitute an average of the quality assured data from

the hour immediately before and the hour immediately after the missing data period for each hour of missing data.

- (2) Whenever the SO₂ continuous emission monitoring system (CEMS) is malfunctioning or down for repairs or adjustment for twenty-four (24) hours or more, and a back-up CEMS cannot be brought on on-line, the Permittee shall comply with the requirements of 40 CFR 75 Subpart D.
- (d) Condition D.1.13(b), shall not apply to Boiler 50 & Boiler 60 after the conversion of Boiler 50 & Boiler 60 to natural Gas.

D.1.15 Particulate Matter (PM) Continuous Emission Monitoring System [326 IAC 2-7-5(3)(A)]

- (a) The Permittee shall install, certify, maintain, and operate a CEMS measuring PM emissions discharged from Unit 7 scrubbed stack to the atmosphere and record the output of the system as specified in paragraphs (a)(1) through (a)(2).
 - (1) The PM CEMS shall be installed, certified, operated, and maintained pursuant to 40 CFR Part 60, Appendix B, Performance Specification #11.
 - (2) Compliance with the applicable particulate emission limit shall be determined based on the 24-hour daily (block) average of the hourly arithmetic average emissions concentrations using the continuous monitoring system outlet data.
- (b) Whenever Unit 7 exhausts to the scrubbed stack and this particulate (PM) continuous emission monitoring system (CEMS) is malfunctioning or down for repair or adjustments for 24 hours or more, and a backup CEMS is not brought on-line, the following shall be used to provide information related to particulate emissions:
 - (1) The ability of the FGD to control particulate matter emissions shall be monitored once per day when Unit 7 is in operation by measuring and recording the following:
 - (a) Number of recycle pumps in service; and
 - (b) Absorber pH.
 - (2) As long as the number of recycle pumps and the slurry pH indicate normal operation of the FGD, any missing daily average data (for purposes of showing compliance with the tons per year limit) will be replaced with the average PM emissions rate from the day before and the day after the missing day.

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

D.1.16 Record Keeping Requirements

- (a) To document the compliance status with Section C - Opacity and Conditions D.1.1, D.1.4, D.1.5, D.1.11, and D.1.15, the Permittee shall maintain records in accordance with (1) through (8) below. Records shall be complete and sufficient to establish compliance with the limits established in Section C – Opacity and Conditions D.1.1 and D.1.4:
 - (1) Monthly and twelve (12) consecutive month distillate oil consumption in Units GT1 and GT2;
 - (2) Data and results from the most recent stack test;
 - (3) PM continuous emissions monitoring data associated with Unit 7 scrubbed stack as required in Condition D.1.15.
 - (4) All continuous opacity monitoring data, pursuant to 326 IAC 3-5;

- (5) The results of all visible emission (VE) notations. The Permittee shall include in its daily record when a visible emission notation is not taken and the reason for the lack of visible emission notation (e.g. the process did not operate that day);
 - (6) The results of all Method 9 visible emission readings taken during any periods of COM downtime;
 - (7) To document the compliance status with Condition D.1.11, the Permittee shall maintain a daily record of the primary and secondary voltages and the current readings of the transformer-rectifier sets of the electrostatic precipitators, identified as Control Equipment ID CE 50 and Control Equipment ID CE 60, controlling emissions from Unit 5 and Unit 6, respectively. The Permittee shall include in its daily record when the primary and secondary voltage and current readings are not taken and the reason for the lack of primary and secondary voltage and current readings (e.g. the process did not operate that day).
 - (8) To document the compliance status with D.1.15, the Permittee shall maintain a record of the number of recycle pumps in service and the absorber pH associated with the FGD when Unit 7 exhausts to the scrubbed stack and PM CEMS is malfunctioning or down for repair or adjustments for 24 hours or more and a backup CEMS is not brought on-line. On days when Unit 7 exhausts to the scrubbed stack and PM CEMS is malfunctioning or down for repair or adjustments for 24 hours or more and a backup CEMS is not brought on-line, the Permittee shall include in its record when readings are not taken and the reason for the lack of readings. (e.g. the boiler did not operate that day.)
- (b) To document the compliance status with Condition D.1.2, D.1.8 and D.1.14, the Permittee shall maintain records in accordance with (1) through (4) below. Records shall be complete and sufficient to establish compliance with the SO₂ limit established in Condition D.1.2 for Unit 5, Unit 6 and Unit 7.
- (1) When using SO₂ CEMs to demonstrate compliance, all SO₂ continuous emissions monitoring data, pursuant to 326 IAC 3-5-6 and 326 IAC 7-2-1(t);
 - (2) When using fuel sampling and analysis to demonstrate compliance, all fuel sampling and analysis data, pursuant to 326 IAC 7-2.
 - (3) Calculated actual fuel usage during each SO₂ CEM downtime for the Unit(s) affected by CEM downtime lasting 24 or more hours.
 - (4) The substitute data used for the missing data periods if data substitution pursuant to 40 CFR Part 75 Subpart D is used to provide data for the SO₂ CEM downtime, in accordance with Condition D.1.14.
- (c) To document the compliance status with Condition D.1.2 and D.1.9, the Permittee shall maintain records in accordance with (1) through (6) below. Records maintained for (1) through (6) shall be complete and sufficient to establish compliance with the SO₂ limit established in Condition D.1.2 for Unit GT1 and Unit GT2.
- (1) Calendar dates covered in the compliance determination period;
 - (2) Monthly weighted average sulfur content;
 - (3) Fuel heat content;
 - (4) Fuel consumption;
 - (5) Monthly weighted average sulfur dioxide emission rate in pounds per million Btu;

- (6) A log of hourly operating status for each Unit and a daily summary indicating which Units were in service during the day.

- (d) Pursuant to 326 IAC 3-7-5(a), the Permittee shall develop a standard operating procedure (SOP) to be followed for sampling, handling, analysis, quality control, quality assurance and data reporting of the information collected pursuant to 326 IAC 3-7-2 through 326 IAC 3-7-4. In addition, any revision to the SOP shall be submitted to IDEM, OAQ.

- (e) Section C - General Record Keeping Requirements contains the permittee's obligations with regard to the records required by this condition.

- (f) Condition D.1.15(a)(7) - Recordkeeping Requirements, shall not apply to Boiler 50 & Boiler 60 after the conversion of Boiler 50 & Boiler 60 to Natural Gas.

D.1.17 Reporting Requirements

A quarterly report of opacity exceedances, continuous emission monitor exceedances, a quarterly summary of Unit 7 PM emissions, and a quarterly summary of the information to document compliance status with Conditions D.1.14 shall be submitted no later than thirty (30) days after the end of the quarter being reported. Section C - General Reporting contains the Permittee's obligation with regard to the reporting required by this condition. The report submitted by the Permittee does require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official," as defined by 326 IAC 2-7-1(35).

SECTION D.2 EMISSIONS UNIT OPERATION CONDITIONS

Emissions Unit Description:

- (a) One (1) General Electric Gas Turbine Engine number GT4 identified as Unit GT4. Unit GT4 is a distillate oil fired and/or natural gas fired unit with a design heat input capacity rated at 875.0 million Btu per hour and exhausting at Stack/Vent ID GT4-1. Model number MS 7001. Water injection performed for NOX emission control. Installation date for Unit GT4 is 1994.
- (b) One (1) General Electric Gas Turbine Engine number GT5 identified as Unit GT5. Unit GT5 is a distillate oil fired and/or natural gas fired unit with a design heat input capacity rated at 867.0 million Btu per hour and exhausting at Stack/Vent ID GT5-1. Model number MS 7001. Water injection performed for NOX emission control. Installation date for Unit GT5 is 1995.

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

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

D.2.1 General Provisions Relating to NSPS [326 IAC 12][40 CFR Part 60, Subpart A]

The provisions of 40 CFR Part 60, Subpart A - General Provisions, which are incorporated by reference in 326 IAC 12-1, apply to Unit GT4 and Unit GT5 as described in this section except when otherwise specified in 40 CFR Part 60, Subpart GG (Standards of Performance for Stationary Gas Turbines).

D.2.2 New Source Performance Standards (NSPS) [326 IAC 12][40 CFR 60, Subpart GG]

Pursuant to 326 IAC 12 (New Source Performance Standards) and 40 CFR 60, Subpart GG (Standards of Performance for Stationary Gas Turbines), the Permittee shall:

- (a) Limit nitrogen oxides (NO_x) emissions, as required by 40 CFR 60.332, to:

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

Where: STD = Allowable NO_x emissions in percent by volume at fifteen percent (15%) oxygen and on a dry basis (ppm = percent by volume x 10⁴).

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

F = The fuel bound nitrogen allowance as defined in 40 CFR 60.332(a)(3).

- (b) Limit sulfur dioxide (SO₂) emissions, as required by 40 CFR 60.333, to 0.015 percent by volume at fifteen percent (15%) oxygen on a dry basis, or use natural gas fuel with a sulfur content less than or equal to eight tenths percent (0.8%) by weight.

D.2.3 Nitrogen Oxides (NO_x) – Best Available Control Technology (BACT) [326 IAC 2-2] [Construction Permit 097-2206-00033]

Pursuant to 326 IAC 2-2 (Prevention of Significant Deterioration Requirements) and Construction Permit 097-2206-00033 issued August 27, 1992, Unit GT4 and Unit GT5 shall comply with the following BACT requirements for nitrogen oxides (NO_x) emissions:

- (a) Application of wet injection;
- (b) When burning natural gas, the NO_x emission rate shall not exceed forty two (42) ppmv at fifteen percent (15%) oxygen and on a dry basis;
- (c) When burning distillate oil, the NO_x emission rate shall not exceed sixty five (65) ppmv at fifteen percent (15%) oxygen and on a dry basis.

Pursuant to Operation Condition 13 of the Construction Permit 097-2206-00033 issued August 27, 1992, compliance with BACT requirements for nitrogen oxides (NO_x) emissions shall ensure compliance with NO_x emission rate specified in Condition D.2.2(a) and 40 CFR 60.332(a)(1).

D.2.4 PSD Minor Limit [326 IAC 2-2][Construction Permit 097-2206-00033]

Pursuant to 326 IAC 2-2(Prevention of Significant Deterioration Requirements) and Construction Permit 097-2206-00033 issued August 27, 1992:

- (a) The fuel sulfur weight percent of distillate oil fired in Unit GT4 and Unit GT5 is limited to five hundredths (0.05) percent by weight; and
- (b) The combined total natural gas throughput (no fuel oil combusted) for Unit GT4 and Unit GT5 is limited to 6300 million cubic feet per twelve (12) consecutive month period with compliance determined at the end of each month; and
- (c) The combined total distillate fuel oil throughput (no natural gas combusted) for Unit GT4 and Unit GT5 is limited to 12.8 million gallons per twelve (12) consecutive month period with compliance determined at the end of each month.
- (d) One gallon of distillate fuel oil can be substituted for each 293 cubic feet reduction of natural gas consumption per twelve (12) consecutive month period with compliance determined at the end of each month.

This is equivalent to sulfur dioxide (SO₂) emission of less than forty (40) tons per twelve (12) consecutive month period with compliance determined at the end of each month such that 326 IAC 2-2 will not apply to SO₂ emissions but will apply to NO_x emissions.

D.2.5 Particulate Matter Limitations Except Lake County [326 IAC 6.5-1-2(a)]

Pursuant to 326 IAC 6.5-1-2(a) (Particulate Matter Limitations Except Lake County), particulate (PM) emissions from Unit GT4 and Unit GT5 shall each not exceed three hundredths (0.03) grains per dry standard cubic foot of exhaust air.

D.2.6 Sulfur Dioxide (SO₂) Emission Limitations [326 IAC 7-1.1-2]

Pursuant to 326 IAC 7-1.1-2 (Sulfur Dioxide (SO₂) Emission Limitations), SO₂ emissions from Unit GT4 and Unit GT5 shall each not exceed five tenths (0.5) pounds per million Btu when burning distillate oil. Compliance with 326 IAC 12 (New Source Performance Standards) and 40 CFR 60.333, Subpart GG (Standards of Performance for Stationary Gas Turbines) will demonstrate compliance with 326 IAC 7-1.1-2 (Sulfur Dioxide (SO₂) Emission Limitations).

D.2.7 Opacity Limitations [326 IAC 2-2] [Construction Permit 097-2206-00033] [326 IAC 5-1]

Pursuant to the Construction Permit 097-2206-00033 issued August 27, 1992, opacity for Unit GT4 and Unit GT5 each shall not exceed twenty percent (20%) as determined by 40 CFR Part 60, Appendix A, Method 9.

Compliance Determination Requirements

D.2.8 Testing Requirements [326 IAC 2-7-6(1),(6)][326 IAC 2-1.1-11]

In order to show compliance with Condition D.2.3 for Unit GT4 and Unit GT5, the Permittee shall conduct NOx emissions testing by a performance stack test utilizing methods as approved by the Commissioner. This test shall be repeated by December 31 of every fifth calendar year following the most recent valid compliance demonstration. Section C - Performance Testing contains the Permittee's obligation with regard to the performance testing required by this condition.

D.2.9 New Source Performance Standard (NSPS) [326 IAC 12][40 CFR Part 60, Subpart GG][40 CFR 64]

Pursuant to 40 CFR 60.334(a), the Permittee shall operate a continuous monitoring system to monitor and record the fuel consumption and the ratio of water to fuel being fired in Unit GT4 and Unit GT5.

D.2.10 Sulfur and Nitrogen Content [326 IAC 12] [40 CFR 60.334]

Pursuant to 40 CFR 60.334(b), the Permittee shall monitor the daily sulfur content and the nitrogen content of the fuel being fired in Unit GT4 and Unit GT5 in accordance with the EPA custom schedule approved on October 26, 2000.

D.2.11 Sulfur Dioxide Emissions (SO₂) and Sulfur Content [326 IAC 7-2][326 IAC 7-1.1-2]

Compliance for Unit GT4 and Unit GT5 shall be determined as follows:

- (a) Pursuant to 326 IAC 7-2-1(c)(3), the Permittee shall demonstrate that the sulfur dioxide emissions for Unit GT4 and Unit GT5 each do not exceed the equivalent of five tenths (0.5) pounds per million Btu using a calendar month average.
- (b) Pursuant to 326 IAC 7-2-1(e) and 326 IAC 3-7-4, the fuel sampling and analysis data shall be collected as follows:
 - (1) The Permittee may rely upon vendor analysis of fuel delivered, if accompanied by a vendor certification [326 IAC 3-7-4(b)]; or
 - (2) The Permittee shall perform sampling and analysis of fuel oil samples in accordance with 327 IAC 3-7-4(a).
 - (A) Oil samples shall be collected from the tanker truck load prior to transferring fuel to the storage tank; or
 - (B) Oil samples shall be collected from the storage tank immediately after each addition of fuel to the tank; or
 - (C) Oil samples shall be collected from the transfer pipe as oil is being unloaded from the tanker truck load and is being transferred to the storage tank.
- (c) Pursuant to 326 IAC 7-2-1(d), compliance or noncompliance with the emission limitations contained in 326 IAC 7-4 may be determined by a stack test conducted in accordance with 326 IAC 3-6 utilizing procedures outlined in 40 CFR 60, Appendix A, Method 6, 6A, 6C or 8.
- (d) A determination of noncompliance, pursuant to either 326 IAC 7-2-1(d) or 326 IAC 7-2-1(e), shall not be refuted by evidence of compliance pursuant to the other method.

- (e) Upon written notification to IDEM by the Permittee, continuous emission monitoring data collected and reported pursuant to 326 IAC 3-5 may be used as the means for determining compliance with the emission limitations in 326 IAC 7. Upon such notification, the other requirements of 326 IAC 7-2 shall not apply. [326 IAC 7-2-1(g)]

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

D.2.12 Sulfur and Nitrogen Content [326 IAC 12][40 CFR 60.334]

The Permittee shall comply with the following custom monitoring schedule for Unit GT4 and Unit GT5 as approved for the site by the USEPA on October 26, 2000:

- (a) Monitoring of fuel nitrogen content shall not be required while natural gas is the only fuel fired in the gas turbine.
- (b) Sulfur Monitoring:
- (1) Analysis for fuel sulfur content of the natural gas shall be conducted using one of the approved ASTM reference methods for the measurement of sulfur in gaseous fuels, or an approved alternate method. The reference methods are: ASTM D1072-80; ASTM D3031-81; ASTM 3246-81; and ASTM D4084-82 as referenced in 40 CFR 60.335(d).
 - (2) Effective the date of this custom schedule, sulfur monitoring shall be conducted twice monthly for six months. If this monitoring shows little variability in the fuel sulfur content, and indicates consistent compliance with 40 CFR 60.333, then sulfur monitoring shall be conducted once per quarter for six quarters.
 - (3) If after the monitoring required in item (b)(2) above, or herein. The sulfur content of the fuel shows little variability and, calculated as sulfur dioxide, represents consistent compliance with the sulfur dioxide emission limits specified under 40 CFR 60.333, sample analysis shall be conducted twice per annum. This monitoring shall be conducted during the first and third quarters of each calendar year.
 - (4) Should any sulfur analysis as required in items (b)(2) or (b)(3) above indicate noncompliance with 40 CFR 60.333, the Permittee shall notify IDEM, OAQ and USEPA of such excess emissions and the custom schedule shall be re-examined. Sulfur monitoring shall be conducted weekly during the interim period when this custom schedule is being re-examined.
 - (5) If there is a change in fuel supply, the Permittee must notify IDEM, OAQ and USEPA of such change for re-examination of this custom schedule. A substantial change in fuel quality shall be considered as a change in fuel supply. Sulfur monitoring shall be conducted weekly during the interim period when this custom schedule is being re-examined.
 - (6) Records of sample analysis and fuel supply pertinent to this custom schedule shall be retained for a period of three (3) years, and be available for inspection by personnel of federal, state, and local air pollution control agencies.

D.2.13 Visible Emissions Notations [326 IAC 2-7-6(1)][326 IAC 2-7-5(1)]

- (a) Visible emission (VE) notations of Unit GT4 and/or Unit GT5 stack exhaust(s) shall be performed once per day during normal daylight operations when the given unit is operating for more than two (2) continuous daylight hours and combusting fuel oil. A trained employee shall record whether emissions are normal or abnormal.

- (b) If abnormal emissions are observed at Unit GT4 and/or Unit GT5 exhaust, the Permittee shall take reasonable response steps in accordance with Section C - Response to Excursions or Exceedances. Observation of abnormal emissions that do not violate 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.
- (c) "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) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.

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

D.2.14 Record Keeping Requirements

- (a) To document the compliance status with Conditions D.2.2, D.2.3, D.2.4, D.2.5, D.2.6, D.2.7, D.2.8, D.2.9, D.2.11, D.2.12 and D.2.13, the Permittee shall maintain records in accordance with (1) through (5) below. Records shall be complete and sufficient to establish compliance with the limits established in Conditions D.2.2, D.2.3, D.2.4, D.2.5, D.2.6 and D.2.7:
 - (1) Data and results from the most recent stack test;
 - (2) All fuel nitrogen content and sulfur content monitoring data;
 - (3) Records of fuel usage;
 - (4) Records of the fuel consumption and the ratio of water to fuel being fired in Unit GT4 and Unit GT5; and
 - (5) Visible emission (VE) notations. The Permittee shall include in its daily record when a visible emission notation is not taken and the reason for the lack of visible emission notation (e.g. the process did not operate that day).
- (b) Section C - General Record Keeping Requirements contains the permittee's obligations with regard to the records required by this condition.

D.2.15 Reporting Requirements

- (a) A quarterly summary of the information to document compliance status with Conditions D.2.4 and D.2.11 shall be submitted not later than thirty (30) days after the end of the quarter being reported. Section C - General Reporting contains the Permittee's obligation with regard to the reporting required by this condition. The report submitted by the Permittee does require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official," as defined by 326 IAC 2-7-1(35).
- (b) Periods of excess emissions shall be reported in accordance with the requirements of 40 CFR 60.334(c).

SECTION D.3 EMISSIONS UNIT OPERATION CONDITIONS

Emissions Unit Description:

- (i) One (1) General Electric Gas Turbine Model number PG7241 identified as Unit GT6. Unit GT6 is a natural gas fired unit with a design heat input capacity rated at 1,660 MMBtu per hour and exhausting at Stack/Vent ID GT-6. NO_x emissions will be controlled by dry low NO_x burners. Installation date for Unit GT6 is 2002.

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

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

D.3.1 General Provisions Relating to NSPS [326 IAC 12] [40 CFR Part 60, Subpart A]

The provisions of 40 CFR Part 60, Subpart A - General Provisions, which are incorporated by reference in 326 IAC 12-1, apply to Unit GT6 as described in this section except when otherwise specified in 40 CFR Part 60, Subpart GG (Standards of Performance for Stationary Gas Turbines).

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

Pursuant to 40 CFR 60.330 Subpart GG (Standards of Performance for Stationary Gas Turbines) and 326 IAC 12 (New Source Performance Standards), the Permittee shall:

- (a) Limit Nitrogen Oxides (NO_x) emissions, as required by 40 CFR 60.332, to:

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

Where: STD = Allowable NO_x emissions in percent by volume at fifteen percent (15%) oxygen and on a dry basis (ppm = percent by volume x 10⁴).

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

F = The fuel bound nitrogen allowance as defined in 40 CFR 60.332(a)(3).

- (b) Limit Sulfur dioxide (SO₂) emissions, as required by 40 CFR 60.333, to 0.015 percent by volume at fifteen percent (15%) oxygen on a dry basis, or use natural gas fuel with a sulfur content less than or equal to eight tenths percent (0.8%) by weight.

D.3.3 PSD Minor Limit [326 IAC 2-2] [Minor Permit Modification 097-14666-00033]

In order to render the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration Requirements) not applicable to Unit GT6 and pursuant to Operation Condition number 9 of the Minor Permit Modification 097-14666-00033 issued on November 9, 2001:

- (a) Nitrogen Oxides (NO_x) emissions are limited to less than forty (40) tons per twelve (12) consecutive month period with compliance demonstrated at the end of each month such that 326 IAC 2-2 will not apply. Compliance with the Nitrogen Oxides (NO_x) emissions limitation shall be demonstrated by installing and operating a continuous emission monitor for NO_x emissions from Unit GT6 in accordance with 326 IAC 3-5.

Compliance Determination Requirements

D.3.4 Continuous Emissions Monitoring [326 IAC 3-5] [Minor Permit Modification 097-14666-00033]

Pursuant to 326 IAC 3-5 (Continuous Monitoring of Emissions) and Operation Condition number 9 of the Minor Permit Modification 097-14666-00033 issued on November 9, 2001, continuous monitoring systems for Unit GT6 shall be calibrated, maintained, and operated for measuring NO_x emissions which meets the performance specifications of 326 IAC 3-5-2 (Continuous Monitoring of Emissions).

D.3.5 Sulfur and Nitrogen Content [326 IAC 12] [40 CFR 60.334]

Pursuant to 40 CFR 60.334(b), the Permittee shall monitor the daily sulfur content and the nitrogen content of the fuel being fired in Unit GT6 in accordance with the EPA custom schedule approved on June 16, 2004.

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

D.3.6 Sulfur and Nitrogen Content [326 IAC 12] [40 CFR 60.334]

As stated in the U.S. EPA Region 5 approval letter dated June 16, 2004, the Permittee shall comply with the following custom monitoring schedule for Unit GT6 as approved by the U.S. EPA for Unit GT4 and Unit GT5 on October 26, 2000:

- (a) Monitoring of fuel nitrogen content shall not be required while natural gas is the only fuel fired in the gas turbine.
- (b) Sulfur Monitoring:
 - (1) Analysis for fuel sulfur content of the natural gas shall be conducted using one of the approved ASTM reference methods for the measurement of sulfur in gaseous fuels, or an approved alternate method. The reference methods are ASTM D1072-80; ASTM D3031-81; ASTM 3246-81; and ASTM D4084-82 as referenced in 40 CFR 60.335(d).
 - (2) Effective the date of this custom schedule, sulfur monitoring shall be conducted twice monthly for six months. If this monitoring shows little variability in the fuel sulfur content, and indicates consistent compliance with 40 CFR 60.333, then sulfur monitoring shall be conducted once per quarter for six quarters.
 - (3) If after the monitoring required in item (b)(2) above, or herein. The sulfur content of the fuel shows little variability and, calculated as sulfur dioxide, represents consistent compliance with the sulfur dioxide emission limits specified under 40 CFR 60.333, sample analysis shall be conducted twice per annum. This monitoring shall be conducted during the first and third quarters of each calendar year.
 - (4) Should any sulfur analysis as required in items (b)(2) or (b)(3) above indicate noncompliance with 40 CFR 60.333, the Permittee shall notify IDEM, OAQ and USEPA of such excess emissions and the custom schedule shall be re-examined. Sulfur monitoring shall be conducted weekly during the interim period when this custom schedule is being re-examined.
 - (5) If there is a change in fuel supply, the Permittee must notify IDEM, OAQ and USEPA of such change for re-examination of this custom schedule. A substantial change in fuel quality shall be considered as a change in fuel supply. Sulfur monitoring shall be conducted weekly during the interim period when this custom schedule is being re-examined.
 - (6) Records of sample analysis and fuel supply pertinent to this custom schedule shall be retained for a period of three (3) years, and be available for inspection by personnel of federal, state, and local air pollution control agencies.

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

D.3.7 Record Keeping Requirements

- (a) To document the compliance status with Conditions D.3.2, D.3.3, D.3.4, D.3.5 and D.3.6, the Permittee shall maintain records in accordance with (1) through (4) below. Records shall be complete and sufficient to establish compliance with the limits established in Conditions D.3.2 and D.3.3.
 - (1) All required fuel nitrogen content and sulfur content monitoring data; and
 - (2) All required NO_x continuous emission monitoring data;
- (b) Section C - General Record Keeping Requirements contains the permittee's obligations with regard to the records required by this condition.

D.3.8 Reporting Requirements

- (a) A quarterly summary of the information to document compliance with status Condition D.3.3(a) shall be submitted not later than thirty (30) days after the end of the quarter being reported. Section C - General Reporting contains the Permittee's obligation with regard to the reporting required by this condition. The report submitted by the Permittee does require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official," as defined by 326 IAC 2-7-1(35).
- (b) Periods of excess emissions shall be reported in accordance with the requirements of 40 CFR 60.334(c)

. SECTION D.4 EMISSIONS UNIT OPERATION CONDITIONS

Emissions Unit Description:

- (j) One (1) General Motors Reciprocating Internal Combustion Standby/Emergency Generator identified as Unit ST14. As an emergency generator, Unit ST14 will be operated less than 500 hours per year. Unit ST14 is distillate oil fired with a design heat input of 27.6 million Btu per hour. Equipped with no add on air pollution control equipment. Exhausting at Stack/Vent ID ST14-1. Installation date for Unit ST14 is 1967.

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

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

D.4.1 Particulate Matter Limitations Except Lake County [326 IAC 6.5-1-2(a)]

- (a) Pursuant to 326 IAC 6.5-1-2(a) (Particulate Matter Limitations Except Lake County), particulate (PM) emissions from Unit ST14 shall not exceed three hundredths (0.03) grains per dry standard cubic foot of exhaust air.
- (b) Absent a direct measurement of emissions, compliance is assumed for ST14 provided visible emissions from ST14-1 are normal.

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

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

- (a) Visible emission notations of Stack/Vent ID ST14-1 exhaust shall be performed once per day during normal daylight operations when operating and exhausting to the atmosphere when the unit is operating for more than two (2) continuous daylight hours and combusting fuel oil. . A trained employee shall record whether emissions are normal or abnormal.
- (b) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shutdown time.
- (c) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.
- (d) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.
- (e) If abnormal emissions are observed from Unit ST14 stack exhaust, the Permittee shall take reasonable response steps in accordance with Section C - Response to Excursions or Exceedances. Failure to take response steps in accordance with Section C - Response to Excursions or Exceedances, shall be considered a deviation from this permit.

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

D.4.3 Record Keeping Requirements

- (a) The Permittee shall maintain records of annual operating hours per year for Unit ST14.
- (b) To document the compliance status with Condition D.4.2, the Permittee shall maintain records of the visible emission notations of Stack/Vent ID ST14-1 once per day. The Permittee shall include in its daily record when a visible emission notation is not taken and the reason for the lack of visible emission notation (e.g. the process did not operate that day).

Permit Reviewer: James Mackenzie

- (c) Section C - General Record Keeping Requirements contains the permittee's obligations with regard to the records required by this condition.

SECTION D.5

FACILITY CONDITIONS

Facility Description [326 IAC 2-7-5(14)]:

- (k) Coal material handling and storage system with a maximum annual capacity of 7.5 million tons per year and described as follows:
- (1) One (1) crusher house, consisting of the following equipment:
 - (i) Two (2) crushers constructed in 1958;
 - (ii) One (1) self cleaning static grizzly constructed in 1996; and
 - (iii) One (1) self cleaning static grizzly constructed in 2006.
 - (2) One (1) covered conveyor system, constructed in 1931, consisting of the following equipment:
 - (i) No. 2 conveyor which transfers coal from the railcar receiving area to the crusher house;
 - (ii) No. 3 conveyor transfers coal from the crusher to No. 4 conveyor;
 - (iii) No. 4 conveyor transfers coal from the crusher to the cross-over conveyor;
 - (iv) Cross-over conveyor transfers coal from No. 4 conveyor to No. 5 conveyor or to conveyor 705 (which then transfers to conveyor 703 and to Unit 7); and
 - (v) No. 5 conveyor transfers coal from the cross-over conveyor to Unit 5 or Unit 6.
 - (3) One (1) covered conveyor system, constructed in 1958 and consisting of the following equipment:
 - (i) Conveyors identified as 600A, 600B, 601, 602, 605, and 606. 600A and 600B conveyor transfers coal from the railcar receiving area to 601 and 602 conveyors which transfer coal to the crusher house; and
 - (ii) 605 conveyor transfers coal to 606 or 703 conveyors. 605 and 606 conveyors are located inside the building and transfer coal to five (5) conveyors which transfer coal to Unit 5's and Unit 6's coal bunkers.
 - (4) One (1) covered conveyor system which became commercial in 1973 and consists of the following equipment:
 - (i) Conveyors identified as 701 and 702 transfer coal to either the crusher house or the low sulfur coal pile; and
 - (ii) Conveyors identified as 703 and 704 are the conveyors which transfer coal from 601, 602, and 605 conveyors to Unit 7's coal bunkers.
 - (5) One (1) covered conveyor system, constructed in 2006 and consisting of the following equipment:
 - (i) Conveyors identified as 801 and 802 transfer coal to the outside high sulfur coal storage pile.
 - (6) One (1) covered conveyor system, constructed in 2006 and consists of the following equipment subject to 40 CFR Part 60, Subpart Y;
 - (i) Conveyors identified as 803 and 804 transfer coal from the high sulfur storage pile to the crusher house.

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

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

D.5.1 General Provisions Relating to NSPS [40 CFR Part 60, Subpart A][326 IAC 12-1]

(a) The provisions of 40 CFR Part 60, Subpart A - General Provisions, which are incorporated by reference in 326 IAC 12-1, apply to the two (2) covered coal conveyors, identified as 803 and 804, as described in this section except when otherwise specified in 40 CFR Part 60, Subpart Y.

(b) Pursuant to 40 CFR 60.4 and 40 CFR 60.7, the Permittee shall submit all required notifications and reports to:

Indiana Department of Environmental Management
Permits Administration and Support Section, Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, IN 46204-2251

And

Region V, Director, Air and Radiation Division
United States Environmental Protection Agency
77 West Jackson Boulevard
Chicago, Illinois 60604-3590

D.5.2 Standards of Performance for Coal Preparation Plants [40 CFR 60.250, Subpart Y] [326 IAC 12]

Pursuant to 40 CFR 60.250, Subpart Y (Standards of Performance for Coal Preparation Plants), incorporated by reference in 326 IAC 12, the two (2) covered coal conveyors, identified as 803 and 804, shall each comply with the following:

§ 60.250 Applicability and designation of affected facility.

(a) The provisions of this subpart apply to affected facilities in coal preparation and processing plants that process more than 181 megagrams (Mg) (200 tons) of coal per day.

(b) The provisions in §60.251, §60.252(a), §60.253(a), §60.254(a), §60.255(a), and §60.256(a) of this subpart are applicable to any of the following affected facilities that commenced construction, reconstruction or modification after October 27, 1974, and on or before April 28, 2008: Thermal dryers, pneumatic coal-cleaning equipment (air tables), coal processing and conveying equipment (including breakers and crushers), and coal storage systems, transfer and loading systems.

[74 FR 51977, Oct. 8, 2009]

§ 60.251 Definitions

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

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

(b) *Bituminous coal* means solid fossil fuel classified as bituminous coal by ASTM D388 (incorporated by reference— see §60.17).

(c) *Coal* means:

(1) For units constructed, reconstructed, or modified on or before May 27, 2009, all solid fossil fuels classified as anthracite, bituminous, subbituminous, or lignite by ASTM D388 (incorporated by reference— see §60.17).

- (2) For units constructed, reconstructed, or modified after May 27, 2009, all solid fossil fuels classified as anthracite, bituminous, subbituminous, or lignite by ASTM D388 (incorporated by reference— see §60.17), and coal refuse.
- (d) *Thermal dryer* means:
- (1) For units constructed, reconstructed, or modified on or before May 27, 2009, any facility in which the moisture content of bituminous coal is reduced by contact with a heated gas stream which is exhausted to the atmosphere.
- (2) For units constructed, reconstructed, or modified after May 27, 2009, any facility in which the moisture content of coal is reduced by either contact with a heated gas stream which is exhausted to the atmosphere or through indirect heating of the coal through contact with a heated heat transfer medium.
- (e) *Pneumatic coal-cleaning equipment* means:
- (1) For units constructed, reconstructed, or modified on or before May 27, 2009, any facility which classifies bituminous coal by size or separates bituminous coal from refuse by application of air stream(s).
- (2) For units constructed, reconstructed, or modified after May 27, 2009, any facility which classifies coal by size or separates coal from refuse by application of air stream(s).
- (f) *Coal processing and conveying equipment* means any machinery used to reduce the size of coal or to separate coal from refuse, and the equipment used to convey coal to or remove coal and refuse from the machinery. This includes, but is not limited to, breakers, crushers, screens, and conveyor belts. Equipment located at the mine face is not considered to be part of the coal preparation and processing plant.
- (g) *Coal storage system* means any facility used to store coal except for open storage piles..
- (h) *Transfer and loading system* means any facility used to transfer and load coal for shipment.

[FR 51977, Oct. 8, 2009]

§ 60.254 Standards for coal processing and conveying equipment, coal storage systems, transfer and loading systems, and open storage piles.

- (a) On and after the date on which the performance test is conducted or required to be completed under §60.8, whichever date comes first, an owner or operator shall not cause to be discharged into the atmosphere from any coal processing and conveying equipment, coal storage system, or coal transfer and loading system processing coal constructed, reconstructed, or modified on or before April 28, 2008, gases which exhibit 20 percent opacity or greater.

[74 FR 51977, Oct. 8, 2009]

§ 60.257 Test methods and procedures.

- (a) The owner or operator must determine compliance with the applicable opacity standards as specified in paragraphs (a)(1) through (3) of this section.
- (1) Method 9 of appendix A–4 of this part and the procedures in §60.11 must be used to determine opacity, with the exceptions specified in paragraphs (a)(1)(i) and (ii).
- (i) The duration of the Method 9 of appendix A–4 of this part performance test shall be 1 hour (ten 6-minute averages).
- (ii) If, during the initial 30 minutes of the observation of a Method 9 of appendix A–4 of this part performance test, all of the 6-minute average opacity readings are less than or equal to half the applicable opacity limit, then the observation period may be reduced from 1 hour to 30 minutes.
- (2) To determine opacity for fugitive coal dust emissions sources, the additional requirements specified in paragraphs (a)(2)(i) through (iii) must be used.

- (i) The minimum distance between the observer and the emission source shall be 5.0 meters (16 feet), and the sun shall be oriented in the 140-degree sector of the back.
 - (ii) The observer shall select a position that minimizes interference from other fugitive coal dust emissions sources and make observations such that the line of vision is approximately perpendicular to the plume and wind direction.
 - (iii) The observer shall make opacity observations at the point of greatest opacity in that portion of the plume where condensed water vapor is not present. Water vapor is not considered a visible emission.
- (3) A visible emissions observer may conduct visible emission observations for up to three fugitive, stack, or vent emission points within a 15-second interval if the following conditions specified in paragraphs (a)(3)(i) through (iii) of this section are met.
- (i) No more than three emissions points may be read concurrently.
 - (ii) All three emissions points must be within a 70 degree viewing sector or angle in front of the observer such that the proper sun position can be maintained for all three points.
 - (iii) If an opacity reading for any one of the three emissions points is within 5 percent opacity from the applicable standard (excluding readings of zero opacity), then the observer must stop taking readings for the other two points and continue reading just that single point.

[74 FR 51977, Oct. 8, 2009]

SECTION D.6

FACILITY OPERATION CONDITIONS

Facility Description: [326 IAC 2-7-5(14)]

- (l) Limestone transfer from trucks and loader vehicles to the conveyor system, identified as T-1, with a maximum capacity to transfer 230,000 tons of limestone per year and using no control. Constructed in 2006.
- (m) Five (5) covered limestone conveyors, identified as T-2, with a maximum capacity to convey 230,000 tons of limestone per year and using no control. Constructed in 2006. Under 40 CFR 60.670, Subpart OOO, T-2 is considered an affected facility.
- (n) Two (2) 630 ton capacity limestone storage silos, identified as L7-1 and L7-2, using bin vents LC7-1 and LC7-2 as control, and exhausting to stack/vent LSV7-1 and LSV7-2. Maximum throughput of 230,000 tons of limestone per year. Constructed in 2006. Under 40 CFR 60.670, Subpart OOO, L7-1 and L7-2 are each considered an affected facility.
- (o) Two (2) weigh feeders which transfer limestone from the silos to the two (2) enclosed wet ball mills (grinding mills) for grinding limestone, identified as BM7-1 and BM7-2. The ball mill grinding mills are located in a covered building. Constructed in 2006. Under 40 CFR 60.670, Subpart OOO, BM7-1 and BM7-2 are each considered an affected facility.
- (p) Gypsum transfer, identified as T-3, with a maximum capacity to transfer 414,000 tons of gypsum per year and using no control. Constructed in 2006.
- (q) Six (6) covered gypsum conveyors, identified as T-4, with a maximum capacity to convey 414,000 tons of gypsum and using no control. Constructed in 2006.

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

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

D.6.1 Particulate Matter (PM) [326 IAC 6.5-1-2(a)]

- (a) Pursuant to 326 IAC 6.5-1-2(a) (Particulate Matter Limitations Except Lake County), particulate matter (PM) emissions from the two (2) limestone storage silos, identified as L7-1 and L7-2, shall each be limited to three hundredths (0.03) grain per dry standard cubic foot of exhaust air.
- (b) Absent a direct measurement of emissions, compliance is assumed for L7-1 and L7-2 provided visible emissions from LSV7-1 and LSV7-2 are normal.

D.6.2 PSD Minor Limit [326 IAC 2-2][326 IAC 2-1.1-5]

- (a) PM10 emissions from each limestone storage silo, identified as L7-1 and L7-2, shall not exceed 0.19 pounds per hour.
- (b) PM emissions from each limestone storage silo, identified as L7-1 and L7-2, shall not exceed 0.022 gr/dscf of exhaust air and shall each not exceed 0.19 pounds per hour.

Compliance with these emission limits will ensure that the limited potential to emit from emission units L7-1 and L7-2, combined with the unrestricted potential to emit from emission units T-1, T-2, T-3, and T-4 is less than twenty-five (25) tons of PM per year and less than fifteen (15) tons of PM10 per year and, therefore, will render the requirements of 326 IAC 2-2 and 326 IAC 2-1.1-5 not applicable.

Compliance Determination Requirements

D.6.3 Particulate Control

- (a) In order to comply with Condition D.7.1 and D. 7.2, the bin vent filters identified as LC-1 and LC-2 for particulate control shall be in operation and control emissions from the limestone storage silos at all times that the limestone storage silos are loaded or unloaded.
- (b) In the event that bag failure is observed in a multi-compartment baghouse, if operations will continue for ten (10) days or more after the failure is observed before the failed units will be repaired or replaced, the Permittee shall promptly notify the IDEM, OAQ of the expected date the failed units will be repaired or replaced. The notification shall also include the status of the applicable compliance monitoring parameters with respect to normal, and the results of any response actions taken up to the time of notification.

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

D.6.4 Visible Emissions Notations

- (a) Visible emission notations of the limestone storage silo stack/vent LSV7-1 and LSV7-2 exhausts shall be performed once per week during normal daylight operations. A trained employee shall record whether emissions are normal or abnormal.
- (b) Visible emission notations of the unenclosed transfer points for the five (5) covered limestone conveyors, identified as T-2 and of the unenclosed transfer points for six (6) covered gypsum conveyors, identified as T-4 shall be performed once per week during normal daylight operations. A trained employee shall record whether emissions are normal or abnormal.
- (c) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.
- (d) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.
- (e) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.
- (f) If abnormal emissions are observed or if visible emissions are observed crossing the property, right of way, or easement on which the source is located, the Permittee shall take reasonable response steps in accordance with Section C – Response to Excursions or Exceedances. Failure to take response steps in accordance with Section C - Response to Excursions or Exceedances shall be considered a deviation from this permit.

D.6.5 Parametric Monitoring

The Permittee shall record the pressure drop across LC7-1 and LC7-2, at least once per week. When for any one reading, the pressure drop is outside the normal range of 0.5 and 5.0 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.6.6 Broken or Failed Bag Detection

- (a) For a single compartment baghouse controlling emissions from a process operated continuously, a failed unit and the associated process shall be shut down immediately until the failed unit has been repaired or replaced. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency

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

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

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

D.6.7 Record Keeping Requirements

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- (a) *To document the compliance status with Condition D.6.4, the Permittee shall maintain the following:*
- (1) Records of weekly visible emission notations of the limestone storage silo stack/vent LSV7-1 and LSV7-2 exhausts. The Permittee shall include in its weekly record when a visible emission notation is not taken and the reason for the lack of visible emission notation (e.g. the process did not operate that day).
 - (2) Records of weekly visible emission notations of the unenclosed transfer points for the five (5) covered limestone conveyors, identified as T-2, and of the transfer points for the six (6) covered gypsum conveyors, identified as T-4. The Permittee shall include in its weekly record when a visible emission notation is not taken and the reason for the lack of visible emission notation (e.g. the process did not operate that day).
- (b) To document the compliance status with Condition D.6.5, the Permittee shall maintain:
- Weekly records of the pressure drop across LC7-1 and LC7-2. The Permittee shall include in its weekly record when a pressure drop reading is not taken and the reason for the lack of pressure drop reading (e.g. the process did not operate that day).
- (c) Section C - General Record Keeping Requirements contains the permittee's obligations with regard to the records required by this condition.

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

D.6.8 General Provisions Relating to NSPS [40 CFR Part 60, Subpart A][326 IAC 12-1]

-
- (a) The provisions of 40 CFR Part 60, Subpart A - General Provisions, which are incorporated by reference in 326 IAC 12-1, apply to the five (5) covered limestone conveyors, identified as T-2, the two (2) limestone storage silos, identified as L7-1 and L7-2, and the two (2) enclosed wet ball mills (grinding mills), identified as BM7-1 and BM7-2, as described in this section except when otherwise specified in 40 CFR Part 60, Subpart OOO.
- (b) Pursuant to 40 CFR 60.4 and CFR 60.7, the Permittee shall submit all required notifications and reports to:

Indiana Department of Environmental Management
Permit Administration and Support Section, Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, IN 46204-2251

And

Region V, Director, Air and Radiation Division

Permit Reviewer: James Mackenzie

United States Environmental Protection Agency
77 West Jackson Boulevard
Chicago, Illinois 60604-3590

D.6.9 New Source Performance Standards for Nonmetallic Mineral Processing Plants
[40 CFR 60.670, Subpart OOO][326 IAC 12]

Pursuant to 40 CFR 60.670, Subpart OOO (New Source Performance Standards for Nonmetallic Mineral Processing Plants), the five (5) covered limestone conveyors, identified as T-2, the two (2) limestone storage silos, identified as L7-1 and L7-2, and the two (2) enclosed wet ball mills (grinding mills), identified as BM7-1 and BM7-2, shall each comply with 40 CFR §§ 60.670, 671, 672, 673, 675 and 676 as incorporated by reference in 326 IAC 12-1.

SECTION D.7

FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(14)]:

Insignificant Activities

- (a) Fuel oil fired combustion sources with heat input equal to or less than two (2) million Btu per hour and firing fuel containing less than five-tenths (0.5) percent sulfur by weight. [326 IAC 6.5-1-2(a)]
- (b) Gasoline generators not exceeding 110 horsepower. [326 IAC 6.5-1-2(a)]
- (c) Two (2) flyash silos identified as Unit 5/6 Flyash Silo and Unit 7 Flyash Silo for truck loading. Each silo is exhausted to a baghouse. [326 IAC 6.5-1-2(a)]
- (d) Degreasing operations that do not exceed 145 gallons per 12 months, except if subject to 326 IAC 20-6. [326 IAC 8-3-2]
- (e) One (1) 81 horsepower diesel fired emergency generator identified as Emission Unit ID Generator # 1, installed in 1988, associated with a communication transmitter tower located at 4190 S. Harding Street, Indianapolis, Indiana, 46217. [326 IAC 6.5-1-2(a)]
- (f) Grit blast existing steel stack liner [326 IAC 6.5-1-2(a)]
- (g) Primer existing steel stack liner with HVLP spray technology [326 IAC 6.5-1-2(a)]
- (h) One (1) emergency internal combustion engine used to power a fire pump, identified as FP-1, installed in 1993, with a maximum heat input capacity of 0.56 MMBtu/hr and a rating of 215 horsepower (bhp).
- (i) One (1) ponded ash screening operation and associated ash handling, identified as PAS-1, approved for construction in 2013, with a maximum throughput of 200 tons/hr.
- (j) One (1) activated carbon storage silo identified as EU-7ACI, approved for construction in 2013, with a maximum hourly throughput of 1,337 lbs/hour, controlled by a fabric filter dust collector, identified as ACI-1 and exhausting to stack S-ACI1.

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

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

D.7.1 Particulate Matter Limitations Except Lake County [326 IAC 6.5]

- (a) Pursuant to 326 IAC 6.5-1-2(a) (Particulate Matter Limitations Except Lake County), particulate (PM) emissions from Unit 5/6 Flyash Silo, Unit 7 Flyash Silo, fuel oil fired combustion sources with heat input equal to or less than two (2) million Btu per hour, gasoline generators, Emission Unit ID Generator # 1, primer and grit blasting shall each not exceed three hundredths (0.03) grains per dry standard cubic foot of exhaust air.
- (b) Pursuant to 326 IAC 6.5-1-1(b), particulate matter (PM) emissions from ponded ash handling and screen operation (PAS-1) shall not exceed three hundredths (0.03) grains per dry standard cubic feet.
- (c) Pursuant to 326 IAC 6.5-1-1(b), particulate matter (PM) emissions from EU-7ACI shall not exceed three hundredths (0.03) grains per dry standard cubic feet.

D.7.2 Volatile Organic Compounds (VOC) [326 IAC 8-3-2]

- (a) Pursuant to 326 IAC 8-3-2 (Organic Solvent Degreaser Operations: Cold Cleaner Operation), for cold cleaning operations existing as of January 1, 1980, located in Marion County and which have potential emissions of one hundred (100) tons per year or greater of VOC, the owner or operator of a cold cleaner degreaser shall ensure the following control equipment and operating requirements are met:

- (1) Equip the degreaser with a cover;
 - (2) Equip the degreaser with a device for draining cleaned parts;
 - (3) Close the degreaser cover whenever parts are not being handled in the degreaser;
 - (4) Drain cleaned parts for at least fifteen (15) seconds or until dripping ceases;
 - (5) Provide a permanent, conspicuous label that lists the operation requirements in subdivisions (3), (4), (6), and (7);
 - (6) Store waste solvent only in closed containers;
 - (7) Prohibit the disposal or transfer of waste solvent in such a manner that could allow greater than twenty percent (20%) of the waste solvent (by weight) to evaporate into the atmosphere.
- (b) The owner or operator of a cold cleaner degreaser subject to this subsection shall ensure the following additional control equipment and operating requirements are met:
- (1) Equip the degreaser with one (1) of the following control devices if the solvent is heated to a temperature of greater than forty-eight and nine-tenths (48.9) degrees Celsius (one hundred twenty (120) degrees Fahrenheit):
 - (A) A freeboard that attains a freeboard ratio of seventy-five hundredths (0.75) or greater.
 - (B) A water cover when solvent used is insoluble in, and heavier than, water.
 - (C) A refrigerated chiller.
 - (D) Carbon adsorption.
 - (E) An alternative system of demonstrated equivalent or better control as those outlined in clauses (A) through (D) that is approved by the department. An alternative system shall be submitted to the U.S. EPA as a SIP revision.
 - (2) Ensure the degreaser cover is designed so that it can be easily operated with one (1) hand if the solvent is agitated or heated.
 - (3) If used, solvent spray:
 - (A) must be a solid, fluid stream; and
 - (B) shall be applied at a pressure that does not cause excessive splashing.

D.7.3 Material requirements for cold cleaner degreasers [326 IAC 8-3-8]

- (a) Pursuant to 326 IAC 8-3-8, material requirements specified in this section for use in cold cleaner degreasers apply as follows:
 - (1) Before January 1, 2015, in Clark, Floyd, Lake, and Porter counties.
 - (2) On and after January 1, 2015, anywhere in the state.
- (b) Material requirements are as follows:
 - (1) No person shall cause or allow the sale of solvents for use in cold cleaner degreasing operations with a VOC composite partial vapor pressure, when diluted at the manufacturer's recommended blend and dilution, that exceeds one (1) millimeter of mercury (nineteen-thousandths (0.019) pound per square inch) measured at twenty (20) degrees Celsius (sixty-eight (68) degrees Fahrenheit) in an amount greater than five (5) gallons during any seven (7) consecutive days to an individual or business.
 - (2) No person shall operate a cold cleaner degreaser with a solvent that has a VOC composite partial vapor pressure that exceeds one (1) millimeter of mercury (nineteen-thousandths

(0.019) pound per square inch) measured at twenty (20) degrees Celsius (sixty-eight (68) degrees Fahrenheit).

(c) Record keeping requirements are as follows:

(1) All persons subject to the requirements of subsection (b)(1) shall maintain all of the following records for each sale:

- (A) The name and address of the solvent purchaser.
- (B) The date of sale (or invoice/bill date of contract servicer indicating service date).
- (C) The type of solvent sold.
- (D) The volume of each unit of solvent sold.
- (E) The total volume of the solvent sold.
- (F) The true vapor pressure of the solvent measured in millimeters of mercury at twenty (20) degrees Celsius (sixty-eight (68) degrees Fahrenheit).

(2) All persons subject to the requirements of subsection (b)(2) shall maintain each of the following records for each purchase:

- (A) The name and address of the solvent supplier.
- (B) The date of purchase (or invoice/bill date of contract servicer indicating service date).
- (C) The type of solvent purchased.
- (D) The total volume of the solvent purchased.
- (E) The true vapor pressure of the solvent measured in millimeters of mercury at twenty (20) degrees Celsius (sixty-eight (68) degrees Fahrenheit).

(d) All records required by subsection (c) shall be:

- (1) retained on-site or accessible electronically from the site for the most recent three (3) year period; and
- (2) reasonably accessible for an additional two (2) year period.

Compliance Determination Requirements

D.7.4 Particulate Control [326 IAC 2-7-6(6)]

In order to ensure compliance with the particulate matter emissions limits specified in Condition D.7.1(c), the silo fabric filter dust collector shall be in operation and controlling emissions whenever the equipment is in operation.

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

D.7.5 Visible Emissions Notations [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]

-
- (a) Visible emission notations of the activated carbon storage silo identified as EU-7ACI shall be performed once per week during normal daylight operations when the equipment is in operation. A trained employee shall record whether emissions are normal or abnormal.
 - (b) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shutdown time.
 - (c) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.
 - (d) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.
 - (e) If abnormal emissions are observed from Unit EU-7ACI stack exhaust (S-ACI1), the Permittee shall take reasonable response steps in accordance with Section C - Response to Excursions or Exceedances. Failure to take response steps in accordance with Section C - Response to Excursions

or Exceedances, shall be considered a deviation from this permit.

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

D.7.6 Record Keeping Requirements

- (a) To document the compliance status with Condition D.7.5 - Visible Emission Notation, the Permittee shall maintain weekly records of the visible emission notations from Activated Carbon storage silo, identified as EU-7ACI. The Permittee shall include in its weekly record when a visible emission notation is not taken and the reason for the lack of a visible emission notation (e.g. the process did not operate that day).

- (b) Section C - General Record Keeping Requirements contains the Permittee's obligation with regard to the records required by this condition.

SECTION D.8 EMISSIONS UNIT OPERATION CONDITIONS

Emissions Unit Description:

- (r) One (1) Reciprocating Internal Combustion Engine identified as Unit BSE-2. Unit BSE-2 is a black start diesel-fired engine and not an emergency use engine. Unit BSE-2 has a design heat input of 6.65 million Btu per hour (475 horsepower) and exhausts to Stack/Vent GT2-1. Unit BSE-2 was installed in 1973.
- (s) One (1) Reciprocating Internal Combustion Engine identified as Unit BSE-3. Unit BSE-3 is a black start diesel-fired engine and not an emergency use engine. Unit BSE-3 has a design heat input of 6.65 million Btu per hour (475 horsepower) and exhausts to Stack/Vent GT3-1. Unit BSE-3 was installed in 1973.

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

National Emission Standards for Hazardous Air Pollutants (NESHAP) Requirements [326 IAC 2-7-5(1)]

D.8.1 General Provisions Relating to National Emission Standards for Hazardous Air Pollutants (NESHAP) [40 CFR 63, Subpart A] [326 IAC 20-82]

The provisions of 40 CFR 63, Subpart A - General Provisions, which are incorporated by reference in 326 IAC 20-1-1, apply to the black start diesel-fired engines, identified as BSE-2 & BSE-3, except when otherwise specified in 40 CFR 63, Subpart ZZZZ.

D.8.2 NESHAP: Stationary Reciprocating Internal Combustion Engines [40 CFR Part 63, Subpart ZZZZ] [326 IAC 20-82]

The Permittee as an owner/operator of Stationary Compression Ignition Internal Combustion Engines shall comply with the following provisions of 40 CFR Part 63, Subpart ZZZZ (included as Attachment A of this permit):

1. 40 CFR 63.6580
2. 40 CFR 63.6585
3. 40 CFR 63.6590 (a)(1)(ii)
4. 40 CFR 63.6595 (a)(1)
5. 40 CFR 63.6595 (c)
6. 40 CFR 63.6602
7. 40 CFR 63.6605
8. 40 CFR 63.6625 (e),(h),(i)
9. 40 CFR 63.6640 (a),(b),(e)
10. 40 CFR 63.6645 (a)(5)
11. 40 CFR 63.6650
12. 40 CFR 63.6660
13. 40 CFR 63.6665
14. 40 CFR 63.6670
15. 40 CFR 63.6675
16. Table 2c(1)
17. Table 2d(4)
18. Table 6(9)
19. Table 8

SECTION E.1

TITLE IV CONDITIONS

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

- (a) One (1) Combustion Engineering Boiler number 50 identified as Unit 5. Unit 5 is a pulverized coal tangentially fired unit with a design heat input capacity rated at 1017.0 million Btu per hour. Emissions are directed to one (1) cold side electrostatic precipitator identified as Control Equipment ID CE 50 and exhausting at Stack/Vent ID 5-1. SO₃ injection is utilized as a flue gas conditioning agent for the electrostatic precipitator but the source is not required to perform gas conditioning. Also equipped with low NO_x burners, neural net controls, separated overfire air (SOFA), and selective non-catalytic reduction technology (SNCR). These technologies were voluntarily installed. Distillate fuel oil is used as supplemental fuel and for firing during startup of Unit 5. Installation date for Unit 5 is 1958.
- (b) One (1) Combustion Engineering Boiler number 60 identified as Unit 6. Unit 6 is a pulverized coal tangentially fired unit with a design heat input capacity rated at 1017.0 million Btu per hour. Emissions are directed to one (1) cold side electrostatic precipitator identified as Control Equipment ID CE 60 and exhausting at Stack/Vent ID 6-1. SO₃ injection is utilized as a flue gas conditioning agent for the electrostatic precipitator but the source is not required to perform gas conditioning. Also equipped with low NO_x burners, neural net controls, separated overfire air (SOFA), and selective non-catalytic reduction technology (SNCR). These technologies were voluntarily installed. Distillate fuel oil is used as supplemental fuel and for firing during startup of Unit 6. Installation date for Unit 6 is 1961.
- (c) One (1) Combustion Engineering Boiler number 70 identified as Unit 7. Unit 7 is a pulverized coal tangentially fired unit with a design heat input capacity rated at 4123.0 million Btu per hour. Emissions are directed to one (1) cold side electrostatic precipitator identified as Control Equipment ID CE 70 and exhausting at Stack/Vent ID 7-1. SO₃ injection is utilized as a flue gas conditioning agent for the electrostatic precipitator but the source is not required to perform gas conditioning. Unit 7 is equipped with low NO_x burners, neural net controls, separated overfire air (SOFA), and selective catalytic reduction technology (SCR) and FGD scrubber. These technologies were voluntarily installed. When the FGD is in operation, Unit 7 exhausts to a separate wet stack. Distillate fuel oil and used oil are used as supplemental fuel and for firing during startup of Unit 7. Construction was commenced on Unit 7 prior to August 17, 1971 and completed in 1973.
- (e) One (1) General Electric Gas Turbine Engine number GT4 identified as Unit GT4. Unit GT4 is a distillate oil fired and/or natural gas fired unit with a design heat input capacity rated at 875.0 million Btu per hour and exhausting at Stack/Vent ID GT4-1. Model number MS 7001. Water injection performed for NO_x emission control. Installation date for Unit GT4 is 1994.
- (f) One (1) General Electric Gas Turbine Engine number GT5 identified as Unit GT5. Unit GT5 is a distillate oil fired and/or natural gas fired unit with a design heat input capacity rated at 867.0 million Btu per hour and exhausting at Stack/Vent ID GT5-1. Model number MS 7001. Water injection performed for NO_x emission control. Installation date for Unit GT5 is 1995.
- (g) One (1) General Electric Gas Turbine Model number PG7241 identified as Unit GT6. Unit GT6 is a natural gas fired unit with a design heat input capacity rated at 1,660 MMBtu per hour and exhausting at Stack/Vent ID GT6. NO_x emissions will be controlled by dry low NO_x burners. Installation date for Unit GT6 is 2002.

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

Acid Rain Program

E.1.1 Acid Rain Permit [326 IAC 2-7-5(1)(C)][326 IAC 21][40 CFR 72 through 40 CFR 78]

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

E.1.2 Title IV Emissions Allowances [326 IAC 2-7-5(4)][326 IAC 21]

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

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

SECTION E.2

FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(14)]:

Insignificant Activities

- (i) One (1) 81 horsepower diesel fired emergency generator identified as Emission Unit ID Generator # 1, installed in 1988, associated with a communication transmitter tower located at 4190 S. Harding Street, Indianapolis, Indiana, 46217. [326 IAC 6.5-1-2(a)]
- (j) One (1) emergency internal combustion engine used to power a fire pump, identified as FP-1, installed in 1993, with a maximum heat input capacity of 0.56 MMBtu/hr and a rating of 215 horsepower (bhp).

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

**National Emission Standards for Hazardous Air Pollutants (NESHAP) Requirements
[326 IAC 2-7-5(1)]**

E.2.1 General Provisions Relating to National Emission Standards for Hazardous Air Pollutants (NESHAP) [40 CFR 63, Subpart A] [326 IAC 20-82]

The provisions of 40 CFR 63, Subpart A - General Provisions, which are incorporated by reference in 326 IAC 20-1-1, apply to the diesel fired emergency generator, identified as Emission Unit #1 and an emergency internal combustion, identified as FP-1, except when otherwise specified in 40 CFR 63, Subpart ZZZZ.

**E.2.2 NESHAP: Stationary Reciprocating Internal Combustion Engines [40 CFR Part 63, Subpart ZZZZ]
[326 IAC 20-82]**

The Permittee as an owner/operator of Stationary Compression Ignition Internal Combustion Engines shall comply with the following provisions of 40 CFR Part 63, Subpart ZZZZ (included as Attachment A of this permit):

1. 40 CFR 63.6580
2. 40 CFR 63.6585
3. 40 CFR 63.6590 (a)(1)(ii)
4. 40 CFR 63.6595 (a)(1)
5. 40 CFR 63.6595 (c)
6. 40 CFR 63.6602
7. 40 CFR 63.6605
8. 40 CFR 63.6612
9. 40 CFR 63.6620 (a)
10. 40 CFR 63.6625 (e),(f),(h),(i)
11. 40 CFR 63.6640 (a),(b),(e),(f)
12. 40 CFR 63.6645 (a)(5)
13. 40 CFR 63.6650 (a)
14. 40 CFR 63.6650 (b)(1-5)
15. 40 CFR 63.6650 (c),(d),(e),(f)
16. 40 CFR 63.6655 (a)(1),(2),(4)
17. 40 CFR 63.6655 (b),(d),(e),(f)
18. 40 CFR 63.6660
19. 40 CFR 63.6665
20. 40 CFR 63.6670
21. 40 CFR 63.6675
22. Table 2c(1)
23. Table 6 (9)
24. Table 7 (a)
25. Table 8

After the Conversion of Boiler number 50 & 60 to Natural Gas

SECTION E.3 EMISSIONS UNIT OPERATION CONDITIONS

Emissions Unit Description:

- (a) One (1) 1,162 MMBtu/hr Combustion Engineering Boiler 50 identified as Unit 5, constructed in 1958, approved for modification in 2013 from coal to natural gas combustion only, and exhausting at Stack/Vent ID 5-1.
- (b) One (1) 1,162 MMBtu/hr natural gas fired Combustion Engineering Boiler 60 identified as Unit 6, constructed in 1961, approved for modification in 2013 from coal to natural gas combustion only, and exhausting at Stack/Vent ID 6-1.

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

**National Emission Standards for Hazardous Air Pollutants (NESHAP) Requirements
[326 IAC 2-7-5(1)]**

E.3.1 General Provisions Relating to NESHAP [326 IAC 20-1][40 CFR Part 63, Subpart A]

Pursuant to 40 CFR 63.1, the Permittee shall comply with the provisions of 40 CFR Part 63, Subpart A - General Provisions, which are incorporated by reference as 326 IAC 20-1, except as otherwise specified in 40 CFR 63, Subpart DDDDD.

E.3.2 National Emission Standards for Hazardous Air Pollutants for Major Sources: Industrial, Commercial, and Institutional Boilers and Process Heaters [40 CFR Part 63, Subpart DDDDD] [326 IAC 20-95]

The Permittee shall comply with the following provisions of 40 CFR 63, Subpart DDDDD, (included as Attachment D of this permit), which are incorporated by reference as 326 IAC 20-95, except as otherwise specified in 40 CFR 63, Subpart DDDDD:

- (1) 40 CFR 63.7480
- (2) 40 CFR 63.7485
- (3) 40 CFR 63.7490
- (4) 40 CFR 63.7495(b), (d), (f)
- (5) 40 CFR 63.7499(l)
- (6) 40 CFR 63.7500(a)(1), (a)(3), (e)
- (7) 40 CFR 63.7501
- (8) 40 CFR 63.7505(a)
- (9) 40 CFR 63.7510(i)
- (9) 40 CFR 63.7515(d)
- (10) 40 CFR 63.7530 (e)
- (11) 40 CFR 63.7540(a)(10), (a)(13), (b), (d)
- (12) 40 CFR 63.7545(a), (b), (h)
- (13) 40 CFR 63.7550(a), (b), (c), (h)(3)
- (14) 40 CFR 63.7555(a)
- (15) 40 CFR 63.7560
- (16) 40 CFR 63.7565
- (17) 40 CFR 63.7570
- (18) 40 CFR 63.7575
- (19) Table 3 to Subpart DDDDD of Part 63, items 1, 2 and 3
- (20) Table 9 to Subpart DDDDD of Part 63
- (21) Table 10 to Subpart DDDDD of Part 63

Permit Reviewer: James Mackenzie

SECTION F [Reserved]

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

ORIS Code: 990

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

- (a) One (1) Combustion Engineering Boiler number 50 identified as Unit 5. Unit 5 is a pulverized coal tangentially fired unit with a design heat input capacity rated at 1017.0 million Btu per hour. Emissions are directed to one (1) cold side electrostatic precipitator identified as Control Equipment ID CE 50 and exhausting at Stack/Vent ID 5-1. SO₃ injection is utilized as a flue gas conditioning agent for the electrostatic precipitator but the source is not required to perform gas conditioning. Also equipped with low NO_x burners, neural net controls, separated overfire air (SOFA), and selective non-catalytic reduction technology (SNCR). These technologies were voluntarily installed. Distillate fuel oil is used as supplemental fuel and for firing during startup of Unit 5. Installation date for Unit 5 is 1958.
- (b) One (1) Combustion Engineering Boiler number 60 identified as Unit 6. Unit 6 is a pulverized coal tangentially fired unit with a design heat input capacity rated at 1017.0 million Btu per hour. Emissions are directed to one (1) cold side electrostatic precipitator identified as Control Equipment ID CE 60 and exhausting at Stack/Vent ID 6-1. SO₃ injection is utilized as a flue gas conditioning agent for the electrostatic precipitator but the source is not required to perform gas conditioning. Also equipped with low NO_x burners, neural net controls, separated overfire air (SOFA), and selective non-catalytic reduction technology (SNCR). These technologies were voluntarily installed. Distillate fuel oil is used as supplemental fuel and for firing during startup of Unit 6. Installation date for Unit 6 is 1961.
- (c) One (1) Combustion Engineering Boiler number 70 identified as Unit 7. Unit 7 is a pulverized coal tangentially fired unit with a design heat input capacity rated at 4123.0 million Btu per hour. Emissions are directed to one (1) cold side electrostatic precipitator identified as Control Equipment ID CE 70 and exhausting at Stack/Vent ID 7-1. SO₃ injection is utilized as a flue gas conditioning agent for the electrostatic precipitator but the source is not required to perform gas conditioning. Unit 7 is equipped with low NO_x burners, neural net controls, separated overfire air (SOFA), and selective catalytic reduction technology (SCR) and FGD scrubber. These technologies were voluntarily installed. When the FGD is in operation, Unit 7 exhausts to a separate wet stack. Distillate fuel oil and used oil are used as supplemental fuel and for firing during startup of Unit 7. Construction was commenced on Unit 7 prior to August 17, 1971 and completed in 1973.
- (g) One (1) General Electric Gas Turbine Engine number GT4 identified as Unit GT4. Unit GT4 is a distillate oil fired and/or natural gas fired unit with a design heat input capacity rated at 875.0 million Btu per hour and exhausting at Stack/Vent ID GT4-1. Model number MS 7001. Water injection performed for NO_x emission control. Installation date for Unit GT4 is 1994.
- (h) One (1) General Electric Gas Turbine Engine number GT5 identified as Unit GT5. Unit GT5 is a distillate oil fired and/or natural gas fired unit with a design heat input capacity rated at 867.0 million Btu per hour and exhausting at Stack/Vent ID GT5-1. Model number MS 7001. Water injection performed for NO_x emission control. Installation date for Unit GT5 is 1995.
- (i) One (1) General Electric Gas Turbine Model number PG7241 identified as Unit GT6. Unit GT6 is a natural gas fired unit with a design heat input capacity rated at 1,660 MMBtu per hour and exhausting at Stack/Vent ID GT-6. NO_x emissions will be controlled by dry low NO_x burners. Installation date for Unit GT6 is 2002.

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

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

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

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

- (a) The owners and operators of each CAIR NO_x source, CAIR SO₂ source, and CAIR NO_x ozone season source and CAIR NO_x unit, CAIR SO₂ unit, and CAIR NO_x ozone season unit shall operate each source and unit in compliance with this CAIR permit.
- (b) The CAIR NO_x unit(s), CAIR SO₂ unit(s), and CAIR NO_x ozone season unit(s) subject to this CAIR permit are Unit 5, Unit 6, Unit 7, Unit GT4, Unit GT5, and Unit GT6.

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

- (a) The owners and operators, and the CAIR designated representative, of each CAIR NO_x source, CAIR SO₂ source, and CAIR NO_x ozone season source and CAIR NO_x unit, CAIR SO₂ unit, and CAIR NO_x ozone season unit at the source shall comply with the applicable monitoring, reporting, and record keeping requirements of 326 IAC 24-1-11, 326 IAC 24-2-10, and 326 IAC 24-3-11.
- (b) The emissions measurements recorded and reported in accordance with 326 IAC 24-1-11, 326 IAC 24-2-10, and 326 IAC 24-3-11 shall be used to determine compliance by each CAIR NO_x source, CAIR SO₂ source, and CAIR NO_x ozone season source with the CAIR NO_x emissions limitation under 326 IAC 24-1-4(c), CAIR SO₂ emissions limitation under 326 IAC 24-2-4(c), and CAIR NO_x ozone season emissions limitation under 326 IAC 24-3-4(c) and Condition G.4.1, Nitrogen Oxides Emission Requirements, Condition G.4.2, Sulfur Dioxide Emission Requirements, and Condition G.4.3, Nitrogen Oxides Ozone Season Emission Requirements.

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

- (a) As of the allowance transfer deadline for a control period, the owners and operators of each CAIR NO_x source and each CAIR NO_x unit at the source shall hold, in the source's compliance account, CAIR NO_x allowances available for compliance deductions for the control period under 326 IAC 24-1-9(i) in an amount not less than the tons of total nitrogen oxides emissions for the control period from all CAIR NO_x units at the source, as determined in accordance with 326 IAC 24-1-11.
- (b) A CAIR NO_x unit shall be subject to the requirements under 326 IAC 24-1-4(c)(1) for the control period starting on the applicable date, as determined under 326 IAC 24-1-4(c)(2), and for each control period thereafter.
- (c) A CAIR NO_x allowance shall not be deducted for compliance with the requirements under 326 IAC 24-1-4(c)(1), for a control period in a calendar year before the year for which the CAIR NO_x allowance was allocated.
- (d) CAIR NO_x allowances shall be held in, deducted from, or transferred into or among CAIR NO_x allowance tracking system accounts in accordance with 326 IAC 24-1-9, 326 IAC 24-1-10, and 326 IAC 24-1-12.

- (e) A CAIR NO_x allowance is a limited authorization to emit one (1) ton of nitrogen oxides in accordance with the CAIR NO_x annual trading program. No provision of the CAIR NO_x annual trading program, the CAIR permit application, the CAIR permit, or an exemption under 326 IAC 24-1-3 and no provision of law shall be construed to limit the authority of the State of Indiana or the United States to terminate or limit the authorization.
- (f) A CAIR NO_x allowance does not constitute a property right.
- (g) Upon recordation by the U.S. EPA under 326 IAC 24-1-8, 326 IAC 24-1-9, 326 IAC 24-1-10, or 326 IAC 24-1-12, every allocation, transfer, or deduction of a CAIR NO_x allowance to or from a CAIR NO_x source's compliance account is incorporated automatically in this CAIR permit.

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

- (a) As of the allowance transfer deadline for a control period, the owners and operators of each CAIR SO₂ source and each CAIR SO₂ unit at the source shall hold, in the source's compliance account, a tonnage equivalent of CAIR SO₂ allowances available for compliance deductions for the control period under 326 IAC 24-2-8(j) and 326 IAC 24-2-8(k) not less than the tons of total sulfur dioxide emissions for the control period from all CAIR SO₂ units at the source, as determined in accordance with 326 IAC 24-2-10.
- (b) A CAIR SO₂ unit shall be subject to the requirements under 326 IAC 24-2-4(c)(1) for the control period starting on the applicable date, as determined under 326 IAC 24-2-4(c)(2), and for each control period thereafter.
- (c) A CAIR SO₂ allowance shall not be deducted for compliance with the requirements under 326 IAC 24-2-4(c)(1), for a control period in a calendar year before the year for which the CAIR SO₂ allowance was allocated.
- (d) CAIR SO₂ allowances shall be held in, deducted from, or transferred into or among CAIR SO₂ allowance tracking system accounts in accordance with 326 IAC 24-2-8, 326 IAC 24-2-9, and 326 IAC 24-2-11.
- (e) A CAIR SO₂ allowance is a limited authorization to emit sulfur dioxide in accordance with the CAIR SO₂ trading program. No provision of the CAIR SO₂ trading program, the CAIR permit application, the CAIR permit, or an exemption under 326 IAC 24-2-3 and no provision of law shall be construed to limit the authority of the State of Indiana or the United States to terminate or limit the authorization.
- (f) A CAIR SO₂ allowance does not constitute a property right.
- (g) Upon recordation by the U.S. EPA under 326 IAC 24-2-8, 326 IAC 24-2-9, or 326 IAC 24-2-11, every allocation, transfer, or deduction of a CAIR SO₂ allowance to or from a CAIR SO₂ source's compliance account is incorporated automatically in this CAIR permit.

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

- (a) As of the allowance transfer deadline for a control period, the owners and operators of each CAIR NO_x ozone season source and each CAIR NO_x ozone season unit at the source shall hold, in the source's compliance account, CAIR NO_x ozone season allowances available for compliance deductions for the control period under 326 IAC 24-3-9(i) in an amount not less than the tons of total nitrogen oxides emissions for the control period from all CAIR NO_x ozone season units at the source, as determined in accordance with 326 IAC 24-3-11.

- (b) A CAIR NO_x ozone season unit shall be subject to the requirements under 326 IAC 24-3-4(c)(1) for the control period starting on the applicable date, as determined under 326 IAC 24-3-4(c)(2), and for each control period thereafter.
- (c) A CAIR NO_x ozone season allowance shall not be deducted for compliance with the requirements under 326 IAC 24-3-4(c)(1), for a control period in a calendar year before the year for which the CAIR NO_x ozone season allowance was allocated.
- (d) CAIR NO_x ozone season allowances shall be held in, deducted from, or transferred into or among CAIR NO_x ozone season allowance tracking system accounts in accordance with 326 IAC 24-3-9, 326 IAC 24-3-10, and 326 IAC 24-3-12.
- (e) A CAIR NO_x ozone season allowance is a limited authorization to emit one (1) ton of nitrogen oxides in accordance with the CAIR NO_x ozone season trading program. No provision of the CAIR NO_x ozone season trading program, the CAIR permit application, the CAIR permit, or an exemption under 326 IAC 24-3-3 and no provision of law shall be construed to limit the authority of the State of Indiana or the United States to terminate or limit the authorization.
- (f) A CAIR NO_x ozone season allowance does not constitute a property right.
- (g) Upon recordation by the U.S. EPA under 326 IAC 24-3-8, 326 IAC 24-3-9, 326 IAC 24-3-10, or 326 IAC 24-3-12, every allocation, transfer, or deduction of a CAIR NO_x ozone season allowance to or from a CAIR NO_x ozone season source's compliance account is incorporated automatically in this CAIR permit.

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

- (a) The owners and operators of a CAIR NO_x source and each CAIR NO_x unit that emits nitrogen oxides during any control period in excess of the CAIR NO_x emissions limitation shall do the following:
 - (1) Surrender the CAIR NO_x allowances required for deduction under 326 IAC 24-1-9(j)(4).
 - (2) Pay any fine, penalty, or assessment or comply with any other remedy imposed, for the same violations, the Clean Air Act (CAA) or applicable state law.

Each ton of such excess emissions and each day of such control period shall constitute a separate violation of 326 IAC 24-1-4, the Clean Air Act (CAA), and applicable state law.
- (b) The owners and operators of a CAIR SO₂ source and each CAIR SO₂ unit that emits sulfur dioxide during any control period in excess of the CAIR SO₂ emissions limitation shall do the following:
 - (1) Surrender the CAIR SO₂ allowances required for deduction under 326 IAC 24-2-8(k)(4).
 - (2) Pay any fine, penalty, or assessment or comply with any other remedy imposed, for the same violations, the Clean Air Act (CAA) or applicable state law.

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

- (c) The owners and operators of a CAIR NO_x ozone season source and each CAIR NO_x ozone season unit that emits nitrogen oxides during any control period in excess of the CAIR NO_x ozone season emissions limitation shall do the following:
- (1) Surrender the CAIR NO_x ozone season allowances required for deduction under 326 IAC 24-3-9(j)(4).
 - (2) Pay any fine, penalty, or assessment or comply with any other remedy imposed, for the same violations, the Clean Air Act (CAA) or applicable state law.

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

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

Unless otherwise provided, the owners and operators of the CAIR NO_x source, CAIR SO₂ source, and CAIR NO_x ozone season source and each CAIR NO_x unit, CAIR SO₂ unit, and CAIR NO_x ozone season unit at the source shall keep on site at the source or at a central location within Indiana for those owners or operators with unattended sources, each of the following documents for a period of five (5) years from the date the document was created:

- (a) The certificate of representation under 326 IAC 24-1-6(h), 326 IAC 24-2-6(h), and 326 IAC 24-3-6(h) for the CAIR designated representative for the source and each CAIR NO_x unit, CAIR SO₂ unit, and CAIR NO_x ozone season unit at the source and all documents that demonstrate the truth of the statements in the certificate of representation. The certificate and documents shall be retained on site at the source or at a central location within Indiana for those owners or operators with unattended sources beyond such five (5) year period until such documents are superseded because of the submission of a new account certificate of representation under 326 IAC 24-1-6(h), 326 IAC 24-2-6(h), and 326 IAC 24-3-6(h) changing the CAIR designated representative.
- (b) All emissions monitoring information, in accordance with 326 IAC 24-1-11, 326 IAC 24-2-10, and 326 IAC 24-3-11, provided that to the extent that 326 IAC 24-1-11, 326 IAC 24-2-10, and 326 IAC 24-3-11 provides for a three (3) year period for record keeping, the three (3) year period shall apply.
- (c) Copies of all reports, compliance certifications, and other submissions and all records made or required under the CAIR NO_x annual trading program, CAIR SO₂ trading program, and CAIR NO_x ozone season trading program.
- (d) Copies of all documents used to complete a CAIR permit application and any other submission under the CAIR NO_x annual trading program, CAIR SO₂ trading program, and CAIR NO_x ozone season trading program or to demonstrate compliance with the requirements of the CAIR NO_x annual trading program, CAIR SO₂ trading program, and CAIR NO_x ozone season trading program.

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

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

- (a) The CAIR designated representative of the CAIR NO_x source, CAIR SO₂ source, and CAIR NO_x ozone season source and each CAIR NO_x unit, CAIR SO₂ unit, and CAIR NO_x ozone season unit at the source shall submit the reports required under the CAIR NO_x annual trading program, CAIR SO₂ trading program, and CAIR NO_x ozone season trading program, including those under 326 IAC 24-1-11, 326 IAC 24-2-10, and 326 IAC 24-3-11.
- (b) Pursuant to 326 IAC 24-1-4(e), 326 IAC 24-2-4(e), and 326 IAC 24-3-4(e) and 326 IAC 24-1-6(e)(1), 326 IAC 24-2-6(e)(1), and 326 IAC 24-3-6(e)(1), each submission under the CAIR NO_x annual trading program, CAIR SO₂ trading program, and CAIR NO_x ozone season trading program shall include the following certification statement by the CAIR designated representative: "I am authorized to make this submission on behalf of the owners and operators of the source or units for which the submission is made. I certify under penalty of law that I have personally examined, and am familiar with, the statements and information submitted in this document and all its attachments. Based on my inquiry of those individuals with primary responsibility for obtaining the information, I certify that the statements and information are to the best of my knowledge and belief true, accurate, and complete. I am aware that there are significant penalties for submitting false statements and information or omitting required statements and information, including the possibility of fine or imprisonment."
- (c) Where 326 IAC 24-1, 326 IAC 24-2, and 326 IAC 24-3 requires a submission to IDEM, OAQ, the information shall be submitted to:

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

- (d) Where 326 IAC 24-1, 326 IAC 24-2, and 326 IAC 24-3 requires a submission to U.S. EPA, the information shall be submitted to:

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

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

The owners and operators of each CAIR NO_x source, CAIR SO₂ source, and CAIR NO_x ozone season source and each CAIR NO_x unit, CAIR SO₂ unit, and CAIR NO_x ozone season unit shall be liable as follows:

- (a) Each CAIR NO_x source, CAIR SO₂ source, and CAIR NO_x ozone season source and each CAIR NO_x unit, CAIR SO₂ unit, and CAIR NO_x ozone season unit shall meet the requirements of the CAIR NO_x annual trading program, CAIR SO₂ trading program, and CAIR NO_x ozone season trading program, respectively.

- (b) Any provision of the CAIR NO_x annual trading program, CAIR SO₂ trading program, and CAIR NO_x ozone season trading program that applies to a CAIR NO_x source, CAIR SO₂ source, and CAIR NO_x ozone season source or the CAIR designated representative of a CAIR NO_x source, CAIR SO₂ source, and CAIR NO_x ozone season source shall also apply to the owners and operators of such source and of the CAIR NO_x units, CAIR SO₂ units, and CAIR NO_x ozone season units at the source.
- (c) Any provision of the CAIR NO_x annual trading program, CAIR SO₂ trading program, and CAIR NO_x ozone season trading program that applies to a CAIR NO_x unit, CAIR SO₂ unit, and CAIR NO_x ozone season unit or the CAIR designated representative of a CAIR NO_x unit, CAIR SO₂ unit, and CAIR NO_x ozone season unit shall also apply to the owners and operators of such unit.

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

No provision of the CAIR NO_x annual trading program, CAIR SO₂ trading program, and CAIR NO_x ozone season trading program, a CAIR permit application, a CAIR permit, or an exemption under 326 IAC 24-1-3, 326 IAC 24-2-3, and 326 IAC 24-3-3 shall be construed as exempting or excluding the owners and operators, and the CAIR designated representative, of a CAIR NO_x source, CAIR SO₂ source, and CAIR NO_x ozone season source or CAIR NO_x unit, CAIR SO₂ unit, and CAIR NO_x ozone season unit from compliance with any other provision of the applicable, approved state implementation plan, a federally enforceable permit, or the Clean Air Act (CAA).

G.10 CAIR Designated Representative and Alternate CAIR Designated Representative
[326 IAC 24-1-6] [326 IAC 24-2-6] [326 IAC 24-3-6] [40 CFR 97, Subpart BB] [40 CFR 97, Subpart BBB] [40 CFR 97, Subpart BBBB]

Pursuant to 326 IAC 24-1-6, 326 IAC 24-2-6, and 326 IAC 24-3-6:

- (a) Except as specified in 326 IAC 24-1-6(f)(3), 326 IAC 24-2-6(f)(3), and 326 IAC 24-3-6(f)(3), each CAIR NO_x source, CAIR SO₂ source, and CAIR NO_x ozone season source, including all CAIR NO_x units, CAIR SO₂ units, and CAIR NO_x ozone season units at the source, shall have one (1) and only one (1) CAIR designated representative, with regard to all matters under the CAIR NO_x annual trading program, CAIR SO₂ trading program, and CAIR NO_x ozone season trading program concerning the source or any CAIR NO_x unit, CAIR SO₂ unit, and CAIR NO_x ozone season unit at the source.
- (b) The provisions of 326 IAC 24-1-6(f), 326 IAC 24-2-6(f), and 326 IAC 24-3-6(f) shall apply where the owners or operators of a CAIR NO_x source, CAIR SO₂ source, and CAIR NO_x ozone season source choose to designate an alternate CAIR designated representative.

Except as specified in 326 IAC 24-1-6(f)(3), 326 IAC 24-2-6(f)(3), and 326 IAC 24-3-6(f)(3), whenever the term "CAIR designated representative" is used, the term shall be construed to include the CAIR designated representative or any alternate CAIR designated representative.

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE AND ENFORCEMENT BRANCH
PART 70 OPERATING PERMIT
CERTIFICATION**

Source Name: Indianapolis Power & Light Company - Harding Street Station.
Source Address: 3700 & 4190 S. Harding St., Indianapolis, Indiana 46217
Part 70 Permit No.: T097-29749-00033

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

Please check what document is being certified:

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

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

Signature:

Printed Name:

Title/Position:

Phone:

Date:

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

PART 70 OPERATING PERMIT
EMERGENCY OCCURRENCE REPORT

Source Name: Indianapolis Power & Light Company - Harding Street Station.
Source Address: 3700 & 4190 S. Harding St., Indianapolis, Indiana 46217
Part 70 Permit No.: T097-29749-00033

This form consists of 2 pages

Page 1 of 2

- This is an emergency as defined in 326 IAC 2-7-1(12)
- The Permittee must notify the Office of Air Quality (OAQ), no later than four (4) business hours (1-800-451-6027 or 317-233-0178, ask for Compliance Section); and
 - The Permittee must submit notice in writing or by facsimile within two (2) working days (Facsimile Number: 317-233-6865), and follow the other requirements of 326 IAC 2-7-16.

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

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

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

Page 2 of 2

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

Form Completed by: _____

Title / Position: _____

Date: _____

Phone: _____

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE AND ENFORCEMENT BRANCH**

Part 70 Quarterly Report

Source Name: Indianapolis Power & Light Company - Harding Street Station.
Source Address: 3700 & 4190 S. Harding St., Indianapolis, Indiana 46217
Part 70 Permit No.: T097-29749-00033
Facility: Unit GT4 and Unit GT5
Parameter: Combined Natural Gas and Natural Gas Equivalent usage
Limit: 6300 MMCF per twelve (12) consecutive month period with compliance determined at the end of each month. 1.0 gallon of distillate fuel usage is equivalent to 293 cubic feet of Natural Gas usage.

QUARTER :

YEAR:

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

No deviation occurred in this quarter.

Deviation/s occurred in this quarter.
Deviation has been reported on:

Submitted by: _____

Title / Position: _____

Signature: _____

Date: _____

Phone: _____

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE AND ENFORCEMENT BRANCH**

Part 70 Quarterly Report

Source Name: Indianapolis Power & Light Company - Harding Street Station.
Source Address: 3700 & 4190 S. Harding St., Indianapolis, Indiana 46217
Part 70 Permit No.: T097-29749-00033
Facility: Unit GT6
Parameter: NO_x emissions
Limit: Less than forty (40) tons per twelve (12) consecutive month period with compliance determined at the end of each month.

QUARTER :

YEAR:

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

No deviation occurred in this quarter.

Deviation/s occurred in this quarter.
Deviation has been reported on:

Submitted by: _____

Title / Position: _____

Signature: _____

Date: _____

Phone: _____

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE AND ENFORCEMENT BRANCH
PART 70 OPERATING PERMIT
QUARTERLY DEVIATION AND COMPLIANCE MONITORING REPORT**

Source Name: Indianapolis Power & Light Company - Harding Street Station.
Source Address: 3700 & 4190 S. Harding St., Indianapolis, Indiana 46217
Part 70 Permit No.: T097-29749-00033

Months: _____ **to** _____ **Year:** _____

Page 1 of 2

<p>This report shall be submitted quarterly based on a calendar year. Proper notice submittal under Section B – Emergency Provisions satisfies the reporting requirements of paragraph (a) of Section C - General Reporting. Any deviation from the requirements of this permit, the date(s) of each deviation, the probable cause of the deviation, and the response steps taken must be reported. A deviation required to be reported pursuant to an applicable requirement that exists independent of the permit, shall be reported according to the schedule stated in the applicable requirement and does not need to be included in this report. Additional pages may be attached if necessary. If no deviations occurred, please specify in the box marked "No deviations occurred this reporting period".</p>	
<p><input type="checkbox"/> NO DEVIATIONS OCCURRED THIS REPORTING PERIOD.</p>	
<p><input type="checkbox"/> THE FOLLOWING DEVIATIONS OCCURRED THIS REPORTING PERIOD</p>	
<p>Permit Requirement (specify permit condition #)</p>	
<p>Date of Deviation:</p>	<p>Duration of Deviation:</p>
<p>Number of Deviations:</p>	
<p>Probable Cause of Deviation:</p>	
<p>Response Steps Taken:</p>	
<p>Permit Requirement (specify permit condition #)</p>	
<p>Date of Deviation:</p>	<p>Duration of Deviation:</p>
<p>Number of Deviations:</p>	
<p>Probable Cause of Deviation:</p>	
<p>Response Steps Taken:</p>	

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

Form Completed by: _____

Title / Position: _____

Date: _____

Phone: _____

Appendix A: Emission Calculations
Emissions Summary - Before Conversion of Boilers number 50 and 60 to Natural Gas

Company Name: Indianapolis Power & Light Company - Harding Street Station
Address City IN Zip: 3700 & 4190 S. Harding Street
Permit Number: 097-35247-00033
Reviewer: Julie Mendez

	Unrestricted Potential to Emit (tons/yr)						
	PM	PM ₁₀	PM _{2.5}	SO ₂	NO _x	VOC	CO
Unit 5	18,846	6,473	3,269	33,203	2,570	10.28	85.66
Unit 6	18,846	6,473	3,269	33,203	2,570	10.28	85.66
Unit 7	124,154	28,555	28,555	218,736	16,930	67.72	645
GT1	15.72	9.17	9.17	397	1,152	0.52	3.93
GT2	15.72	9.17	9.17	397	1,152	0.52	3.93
GT4	45.99	26.83	26.83	194	920	7.67	291
GT5	45.57	26.58	26.58	192	911	7.59	289
GT6	50.90	36.35	36.35	5.54	945	14.54	218
ST14	0.48	0.39	0.39	2.09	22.08	0.55	5.87
Grit Blast / Coat	1.02	0.72	0.72	0	0	3.17	0
Conveyors: lime, gypsum, coal	10.79	5.10	5.10	0	0	0	0
CT-7	8.30	7.05	7.05	0	0	0	0
FP-1	0.12	0.12	0.12	0.11	1.67	0.13	0.36
BSE-2	4.58	4.58	4.58	4.27	64.50	5.23	13.90
BSE-3	4.58	4.58	4.58	4.27	64.50	5.23	13.90
EU-7 ACI	9.21	3.23	3.23	0	0	0	0
Ponded ash screening	6.26	2.44	0.26	0	0	0	0
Gypsum; transfer & store pile	4.54	1.63	1.50	0	0	0	0
Coal; roads & pile	137	27.52	6.86	0	0	0	0
Paved roads - carbon delivery	1.39	0.28	0.07	0	0	0	0
Total	162,208	41,666	35,236	286,337	27,304	133	1,656

	Limited Potential to Emit (tons/yr)						
	PM	PM ₁₀	PM _{2.5}	SO ₂	NO _x	VOC	CO
Unit 5	82.2	45.3	22.9	20,936	2,570	10.28	85.66
Unit 6	82.2	45.3	22.9	20,936	2,570	10.28	85.66
Unit 7	831	171	171	95,711	16,930	67.72	645
GT1	0.28	9.17	9.17	397	1,152	0.52	3.93
GT2	0.28	9.17	9.17	397	1,152	0.52	3.93
GT4	22.05	15.75	15.75	45.25	410	6.30	94.50
GT5							
GT6	50.90	36.35	36.35	5.54	40.00	14.54	218
ST14	0.48	0.39	0.39	2.09	22.08	0.55	5.87
Grit Blast / Coat	1.02	0.72	0.72	0	0	3.17	0
Conveyors: lime, gypsum, coal	10.79	5.10	5.10	0	0	0	0
CT-7	8.30	7.05	7.05	0	0	0	0
FP-1	0.12	0.12	0.12	0.11	1.67	0.13	0.36
BSE-2	4.58	4.58	4.58	4.27	64.50	5.23	13.90
BSE-3	4.58	4.58	4.58	4.27	64.50	5.23	13.90
EU-7 ACI	4.22	3.23	3.23	0	0	0	0
Ponded ash screening	6.26	2.44	0.26	0	0	0	0
Gypsum; transfer & store pile	4.54	1.63	1.50	0	0	0	0
Coal; roads & pile	68.58	13.83	3.50	0	0	0	0
Paved roads - carbon delivery	1.39	0.28	0.07	0	0	0	0
Total	1,183	376	319	138,438	24,977	124	1,171

Appendix A: Emission Calculations
Emissions Summary - After Conversion of Boilers number 50 and 60 to Natural Gas

Company Name: Indianapolis Power & Light Company - Harding Street Station
Address City IN Zip: 3700 & 4190 S. Harding Street
Permit Number: 097-35247-00033
Reviewer: Julie Mendez

	Unrestricted Potential to Emit (tons/yr)						
	PM	PM ₁₀	PM _{2.5}	SO ₂	NO _x	VOC	CO
Unit 5	9.48	37.92	37.92	2.99	763	27.44	419
Unit 6	9.48	37.92	37.92	2.99	763	27.44	419
Unit 7	124,154	28,555	28,555	218,736	16,930	67.72	645
GT1	15.72	9.17	9.17	397	1,152	0.52	3.93
GT2	15.72	9.17	9.17	397	1,152	0.52	3.93
GT4	45.99	26.83	26.83	194	920	7.67	291
GT5	45.57	26.58	26.58	192	911	7.59	289
GT6	50.90	36.35	36.35	5.54	945	14.54	218
ST14	0.48	0.39	0.39	2.09	22.08	0.55	5.87
Grit Blast / Coat	1.02	0.72	0.72	0	0	3.17	0
Conveyors: lime, gypsum, coal	10.79	5.10	5.10	0	0	0	0
CT-7	8.30	7.05	7.05	0	0	0	0
FP-1	0.12	0.12	0.12	0.11	1.67	0.13	0.36
BSE-2	4.58	4.58	4.58	4.27	64.50	5.23	13.90
BSE-3	4.58	4.58	4.58	4.27	64.50	5.23	13.90
EU-7 ACI	9.21	3.23	3.23	0	0	0	0
Ponded ash screening	6.26	2.44	0.26	0	0	0	0
Gypsum; transfer & store pile	4.54	1.63	1.50	0	0	0	0
Coal; roads & pile	137	27.52	6.86	0	0	0	0
Paved roads - carbon delivery	1.39	0.28	0.07	0	0	0	0
Total	124,535	28,797	28,774	219,938	23,691	168	2,323

	Limited Potential to Emit (tons/yr)						
	PM	PM ₁₀	PM _{2.5}	SO ₂	NO _x	VOC	CO
Unit 5	9.48	37.92	37.92	2.99	763	27.44	419
Unit 6	9.48	37.92	37.92	2.99	763	27.44	419
Unit 7	831	171	171	95,711	16,930	67.72	645
GT1	0.28	9.17	9.17	397	1,152	0.52	3.93
GT2	0.28	9.17	9.17	397	1,152	0.52	3.93
GT4	22.05	15.75	15.75	45.25	410	6.30	94.50
GT5							
GT6	50.90	36.35	36.35	5.54	40.00	14.54	218
ST14	0.48	0.39	0.39	2.09	22.08	0.55	5.87
Grit Blast / Coat	1.02	0.72	0.72	0	0	3.17	0
Conveyors: lime, gypsum, coal	10.79	5.10	5.10	0	0	0	0
CT-7	8.30	7.05	7.05	0	0	0	0
FP-1	0.12	0.12	0.12	0.11	1.67	0.13	0.36
BSE-2	4.58	4.58	4.58	4.27	64.50	5.23	13.90
BSE-3	4.58	4.58	4.58	4.27	64.50	5.23	13.90
EU-7 ACI	4.22	3.23	3.23	0	0	0	0
Ponded ash screening	6.26	2.44	0.26	0	0	0	0
Gypsum; transfer & store pile	4.54	1.63	1.50	0	0	0	0
Coal; roads & pile	68.58	13.83	3.50	0	0	0	0
Paved roads - carbon delivery	1.39	0.28	0.07	0	0	0	0
Total	1,038	362	349	96,572	21,364	159	1,838

Appendix A: Emission Calculations

Utility Boiler - Unit 5 (Boiler 50)

Company Name: Indianapolis Power & Light Company - Harding Street Station
Address City IN Zip: 3700 & 4190 S. Harding Street
Permit Number: 097-35247-00033
Reviewer: Julie Mendez

Coal

Heat Input Capacity (MMBtu/hr)	Heat Content of Coal (Btu/lb of Coal)	Potential Throughput Coal (tons/year)	Weight % Sulfur in Fuel	%Control Efficiency ESP*	% Ash Content
1017	13,000	342,651	5.1	99.30%	11.0

	Pollutant												
	PM*	PM10*	PM2.5	SO2	NOx	VOC	CO	H2SO4	Lead	Mercury	Beryllium	Fluorene	
Combustion Emission Factor in lb/ton	110.0 (10A)	37.78 (2.3A)	19.08 (2.3A)	193.8 (38S)	15.0	0.06	0.50	14.8	0.00811	0.000256	0.001296	0.15	
Potential Emission in tons/yr	18845.8	6472.7	3268.9	33202.9	2569.9	10.3	85.7	2542.1	1.39	0.04	0.22	25.70	
Controlled/Limited Emissions in tons/yr	82.2	45.3	22.9	20936.0									

Methodology

Potential Throughput (tons/yr) = Heat input capacity (MMBtu/hr) x 8,760 hrs/yr x lb coal/MMBtu x ton/2000lbs
 Emission Factors are from AP 42, Tables 1.1-3, 1.1-4, 1.1-15, 1.1-17 and 1.1-19
 Emissions (tons/yr) = Throughput (tons/yr) x Emission Factor (lb/ton)/2,000 lb/ton

Limited PTE (SIP Limit)

PM-326 IAC 6.5-6-23.1
 0.135 lbs/MMBtu and 82.2 tons per year.
SO2-326 IAC 7-4-2
 4.7 lbs/MMBtu

Fuel Oil (No. 2)

Heat Input Capacity MMBtu/hr	Potential Throughput kgals/year	S = Weight % Sulfur
1017	63635.14	0.3

	Pollutant												
	PM*	PM10	PM2.5	SO2	NOx	VOC	CO	H2SO4	Lead	Mercury	Beryllium	Fluorene	
Emission Factor in lb/kgal	2.0	2.3	1.55	42.6 (142.0S)	24.0	0.20	5.0	3.26	1.26E-03	4.20E-04	4.20E-04	4.47E-06	
Potential Emission in tons/yr	63.6	73.2	49.3	1355.4	763.6	6.4	159.1	103.77	0.04	0.01	0.01	0.0001	

Methodology

1 gallon of No. 2 Fuel Oil has a heating value of 140,000 Btu
 Potential Throughput (kgals/year) = heat input capacity (mmBtu/hr) x 8,760 hrs/yr x 1 kgal per 1000 gallon x 1 gal per 0.140 mm
 Emission Factors are from AP 42, Tables 1.3-1, 1.3-2, 1.3-3, 1.3-9 and 1.3-10 Updated 5/10
 *PM emission factor is filterable PM only.

Limited PTE based on PM and SO2 Limitations (tons per year):

	Pollutant												
	PM*	PM10	PM2.5	SO2	NOx	VOC	CO	H2SO4	Lead	Mercury	Beryllium	Fluorene	
Boiler (50) PTE (tons/year)	82.2	6472.7	3268.9	20936.0	2569.9	10.3	159.1	2542.1	1.39	0.01	0.22	25.70	

Appendix A: Emission Calculations

Utility Boiler - Unit 5 (Boiler 50) GHGs

Company Name: Indianapolis Power & Light Company - Harding Street Station
Address City IN Zip: 3700 & 4190 S. Harding Street
Permit Number: 097-35247-00033
Reviewer: Julie Mendez

Coal

Emission Factor in Kg/MM	Greenhouse Gas		
	CO2	CH4	N2O
93.40	0.011	0.0016	
Potential Emission in tons/	916,402	107.9	15.7
Summed Potential Emissions in tons/yr	916,526		
Global Warming Potential	1	21	310
CO2e Total in tons/yr	923,535		

Methodology

CO2, CH4 and N2O emissions factors are from 40 CFR 98 Subpart C, Table C-1 and Table C-2 for Bituminous Coal Combustion
 Emission (tons/yr) = Heat Input (MMBtu/hr) x Emission Factor (kg/MMBtu) x 8760 hr/yr x 1lbs/0.454 kg x 1 ton/2000 lbs
 Global Warming Potentials (GWP) from Table A-1 of 40 CFR Part 98 Subpart A.
 CO2e (tons/yr) = CO2 Potential Emission ton/yr x CO2 GWP (1) + CH4 Potential Emission ton/yr x CH4

Fuel Oil

Emission Factor in Kg/MM	Greenhouse Gas		
	CO2	CH4	N2O
73.96	0.003	0.0006	
Potential Emission in tons/	725,665	29.4	5.9
Summed Potential Emissions in tons/yr	725,700		
Global Warming Potential	1	21	310
CO2e Total in tons/yr	728,108		

Methodology

CO2, CH4 and N2O emissions factors are from 40 CFR 98 Subpart C, Table C-1 and Table C-2 for Fuel Oil No. 2
 Emission (tons/yr) = Heat Input (MMBtu/hr) x Emission Factor (kg/MMBtu) x 8760 hr/yr x 1lbs/0.454 kg x 1 ton/2000 lbs
 Global Warming Potentials (GWP) from Table A-1 of 40 CFR Part 98 Subpart A.
 CO2e (tons/yr) = CO2 Potential Emission ton/yr x CO2 GWP (1) + CH4 Potential Emission ton/yr x CH4

Appendix A: Emission Calculations

Utility Boiler - Unit 6 (Boiler 60)

Company Name: Indianapolis Power & Light Company - Harding Street Station
Address City IN Zip: 3700 & 4190 S. Harding Street
Permit Number: 097-35247-00033
Reviewer: Julie Mendez

Coal

Heat Input Capacity (MMBtu/hr)	Heat Content of Coal (Btu/lb of Coal)	Potential Throughput Coal (tons/year)	Weight % Sulfur in Fuel	%Control Efficiency ESP	% Ash Content
1017	13,000	342,651	5.1	99.30%	11.0

	Pollutant											
	PM*	PM10*	PM _{2.5}	SO ₂	NO _x	VOC	CO	H ₂ SO ₄	Lead	Mercury	Beryllium	Fluorene
Combustion Emission Factor in lb/ton	110.0 (10A)	37.78 (2.3A)	19.08 (2.3A)	193.8 (38S)	15.0	0.06	0.50	14.8	0.00811	0.000256	0.001296	0.15
Potential Emission in tons/yr	18845.8	6472.7	3268.9	33202.9	2569.9	10.3	85.7	2542.1	1.39	0.04	0.22	25.70
Controlled/Limited Emissions in tons/yr	82.2	45.3	22.9	20936.0								

Methodology

Potential Throughput (tons/yr) = Heat input capacity (MMBtu/hr) x 8,760 hrs/yr x lb coal/MMBtu x ton/2000lbs
 Emission Factors are from AP 42, Tables 1.1-3, 1.1-4, 1.1-15, 1.1-17 and 1.1-19
 Emissions (tons/yr) = Throughput (tons/yr) x Emission Factor (lb/ton)/2,000 lb/ton

Limited PTE (SIP Limit)

PM-326 IAC 6.5-6-23.1
 0.135 lbs/MMBtu and 82.2 tons per year.
SO2-326 IAC 7-4-2
 4.7 lbs/MMBtu

Fuel Oil (No. 2)

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

1017 63635.14 0.3

	Pollutant											
	PM*	PM10	PM _{2.5}	SO ₂	NO _x	VOC	CO	H ₂ SO ₄	Lead	Mercury	Beryllium	Fluorene
Emission Factor in lb/kgal	2.0	2.3	1.55	42.6 (142.0S)	24.0	0.20	5.0	3.26	1.26E-03	4.20E-04	4.20E-04	4.47E-06
Potential Emission in tons/yr	63.6	73.2	49.3	1355.4	763.6	6.4	159.1	103.77	0.04	0.01	0.01	0.0001

Methodology

1 gallon of No. 2 Fuel Oil has a heating value of 140,000 Btu
 Potential Throughput (kgals/year) = heat input capacity (MMBtu/hr) x 8,760 hrs/yr x 1 kgal per 1000 gallons x 1 gal per 0.140 MM Btu
 Emission Factors are from AP 42, Tables 1.3-1, 1.3-2, 1.3-3, 1.3-9 and 1.3-10 Updated 5/10
 *PM emission factor is filterable PM only.

Limited PTE based on PM and SO2 Limitations (tons per year):

	Pollutant											
	PM*	PM10	PM _{2.5}	SO ₂	NO _x	VOC	CO	H ₂ SO ₄	Lead	Mercury	Beryllium	Fluorene
Boiler (60) PTE (tons/year)	82.2	6472.7	3268.9	20936.0	2569.9	10.3	159.1	2542.1	1.39	0.01	0.22	25.70

Appendix A: Emission Calculations

Utility Boiler - Unit 6 (Boiler 60) GHGs
Company Name: Indianapolis Power & Light Company - Harding Street Station
Address City IN Zip: 3700 & 4190 S. Harding Street
Permit Number: 097-35247-00033
Reviewer: Julie Mendez

Coal

Emission Factor in Kg/MM	Greenhouse Gas		
	CO2	CH4	N2O
93.40	0.011	0.0016	
Potential Emission in tons/	916,402	107.9	15.7
Summed Potential Emissions in tons/yr	916,526		
Global Warming Potential	1	21	310
CO2e Total in tons/yr	923,535		

Methodology

CO2, CH4 and N2O emissions factors are from 40 CFR 98 Subpart C, Table C-1 and Table C-2 for Bituminous Coal Combustion
Emission (tons/yr) = Heat Input (MMBtu/hr) x Emission Factor (kg/MMBtu) x 8760 hr/yr x 1lbs/0.454 kg x 1 ton/2000 lbs
Global Warming Potentials (GWP) from Table A-1 of 40 CFR Part 98 Subpart A.
CO2e (tons/yr) = CO2 Potential Emission ton/yr x CO2 GWP (1) + CH4 Potential Emission ton/yr x CH4

Fuel Oil

Emission Factor in Kg/MM	Greenhouse Gas		
	CO2	CH4	N2O
73.96	0.003	0.0006	
Potential Emission in tons/	725,665	29.4	5.9
Summed Potential Emissions in tons/yr	725,700		
Global Warming Potential	1	21	310
CO2e Total in tons/yr	728,108		

Methodology

CO2, CH4 and N2O emissions factors are from 40 CFR 98 Subpart C, Table C-1 and Table C-2 for Fuel Oil No. 2
Emission (tons/yr) = Heat Input (MMBtu/hr) x Emission Factor (kg/MMBtu) x 8760 hr/yr x 1lbs/0.454 kg x 1 ton/2000 lbs
Global Warming Potentials (GWP) from Table A-1 of 40 CFR Part 98 Subpart A.
CO2e (tons/yr) = CO2 Potential Emission ton/yr x CO2 GWP (1) + CH4 Potential Emission ton/yr x CH4

Appendix A: Emission Calculations

Natural Gas Combustion Only

MMBTU/HR >100

Utility Boiler - Unit 5 & 6

Company Name: Indianapolis Power & Light Company - Harding Street Station

Address City IN Zip: 3700 & 4190 S. Harding Street

Permit Number: 097-35247-00033

Reviewer: Julie Mendez

Two Natural gas fired boiler of 1162 MMBtu per hour each.

Heat Input Capacity

MMBTu/hr

Potential Throughput

MMCF/yr

1162.0 Each

9979.5

Emission Factor in lb/MMC	Pollutant											
	PM*	PM10*	direct PM2.5*	SO2	NOx	VOC	CO	H2SO4	Lead	Mercury	Beryllium	Fluorene
	1.9	7.6	7.6	0.6	153.0	5.5	84.0	0.0459	0.00050	0.00026	0.000012	0.0000028
Potential Emission in tons/yr - Boiler 5	9.5	37.9	37.9	3.0	763.4	27.4	419.1	0.23	0.002	0.001	0.0001	0.00
Potential Emission in tons/yr - Boiler 6	9.5	37.9	37.9	3.0	763.4	27.4	419.1	0.23	0.002	0.001	0.0001	0.00
Total	19.0	75.8	75.8	6.0	1526.9	54.9	838.3	0.46	0.005	0.003	0.0001	0.00

*PM emission factor is filterable PM only. PM10 emission factor is condensable and filterable PM10 combined.

PM2.5 emission factor is condensable and filterable PM2.5 combined.

Methodology

All emission factors are based on normal firing.

MMBTu = 1,000,000 Btu

MMCF = 1,000,000 Cubic Feet of Gas

Potential Throughput (MMCF) = Heat Input Capacity (MMBTu/hr) x 8,760 hrs/yr x 1 MMCF/1,000,000 Btu

Emission Factors from AP 42, Chapter 1.4, Tables 1.4-1, 1.4-2, and 1.4-3, SCC #1-01-006-01, (AP-42 Supplement D 3/98)

Emission factor for NOX is used as 0.15 lb/MMBTu from vendor design specification.

Emission (tons/yr) = Throughput (MMCF/yr) x Emission Factor (lb/MMCF)/2,000

See page 8 for HAPs emissions calculations.

Appendix A: Emission Calculations**Natural Gas Combustion Only****MMBTU/HR >100****HAPs Emissions****Unit 5 & Unit 6****Company Name:** Indianapolis Power & Light Company - Harding Street Station**Address City IN Zip:** 3700 & 4190 S. Harding Street**Permit Number:** 097-35247-00033**Reviewer:** Julie Mendez

HAPs - Organics					
	Benzene	Dichlorobenzene	Formaldehyde	Hexane	Toluene
Emission Factor in lb/MMc	2.1E-03	1.2E-03	7.5E-02	1.8E+00	3.4E-03
Potential Emission in tons/	1.05E-02	5.99E-03	3.74E-01	8.98E+00	1.70E-02

HAPs - Metals					
	Lead	Cadmium	Chromium	Manganese	Nickel
Emission Factor in lb/MMc	5.0E-04	1.1E-03	1.4E-03	3.8E-04	2.1E-03
Potential Emission in tons/	2.49E-03	5.49E-03	6.99E-03	1.90E-03	1.05E-02
	Single HAP =				17.96
	Total HAP =				18.83

Methodology is the same as page 1.

The five highest organic and metal HAPs emission factors are provided above.

Additional HAPs emission factors are available in AP-42, Chapter 1.4.

See Page 9 for Greenhouse Gas calculations.

Appendix A: Emissions Calculations**Natural Gas Combustion Only****MMBTU/HR >100****Greenhouse Gas Emissions****Unit 5 & Unit 6****Company Name:** Indianapolis Power & Light Company - Harding Street Station**Address City IN Zip:** 3700 & 4190 S. Harding Street**Permit Number:** 097-35247-00033**Reviewer:** Julie Mendez

	Greenhouse Gas		
	CO2	CH4	N2O
Emission Factor in Kg/MMI	53.02	0.001	0.0001
Potential Emission in tons/	594,380	11.2	1.1
Summed Potential Emissions in tons/yr	594,392		
Global Warming Potential	1	21	310
CO2e Total in tons/yr each.	594,963		
Total CO2e from Unit 5 & 6	1,189,926		

Methodology

CO2, CH4 and N2O emissions factors are from 40 CFR 98 Subpart C, Table C-1 and Table C-2 for Natural Gas Combustion

Emission (tons/yr) = Throughput (MMCF/yr) x Emission Factor (kg/MMBtu) x 1020 MMBtu/MMscf x 1lbs/0.4

Global Warming Potentials (GWP) from Table A-1 of 40 CFR Part 98 Subpart A.

CO2e (tons/yr) = CO2 Potential Emission ton/yr x CO2 GWP (1) + CH4 Potential Emission ton/yr x CH4

**Appendix A: Emission Calculations
Unit 7 (Boiler 70)**

Company Name: Indianapolis Power & Light Company - Harding Street Station
Address City IN Zip: 3700 & 4190 S. Harding Street
Permit Number: 097-35247-00033
Reviewer: Julie Mendez

Unit 7 (Boiler 70)

Coal

Heat Input Capacity MMBtu/hr	Heat Content of Coal Btu/lb of Coal	Throughput Coal tons/year	Weight % Sulfur in Fuel	%Control Efficiency ESP				% Ash Content
4123	8,000	2,257,343	5.1	99.40%				11.0

	Pollutant						
	PM*	PM ₁₀ *	PM _{2.5} *	SO ₂	NO _x	VOC	CO
Combustion Emission Factor in lb/ton	110.0 <i>(10A)</i>	25.30 <i>(2.3A)</i>	25.30 <i>(2.3A)</i>	193.8 <i>(38S)</i>	15.0	0.06	0.50
Potential Emission in tons/yr	124153.8	28555.4	28555.4	218736.5	16930.1	67.7	564.3
Controlled/Limited Emissions in tons/yr	830.7	171.3	171.3	95711.3			

Methodology

Potential Throughput (tons/yr) = Heat input capacity (MMBtu/hr) x 8,760 hrs/yr x lb coal/MMBtu x ton/2000lbs

Emission Factors are from AP 42, Tables 1.1-3, 1.1-4, and 1.1-19

Emissions (tons/yr) = Throughput (tons/yr) x Emission Factor (lb/ton)/2,000 lb/ton

Fuel Oil

Heat Input Capacity MMBtu/hr	Potential Throughput kgals/year	S = Weight % Sulfur 0.3
4123	257982	

	Pollutant						
	PM*	PM ₁₀ *	PM _{2.5} *	SO ₂	NO _x	VOC	CO
Emission Factor in lb/kgal	2.0	1.3	1.3	42.6 <i>(142.0S)</i>	24.0	0.20	5.0
Potential Emission in tons/yr	258.0	167.7	167.7	5495.0	3095.8	25.8	645.0
Limited PTE	830.7						

Methodology

1 gallon of No. 2 Fuel Oil has a heating value of 140,000 Btu

Potential Throughput (kgals/year) = Heat Input Capacity (MMBtu/hr) x 8,760 hrs/yr x 1kgal per 1000 gallon x 1 gal per 0.140 MM Btu

Emission Factors are from AP 42, Tables 1.3-1, 1.3-2, and 1.3-3 (SCC 1-02-005-01/02/03) Supplement E 9/98

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

**Appendix A: Emission Calculations
Units GT1 and GT2**

Company Name: Indianapolis Power & Light Company - Harding Street Station
Address City IN Zip: 3700 & 4190 S. Harding Street
Permit Number: 097-35247-00033
Reviewer: Julie Mendez

Units GT1, GT2 (per unit calculations)

Heat Input Capacity MMBtu/hr	Potential Throughput kgals/year	Weight % Sulfur
299.0	18708.9	0.3

Emission Factor in lb/MMBtu	Pollutant						
	PM*	PM ₁₀ *	PM _{2.5} *	SO ₂	NO _x	VOC	CO
	0.012	0.007	0.007	0.303 (1.01S)	0.880	0.000	0.003
Potential Emission in tons/yr	15.7	9.2	9.2	396.8	1152.5	0.5	3.9
Controlled/Limited Emissions in tons/yr	0.28						

Methodology

1 gallon of No.2 fuel oil has a heating value of 140,000 Btu
 Potential Throughput (kgals/year) = Heat Input Capacity (MMBtu/hr) x 8,760 hrs/yr x 1 kgal/1000 gal x 1gal/.14 MMBtu
 Emission Factors from AP 42, Tables 3.1-1 and 3.1-2a
 Emission (tons/yr) =Heat Input (MMBtu/hr) x Emission Factor (lb/MMBtu) x 8760 hrs/yr / 2,000 lb/ton

**Appendix A: Emission Calculations
Units GT4 and GT5**

Company Name: Indianapolis Power & Light Company - Harding Street Station
Address City IN Zip: 3700 & 4190 S. Harding Street
Permit Number: 097-35247-00033
Reviewer: Julie Mendez

Units GT4 & GT5

Distillate Oil

Heat Input Capacity MMBtu/hr	Potential Throughput kgals/year	Weight % Sulfur	Limited Throughput kgals/year
1742.0	108999.4	0.05	12800

Emission Factor in lb/MMBtu	Pollutant						
	PM*	PM10*	PM _{2.5} *	SO ₂	NO _x	VOC	CO
	0.012	0.007	0.007	0.051 (1.01S)	0.240	0.0004	0.076
Potential Emission in tons/yr	91.6	53.4	53.4	385.3	1831.2	3.1	579.9
Limited Emissions in tons/yr	10.8	6.3	6.3	45.2	215.0	0.4	68.1

Methodology

1 gallon of No.2 fuel oil has a heating value of 140,000 Btu
 Potential Throughput (kgals/year) = Heat Input Capacity (MMBtu/hr) x 8,760 hrs/yr x 1 kgal/1000 gal x 1gal/.14 MMBtu
 Emission Factors from AP 42, Tables 3.1-1 and 3.1-2a for water injection units
 Emission (tons/yr) =Heat Input (MMBtu/hr) x Emission Factor (lb/MMBtu) x 8760 hrs/yr / 2,000 lb/ton

Natural Gas

Heat Input Capacity MMBtu/hr	Potential Throughput MMCF/year	Weight % Sulfur	Limited Throughput MMCF/year
1742.0	15259.9	0.00081	6300

Emission Factor in lb/MMBtu	Pollutant						
	PM*	PM10*	PM _{2.5} *	SO ₂	NO _x	VOC	CO
	0.007	0.005	0.005	0.001 (0.94S)	0.130	0.002	0.030
Potential Emission in tons/yr	53.4	38.1	38.1	5.8	991.9	15.3	228.9
Combined Limited Emissions in tons/yr	22.1	15.8	15.8	2.4	409.5	6.3	94.5

Methodology

1 MMcf = 1,000 MMBtu
 Potential Throughput (MMCF/year) = Heat Input Capacity (MMBtu/hr) x 8,760 hrs/yr x 1 MMcf/ 1000 MMBtu
 Emission Factors from AP 42, Tables 3.1-1 and 3.1-2a for water injection units
 Emission (tons/yr) =Heat Input (MMBtu/hr) x Emission Factor (lb/MMBtu) x 8760 hrs/yr / 2,000 lb/ton

**Appendix A: Emission Calculations
Unit GT6**

Company Name: Indianapolis Power & Light Company - Harding Street Station
Address City IN Zip: 3700 & 4190 S. Harding Street
Permit Number: 097-35247-00033
Reviewer: Julie Mendez

Unit GT6

Heat Input Capacity MMBtu/hr	Potential Throughput MMCF/year	Weight % Sulfur
1660.0	14541.6	0.00081

Emission Factor in lb/MMBtu	Pollutant						
	PM*	PM ₁₀ *	PM _{2.5} *	SO ₂	NO _x	VOC	CO
	0.007	0.005	0.005	0.001 (0.94S)	0.130	0.002	0.030
Potential Emission in tons/yr	50.9	36.4	36.4	5.5	945.2	14.5	218.1
Combined Limited Emissions in tons/yr					40.0		

Methodology

1 MMcf = 1,000 MMBtu
 Potential Throughput (MMCF/year) = Heat Input Capacity (MMBtu/hr) x 8,760 hrs/yr x 1 MMcf/ 1000 MMBtu
 Emission Factors from AP 42, Tables 3.1-1 and 3.1-2a for water injection units
 Emission (tons/yr) = Heat Input (MMBtu/hr) x Emission Factor (lb/MMBtu) x 8760 hrs/yr / 2,000 lb/ton

**Appendix A: Emission Calculations
Unit ST14**

Company Name: Indianapolis Power & Light Company - Harding Street Station
Address City IN Zip: 3700 & 4190 S. Harding Street
Permit Number: 097-35247-00033
Reviewer: Julie Mendez

Unit ST14

Heat Input Capacity
MMBtu/hr

Weight % Sulfur

27.6

0.30000

Emission Factor in lb/MMBtu	Pollutant						
	PM*	PM ₁₀ *	PM _{2.5} *	SO ₂	NO _x	VOC	CO
	0.070	0.057	0.057	0.303 (1.01S)	3.200	0.080	0.850
Potential Emission in tons/yr	0.5	0.4	0.4	2.1	22.1	0.6	5.9

Methodology

Emission Factors from AP 42, Tables 3.4-1 and 3.4-2 for water injection units
Emission (tons/yr) = Heat Input (MMBtu/hr) x Emission Factor (lb/MMBtu) x 500 hrs/yr / 2,000 lb/ton

Appendix A: Emission Calculations
Grit Blasting

Company Name: Indianapolis Power & Light Company - Harding Street Station
Address City IN Zip: 3700 & 4190 S. Harding Street
Permit Number: 097-35247-00033
Reviewer: Julie Mendez

GRIT BLAST

2000,000 pounds grit/yr X 0.01 pounds PM /pounds abrasive = 2000 pounds PM/Year

2000 pounds PM/year X 0.7 pounds PM10/pounds PM = 1400 pounds PM10/Year

Emissions: PM, PM₁₀, PM_{2.5}		
Emission Unit	pounds/year	ton/year
PM	2000	1.0
PM₁₀	1400	0.7
PM_{2.5}	1400	0.7

METHODOLOGY

Uncontrolled Emissions (tons/yr)= Pounds of Grit/yr X Ef X 1 tons/2000lb

Emission factors from STAPPA/ALAPCO "Air Quality Permits" Vol.1

Section 3 "Abrasive Blasting" (1991 edition)

PRIMER / ADHESIVE; VOC & PM

Material	Density (Lb/Gal)	Weight % Volatile (H2O & Organics)	Weight % Water	Weight % Organics	Volume % Water	Volume % Non-Volatiles (solids)	Gal of Mat. (gal/set)	Maximum (sets/year)	Pounds VOC per gallon of coating less water	Pounds VOC per gallon of coating	Potential VOC pounds per year	Potential VOC pounds per day	Potential VOC tons per year	Particulate Potential (ton/yr)	lb VOC/gal solids	Transfer Efficiency
Primer	8.3	88.50%	0.0%	88.5%	0.0%	17.00%	4.00000	41.000	7.37	7.37	1208.29	3.31	0.60	0.02	43.34	75%
Adhesive	8.7	8.87%	0.0%	8.9%	0.0%	87.68%	4.00000	1655.000	0.77	0.77	5124.05	14.04	2.56	0.00	0.88	100%

State Potential Emissions Add worst case coating to all solvents

1.60

6332.34 17.35 3.166 0.02

METHODOLOGY

Pounds of VOC per Gallon Coating less Water = (Density (lb/gal) * Weight % Organics) / (1-Volume % water)

Pounds of VOC per Gallon Coating = (Density (lb/gal) * Weight % Organics)

Potential VOC Pounds per Year = Pounds of VOC per Gallon coating (lb/gal) * Gal of Material (gal/set) * Maximum (sets/yr)

Potential VOC Pounds per Day = Pounds of VOC per Gallon coating (lb/gal) * Gal of Material (gal/set) * Maximum (sets/yr) / (24)

Potential VOC Tons per Year = Pounds of VOC per Gallon coating (lb/gal) * Gal of Material (gal/set) * Maximum (sets/yr) * (1 ton/2000 lbs)

Particulate Potential Tons per Year = (sets/yr) * (gal/set * (lbs/gal) * (1- Weight % Volatiles) * (1-Transfer efficiency)) * (1 ton/2000 lbs)

Pounds VOC per Gallon of Solids = (Density (lbs/gal) * Weight % organics) / (Volume % solids)

Total = Worst Coating + Sum of all solvents used

*Note: The primer process and adhesive process are 2 separate operations and thus each process was reviewed independently regarding 326 IAC 8-2-9 applicability.

PRIMER / ADHESIVE; HAP'S

Material	Density (Lb/Gal)	Weight % Single Worst Case HAP	Gal of Mat. (gal/set)	Maximum (sets)	Potential worse case single HAP tons per year
Primer	8.3	0.0%	4.00000	41.000	0.00
Adhesive	8.7	0.49%	4.00000	1655.000	0.141

State Potential Emissions

0.141

METHODOLOGY

Potential VOC Tons per Year = Density (lb/gal) * HAP * Gal of Material (gal/set) * Maximum (sets) * (1 ton/2000 lbs)

**Appendix A: Emission Calculations
Limestone & Coal**

Company Name: Indianapolis Power & Light Company - Harding Street Station
Address City IN Zip: 3700 & 4190 S. Harding Street
Permit Number: 097-35247-00033
Reviewer: Julie Mendez

The following calculations determine the amount of emissions created by loading, conveying, & unloading of materials based on 8760 hours of use and AP-42, Ch 13.2.4.

$$E_f = k \cdot 0.0032 \cdot [(U/5)^{1.3} / (m/2)^{1.4}] \text{ in lb/ton}$$

where k = particle size multiplier
 U = mean wind speed (mi/hr)
 m = moisture content (%)

Material		Limestone				Coal		Total
		Conveyance	Conveyance ² (Gypsum)	Silos Storage ^{1,3}	Ball Mills ⁴	Unloading ⁵	Conveyance ⁶	
Material Capacity (tons/yr)		230,000	414,000	230,000	230,000	7,500,000	7,500,000	
k =	PM	0.74	0.74	0.74	0.74	0.74	0.74	
	PM10	0.35	0.35	0.35	0.35	0.35	0.35	
	PM2.5	0.053	0.053	0.053	0.053	0.053	0.053	
U (mi/hr) ²		1	1	8	1	8	1	
M (%)		0.7	7	0.7	0.7	4.50	4.50	
E _f (lbs/ton) for PM		0.0013	0.00005	0.0190	0.0013	0.0014	0.0001	
E _f (lbs/ton) for PM ₁₀		0.0006	0.00002	0.0090	0.0006	0.0007	0.0000	
Number of Transfer Points ¹		7	7	1	1	1	6	
PTE (tons/yr) for PM		1.02	0.07	2.18	0.15	5.26	2.11	10.79
PTE (tons/yr) for PM₁₀		0.48	0.03	1.03	0.07	2.49	1.00	5.10
PTE (tons/yr) for PM_{2.5}		0.48	0.03	1.03	0.07	2.49	1.00	5.10

PTE (tons/yr) = E_f (lbs/ton) * transfer (tons/yr) * # transfer points

¹Limestone conveyance is enclosed. Therefore, 1 mi/hr wind speed is used. The two transfer points associated with loading/unloading are from the truck to the silo and from the silo to the hopper. 8 mi/hr wind speed based on NOAA data at <http://www.ncdc.noaa.gov/oa/climate/online/ccd/avgwind.html>

²Gypsum conveyance is enclosed and stored in a building. Five transfer points associated with the gypsum transfer and the drop point to the storage pile and loading from the storage pile to the trucks. Therefore, a wind speed of 1 mi/hr is used.

³The emissions from the Limestone Silos will occur during filling.

⁴The maximum emissions from the Ball Mills occur during filling because the ball mill is wet and because it is closed during the process. The ball mill is inside the building. Therefore, a wind speed of 1 mi/hr is used.

⁵Coal unload is drop operation. See note 1 regarding wind speed.

⁶Coal conveyance has six (6) transfers: to; (crusher), (#4 cnvyr.), (x-over), (#5 cnvyr. or 705 cnvyr.), (703 cnvyr. or unit 7), (unit 5 or unit 6)

Appendix A: Emission Calculations
Loading, Unloading, Storage Piles : fugitive

Company Name: Indianapolis Power & Light Company - Harding Street Station
Address City IN Zip: 3700 & 4190 S. Harding Street
Permit Number: 097-35247-00033
Reviewer: Julie Mendez

Loading / Unloading

The following calculations determine the amount of emissions created by loading & unloading of materials based on 8760 hours of use and AP-42, Ch 13.2.4.

$$E_f = k \cdot 0.0032 \cdot [(U/5)^{1.3} / (m/2)^{1.4}] \text{ in lb/ton}$$

where k = particle size multiplier
 U = mean wind speed (mi/hr)
 m = moisture content (%)

Operation	Gypsum transfer to outdoor pile ¹	Gypsum transfer from outdoor pile ¹
(tons/yr)	414000	414000
k =	PM	0.74
	PM ₁₀	0.35
	PM _{2.5}	0.053
U (mi/hr) ²	8	8
M (%)	7	7
Ef (lbs/ton) for PM	7.55E-04	7.55E-04
Ef (lbs/ton) for PM ₁₀	3.57E-04	3.57E-04
Ef (lbs/ton) for PM _{2.5}	5.41E-05	5.41E-05
Number of Transfer Points ¹	1	1
PTE (tons/yr) for PM	0.16	0.16
PTE (tons/yr) for PM₁₀	0.07	0.07
PTE (tons/yr) for PM_{2.5}	0.01	0.01

Methodology

$$PTE \text{ (tons/yr)} = E_f \text{ (lbs/ton)} \cdot \text{transfer (tons/yr)} \cdot \# \text{ transfer points}$$

¹Existing gypsum conveyance and storage piles are enclosed and stored in a building. Two new transfer points will be associated with the gypsum transfer are loading to the outdoor storage pile by front end loader and transfer from outdoor storage pile. Therefore, a wind speed of 8 mi/hr is used for loading & unloading of the outdoor storage pile. (based on NOAA data at <http://www.ncdc.noaa.gov/oa/climate/online/ccd/avgwind.html>)

Storage Piles

The following calculations determine the amount of emissions created by wind erosion of storage stockpiles, based on 8,760 hours of use and USEPA's AP-42 (Pre 1983 Edition), Section 11.2.2 (factors: AP-42; 13.2.4-1 (1/95))

$$E_f = 1.7 \cdot (s/1.5) \cdot (365-p)/235 \cdot (f/15)$$

where Ef = emission factor (lb/acre/day)

s = silt content (wt %) =

p = days of rain greater than or equal to 0.01 inches =

f = % of wind greater than or equal to 12 mph =

Area = 1 acre

20
125
15

Ef (lbs/ton) for PM	23.15
Ef (lbs/ton) for PM ₁₀	8.10
Ef (lbs/ton) for PM _{2.5}	8.10
PTE (tons/yr) for PM	4.2
PTE (tons/yr) for PM₁₀	1.5
PTE (tons/yr) for PM_{2.5}	1.5

Methodology

$$PTE \text{ of PM (tons/yr)} = [Emission \text{ Factor (lb/acre/day)}] \cdot [Maximum \text{ Pile Size (acres)}] \cdot (ton/2000 \text{ lbs}) \cdot (365 \text{ days/yr})$$

$$E_f \text{ for PM}_{10} \text{ (tons/yr)} = E_f \text{ PM} \cdot 35\%$$

**Appendix A: Emission Calculations
Roads & Pile : fugitive**

Company Name: Indianapolis Power & Light Company - Harding Street Station
Address City IN Zip: 3700 & 4190 S. Harding Street
Permit Number: 097-35247-00033
Reviewer: Julie Mendez

The following calculations determine the amount of emissions created by vehicle traffic on paved roads, based on 8760 hours of use and AP-42, Ch 13.2.1.

Semi Truck

$$\frac{13.0 \text{ trips/hr} \times 0.900 \text{ miles roundtrip} \times 8760 \text{ hrs/yr}}{2000 \text{ lb/ton}} = 102272.7 \text{ miles per year}$$

For PM-2.5 For PM For PM-10 $E_f = k[sL^{.91}][W^{1.02}](1-P/4N)$

0.13	2.68	=	0.54	lb/mile			
0.00054	0.011	where k =	0.0022	(particle size multiplier for PM-10) (k=4.9 for PM-30 or TSP)			
25	25	sL =	25	silt loading (g/m ²)			
13.5	13.5	W =	13.5	tons average vehicle weight			
125	125	P =	125	number of days with at least 0.254mm of precipitation (See Figure 13.2.2-1)			
365	365	N =	365	days			
			2.68	lb/mi x	102272.73	mi/yr =	
					2000	lb/ton	PM = 136.87 tons/yr
			0.54	lb/mi x	102272.73	mi/yr =	
					2000	lb/ton	PM ₁₀ = 27.37 tons/yr
			0.13	lb/mi x	102272.7	mi/yr =	
					2000	lb/ton	PM _{2.5} = 6.72 tons/yr

2,500,000 tons coal per year * 1 trip / 22 tons * 1 year / 8760 hrs = 13 trips / hr
 Average vehicle weight is based on 2.5 ton truck carrying 22 tons one way and empty one way.

Coal Storage: Piles

The following calculations determine the amount of emissions created by wind erosion of storage stockpiles, based on 8,760 hours of use and USEPA's AP-42 (1983 Edition), Section 11.2.3.

$$E_f = 1.7(s/1.5)^{(365-p)/235}(f/15)$$

where E_f = emission factor (lb/acre/day)
 s = silt content (wt %) = 2.2 (AP-42 Table 13.2.4-1)
 p = days of rain greater than or equal to 0.01 inches = 125
 f = % of wind greater than or equal to 12 mph = 15
 Area = 20.7 acre

Ef (lbs/ton) for PM	2.5464
Ef (lbs/ton) for PM ₁₀	0.8912
Ef (lbs/ton) for PM _{2.5}	0.8912
PTE (tons/yr) for PM	0.41
PTE (tons/yr) for PM ₁₀	0.14
PTE (tons/yr) for PM _{2.5}	0.14

Methodology

PTE of PM (tons/yr) = [Emission Factor (lb/acre/day)] * [Maximum Pile Size (acres)] * (ton/2000 lbs) * (365 days/yr)

Ef for PM10 (tons/yr) = Ef PM * 35%

See pg. 174 of http://www.epa.gov/ttn/chief/ap42/oldeditions/3rd_edition/ap42_3rdsup14_may1983.pdf

**Appendix A: Emission Calculations
Unit 7 Cooling Tower (CT-7)**

Company Name: Indianapolis Power & Light Company - Harding Street Station
Address City IN Zip: 3700 & 4190 S. Harding Street
Permit Number: 097-35247-00033
Reviewer: Julie Mendez

POTENTIAL TO EMIT

The following calculations determine the amount of emissions created by drift from the Unit 7 Cooling tower, based on 8,760 hours of operation and USEPA's AP-42, Section 13.4.

$$E = D \cdot S / 1E6$$

$$PTE = E / 1000 \cdot Q \cdot 1 \text{ ton} / 2000 \text{ lbs} \cdot 8760 \text{ hr/yr} \cdot 60 \text{ min} / \text{hr}$$

where E = emission factor (lb/10³ gal) = **0.000167**
 D = Total Liquid Drift (lb/10³ gal) = **0.0834**
 S = Total Dissolved Solids (ppm) = **2000**
 Q = Circulating Water Flow (gal/min) = **189,280**

PTE (tons/yr) for PM	8.30
PTE (tons/yr) for PM₁₀	7.05
PTE (tons/yr) for PM_{2.5}	7.05

PM10/PM2.5 fraction based on research paper Calculating Realistic PM10 Emissions from Cooling Towers

PM10 is conservatively calculated as 85% of total PM

Q = Water flow capacity is 93,660 gpm for 7-1 and 95,620 gpm for 7-2.

S = Total dissolved solids 2011 measurement of 1800 ppm. 2000 ppm is used in an effort to be conservative.

D (lb/10³gal) = 0.001 lb / 100 lb * 8.34 lb/gal * 1000 gal/10³gal

Appendix A: Emission Calculations
Internal Combustion Engines - Diesel Fuel
Turbine (>250 and <650 HP)
FP-1

Company Name: Indianapolis Power & Light Company - Harding Street Station
Address City IN Zip: 3700 & 4190 S. Harding Street
Permit Number: 097-35247-00033
Reviewer: Julie Mendez

Green House Gas Emissions (GHG)

	Pollutant		
	CO2	CH4	N2O
Emission Factor in lb/hp-h	1.15E+00	4.63E-05	9.26E-06
Potential Emission in tons	6.18E+01	2.49E-03	4.98E-04

Summed Potential Emissions in tons/yr	6.18E+01
CO2e Total in tons/yr	62.02

Appendix A: Emission Calculations
Reciprocating Internal Combustion Engines - Diesel Fuel: Black Start Diesel Engines BSE-2 & BSE-3
475 Horsepower Each

Output Rating (<=600 HP)
Maximum Input Rate (<=4.2 MMBtu/hr)

Company Name: Indianapolis Power & Light Company - Harding Street Station
Address City IN Zip: 3700 & 4190 S. Harding Street
Permit Number: 097-35247-00033
Reviewer: Julie Mendez

B. Emissions calculated based on output rating (hp)

Output Horsepower Rating (hp)	475.0
Maximum Hours Operated per Year	8760
Potential Throughput (hp-hr/yr)	4,161,000

	Pollutant						
	PM*	PM10*	direct PM2.5*	SO2	NOx	VOC	CO
Emission Factor in lb/hp-hr	0.0022	0.0022	0.0022	0.0021	0.0310	0.0025	0.0067
Potential Emission in tons/yr	4.58	4.58	4.58	4.27	64.50	5.23	13.90

*PM and PM2.5 emission factors are assumed to be equivalent to PM10 emission factors. No information was given regarding which method was used to determine the factor or the fraction of PM10 which is condensable.

Hazardous Air Pollutants (HAPs)

	Pollutant							Total PAH HAPs***
	Benzene	Toluene	Xylene	1,3-Butadiene	Formaldehyde	Acetaldehyde	Acrolein	
Emission Factor in lb/hp-hr	6.53E-06	2.86E-06	2.00E-06	2.74E-07	8.26E-06	5.37E-06	6.48E-07	1.18E-06
Potential Emission in tons/yr	1.36E-02	5.96E-03	4.15E-03	5.69E-04	1.72E-02	1.12E-02	1.35E-03	2.45E-03

***PAH = Polyaromatic Hydrocarbon (PAHs are considered HAPs, since they are considered Polycyclic Organic Matter)

****Emission factors in lb/hp-hr were calculated using emission factors in lb/MMBtu and a brake specific fuel consumption of 7,000 Btu / hp-hr (AP-42 Table 3.3-1).

Potential Emission of Total HAPs (tons/yr)	5.64E-02
---	-----------------

Green House Gas Emissions (GHG)

	Pollutant		
	CO2	CH4	N2O
Emission Factor in lb/hp-hr	1.15E+00	4.63E-05	9.26E-06
Potential Emission in tons/yr	2.39E+03	9.63E-02	1.93E-02

Summed Potential Emissions in tons/yr	2.39E+03
CO2e Total in tons/yr	2.40E+03

Methodology

Emission Factors are from AP42 (Supplement B 10/96), Tables 3.3-1 and 3.3-2
 CH4 and N2O Emission Factor from 40 CFR 98 Subpart C Table C-2.
 Global Warming Potentials (GWP) from Table A-1 of 40 CFR Part 98 Subpart A.

Potential Throughput (hp-hr/yr) = [Output Horsepower Rating (hp)] * [Maximum Hours Operated per Year]
 Potential Emission (tons/yr) = [Potential Throughput (hp-hr/yr)] * [Emission Factor (lb/hp-hr)] / [2,000 lb/ton]
 CO2e (tons/yr) = CO2 Potential Emission ton/yr x CO2 GWP (1) + CH4 Potential Emission ton/yr x CH4

Appendix A: Emission Calculations
Activated Carbon Silo - EU-7 ACI System

Company Name: Indianapolis Power & Light Company - Harding Street Station
Address City IN Zip: 3700 & 4190 S. Harding Street
Permit Number: 097-35247-00033
Reviewer: Julie Mendez

Unit ID	Max. Throughput (lb/hr)	Silo Loading EF for PM (lb/ton)	Transfer EF for PM (lb/ton)	Silo Loading EF for PM10/PM2.5 (lb/ton)	Transfer EF for PM10/PM2.5 (lb/ton)	PM Uncontrolled PTE (tons/year)	PM10/PM2.5 Uncontrolled PTE (tons/year)	Control Efficiency (%)	PM Controlled PTE (tons/year)	PM10/PM2.5 Controlled PTE (tons/year)	326 IAC 6.5-1-1-2(a) For PM
Unit 7 ACI System	1337	3.14	0.0069	1.1	0.0033	9.21	3.23	99	0.09	0.03	4.22

Methodology:

Emission factors are based on AP 42, table 11.12-2 for Cement Supplement unloading to elevated storage silo (6/06).

Emission factors are based on AP 42, table 11.12-2 for aggregate transfer (6/06).

Uncontrolled PTE (tons/year) = Max throughput (lbs/hr)*[EF Silo Loading + EF Transfer]*ton/2000 lb*8760 hr/year*ton/2000 lb

Controlled PTE (tons/year) = Uncontrolled PTE * (1-Control Efficiency)

Limited PM PTE (326 IAC 6.5-1-1-2(a))

SIP Limit = 0.03 gr/dscf

Exhaust Flow rate of Fabric Filter = 3750 dscf/min

Future Actual Emissions

Operate 1 hour per day

3750 dscf/min.

0.03 gr/dscf

0.964 lbs/hour

0.176 tons/year

Appendix A: Emission Calculations
Paved Roads - Emissions Associated with AC Deliveries

Company Name: Indianapolis Power & Light Company - Harding Street Station
Address City IN Zip: 3700 & 4190 S. Harding Street
Permit Number: 097-35247-00033
Reviewer: Julie Mendez

Maximum Hourly Throughput = 1337 lbs/hr
 Maximum Hourly Throughput = 5856.1 tons/year
 Maximum Weight per load = 15 tons/load
 Maximum Loads per year = 390.4 loads/year
 Maximum Loads per day = 1.07 loads/day
 Maximum one way distance = 0.587 mil/trip
 Maximum miles traveled per year = 458.3 miles/yr (two ways)
 Average Vehicle weight per trip = 30 tons/trip

Particulate Matter EF from AP-42 Chp. 13.2.1 (1/2011)

$$E = [k(sL)^{0.91} \cdot (W)^{1.02}] \cdot (1-P/4N)$$

where;

E= Emission Factor
 K= particle size multiplier
 sL= Silt Loading
 W= average vehicle weight
 P= number of wet days with at least 0.01 in of precipitation
 N= number of days in averaging period

	PM	PM10	PM2.5	
K=	0.011	0.0022	0.00054	lb/VMT - particle size multiplier (AP 42 Table 13.2.1-1)
sL=	25	25	25	g/m ² from table 13.2.1-3
W=	30	30	30	tons
P=	125	125	125	days from figure 13.2.1-2
N=	365	365	365	days per year
E=	6.04	1.21	0.30	lb/mile

Process	Throughput (tons/hr)	Trips/hr ¹	Mile/Trip	Miles/Year	Uncontrolled PTE PM (tons/yr) ²	Uncontrolled PTE PM10 (tons/yr) ²	Uncontrolled PTE PM2.5 (tons/yr) ²	Control Efficiency%	Controlled PTE PM (tons/yr) ³	Controlled PTE PM10 (tons/yr) ³	Controlled PTE PM2.5 (tons/yr) ³
ACI system for Unit 7	0.6685	0.033425	0.587	458.3	1.39	0.28	0.07	50	0.69	0.14	0.03

Methodology:

Truck capacity for ACI is 15 tons

¹Trips/Hour = Throughput (tons/hr)/Truck capacity (tons)

²Uncontrolled PTE (tons/year) = EF(lb/mile)*Miles/year*ton/2000lbs

³Controlled PTE (tons/year) = Uncontrolled PTE (tons/year) * (1-control efficiency/100)

Controls are required as specified in Fugitive Dust Plan

**Appendix A: Emission Calculations
Material Handling
Ponded Ash Handling and Screening**

Company Name: Indianapolis Power & Light Company - Harding Street Station
Address City IN Zip: 3700 & 4190 S. Harding Street
Permit Number: 097-35247-00033
Reviewer: Julie Mendez

The following calculations determine the amount of emissions created by loading, conveying, & unloading of materials based on 8760 hours of use. The equation is taken from AP-42, Ch 13.2.4.

$$E_f = k \cdot 0.0032 \cdot [(U/5)^{1.3} / (m/2)^{1.4}] \text{ in lb/ton}$$

where k = particle size multiplier
 U = mean wind speed (mi/hr)
 m = moisture content (%)

	Ponded Ash Handling	Ponded Ash Screening ²	Total
Amount transferred	1752000	1752000	1752000
k	PM	0.74	
	PM10	0.35	
	PM2.5	0.053	
U (mi/hr) ¹	8		
M (%)	10		
Ef (lbs/ton) for PM	0.0005	0.0022	
Ef (lbs/ton) for PM ₁₀	0.0002	0.00074	
Ef (lbs/ton) for PM _{2.5}	0.00003	0.00005	
Number of Transfer/Screening Points ¹	6	2	
PTE (tons/yr) for PM	2.41	3.85	6.26
PTE (tons/yr) for PM₁₀	1.14	1.30	2.44
PTE (tons/yr) for PM_{2.5}	0.17	0.09	0.26

PTE (tons/yr) = Ef (lbs/ton) * transfer (tons/yr) * # transfer/screening points

¹ 8 mi/hr wind speed is used for unenclosed conveyance based on NOAA data at <http://www.ncdc.noaa.gov/oa/climate/online/ccd/avgwind.html>

² Based on screening EF from AP 42, 11.19.2-2 for Crushed Stone and pulverized mineral processing



INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

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TO: Jennifer Hatfield
Indianapolis Power & Light Company – Harding Street Station
3700 S Harding Street
Indianapolis, IN 46217

DATE: January 2, 2015

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

SUBJECT: Final Decision
Administrative Amendment
097-35247-00033

Enclosed is the final decision and supporting materials for the air permit application referenced above. Please note that this packet contains the original, signed, permit documents.

The final decision is being sent to you because our records indicate that you are the contact person for this application. However, if you are not the appropriate person within your company to receive this document, please forward it to the correct person.

A copy of the final decision and supporting materials has also been sent via standard mail to:
Justin Barrett - IPL
OAQ Permits Branch Interested Parties List

If you have technical questions regarding the enclosed documents, please contact the Office of Air Quality, Permits Branch at (317) 233-0178, or toll-free at 1-800-451-6027 (ext. 3-0178), and ask to speak to the permit reviewer who prepared the permit. If you think you have received this document in error, please contact Joanne Smiddie-Brush of my staff at 1-800-451-6027 (ext 3-0185), or via e-mail at jbrush@idem.IN.gov.

Final Applicant Cover letter.dot 6/13/2013

Mail Code 61-53

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1		Jennifer Hatfield Indianapolis Power & Light Company - Harding Stree 3700 S Harding St Indianapolis IN 46217 (Source CAATS) via confrimed delivery										
2		Matt Mosier Office of Sustainability City-County Bldg/200 E Washington St. Rm# 2460 Indianapolis IN 46204 (Local Official)										
3		Justin Barrett IPL One Monument Circle Indianapolis IN 46204 (Source – addl contact)										
4		Johan & Susan Van Den Heuvel 4409 Blue Creek Drive Carmel IN 46033 (Affected Party)										
5		Fairfield Builders Supply Corp PO Box 4427 Lafayette IN 47903 (Affected Party)										
6		Marion County Health Department 3838 N, Rural St Indianapolis IN 46205-2930 (Health Department)										
7		Indianapolis City Council 200 East Washington Street, Room E Indianapolis IN 46204 (Local Official)										
8		Marion County Commissioners 200 E. Washington St. City County Bldg., Suite 801 Indianapolis IN 46204 (Local Official)										
9		Indiana Members Credit Union 5103 Madison Avenue Indianapolis IN 46227 (Affected Party)										
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