



INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

We Protect Hoosiers and Our Environment.

Mitchell E. Daniels Jr.
Governor

Thomas W. Easterly
Commissioner

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

TO: Interested Parties / Applicant

DATE: May 30, 2008

RE: Worthington Generation / 055-25209-00034

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

Notice of Decision: Approval – Effective Immediately

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

If you wish to challenge this decision, IC 4-21.5-3-7 and IC 13-15-6-1(b) or IC 13-15-6-1(a) require that you file a petition for administrative review. This petition may include a request for stay of effectiveness and must be submitted to the Office of Environmental Adjudication, 100 North Senate Avenue, Government Center North, Suite N 501E, Indianapolis, IN 46204.

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

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

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

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

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

- (1) the name and address of the person making the request;

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

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

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

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

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



Mitchell E. Daniels, Jr.
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100 North Senate Avenue
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Indianapolis, Indiana 46204-2251
(317) 232-8603
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www.IN.gov/idem

Part 70 Operating Permit Renewal OFFICE OF AIR QUALITY

Worthington Generation 3 miles S. of Worthington, Highway 57 Worthington, Indiana 47471

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

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

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

Operation Permit No.: T055-25209-00034	
Issued by/Original Signed By:	Issuance Date: May 30, 2008
Matthew Stuckey, Branch Chief Permits Branch Office of Air Quality	Expiration Date: May 30, 2013

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SECTION A SOURCE SUMMARY

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

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

The Permittee owns and operates a stationary 180 MW merchant electric generating peaking station.

Source Address:	3 miles S. of Worthington, Highway 57, Worthington, Indiana 47471
Mailing Address:	RR1 Box 37B, Switz City, IN 47471
General Source Phone Number:	(812) 875-9707
SIC Code:	4911
County Location:	Greene
Source Location Status:	Attainment for all criteria pollutants
Source Status:	Part 70 Operating Permit Program Minor Source, under PSD and Emission Offset Rules Minor Source, Section 112 of the Clean Air Act Not 1 of 28 Source Categories

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

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

- (a) Four (4) simple cycle natural gas-fired turbines, identified as Turbines 1 through 4, constructed in 2000 and modified in 2004, with a maximum heat input capacity of 460 MMBtu/hr per turbine and a generating capacity of 45 MW per turbine, using No. 2 fuel oil as a back-up fuel, with water-injection for NO_x emissions control, and exhausting to four (4) stacks designated as S-1 through S-4, respectively.
- (b) One (1) diesel fired emergency generator, constructed in 2004, with a maximum power output rate of 3,000 horsepower.

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

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

- (a) Emergency diesel generators not exceeding 1600 horsepower: One (1) diesel-fired emergency generator, constructed in 2000, with a maximum capacity of 588 hp. [326 IAC 2-2]
- (b) Activities with emissions equal to or less than the following thresholds: 5 lb/hr or 25 lb/day PM; 5 lb/hr or 25 lb/day SO₂; 5 lb/hr or 25 lb/day NO_x; 3 lb/hr or 15 lb/day VOC; 0.6 tons per year Pb; 1.0 ton/yr of a single HAP, or 2.5 ton/yr of any combination of HAPs:
 - (1) One (1) natural gas-fired boiler, a maximum heat input capacity of 17.7 MMBtu/hr, with emissions uncontrolled, exhausting to stack S-5 [326 IAC 6-2-4].
 - (2) One (1) No. 2 fuel oil storage tank, constructed in 2004, with a maximum

capacity of 950,000 gallons. [40 CFR 60, Subpart Kb]

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, T055-25209-00034, is issued for a fixed term of five (5) years from the issuance date of this permit, as determined in accordance with IC 4-21.5-3-5(f) and IC 13-15-5-3. Subsequent revisions, modifications, or amendments of this permit do not affect the expiration date of this permit or of permits issued pursuant to Title IV of the Clean Air Act and 326 IAC 21 (Acid Deposition Control).
- (b) If IDEM, OAQ, upon receiving a timely and complete renewal permit application, fails to issue or deny the permit renewal prior to the expiration date of this permit, this existing permit shall not expire and all terms and conditions shall continue in effect, including any permit shield provided in 326 IAC 2-7-15, until the renewal permit has been issued or denied.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

and

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

- (b) The annual compliance certification report required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ on or before the date it is due.
- (c) The annual compliance certification report shall include the following:
 - (1) The appropriate identification of each term or condition of this permit that is the basis of the certification;
 - (2) The compliance status;
 - (3) Whether compliance was continuous or intermittent;
 - (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 the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

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

- (a) If required by specific condition(s) in Section D of this permit, the Permittee shall maintain and implement Preventive Maintenance Plans (PMPs) 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.
- (b) A copy of the PMPs shall be submitted to IDEM, OAQ upon request and within a reasonable time, and shall be subject to review and approval by IDEM, OAQ. IDEM, OAQ may require the Permittee to revise its PMPs whenever lack of proper maintenance causes or is the primary contributor to an exceedance of any limitation on emissions or potential to emit. The PMPs do not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).
- (c) To the extent the Permittee is required by 40 CFR Part 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 Section), or
Telephone Number: 317-233-0178 (ask for Compliance Section)
Facsimile Number: 317-233-6865

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

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

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

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

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

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

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

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

- (a) Pursuant to 326 IAC 2-7-15, the Permittee has been granted a permit shield. The permit shield provides that compliance with the conditions of this permit shall be deemed

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

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

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

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

- (a) All terms and conditions of permits established prior to T055-25209-00034 and issued pursuant to permitting programs approved into the state implementation plan have been either:

- (1) incorporated as originally stated,
 - (2) revised under 326 IAC 2-7-10.5, or
 - (3) deleted under 326 IAC 2-7-10.5.
- (b) Provided that all terms and conditions are accurately reflected in this permit, all previous registrations and permits are superseded by this Part 70 operating permit, except for permits issued pursuant to Title IV of the Clean Air Act and 326 IAC 21 (Acid Deposition Control)

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

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

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

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

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

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

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

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

B.16 Permit Modification, Reopening, Revocation and Reissuance, or Termination [326 IAC 2-7-5(6)(C)][326 IAC 2-7-8(a)][326 IAC 2-7-9]

- (a) This permit may be modified, reopened, revoked and reissued, or terminated for cause. The filing of a request by the Permittee for a Part 70 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 the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).
- (b) This permit shall be reopened and revised under any of the circumstances listed in IC 13-15-7-2 or if IDEM, OAQ determines any of the following:
- (1) That this permit contains a material mistake.
 - (2) That inaccurate statements were made in establishing the emissions standards or other terms or conditions.

- (3) That this permit must be revised or revoked to assure compliance with an applicable requirement. [326 IAC 2-7-9(a)(3)]
- (c) Proceedings by IDEM, OAQ to reopen and revise this permit shall follow the same procedures as apply to initial permit issuance and shall affect only those parts of this permit for which cause to reopen exists. Such reopening and revision shall be made as expeditiously as practicable. [326 IAC 2-7-9(b)]
- (d) The reopening and revision of this permit, under 326 IAC 2-7-9(a), shall not be initiated before notice of such intent is provided to the Permittee by IDEM, OAQ at least thirty (30) days in advance of the date this permit is to be reopened, except that IDEM, OAQ may provide a shorter time period in the case of an emergency. [326 IAC 2-7-9(c)]

B.17 Permit Renewal [326 IAC 2-7-3][326 IAC 2-7-4][326 IAC 2-7-8(e)]

- (a) The application for renewal shall be submitted using the application form or forms prescribed by IDEM, OAQ and shall include the information specified in 326 IAC 2-7-4. Such information shall be included in the application for each emission unit at this source, except those emission units included on the trivial or insignificant activities list contained in 326 IAC 2-7-1(21) and 326 IAC 2-7-1(40). The renewal application does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

Request for renewal shall be submitted to:

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

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

B.18 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
Permits Branch, Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251

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

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

B.19 Permit Revision Under Economic Incentives and Other Programs
[326 IAC 2-7-5(8)][326 IAC 2-7-12(b)(2)]

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

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

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

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

and

United States Environmental Protection Agency, Region V
Air and Radiation Division, Regulation Development Branch - Indiana (AR-18J)

77 West Jackson Boulevard
Chicago, Illinois 60604-3590

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

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

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

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

- (1) A brief description of the change within the source;
- (2) The date on which the change will occur;
- (3) Any change in emissions; and
- (4) Any permit term or condition that is no longer applicable as a result of the change.

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

- (c) Emission Trades [326 IAC 2-7-20(c)]
The Permittee may trade 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.21 Source Modification Requirement [326 IAC 2-7-10.5]

A modification, construction, or reconstruction is governed by the requirements of 326 IAC 2 and 326 IAC 2-7-10.5.

B.22 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.23 Transfer of Ownership or Operational Control [326 IAC 2-7-11]

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

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

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

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

B.24 Annual Fee Payment [326 IAC 2-7-19] [326 IAC 2-7-5(7)][326 IAC 2-1.1-7]

- (a) The Permittee shall pay annual fees to IDEM, OAQ within thirty (30) calendar days of receipt of a billing. Pursuant to 326 IAC 2-7-19(b), if the Permittee does not receive a bill from IDEM, OAQ the applicable fee is due April 1 of each year.
- (b) Except as provided in 326 IAC 2-7-19(e), failure to pay may result in administrative enforcement action or revocation of this permit.

- (c) The Permittee may call the following telephone numbers: 1-800-451-6027 or 317-233-4230 (ask for OAQ, Billing, Licensing, and Training Section), to determine the appropriate permit fee.

B.25 Advanced Source Modification Approval [326 IAC 2-7-5(16)] [326 IAC 2-7-10.5]

- (a) The requirements to obtain a source modification approval under 326 IAC 2-7-10.5 or a permit modification under 326 IAC 2-7-12 are satisfied by this permit for the proposed emission units, control equipment or insignificant activities in Sections A.2 and A.3.
- (b) Pursuant to 326 IAC 2-1.1-9 any permit authorizing construction may be revoked if construction of the emission unit has not commenced within eighteen (18) months from the date of issuance of the permit, or if during the construction, work is suspended for a continuous period of one (1) year or more.

B.26 Credible Evidence [326 IAC 2-7-5(3)][326 IAC 2-7-6][62 FR 8314] [326 IAC 1-1-6]

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

SECTION C SOURCE OPERATION CONDITIONS

Entire Source

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

C.1 Particulate Emission Limitations For Processes with Process Weight Rates Less Than One Hundred (100) Pounds per Hour [326 IAC 6-3-2]

Pursuant to 326 IAC 6-3-2(e)(2), particulate emissions from any process not exempt under 326 IAC 6-3-1(b) or (c) which has a maximum process weight rate less than 100 pounds per hour and the methods in 326 IAC 6-3-2(b) through (d) do not apply shall not exceed 0.551 pounds per hour.

C.2 Opacity [326 IAC 5-1]

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

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

C.3 Open Burning [326 IAC 4-1] [IC 13-17-9]

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

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

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

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

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

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.

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
Asbestos Section, Office of Air Quality
100 North Senate Avenue
MC 61-52 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 by the "responsible official" as defined by 326 IAC 2-7-1(34).

- (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 Accredited 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 Accredited Asbestos Inspector to thoroughly inspect the affected portion of the facility for the presence of asbestos. The requirement to use an Indiana Accredited Asbestos inspector is not federally enforceable.

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

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

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

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

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

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

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

Compliance Requirements [326 IAC 2-1.1-11]

C.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)]

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

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

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

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

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

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

If continuous emissions monitoring systems (CEMS) are used to meet the requirements of 40 CFR Part 60, Subpart GG or 40 CFR Part 75, then:

- (a) The Permittee shall install, calibrate, maintain, and operate all necessary continuous emission monitoring systems (CEMS) and related equipment.
- (b) 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.
- (c) Whenever a continuous emission monitor other than an opacity monitor is malfunctioning or will be down for calibration, maintenance, or repairs for a period of four (4) hours or more, a calibrated backup CEMS shall be brought online within four (4) hours of shutdown of the primary CEMS, and shall be operated until such time as the primary CEMS is back in operation.
- (d) Nothing in this permit shall excuse the Permittee from complying with the requirements to operate a continuous emission monitoring system pursuant to 326 IAC 3-5, 326 IAC 10-4, 40 CFR 60, and 40 CFR 75.

C.12 Monitoring Methods [326 IAC 3] [40 CFR 60] [40 CFR 63]

Any monitoring or testing required by Section D of this permit shall be performed according to the provisions of 326 IAC 3, 40 CFR 60, Appendix A, 40 CFR 60, Appendix B, 40 CFR 63, or other approved methods as specified in this permit.

C.13 Instrument Specifications [326 IAC 2-1.1-11] [326 IAC 2-7-5(3)] [326 IAC 2-7-6(1)]

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

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

C.14 Emergency Reduction Plans [326 IAC 1-5-2] [326 IAC 1-5-3]

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

- (a) The Permittee prepared and submitted written emergency reduction plans (ERPs) consistent with safe operating procedures on October 18, 2000.
- (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.15 Risk Management Plan [326 IAC 2-7-5(12)] [40 CFR 68]

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

C.16 Response to Excursions or Exceedances [326 IAC 2-7-5] [326 IAC 2-7-6]

- (a) Upon detecting an excursion or exceedance, the Permittee shall restore operation of the emissions unit (including any control device and associated capture system) to its normal or usual manner of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions.
- (b) The response shall include minimizing the period of any startup, shutdown or malfunction and taking any necessary corrective actions to restore normal operation and prevent the likely recurrence of the cause of an excursion or exceedance (other than those caused by excused startup or shutdown conditions). Corrective actions may include, but are not limited to, the following:
 - (1) initial inspection and evaluation;
 - (2) recording that operations returned to normal without operator action (such as through response by a computerized distribution control system); or
 - (3) any necessary follow-up actions to return operation to within the indicator range, designated condition, or below the applicable emission limitation or standard, as applicable.
- (c) A determination of whether the Permittee has used acceptable procedures in response to an excursion or exceedance will be based on information available, which may include, but is not limited to, the following:
 - (1) monitoring results;
 - (2) review of operation and maintenance procedures and records; and/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 maintain the following records:
 - (1) monitoring data;
 - (2) monitor performance data, if applicable; and
 - (3) corrective actions taken.

C.17 Actions Related to Noncompliance Demonstrated by a Stack Test [326 IAC 2-7-5][326 IAC 2-7-6]

- (a) When the results of a stack test performed in conformance with Section C - Performance Testing, of this permit exceed the level specified in any condition of this permit, the Permittee shall take appropriate response actions. The Permittee shall submit a description of these response actions to IDEM, OAQ, within thirty (30) days of receipt of the test results. The Permittee shall take appropriate action to minimize excess emissions from the affected facility while the response actions are being implemented.

- (b) A retest to demonstrate compliance shall be performed within one hundred twenty (120) days of receipt of the original test results. Should the Permittee demonstrate to IDEM, OAQ that retesting in one hundred twenty (120) days is not practicable, IDEM, OAQ may extend the retesting deadline.
- (c) IDEM, OAQ reserves the authority to take any actions allowed under law in response to noncompliant stack tests.

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

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

C.18 Emission Statement [326 IAC 2-7-5(3)(C)(iii)][326 IAC 2-7-5(7)][326 IAC 2-7-19(c)][326 IAC 2-6]

- (a) Pursuant to 326 IAC 2-6-3(a)(1), the Permittee shall submit by July 1 of each year an emission statement covering the previous calendar year. The emission statement shall contain, at a minimum, the information specified in 326 IAC 2-6-4(c) and shall meet the following requirements:
 - (1) Indicate estimated actual emissions of all pollutants listed in 326 IAC 2-6-4(a);
 - (2) Indicate estimated actual emissions of regulated pollutants as defined by 326 IAC 2-7-1 (32) ("Regulated pollutant, which is used only for purposes of Section 19 of this rule") from the source, for 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 the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

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

C.19 General Record Keeping Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-6]

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

C.20 General Reporting Requirements [326 IAC 2-7-5(3)(C)] [326 IAC 2-1.1-11]

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

Indiana Department of Environmental Management
Compliance Data Section, Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251
- (c) Unless otherwise specified in this permit, any notice, report, or other submission required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ on or before the date it is due.
- (d) Unless otherwise specified in this permit, all reports required in Section D of this permit shall be submitted within thirty (30) days of the end of the reporting period. All reports do require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).
- (e) 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.

Stratospheric Ozone Protection

C.21 Compliance with 40 CFR 82 and 326 IAC 22-1

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

- (a) Persons opening appliances for maintenance, service, repair, or disposal must comply with the required practices pursuant to 40 CFR 82.156.
- (b) Equipment used during the maintenance, service, repair, or disposal of appliances must comply with the standards for recycling and recovery equipment pursuant to 40 CFR 82.158.
- (c) Persons performing maintenance, service, repair, or disposal of appliances must be certified by an approved technician certification program pursuant to 40 CFR 82.161.

Ambient Monitoring Requirements [326 IAC 7-3]

C.22 Ambient Monitoring [326 IAC 7-3]

- (a) The Permittee shall operate continuous ambient sulfur dioxide air quality monitors and a meteorological data acquisition system according to a monitoring plan submitted to the commissioner for approval. The monitoring plan shall include requirements listed in 326 IAC 7-3-2(a)(1), 326 IAC 7-3-2(a)(2) and 326 IAC 7-3-2(a)(3).

- (b) The Permittee and other operators subject to the requirements of this rule, located in the same county, may submit a joint monitoring plan to satisfy the requirements of this rule. [326 IAC 7-3-2(c)]

- (c) The Permittee may petition the commissioner for an administrative waiver of all or some of the requirements of 326 IAC 7-3 if such owner or operator can demonstrate that ambient monitoring is unnecessary to determine continued maintenance of the sulfur dioxide ambient air quality standards in the vicinity of the source. [326 IAC 7-3-2(d)]

SECTION D.1 EMISSIONS UNIT OPERATION CONDITIONS - Turbines

Emissions Unit Description:

- (a) Four (4) simple cycle natural gas-fired turbines, identified as Turbines 1 through 4, constructed in 2000 and modified in 2004, with a maximum heat input capacity of 460 MMBtu/hr per turbine and a generating capacity of 45 MW per turbine, using No. 2 fuel oil as a back-up fuel, with water-injection for NO_x emissions control, and exhausting to four (4) stacks designated as S-1 through S-4, respectively.

(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.1.1 Fuel Usage Limitations [326 IAC 2-2]

- (a) Pursuant to CP 055-10724-00034, issued July 15, 1999, the total "weighted" natural gas usage for the turbines shall not exceed 4,930 million standard cubic feet (MMSCF) during any twelve (12) consecutive month period with compliance determined at the end of each month.
- (b) Pursuant to CP 055-10724-00034, issued July 15, 1999, for every 1.0 million standard cubic feet (MMSCF) consumed by the boiler (Section D.2), the "weighted" natural gas limit shall be reduced by 1.08 million standard cubic feet (MMSCF).
- (c) Pursuant to CP 055-10724-00034, issued July 15, 1999, the "weighted" natural gas usage is determined in the winter months (October through April) by multiplying the actual natural gas usage by 2.35. During the summer months (May through September) the actual natural gas usage is equivalent to the "weighted" natural gas usage.
- (d) For every kilogallon (1,000 gallons) of No. 2 fuel oil consumed by the turbines, the "weighted" natural gas usage limit shall be reduced by 0.255 MMSCF.

Compliance with these CO and NO_x emission limits in conjunction with the limits in Condition D.1.4 and the potential to emit CO and NO_x emissions from the boiler, the emergency generators, and the insignificant activities, shall result in CO and NO_x emissions from the entire source of less than 250 tons/yr. Therefore, the requirements of 326 IAC 2-2 (PSD) are not applicable.

D.1.2 General Provisions Relating to NSPS [326 IAC 12-1][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 the facility described in this section except when otherwise specified in 40 CFR Part 60, Subpart GG.

D.1.3 40 CFR Part 60, Subpart GG Applicability (Stationary Gas Turbines)

The four (4) simple cycle natural gas-fired turbines, identified as Turbines 1 through 4, using No. 2 fuel oil as a back-up fuel, are subject to the New Source Performance Standard for Stationary Gas Turbines (40 CFR 60, Subpart GG), which is incorporated by reference as 326 IAC 12-1, because the heat input at peak load is equal to or greater than 10.7 gigajoules per hour, based on the lower heating value of the fuel fired.

Pursuant to 326 IAC 12-1 and 40 CFR 60, Subpart GG (Stationary Gas Turbines), the Permittee shall:

- (1) limit nitrogen oxides emissions, as required by 40 CFR 60.332, to:

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

where STD = allowable NO_x emissions (percent by volume at 15 percent oxygen on a dry basis).

Y = manufacturer's rated heat rate at manufacturer's rated load (kilojoules per watt hour) or, actual measured heat rate based on lower heating value of fuel as measured at actual peck load for the facility. The value of Y shall not exceed 14.4 kilojoules per watt hour.

F = NO_x emission allowance for fuel-bound nitrogen as defined in paragraph (a)(3) of 40 CFR 60.332.

- (2) Limit sulfur dioxide emissions, as required by 40 CFR 60.333, to 0.015 percent by volume at 15 percent oxygen on a dry basis, or use natural gas fuel with a sulfur content less than or equal to 0.8 percent by weight.
- (3) Combust only pipeline natural gas, as defined by 40 CFR 72.2, in the turbines.

D.1.4 Emission Rate Limitations [326 IAC 2-2][326 IAC 8-1-6]

- (a) Pursuant to CP 055-10724-00034, issued July 15, 1999, the CO emission rate from the turbines during the summer months (May through September) shall not exceed 99.5 pounds per million cubic feet of natural gas combusted. The CO emission rate from the turbines during the winter months (October through April) shall not exceed 233.8 pounds per million cubic feet of "weighted" natural gas combusted. Compliance with these limits and the limitations in Condition D.1.1(a) will ensure that the Prevention of Significant Deterioration (PSD) rule, 326 IAC 2-2, does not apply.
- (b) The NO_x emissions from the turbines shall be limited to the following:
 - (1) The NO_x emissions from the turbines shall be not exceed 92.4 lbs/MMCF during the summer months (May through September) and shall not exceed 217 lbs/MMCF during the winter months (October through April) while combusting natural gas.
 - (2) The NO_x emissions shall not exceed 0.17 lbs/MMBtu while combusting No. 2 fuel oil with a maximum heating value of 139,000 Btu/gal.

Compliance with these NO_x emission limits, combined with the NO_x emission limits in Condition D.1.1, as well as the NO_x emissions from the boiler, the emergency generators, and the insignificant activities, shall result in NO_x emissions from the entire source of less than 250 tons/yr. Therefore, the requirements of 326 IAC 2-2 (PSD) are not applicable.

- (c) The SO₂ emissions shall not exceed 0.152 lbs/MMBtu while combusting No. 2 fuel oil with a maximum heat heating value of 139,000 Btu/gal.

Compliance with this SO₂ emission limit, in conjunction with the emissions limits in Condition D.1.1, shall result in SO₂ emissions of no greater than 204 tons/yr of SO₂ emissions. Combined with the SO₂ emissions from the boiler, the emergency generators, and the insignificant activities, the SO₂ emissions from the entire source are limited to less than 250 tons/yr. Therefore, the requirements of 326 IAC 2-2 (PSD) are not applicable.

- (d) Pursuant to CP 055-10724-00034, issued July 15, 1999, the VOC emission rate from the turbines during the summer months (May through September) shall not exceed 9.5 pounds per million cubic feet of natural gas combusted. The VOC emission rate from the

turbines during the winter months (October through April) shall not exceed 22.3 pounds per million cubic feet of natural gas combusted. Compliance with these limitations along with Condition D.1.1 will ensure that 326 IAC 8-1-6 (BACT) does not apply to the turbines.

D.1.5 Water-to-Fuel Ratio Monitoring [40 CFR Part 60, Subpart GG]

The Permittee shall install and operate a continuous monitoring system to monitor and record the fuel consumption and the ratio of water to fuel being fired in the turbine. This system shall be accurate to within 5 percent and shall be approved by IDEM, OAQ. [40 CFR 60.334(b)]

D.1.6 Sulfur Dioxide (SO₂)[326 IAC 7-1.1-1]

Pursuant to 326 IAC 7-1.1 (Sulfur Dioxide Emissions Limitations), sulfur dioxide (SO₂) emissions from each of the turbines shall be limited to 0.5 pounds per million Btu heat input, when burning No. 2 fuel oil.

D.1.7 Preventative Maintenance Plan [326 IAC 1-6-3]

A Preventative Maintenance Plan, in accordance with Section B - Preventative Maintenance Plan, of this permit, is required for this facility and its control device.

Compliance Determination Requirements

D.1.8 Testing Requirements [326 IAC 2-1.1-11]

- (a) The Permittee shall perform NO_x stack tests utilizing methods as approved by the Commissioner. These tests shall be performed in accordance with Section C - Performance Testing, and repeated the earlier of 3,000 unit operating hours or once every five (5) years from the date of this valid compliance demonstration. NO_x stack testing was last conducted on September 16, 2005.
- (b) The Permittee shall perform NO_x stack tests utilizing methods as approved by the Commissioner. These tests shall be performed during the summer months (May through September), in accordance with Section C - Performance Testing, and repeated the earlier of 3,000 unit operating hours or once every five (5) years from valid compliance demonstration. If the NO_x stack tests required in (a) of this condition are performed during the summer months (May through September), the separate NO_x tests described here are not required. NO_x stack testing was last conducted on September 16, 2005.
- (c) The Permittee shall perform CO stack tests utilizing methods as approved by the Commissioner. These tests shall be performed in accordance with Section C - Performance Testing, and repeated once every five (5) years from the date of this valid compliance demonstration. CO stack testing was last conducted on September 16, 2005.
- (d) The Permittee shall perform VOC stack tests utilizing methods as approved by the Commissioner. Separate testing shall be performed during the summer months (May through September) and winter months (October through April). These tests shall be performed in accordance with Section C - Performance Testing, and repeated once every five (5) years from valid compliance demonstration. VOC stack testing was last conducted on September 16, 2005.

D.1.9 Sulfur Dioxide Emissions and Sulfur Content

- (a) In order to demonstrate compliance with Conditions D.1.4(c) and D.1.6, and pursuant to 326 IAC 3-7-4, the Permittee shall demonstrate the sulfur dioxide emission limits by:
 - (1) Providing vendor analysis of fuel delivered, if accompanied by a vendor certification, or;

- (2) Analyzing the oil sample to determine the sulfur content of the oil via the procedures in 40 CFR 60, Appendix A, Method 19.
 - (A) Oil samples may be collected from the fuel tank immediately after the fuel tank is filled and before any oil is combusted; and
 - (B) If a partially empty fuel tank is refilled, a new sample and analysis would be required upon filling.
- (b) Compliance may also be determined by conducting a stack test for sulfur dioxide emissions from one of the turbines, using 40 CFR 60, Appendix A, Method 6 in accordance with the procedures in 326 IAC 3-6.

A determination of noncompliance pursuant to any of the methods specified in (a) or (b) above shall not be refuted by evidence of compliance pursuant to the other method.

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

D.1.10 Visible Emissions Notations

- (a) Visible emission notations of the turbine stack exhausts shall be performed once per day during normal daylight operations when 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 shut down time.
- (c) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.
- (d) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.
- (e) If abnormal emissions are observed, the Permittee shall take reasonable response steps in accordance with Section C - Response to Excursions or Exceedances. Failure to take response steps in accordance with Section C - Response to Excursions or Exceedances shall be considered a deviation from this permit.

D.1.11 Sulfur Content and Nitrogen Content Monitoring [40 CFR Part 60, Subpart GG]

- (a) Pursuant to 40 CFR Part 60, Subpart GG (Stationary Gas Turbines), and EPA approval issued December 7, 2000, the Permittee shall comply with the following custom monitoring schedule:

Determine the sulfur content of the fuel being fired in the turbines semiannually. This determination shall be conducted during the first and third quarters of each calendar year and will be made using methods approved by the Commissioner. If any sulfur analysis indicates noncompliance with Condition D.1.3, the Permittee shall notify IDEM of such excess emissions and this custom schedule shall be re-examined. Sulfur monitoring shall be conducted weekly while the custom schedule is re-examined. If there is a change in fuel supply (supplier), IDEM, OAQ shall be notified of the change and the fuel shall be sampled daily for a period of two weeks to re-establish that the fuel supply is low in sulfur content. If the fuel supply's low sulfur content is re-established, then the custom monitoring schedule can resume.

- (b) The analyses required above may be performed by the owner or operator, a service contractor retained by the owner or operator, the fuel vendor or any other qualified agency.

The NO_x and SO₂ monitoring required by 40 CFR Part 75 and specified in Condition D.1.12 shall satisfy the monitoring requirements for the purposes of 40 CFR Part 60, Subpart GG.

D.1.12 SO₂ and NO_x Monitoring Requirements [40 CFR Part 72.9][40 CFR Part 75]

- (a) Pursuant to 40 CFR 72.9 and 40 CFR 75.11, the Permittee has elected to monitor SO₂ emissions from the turbines pursuant to 40 CFR 75, Appendix D. Appendix D includes, but is not limited to, the following requirements:
- (1) For each hour when the unit is combusting fuel, the Permittee shall measure and record the flow of fuel combusted by the unit with an in-line flowmeter and automatically record the data with a data acquisition and handling system. This shall be performed in accordance with the procedures specified in Section 2.1 of Appendix D.
 - (2) Pursuant to 40 CFR 75.11(d)(2), the Permittee shall measure and record SO₂ emissions using the applicable procedures specified in Appendix D to 40 CFR 75 for estimating hourly SO₂ mass emissions.
 - (3) The Permittee shall provide information on the contractual sulfur content from the pipeline gas supplier in the monitoring plan for the unit, demonstrating that the gas has a hydrogen sulfide content of 1 grain/100 scf or less, and a total sulfur content of 20 grain/100 scf or less.
- (b) Pursuant to 40 CFR 72.9 and 40 CFR 75.12, the Permittee has elected to monitor NO_x emissions from the turbines pursuant to 40 CFR 75, Appendix E, which is used for peaking units. Appendix E includes, but is not limited to, the following requirements:
- (1) The Permittee shall perform initial performance tests for each turbine to measure NO_x emission rates at heat input rate levels corresponding to different load levels, measure the heat input rate, and plot the correlation between heat input rate and NO_x emission rate, in order to determine the emission rate of the units. This testing shall be performed in accordance with section 2.1 of Appendix E.
 - (2) The Permittee shall retest the NO_x emission rate of the turbines prior to the earlier of 3,000 unit operating hours or the 5 year anniversary and renewal of its operating permit under 40 CFR 72.
 - (3) The Permittee shall record the time (hour and minute), load (MWge or steam load in 1000 lb/hr), fuel flow rate and heat input rate (using the procedures in section 2.1.3 of Appendix E) for each hour during which the unit combusts fuel. The Permittee shall calculate the total hourly heat input using equation E-1 of Appendix E and record the heat input rate for each fuel to the nearest 0.1 MMBtu/hr. During partial unit operating hours, heat input must be represented as an hourly rate in MMBtu/hr, as if the fuel were combusted for the entire hour at that rate in order to ensure proper correlation with the NO_x emission rate graph.
 - (4) The Permittee shall use the graph of the baseline correlation results to determine the NO_x emissions rate (lb/MMBtu) corresponding to the heat input rate (MMBtu/hr) and input this correlation into the data acquisition and handling system for the turbines. The data shall be linearly interpolated to 0.1 MMBtu/hr

heat input rate and 0.01 lb/MMBtu.

If a combustion turbine exceeds a capacity factor of 20 percent in any given year, or an average capacity factor of 10 percent for the previous 3 years, then the Permittee shall install, certify, and operate a NO_x continuous emission monitoring (CEM) system by December 31 of the following calendar year. The NO_x CEM system shall meet the minimum requirements of 40 CFR Part 75 and 326 IAC 3-5.

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

D.1.13 Record Keeping Requirements

- (a) To document compliance with Condition D.1.1, the Permittee shall maintain records of the monthly fuel usage.
- (b) To document compliance with Conditions D.1.3, D.1.4(c), D.1.6, D.1.11 and D.1.12, the Permittee shall maintain records of the SO₂ and NO_x emissions in accordance with 40 CFR Part 75, Appendices D and E. In addition, the hours of operation of each turbine shall be recorded and maintained to ensure that the turbines are defined as peaking units.
- (c) To document compliance with Conditions D.1.4(c) and D.1.6, the Permittee shall maintain records in accordance with (1) through (6) below.
 - (1) Calendar dates covered in the compliance determination period.
 - (2) Actual fuel oil usage since last compliance determination period and equivalent sulfur dioxide emissions.
 - (3) To certify compliance when burning natural gas only, the Permittee shall maintain records of fuel used.

If the fuel supplier certification is used to demonstrate compliance, when burning alternate fuels and not determining compliance pursuant to 326 IAC 3-7-4, the following, as a minimum, shall be maintained:

- (4) Fuel supplier certifications.
- (5) The name of the fuel supplier.
- (6) A statement from the fuel supplier that certifies the sulfur content of the fuel oil.

The Permittee shall retain records of all recording/monitoring data and support information for a period of five (5) years, or longer if specified elsewhere in this permit, from the date of the monitoring sample, measurement, or report. Support information includes all calibration and maintenance records and all original strip-chart recording for continuous monitoring instrumentation, and copies of all reports required by this permit.

- (d) To document compliance with Condition D.1.5, the Permittee shall maintain records of fuel consumption and the ratio of water to fuel being fired in the turbines.
- (e) To document compliance with Condition D.1.10, the Permittee shall maintain records of visible emission notations of the turbine stack exhausts when firing No. 2 fuel oil. If visible emissions notations are not taken on a specific date, the reason that they were not taken must be noted (i.e. the emissions unit was not in operation that day).

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

D.1.14 Reporting Requirements

- (a) A quarterly summary of the information used to document compliance with Condition D.1.1 shall be submitted to the address listed to Section C - General Reporting Requirements, of this permit, using the reporting forms located at the end of this permit, or their equivalent, within thirty (30) days after the end of the quarter being reported.
- (b) The Permittee shall submit a quarterly excess emissions report indicating any period during which the NO_x emissions from the turbines were greater than the amount allowed by the equation in Condition D.1.3, or any period during which the fuel bound nitrogen of the fuel is greater than the maximum nitrogen content allowed by the fuel-bound nitrogen allowance determined from performance testing.
- (c) The Permittee shall submit a quarterly excess emissions report indicating any daily period during which the SO₂ emissions from the turbines were greater than the amount allowed in Condition D.1.3.
- (d) The Permittee shall submit reports of any one-hour period during which the average water-to-fuel ratio, as measured by the continuous monitoring system, falls below the water-to-fuel ratio determined to demonstrate compliance with Condition D.1.3 from performance testing.
- (e) These reports shall be submitted within thirty (30) calendar days following the end of each calendar quarter and shall be in accordance with Section C - General Reporting Requirements of this permit. The report submitted by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

SECTION D.2 EMISSIONS UNIT OPERATION CONDITIONS - Generators and Insignificant Activities

Emissions Unit Description:

- (a) One (1) diesel fired emergency generator, constructed in 2004, with a maximum power output rate of 3,000 horsepower.

Insignificant Activities:

- (a) Emergency diesel generators not exceeding 1600 horsepower: One (1) diesel-fired emergency generator, constructed in 2000, with a maximum capacity of 588 hp. [326 IAC 2-2]
- (b) Activities with emissions equal to or less than the following thresholds: 5 lb/hr or 25 lb/day PM; 5 lb/hr or 25 lb/day SO₂; 5 lb/hr or 25 lb/day NO_x; 3 lb/hr or 15 lb/day VOC; 0.6 tons per year Pb; 1.0 ton/yr of a single HAP, or 2.4 ton/yr of any combination of HAPs:
- (1) One (1) natural gas-fired boiler, a maximum heat input capacity of 17.7 MMBtu/hr, with emissions uncontrolled, exhausting to stack S-5.
- (2) One (1) No. 2 fuel oil storage tank, constructed in 2004, with a maximum capacity of 950,000 gallons. [40 CFR 60, Subpart Kb]

(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 12-1][40 CFR 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 the boiler except when otherwise specified in 40 CFR Part 60, Subpart Dc.

D.2.2 NO_x and CO Limitations [326 IAC 2-2]

The operating hours for the 3,000 hp emergency generator shall be limited to less than 300 hours per twelve (12) consecutive month period with compliance determined at the end of each month.

Compliance with this limit, along with the fuel usage limitation for the turbines and boiler (Condition D.1.1) and the potential emissions for other permitted emissions units, is equivalent to NO_x and CO emissions of less than 250 tons per year and will render the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration) not applicable.

D.2.3 Particulate Matter [326 IAC 6-2-4]

Pursuant to 326 IAC 6-2-4, the particulate matter emissions from the boiler shall not exceed 0.516 pounds per MMBtu energy input.

This limitation is based on the following equation:

$$Pt = \frac{1.09}{Q^{0.26}}$$

Pt = Pounds of particulate matter emitted per million Btu (lb/MMBtu) heat input.

Q = Total source maximum operating capacity rating in million Btu per hour (MMBtu/hr) heat input. (Q = 17.7 MMBtu/hr)

D.2.4 Volatile Organic Compounds (VOCs) [326 IAC 12-1][40 CFR 60.116b, Subpart Kb]

Pursuant to 40 CFR 60.116b, Subpart Kb (New Source Performance Standards for Volatile Organic Liquid Storage Vessels), the No. 2 fuel oil storage tank is subject to 40 CFR 60.116b, paragraphs (a) and (b), which requires record keeping.

D.2.5 Preventative Maintenance Plan [326 IAC 2-7-5(13)]

A Preventative Maintenance Plan, in accordance with Section B - Preventative Maintenance Plan, of this permit, is required for the boiler

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

D.2.6 Record Keeping Requirements

- (a) To document compliance with Condition D.2.2 and 40 CFR Part 60, Subpart Dc, the Permittee shall maintain records of the:
 - (1) Number of the operating hours for each emergency generator each month; and
 - (2) Amount of natural gas (MMSCF) consumed by the boiler each day.
- (b) To document compliance with Condition D.2.4, the Permittee shall maintain records for the life of the source in accordance with (1) and (2) below:
 - (1) The dimension of the storage vessel; and
 - (2) An analysis showing the capacity of the storage vessel.
- (c) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

D.2.7 Reporting Requirements

A quarterly summary of the information to document compliance with Condition D.2.2 shall be submitted to the address listed in Section C - General Reporting Requirements, of this permit, using the reporting forms located at the end of this permit, or their equivalent, within thirty (30) days after the end of the quarter being reported. The report submitted by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

SECTION E ACID RAIN PROGRAM CONDITIONS

Emissions Unit Description:

- (a) Four (4) simple cycle natural gas-fired turbines, identified as Turbines 1 through 4, constructed in 2000 and modified in 2004, with a maximum heat input capacity of 460 MMBtu/hr per turbine and a generating capacity of 45 MW per turbine, using No. 2 fuel oil as a back-up fuel, with water-injection for NO_x emissions control, and exhausting to four (4) stacks designated as S-1 through S-4, respectively.

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

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

- (a) The Acid Rain permit for this source, AR 055-19648-00034, issued October 14, 2000, is incorporated by reference into this Part 70 permit and is attached as Attachment A. Pursuant to 326 IAC 21 (Acid Deposition Control), the Permittee shall comply with all provisions of the Acid Rain permit and any other applicable requirements contained in 40 CFR 72 through 40 CFR 78.
- (b) Where an applicable requirement of the Clean Air Act is more stringent than an applicable requirement of regulations promulgated under Title IV of the Act, both provisions shall apply.

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

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

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

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

Emissions Unit Description:

- (a) Four (4) simple cycle natural gas-fired turbines, identified as Turbines 1 through 4, constructed in 2000 and modified in 2004, with a maximum heat input capacity of 460 MMBtu/hr per turbine and a generating capacity of 45 MW per turbine, using No. 2 fuel oil as a back-up fuel, with water-injection for NO_x emissions control, and exhausting to four (4) stacks designated as S-1 through S-4, respectively.

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

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

Pursuant to 326 IAC 10-4-7(e), this NO_x budget permit is deemed to incorporate automatically the definitions of terms under 326 IAC 10-4-2.

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

- (a) Pursuant to 326 IAC 10-4-4(a)(2), the Permittee shall operate each unit in compliance with this NO_x budget permit.
- (b) The NO_x budget units subject to this NO_x budget permit are: Turbine 1, Turbine 2, Turbine 3, and Turbine 4.

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

Pursuant to 326 IAC 10-4-4(b):

- (a) The Permittee and, to the extent applicable, the NO_x authorized account representative for Turbines 1 through 4, shall comply with the monitoring requirements of 40 CFR 75 and 326 IAC 10-4-12.
- (b) The emissions measurements recorded and reported in accordance with 40 CFR 75 and 326 IAC 10-4-12 shall be used to determine compliance by each unit with the NO_x budget emissions limitation under 326 IAC 10-4-4(c) and Condition F.4, Nitrogen Oxides Requirements.

F.4 Nitrogen Oxides Requirements [326 IAC 10-4-4(c)]

Pursuant to 326 IAC 10-4-4(c):

- (a) The Permittee shall hold NO_x allowances available for compliance deductions under 326 IAC 10-4-10(j), as of the NO_x allowance transfer deadline, in each turbine's compliance account and the source's overdraft account in an amount:
- (1) Not less than the total NO_x emissions for the ozone control period from the turbine, as determined in accordance with 40 CFR 75 and 326 IAC 10-4-12;
 - (2) To account for excess emissions for a prior ozone control period under 326 IAC 10-4-10(k)(5); or
 - (3) To account for withdrawal from the NO_x budget trading program, or a change in regulatory status of a NO_x budget opt-in unit.

- (b) Each ton of NO_x emitted in excess of the NO_x budget emissions limitation shall constitute a separate violation of the Clean Air Act (CAA) and 326 IAC 10-4.
- (c) NO_x allowances shall be held in, deducted from, or transferred among NO_x allowance tracking system accounts in accordance with 326 IAC 10-4-9 through 11, 326 IAC 10-4-13, and 326 IAC 10-4-14.
- (d) A NO_x allowance shall not be deducted, in order to comply with the requirements under (a) above and 326 IAC 10-4-4(c)(1), for an ozone control period in a year prior to the year for which the NO_x allowance was allocated.
- (e) A NO_x allowance allocated under the NO_x budget trading program is a limited authorization to emit one (1) ton of NO_x in accordance with the NO_x budget trading program. No provision of the NO_x budget trading program, the NO_x budget permit application, this permit, or an exemption under 326 IAC 10-4-3 and no provision of law shall be construed to limit the authority of the U.S. EPA or IDEM, OAQ to terminate or limit the authorization.
- (f) A NO_x allowance allocated under the NO_x budget trading program does not constitute a property right.
- (g) Upon recordation by the U.S. EPA under 326 IAC 10-4-10, 326 IAC 10-4-11, or 326 IAC 10-4-13, every allocation, transfer, or deduction of a NO_x allowance to or from each turbine's compliance account or the overdraft account is deemed to amend automatically, and become a part of this permit by operation of law without any further review.

F.5 Excess Emissions Requirements [326 IAC 10-4-4(d)]

Pursuant to 326 IAC 10-4-4(d), the Permittee, for each turbine that has excess emissions in any ozone control period shall do the following:

- (a) Surrender the NO_x allowances required for deduction under 326 IAC 10-4-10(k)(5).
- (b) Pay any fine, penalty, or assessment or comply with any other remedy imposed under 326 IAC 10-4-10(k)(7).

F.6 Record Keeping Requirements [326 IAC 10-4-4(e)] [326 IAC 2-7-5(3)]

Pursuant to 326 IAC 10-4-4(e)(1) and 326 IAC 2-7-5(3), unless otherwise provided, the Permittee shall keep, either on site at the source or at a central location within Indiana for unattended sources, each of the following documents for a period of five (5) years:

- (a) The account certificate of representation for the NO_x authorized account representative for the source and turbines 1 through 4 and all documents that demonstrate the truth of the statements in the account certificate of representation, in accordance with 326 IAC 10-4-6(h). The certificate and documents shall be retained either on site at the source or at a central location within Indiana for those owners or operators with unattended sources beyond the five (5) year period until the documents are superseded because of the submission of a new account certificate of representation changing the NO_x authorized account representative.
- (b) All emissions monitoring information, in accordance with 40 CFR 75 and 326 IAC 10-4-12, provided that to the extent that 40 CFR 75 and 326 IAC 10-4-12 provide for a three (3) year period for record keeping, the three (3) year period shall apply.
- (c) Copies of all reports, compliance certifications, and other submissions and all records made or required under the NO_x budget trading program.

- (d) Copies of all documents used to complete a NO_x budget permit application and any other submission under the NO_x budget trading program or to demonstrate compliance with the requirements of the NO_x budget trading program.

This period may be extended for cause, at any time prior to the end of five (5) years, in writing by IDEM, OAQ or the U.S. EPA. Records retained at a central location within Indiana shall be available immediately at the location and submitted to IDEM, OAQ or U.S. EPA within three (3) business days following receipt of a written request. Nothing in 326 IAC 10-4-4(e) shall alter the record retention requirements for a source under 40 CFR 75. Unless otherwise provided, all records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

F.7 Reporting Requirements [326 IAC 10-4-4(e)] [326 IAC 10-4-6(e)]

- (a) Pursuant to 326 IAC 10-4-4(e), the NO_x authorized account representative of Turbines 1 through 4 shall submit the reports and compliance certifications required under the NO_x budget trading program, including those under 326 IAC 10-4-8, 326 IAC 10-4-12, or 326 IAC 10-4-13.
- (b) Pursuant to 326 IAC 10-4-4(e) and 326 IAC 10-4-6(e)(1), each submission shall include the following certification statement by the NO_x authorized account representative: "I am authorized to make this submission on behalf of the owners and operators of the NO_x budget sources or NO_x budget units for which the submission is made. I certify under penalty of law that I have personally examined, and am familiar with, the statements and information submitted in this document and all its attachments. Based on my inquiry of those individuals with primary responsibility for obtaining the information, I certify that the statements and information are to the best of my knowledge and belief true, accurate, and complete. I am aware that there are significant penalties for submitting false statements and information or omitting required statements and information, including the possibility of fine or imprisonment."
- (c) Where 326 IAC 10-4 requires a submission to IDEM, OAQ, the NO_x authorized account representative shall submit required information to:

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

- (d) Where 326 IAC 10-4 requires a submission to U.S. EPA, the NO_x authorized account representative shall submit required information to:

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

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

Pursuant to 326 IAC 10-4-4(f), the Permittee shall be liable as follows:

- (a) Any person who knowingly violates any requirement or prohibition of the NO_x budget trading program, a NO_x budget permit, or an exemption under 326 IAC 10-4-3 shall be subject to enforcement pursuant to applicable state or federal law.

- (b) Any person who knowingly makes a false material statement in any record, submission, or report under the NO_x budget trading program shall be subject to criminal enforcement pursuant to the applicable state or federal law.
- (c) No permit revision shall excuse any violation of the requirements of the NO_x budget trading program that occurs prior to the date that the revision takes effect.
- (d) Turbines 1 through 4 shall meet the requirements of the NO_x budget trading program.
- (e) Any provision of the NO_x budget trading program that applies to Turbines 1 through 4, including a provision applicable to the NO_x authorized account representative, shall also apply to the Permittee.
- (f) Any provision of the NO_x budget trading program that applies to Turbines 1 through 4, including a provision applicable to the NO_x authorized account representative, shall also apply to the Permittee. Except with regard to the requirements applicable to units with a common stack under 40 CFR 75 and 326 IAC 10-4-12, the owners and operators and the NO_x authorized account representative of one (1) NO_x budget unit shall not be liable for any violation by any other NO_x budget unit of which they are not owners or operators or the NO_x authorized account representative and that is located at a source of which they are not owners or operators or the NO_x authorized account representative.

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

Pursuant to 326 IAC 10-4-4(g), no provision of the NO_x budget trading program, a NO_x budget permit application, this permit, or an exemption under 326 IAC 10-4-3 shall be construed as exempting or excluding the Permittee and, to the extent applicable, the NO_x authorized account representative from compliance with any other provision of the applicable, approved state implementation plan, a federally enforceable permit, or the CAA.

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
PART 70 OPERATING PERMIT
CERTIFICATION**

Source Name: Worthington Generation
Source Address: 3 miles S. of Worthington, Highway 57, Worthington, Indiana 47471
Mailing Address: RR1 Box 37B, Switz City, IN 47471
Part 70 Permit No.: T055-25209-00034

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

Please check what document is being certified:

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

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

Signature:

Printed Name:

Title/Position:

Phone:

Date:

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

**PART 70 OPERATING PERMIT
EMERGENCY OCCURRENCE REPORT**

Source Name: Worthington Generation
Source Address: 3 miles S. of Worthington, Highway 57, Worthington, Indiana 47471
Mailing Address: RR1 Box 37B, Switz City, IN 47471
Part 70 Permit No.: T055-25209-00034

This form consists of 2 pages

Page 1 of 2

- This is an emergency as defined in 326 IAC 2-7-1(12)
- The Permittee must notify the Office of Air Quality (OAQ), within four (4) business hours (1-800-451-6027 or 317-233-0178, ask for Compliance Section); and
 - The Permittee must submit notice in writing or by facsimile within two (2) working days (Facsimile Number: 317-233-6865), and follow the other requirements of 326 IAC 2-7-16.

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

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

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

Page 2 of 2

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

Form Completed by: _____

Title / Position: _____

Date: _____

Phone: _____

A certification is not required for this report.

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

Quarterly Report

Source Name: Worthington Generation
 Source Address: 3 miles S. of Worthington, Highway 57, Worthington, Indiana 47471
 Mailing Address: RR1 Box 37B, Switz City, IN 47471
 Part 70 Permit No.: T055-25209-00034
 Facility: Turbines and boiler
 Parameter: Weighted natural gas usage
 Limit: Less than 4,930 MMSCF per twelve (12) consecutive month period with compliance determined at the end of each month. For every 1.0 MMSCF consumed by the boiler, the "weighted" natural gas usage limit shall be reduced by 1.08 MMSCF. For every kilogallon of No. 2 fuel oil consumed, the "weighted" natural gas usage limit shall be reduced by 0.255 MMSCF.

Year: _____

Month	Natural Gas Used by Turbines This Month (MMSCF)	Weighting Factor	Natural Gas Used by Boiler This Month (MMSCF)	Total "Weighted" Natural Gas Usage This Month (MMSCF)*	Total "Weighted" Natural Gas Usage for Past 11 Months (MMSCF)	Total "Weighted" Natural Gas Usage for 12 Month Period (MMSCF)

* Weighted natural gas usage (October through April) = [Actual gas usage (turbines) x 2.35] + [Actual gas usage (boiler) x 1.08] [Actual No. 2 fuel oil usage (kgal) x 0.255]
 * Weighted natural gas usage (May through September) = [Actual gas usage (turbines)] + [Actual gas usage (boiler) x 1.08] [Actual No. 2 fuel oil usage (kgal) x 0.255]

Submitted by: _____
 Title / Position: _____
 Signature: _____
 Date: _____
 Phone: _____

Attach a signed certification to complete this report.

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

Part 70 Quarterly Report

Source Name: Worthington Generation
Source Address: 3 miles S. of Worthington, Highway 57, Worthington, Indiana 47471
Mailing Address: RR1 Box 37B, Switz City, IN 47471
Part 70 Permit No.: T055-25209-00034
Facility: 588 hp Emergency Generator
Parameter: Operating hours
Limit: Less than 500 operating hours per twelve (12) consecutive month period with compliance determined at the end of each month.

YEAR: _____

Month	Operating Hours this Month (hrs)	Total Operating Hours for Past 11 Months (hrs)	Total Operating Hours for Past 12 Month Period (hrs)

Submitted by: _____
Title / Position: _____
Signature: _____
Date: _____
Phone: _____

Attach a signed certification to complete this report.

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

Part 70 Quarterly Report

Source Name: Worthington Generation
Source Address: 3 miles S. of Worthington, Highway 57, Worthington, Indiana 47471
Mailing Address: RR1 Box 37B, Switz City, IN 47471
Part 70 Permit No.: T055-25209-00034
Facility: 3,000 hp Emergency Generator
Parameter: Operating hours
Limit: Less than 300 operating hours per twelve (12) consecutive month period with compliance determined at the end of each month.

YEAR: _____

Month	Operating Hours this Month (hrs)	Total Operating Hours for Past 11 Months (hrs)	Total Operating Hours for Past 12 Month Period (hrs)

Submitted by: _____
Title / Position: _____
Signature: _____
Date: _____
Phone: _____

Attach a signed certification to complete this report.

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

Source Name: Worthington Generation
 Source Address: 3 miles S. of Worthington, Highway 57, Worthington, Indiana 47471
 Mailing Address: RR1 Box 37B, Switz City, IN 47471
 Part 70 Permit No.: T055-25209-00034

Months: _____ to _____ Year: _____

<p>This report shall be submitted quarterly based on a calendar year. Any deviation from the requirements, the date(s) of each deviation, the probable cause of the deviation, and the response steps taken must be reported. A deviation required to be reported pursuant to an applicable requirement that exists independent of the permit, shall be reported according to the schedule stated in the applicable requirement and does not need to be included in this report. Additional pages may be attached if necessary. If no deviations occurred, please specify in the box marked "No deviations occurred this reporting period".</p>	
<input type="checkbox"/> NO DEVIATIONS OCCURRED THIS REPORTING PERIOD.	
<input type="checkbox"/> THE FOLLOWING DEVIATIONS OCCURRED THIS REPORTING PERIOD	
Permit Requirement (specify permit condition #)	
Date of Deviation:	Duration of Deviation:
Number of Deviations:	
Probable Cause of Deviation:	
Response Steps Taken:	
Permit Requirement (specify permit condition #)	
Date of Deviation:	Duration of Deviation:
Number of Deviations:	
Probable Cause of Deviation:	
Response Steps Taken:	

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

Form Completed by: _____

Title / Position: _____

Date: _____

Phone: _____

Attach a signed certification to complete this report.



Mitchell E. Daniels, Jr.
Governor

Thomas W. Easterly
Commissioner

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

Attachment A: Acid Rain Permit

Phase II ACID RAIN PERMIT RENEWAL OFFICE OF AIR QUALITY

Worthington Generation, LLC
South of Intersection of Routes 67/231 and Route 57
Worthington, Indiana, 47465
ORIS: 55148

The owners and operators (hereinafter collectively known as the Permittee) of the above source are issued this permit under the provisions of 326 Indiana Administrative Code (IAC) 21 with conditions listed on the attached pages.

Permit No.: AR 055-19648-00034	
Issued by: Paul Dubenetzky, Chief Permits Branch Office of Air Quality	Issuance Date: Expiration Date:

Title IV Operating Conditions

Title IV Source Description:

Four (4) simple cycle natural gas-fired turbines identified as Units 1, 2, 3, and 4, (known as Turbines 1 through 4 in the Title V permit) constructed in 2000, with a maximum heat input capacity of 460 MMBtu/hr per turbine and a generating capacity of 45 MW per turbine, with water-injection for NO_x emissions control and exhausting to four (4) stacks designated as S-1 through S-4, respectively.

(The information contained in this box is descriptive information and does not constitute enforceable conditions.)

1. Statutory and Regulatory Authorities

In accordance with IC 13-17-3-4 and IC 13-17-3-11 as well as Titles IV and V of the Clean Air Act, the Indiana Department of Environmental Management (IDEM), Office of Air Quality (OAQ) issues this permit pursuant to 326 IAC 2 and 326 IAC 21 (incorporates by reference 40 Code of Federal Regulations (CFR) 72 through 78).

2. Standard Permit Requirements [326 IAC 21]

- (a) The designated representative has submitted a complete acid rain permit application in accordance with the deadlines in 40 CFR 72.30.
- (b) The Permittee shall operate Units 1, 2, 3, and 4 in compliance with this permit.

3. Monitoring Requirements [326 IAC 21]

- (a) The Permittee and, to the extent applicable, the designated representative of Units 1, 2, 3, and 4 shall comply with the monitoring requirements as provided in 40 CFR 75.
- (b) The emissions measurements recorded and reported in accordance with 40 CFR 75 shall be used to determine compliance by the unit with the acid rain emissions limitations and emissions reduction requirements for sulfur dioxide under the Acid Rain Program.
- (c) The requirements of 40 CFR 75 shall not affect the responsibility of the Permittee to monitor emissions of other pollutants or other emissions characteristics at Units 1, 2, 3, and 4 under other applicable requirements of the Clean Air Act and other provisions of the operating permit for the source.

4. Sulfur Dioxide Requirements [326 IAC 21]

- (a) The Permittee shall:
 - (1) Hold allowances, as of the allowance transfer deadline (as defined in 40 CFR 72.2), in the compliance subaccount of Units 1, 2, 3, and 4, after deductions under 40 CFR 73.34(c), not less than the total annual emissions of sulfur dioxide for the previous calendar year from Units 1, 2, 3, and 4; and,
 - (2) Comply with the applicable acid rain emissions limitations for sulfur dioxide.
- (b) Each ton of sulfur dioxide emitted in excess of the acid rain emissions limitations for sulfur dioxide shall constitute a separate violation of the Clean Air Act.
- (c) Units 1, 2, 3, and 4 shall be subject to the requirements under paragraph 4(a) of the sulfur dioxide requirements as follows:
 - (1) Starting January 1, 2000, an affected unit under 40 CFR 72.6(a)(2); or,
 - (2) Starting on the latter of January 1, 2000, or the deadline for monitor certification under 40 CFR 75, an affected unit under 40 CFR 72.6(a)(3).
- (d) Allowances shall be held in, deducted from, or transferred among Allowance Tracking System accounts in accordance with the Acid Rain Program.

- (e) An allowance shall not be deducted in order to comply with the requirements under paragraph 4(a) of the sulfur dioxide requirements prior to the calendar year for which the allowance was allocated.
- (f) Units 1, 2, 3, and 4 were not allocated allowances by United States Environmental Protection Agency (U.S. EPA) under 40 CFR part 73.10. However, Units 1, 2, 3, and 4 must still comply with the requirement to hold allowances to account for sulfur dioxide emissions under paragraph 4(a) and 326 IAC 21.
- (g) An allowance allocated by the U.S. EPA under the Acid Rain Program is a limited authorization to emit sulfur dioxide in accordance with the Acid Rain Program. No provision of the Acid Rain Program, the acid rain permit application, the acid rain permit, the acid rain portion of an operating permit, or the written exemption under 40 CFR 72.7 and 72.8 and 326 IAC 21, and no provision of law shall be construed to limit the authority of the United States to terminate or limit such authorization.
- (h) An allowance allocated by U.S. EPA under the Acid Rain Program does not constitute a property right.
- (i) Units 1, 2, 3, and 4 have no sulfur dioxide (SO₂) allowance allocations from U.S. EPA. The allowances shall be obtained from other units to account for the SO₂ emissions from these units as required by 40 CFR 72.9(c).
- (j) No permit revision may be required for increases in emissions that are authorized by allowances acquired pursuant to the Acid Rain Program, provided that the increases do not require a permit revision under any other applicable requirement. [326 IAC 2-7-5(4)(A)]
- (k) No limit shall be placed on the number of allowances held by the Permittee. The Permittee may not, however, use allowances as a defense to noncompliance with any applicable requirement other than the requirements of the Acid Rain Program. [326 IAC 2-7-5(4)(B)]

5. Nitrogen Oxides Requirements [326 IAC 21]

Pursuant to 40 CFR 76, Acid Rain Nitrogen Oxides Emission Reduction Program, the simple cycle natural gas-fired turbines, Units 1, 2, 3, and 4, are not subject to the nitrogen oxide limitations set out in 40 CFR 76.

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

(a) If Units 1, 2, 3, or 4 has excess emissions of sulfur dioxide in any calendar year, the designated representative shall submit a proposed offset plan to U.S. EPA and IDEM, OAQ as required under 40 CFR 77 and 326 IAC 21.

(b) The designated representative shall submit required information to:

Indiana Department of Environmental Management
Air Compliance Section 1, Office of Air Quality
100 North Senate Avenue
Indianapolis, Indiana 46204

and

Ms. Cecilia Mijares
Air and Radiation Division
U.S. Environmental Protection Agency, Region V
77 West Jackson Boulevard
Chicago, IL 60604-3590

and

U.S. Environmental Protection Agency
Clean Air Markets Division

1200 Pennsylvania Avenue, NW
Mail Code (6204N)
Washington, DC 20460

- (c) If Units 1, 2, 3, or 4 has excess emissions, as defined in 40 CFR 72.2, in any calendar year the Permittee shall:
- (1) Pay to U.S. EPA without demand the penalty required, and pay to U.S. EPA upon demand the interest on that penalty, as required by 40 CFR 77 and 326 IAC 21; and,
 - (2) Comply with the terms of an approved sulfur dioxide offset plan, as required by 40 CFR 77 and 326 IAC 21.

7. Record Keeping and Reporting Requirements [326 IAC 21]

- (a) Unless otherwise provided, the Permittee shall keep on site each of the following documents for a period of 5 years, as required by 40 CFR 72.9(f), from the date the document is created. This period may be extended for cause, at any time prior to the end of the 5 years, in writing by U.S. EPA or IDEM, OAQ:
- (1) The certificate of representation for the designated representative for Units 1, 2, 3, and 4 and all documents that demonstrate the truth of the statements in the certificate of representation, in accordance with 40 CFR 72.24; provided that the certificate and documents shall be retained on site at the source beyond such 5 year period until such documents are superseded because of the submission of a new certificate of representation changing the designated representative;
 - (2) All emissions monitoring information collected in accordance with 40 CFR 75 shall be retained on site for 3 years;
 - (3) Copies of all reports, compliance certifications, and other submissions and all records made or required under the Acid Rain Program; and,
 - (4) Copies of all documents used to complete an acid rain permit application and any other submission under the Acid Rain Program or to demonstrate compliance with the requirements of the Acid Rain Program.
- (b) The designated representative of Units 1, 2, 3, and 4 shall submit the reports and compliance certifications required under the Acid Rain Program, including those under 40 CFR 72.90 subpart I, 40 CFR 75, and 326 IAC 21. Submit required information to the appropriate authority(ies) as specified in 40 CFR 72.90 subpart I and 40 CFR 75.

8. Submissions [326 IAC 21]

- (a) The designated representative of Units 1, 2, 3, and 4 shall submit a certificate of representation, and any superseding certificate of representation, to U.S. EPA and IDEM, OAQ in accordance with 40 CFR 72 and 326 IAC 21.
- (b) The designated representative shall submit required information to:

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

and

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

- (c) Each such submission under the Acid Rain Program shall be submitted, signed and certified by the designated representative for all sources on behalf of which the submission is made.
- (d) In each submission under the Acid Rain Program, the designated representative shall certify, by his or her signature, the following statements which shall be included verbatim in the submission:
 - (1) "I am authorized to make this submission on behalf of the owners and operators of the affected source or affected units for which the submission is made."; and,
 - (2) "I certify under penalty of law that I have personally examined, and am familiar with, the statements and information submitted in this document and all its attachments. Based on my inquiry of those individuals with primary responsibility for obtaining the information, I certify that the statements and information are to the best of my knowledge and belief true, accurate, and complete. I am aware that there are significant penalties for submitting false statements and information or omitting required statements and information, including the possibility of fine or imprisonment."
- (e) The designated representative of Units 1, 2, 3, and 4 shall notify the Permittee:
 - (1) By the date of submission, of any Acid Rain Program submissions by the designated representative;
 - (2) Within 10 business days of receipt of any written determination by U.S. EPA or IDEM, OAQ; and,
 - (3) Provided that the submission or determination covers the source or the unit.
- (f) The designated representative of Units 1, 2, 3, and 4 shall provide the Permittee a copy of any submission or determination under condition 8(e) of this section, unless the Permittee expressly waives the right to receive a copy.

9. Severability [326 IAC 21]

Invalidation of the acid rain portion of an operating permit does not affect the continuing validity of the rest of the operating permit, nor shall invalidation of any other portion of the operating permit affect the continuing validity of the acid rain portion of the permit. [40 CFR 72.72(b), 326 IAC 21, and 326 IAC 2-7-5(5)]

10. Liability [326 IAC 21]

- (a) Any person who knowingly violates any requirement or prohibition of the Acid Rain Program, an acid rain permit, an acid rain portion of an operation permit, or a written exemption under 40 CFR 72.7 or 72.8, including any requirement for the payment of any penalty owed to the United States, shall be subject to enforcement by U.S. EPA pursuant to Section 113(c) of the Clean Air Act and shall be subject to enforcement by IDEM pursuant to 326 IAC 21 and IC 13-30-3.
- (b) Any person who knowingly makes a false, material statement in any record, submission, or report under the Acid Rain Program shall be subject to criminal enforcement pursuant to Section 113(c) of the Clean Air Act, 18 U.S.C. 1001 and IDEM pursuant to 326 IAC 21 and IC 13-30-6-2.
- (c) No permit revision shall excuse any violation of the requirements of the Acid Rain Program that occurs prior to the date that the revision takes effect.

- (d) Units 1, 2, 3, and 4 shall meet the requirements of the Acid Rain Program.
- (e) Any provision of the Acid Rain Program that applies to Units 1, 2, 3, or 4, including a provision applicable to the designated representative of Units 1, 2, 3, or 4, shall also apply to the Permittee.
- (f) Any provision of the Acid Rain Program that applies to Units 1, 2, 3, or 4, including a provision applicable to the designated representative, shall also apply to the Permittee. Except as provided under 40 CFR 72.44 (Phase II repowering extension plans) and 40 CFR 76.11 (NOx averaging plans), and except with regard to the requirements applicable to units with a common stack under 40 CFR 75, including 40 CFR 75.16, 75.17, and 75.18, the Permittee and the designated representative of one affected unit shall not be liable for any violation by any other affected unit of which they are not owners or operators or the designated representative and that is located at a source of which they are not owners or operators or the designated representative.
- (g) Each violation of a provision of 40 CFR parts 72, 73, 75, 77, and 78 by Units 1, 2, 3, or 4, or by the Permittee or designated representative, shall be a separate violation of the Clean Air Act.

11. Effect on Other Authorities [326 IAC 21]

No provision of the Acid Rain Program, an acid rain permit application, an acid rain permit, an acid rain portion of an operation permit, or a written exemption under 40 CFR 72.7 or 72.8 shall be construed as:

- (a) Except as expressly provided in Title IV of the Clean Air Act (42 USC 7651 to 7651(o)), exempting or excluding the Permittee and, to the extent applicable, the designated representative of Units 1, 2, 3, or 4 from compliance with any other provision of the Clean Air Act, including the provisions of Title I of the Clean Air Act relating to applicable National Ambient Air Quality Standards or State Implementation Plans;
- (b) Limiting the number of allowances a unit can hold; provided, that the number of allowances held by the unit shall not affect the source's obligation to comply with any other provisions of the Clean Air Act;
- (c) Requiring a change of any kind in any state law regulating electric utility rates and charges, affecting any state law regarding such state regulation, or limiting such state regulation, including any prudence review requirements under such state law;
- (d) Modifying the Federal Power Act (16 USC 791(a) et seq.) or affecting the authority of the Federal Energy Regulatory Commission under the Federal Power Act; or,
- (e) Interfering with or impairing any program for competitive bidding for power supply in a state in which such a program is established.

Indiana Department of Environmental Management
Office of Air Quality

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

Source Background and Description

Source Name: Worthington Generation
Source Location: 3 Miles S. of Worthington, Highway 57, Worthington, IN 47471
County: Greene
SIC Code: 4911
Permit Renewal No.: T055-25209-00034
Permit Reviewer: Summer Keown

The Office of Air Quality (OAQ) has reviewed the operating permit renewal application from Worthington Generation relating to the operation of a 180 MW merchant electric generating peaking station.

History

On August 8, 28, 2007, Worthington Generation submitted applications to the OAQ requesting to renew its operating permit. Worthington Generation was issued a Part 70 Operating Permit, No. T055-14484-00034, on May 28, 2003.

Permitted Emission Units and Pollution Control Equipment

- (a) Four (4) simple cycle natural gas-fired turbines, identified as Turbines 1 through 4, constructed in 2000 and modified in 2004, with a maximum heat input capacity of 460 MMBtu/hr per turbine and a generating capacity of 45 MW per turbine, using No. 2 fuel oil as a back-up fuel, with water-injection for NO_x emissions control, and exhausting to four (4) stacks designated as S-1 through S-4, respectively.
- (b) One (1) diesel fired emergency generator, constructed in 2004, with a maximum power output rate of 3,000 horsepower.

Insignificant Activities

- (a) Emergency diesel generators not exceeding 1600 horsepower: One (1) diesel-fired emergency generator, constructed in 2000, with a maximum capacity of 588 hp. [326 IAC 2-2 and 326 IAC 2-7(21)(G)(xxii)]
- (b) Activities with emissions equal to or less than the following thresholds: 5 lb/hr or 25 lb/day PM; 5 lb/hr or 25 lb/day SO₂; 5 lb/hr or 25 lb/day NO_x; 3 lb/hr or 15 lb/day VOC; 0.6 tons per year Pb; 1.0 ton/yr of a single HAP, or 2.5 ton/yr of any combination of HAPs:
 - (1) One (1) natural gas-fired boiler, a maximum heat input capacity of 17.7 MMBtu/hr, with emissions uncontrolled, exhausting to stack S-5 [326 IAC 6-2-4].
 - (2) One (1) No. 2 fuel oil storage tank, constructed in 2004, with a maximum capacity of 950,000 gallons. [40 CFR 60, Subpart Kb]
- (c) Paved and unpaved roads and parking lots with public access. [326 IAC 6-4]
- (d) Noncontact, forced and induced, draft cooling tower system not regulated under a NESHAP.

Existing Approvals

Since the issuance of the Part 70 Operating Permit No. T055-14484-00034 on May 28, 2003, the source has constructed or has been operating under the following approvals as well:

- (a) Minor Source Modification No. 055-17772-00034 issued on September 29, 2003;
- (b) First Significant Permit Modification No. 055-17372-00034 issued on November 14, 2003;
- (c) Significant Source Modification No. 055-18572-00034 issued on July 1, 2004;
- (d) Second Significant Permit Modification No. 055-18803-00034 issued on July 21, 2004;
- (e) Acid Rain Permit Renewal No. 055-19648-00034 issued on October 14, 2005;
- (f) Administrative Amendment No. 055-21705-00034 issued on March 23, 2006;
- (g) Third Significant Permit Modification No. 055-22754-00034 issued on September 6, 2006.

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

Enforcement Issue

There are no enforcement actions pending.

Emission Calculations

See Appendix A, pages 1 through 10, of this document for detailed emission calculations.

County Attainment Status

The source is located in Greene County

Pollutant	Status
PM ₁₀	attainment
PM _{2.5}	attainment
SO ₂	attainment
NO _x	attainment
8-hour Ozone	attainment
CO	attainment
Lead	attainment

- (a) Greene County has been classified as attainment for PM_{2.5}. U.S. EPA has not yet established the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2 for PM_{2.5} emissions. Therefore, until the U.S.EPA adopts specific provisions for PSD review for PM_{2.5} emissions, it has directed states to regulate PM₁₀ emissions as a surrogate for PM_{2.5} emissions. See the State Rule Applicability – Entire Source section.
- (b) Volatile organic compounds (VOC) and Nitrogen Oxides (NO_x) are regulated under the Clean Air Act (CAA) for the purposes of attaining and maintaining the National Ambient Air Quality Standards (NAAQS) for ozone. Therefore, VOC emissions and NO_x emissions are considered when evaluating the rule applicability relating to ozone. Greene County has been designated as attainment or unclassifiable for ozone. Therefore, VOC emissions and

NOx emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2. See the State Rule Applicability – Entire Source section.

- (c) Greene County has been classified as attainment or unclassifiable in Indiana for all other criteria pollutants. Therefore, these emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2. See the State Rule Applicability – Entire Source section.
- (d) On October 25, 2006, the Indiana Air Pollution Control Board finalized a rule revision to 326 IAC 1-4-1 redesignating Delaware, Greene, Jackson, Vanderburgh, Vigo and Warrick Counties to attainment for the eight-hour ozone standard.
- (e) On October 25, 2006, the Indiana Air Pollution Control Board finalized a rule revision to 326 IAC 1-4-1 revoking the one-hour ozone standard in Indiana.
- (f) Fugitive Emissions
Since there is an applicable New Source Performance Standard that was in effect on August 7, 1980 (40 CFR Part 60 Subpart GG), the fugitive emissions are counted toward determination of PSD and Emission Offset applicability.

Unrestricted Potential Emissions

This table reflects the unrestricted potential emissions of the source.

Pollutant	tons/year
PM	816.88
PM-10	817.32
SO ₂	4,071.60
VOC	131.31
CO	799.25
NO _x	1,404.52

HAPs	tons/year
hexane	14.3
formaldehyde	0.59
Total	15.06

- (a) The potential to emit (as defined in 326 IAC 2-7-1(29)) of PM, PM10, SO₂, NO_x, and CO is equal to or greater than 100 tons per year. Therefore, the source is subject to the provisions of 326 IAC 2-7.
- (b) The potential to emit (as defined in 326 IAC 2-7-1(29)) of all other criteria pollutants are less than 100 tons per year.
- (c) The potential to emit (as defined in 326 IAC 2-7-1(29)) of any single HAP is equal to or greater than ten (10) tons per year and/or the potential to emit (as defined in 326 IAC 2-7-1(29)) of a combination of HAPs is equal to or greater than twenty-five (25) tons per year. Therefore, the source is subject to the provisions of 326 IAC 2-7.
- (d) Fugitive Emissions
Since there is an applicable New Source Performance Standard that was in effect on August 7, 1980 (40 CFR Part 60 Subpart GG), the fugitive emissions are counted toward determination of PSD and Emission Offset applicability.

Part 70 Permit Conditions

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

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

Potential to Emit After Issuance

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

Process/Emission Unit	Potential to Emit (tons/year)						
	PM	PM10	SO ₂	VOC	CO	NO _x	HAPs
Four (4) Turbines	134.1	134.1	203.9	23.40	<238.9	<224.8	4.65
Boiler	0.15	0.59	0.05	0.43	6.51	7.75	0.15
Diesel Generator	0.99	0.99	0.92	1.11	3.01	13.95	negl.
Insignificant Generator	0.12	0.12	0.11	0.13	1.56	3.42	negl.
Fugitive Emissions	9.06	9.06	0.00	0.00	0.00	0.00	0.00
Total	144.42	144.86	204.98	25.07	<250	<250	4.80
PSD Major Source Threshold	n/a	250	250	250	250	250	10 for single HAP; 25 for total HAPs

- (a) This existing stationary source is not major for PSD because the emissions of each criteria pollutant are less than two hundred fifty (<250) tons per year, and it is not one of the twenty-eight (28) listed source categories.
- (b) Fugitive Emissions
 This type of operation is not one of the twenty-eight (28) listed source categories under 326 IAC 2-2 or 326 IAC 2-3, however, there is an applicable New Source Performance Standard that was in effect on August 7, 1980, therefore fugitive emissions are counted toward the determination of PSD and Emission Offset applicability.

Federal Rule Applicability

The following federal rules are applicable to the source:

- (a) The four (4) simple cycle natural gas-fired turbines, identified as Turbines 1 through 4, using No. 2 fuel oil as a back-up fuel, are subject to the New Source Performance Standard for Stationary Gas Turbines (40 CFR 60, Subpart GG), which is incorporated by reference as 326 IAC 12-1, because the heat input at peak load is equal to or greater than 10.7 gigajoules per hour, based on the lower heating value of the fuel fired.

Pursuant to 326 IAC 12-1 and 40 CFR 60, Subpart GG (Stationary Gas Turbines), the Permittee shall:

- (1) limit nitrogen oxides emissions, as required by 40 CFR 60.332, to:

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

where STD = allowable NO_x emissions (percent by volume at 15 percent oxygen on a dry basis).

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

F = NO_x emission allowance for fuel-bound nitrogen as defined in paragraph (a)(3) of 40 CFR 60.332.

- (2) Limit sulfur dioxide emissions, as required by 40 CFR 60.333, to 0.015 percent by volume at 15 percent oxygen on a dry basis, or use natural gas fuel with a sulfur content less than or equal to 0.8 percent by weight.
- (3) Combust only pipeline natural gas, as defined by 40 CFR 72.2, in the turbines.
- (b) The insignificant activity No. 2 fuel oil storage tank is subject to 40 CFR 60.116b, Subpart Kb (New Source Performance Standards for Volatile Organic Liquid Storage Vessels), paragraphs (a) and (b), which requires record keeping.
- (c) There are no other New Source Performance Standards (326 IAC 12 and 40 CFR Part 60) applicable to this facility.
- (d) This source is subject to the requirements of 40 CFR Part 72 through 40 CFR Part 80 (Acid Rain Program). The requirements of this program are detailed in Section E and Attachment A of this permit.
- (e) There are no National Emission Standards for Hazardous Air Pollutants (NESHAP) (326 IAC 14, 326 IAC 20 and 40 CFR Part 63) included in this permit renewal.
- (f) The requirements of Section 112(j) of the Clean Air Act (40 CFR Part 63.50 through 63.56) are not applicable to this source because the source is not a major source of HAPs. Upon issuance of the respective Part 70 permit, the source shall have a potential to emit less than 10 tons per year of a single HAP and less than 25 tons per year of any combination of HAPs.

- (g) This source is not subject to the provisions of 40 CFR 64, Compliance Assurance Monitoring. In order for this rule to apply, a specific emissions unit at a Part 70 or Part 71 source must meet three criteria for a given pollutant: 1) the unit is subject to an emission limitation or standard for the applicable regulated air pollutant, 2) the unit uses a control device to achieve compliance with any such emission limitation or standard, and, 3) the unit has potential pre-control device emissions of the applicable regulated air pollutant that are equal or greater than 100 percent of the amount required for a source to be classified as a major source.

The turbines each have the potential to emit NO_x greater than 100 tons per year, use water injection for NO_x control, and are subject to NO_x emissions limitations. However, pursuant to 40 CFR 64.2(b)(1), any facility subject to the requirements of Sections 404 through 407(b), or 410 of the Acid Rain Program is exempt from 40 CFR Part 64. Therefore, the turbines are not subject to 40 CFR Part 64 because the turbines are subject to the requirements of the Acid Rain Program.

State Rule Applicability - Entire Source

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

The source has submitted an Emergency Reduction Plan (ERP) on October 18, 2000. The ERP has been verified to fulfill the requirements of 326 IAC 1-5-2 (Emergency Reduction Plans).

326 IAC 2-2 (Prevention of Significant Deterioration)

This source is not in "1 of the 28" source categories with a 100 ton per year PSD threshold because the turbines do not use steam as the working fluid and therefore are not "steam electric plants". The NO_x, VOC, SO₂ and CO emissions from the source are limited to less than 250 tons per year and will render the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration) not applicable.

326 IAC 2-3 (Emission Offset)

326 IAC 2-3 is applicable to major stationary sources located in nonattainment areas. This source is located in Greene County, which is attainment for all criteria pollutants; therefore 326 IAC 2-3 is not applicable.

326 IAC 2-4.1-1 (New Source Toxics Control)

The source potential to emit is less than ten (10) tons of a single HAP and less than twenty-five tons of any combination of HAPs. Therefore, pursuant to 326 IAC 2-4.1-1, the requirements of 326 IAC 2-4.1-1 (New Source Toxics Control) are not applicable to this source.

326 IAC 2-6 (Emission Reporting)

This source is subject to 326 IAC 2-6 (Emission Reporting) because it is required to have an operating permit under 326 IAC 2-7, Part 70 program. Pursuant to this rule, the Permittee shall submit an emission statement certified pursuant to the requirements of 326 IAC 2-6. In accordance with the compliance schedule specified in 326 IAC 2-6-3, an emission statement must be submitted annually by July 1. Therefore, the next emission statement for this source must be submitted by July 1, 2008. The emission statement shall contain, at a minimum, the information specified in 326 IAC 2-6-4.

326 IAC 5-1 (Opacity Limitations)

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

- (a) Opacity shall not exceed an average of forty percent (40%) in any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.

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

326 IAC 6-2 (Particulate Matter Emissions from Sources of Indirect Heating)

The requirements of 326 IAC 6-2 do not apply to the turbines because the combustion units are not utilized as a source of indirect heating. No other 326 IAC 6 rules apply.

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

This source has the potential to emit fugitive particulate matter less than twenty-five (25) tons per year. Therefore, the source is not subject to the requirements of 326 IAC 6-5.

326 IAC 9 (Carbon Monoxide Emission Limits)

Pursuant to 326 IAC 9 (Carbon Monoxide Emission Limits), this source is subject to 326 IAC 9 because it is a stationary source which emits CO and commenced operation after March 21, 1972. However, there is not a specific emission limit because the source is not an operation listed under 326 IAC 9-1-2.

326 IAC 10-4 (NOx Budget Trading Program)

Pursuant to 326 IAC 10-4-2(16) each turbine is considered an "electricity generating unit (EGU)" because it commenced operation on or after January 1, 1999 and serves a generator at any time that has a nameplate capacity greater than twenty-five (25) megawatts that produces electricity for sale under a firm contract to the electric grid. Pursuant to 326 IAC 10-4-1(a)(1), an "EGU" is a NOx budget unit. Because this source meets the criteria of having one (1) or more NOx budget units, it is a NOx budget source. The Permittee shall be subject to the requirements of this rule. The NOx budget permit is Section F of the permit. NOx emissions shall be limited to less than 250 tons per year to render the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration) not applicable to the source.

State Rule Applicability – Turbines

326 IAC 2-2 (Prevention of Significant Deterioration)

Pursuant to CP 055-10724-00034, issued on July 15, 1999:

- (a) The total "weighted" natural gas usage for the turbines shall not exceed 4,930 million standard cubic feet (MMSCF) during any twelve (12) consecutive month period with compliance determined at the end of each month.
- (b) For every 1.0 million standard cubic feet (MMSCF) consumed by the insignificant activity boiler, the "weighted" natural gas limit shall be reduced by 1.08 million standard cubic feet (MMSCF).
- (c) The CO emission rate from the turbines during the summer months (May through September) shall not exceed 99.5 pounds per million cubic feet of natural gas combusted. The CO emission rate from the turbines during the winter months (October through April) shall not exceed 233.8 pounds per million cubic feet of "weighted" natural gas combusted.
- (d) The "weighted" natural gas usage is determined in the winter months (October through April) by multiplying the actual natural gas usage by 2.35. During the summer months (May through September) the actual natural gas usage is equivalent to the "weighted" natural gas usage.
- (e) For every kilogallon (1,000 gallons) of No. 2 fuel oil consumed by the turbines, the "weighted" natural gas usage limit shall be reduced by 0.255 MMSCF.

- (f) The NO_x emissions from the turbines shall be limited to the following:
 - (1) The NO_x emissions shall not exceed 92.4 lbs/MMSCF during the summer months (May through September) and shall not exceed 217 lbs/MMSCF during the winter months (October through April) while combusting natural gas.
 - (2) The NO_x emissions shall not exceed 0.17 lbs/MMBtu while combusting No. 2 fuel oil with a maximum heat heating value of 139,000 Btu/gal.
- (g) The SO₂ emissions shall not exceed 0.152 lbs/MMBtu while combusting No. 2 fuel oil with a maximum heat heating value of 139,000 Btu/gal.

Combined with the requirements of 40 CFR, Subpart GG and CO, NO_x, VOC and SO₂ emissions from the insignificant activity boiler, the emergency generators, and the other insignificant activities, the CO, NO_x, VOC and SO₂ emissions from the entire source as each limited to less than 250 tons/yr. Therefore, the requirements of 326 IAC 2-2 (PSD) are not applicable.

326 IAC 7-1.1 (Sulfur Dioxide Emission Limitations)

Pursuant to 326 IAC 7-1.1, sulfur dioxide (SO₂) emissions from each of the turbines shall be limited to 0.5 pounds per million Btu heat input, when burning No. 2 fuel oil.

326 IAC 8-1-6 (New Facilities; General Reduction Requirements):

Pursuant to CP 055-10724-00034, issued on July 15, 1999, the VOC emission rate from the turbines during the summer months (May through September) shall not exceed 9.5 pounds per million cubic feet of natural gas combusted. The VOC emission rate from the turbines during the winter months (October through April) shall not exceed 22.3 pounds per million cubic feet of natural gas combusted.

Compliance with these limitations along with the limitations taken to avoid 326 IAC 2-2 (Prevention of Significant Deterioration) will ensure that 326 IAC 8-1-6 does not apply.

State Rule Applicability – Emergency diesel generators

326 IAC 2-2 (Prevention of Significant Deterioration) and 326 IAC 2-7(21)(G)(xxii)

- (a) The operating hours for the insignificant activity 588 hp emergency generator shall be limited to less than 500 hours per twelve (12) consecutive month period with compliance determined at the end of each month.
- (b) The operating hours for the 3,000 hp emergency generator shall be limited to less than 300 hours per twelve (12) consecutive month period with compliance determined at the end of each month.

Compliance with these limits, along with the fuel usage limitation for the turbines and boiler, is equivalent to NO_x and CO emissions of less than 250 tons per year and will render the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration) not applicable.

State Rule Applicability – Insignificant Activities: Natural Gas-Fired Boiler and No. 2 Fuel Oil Storage Tank

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

Pursuant to 326 IAC 6-2-4, the particulate emissions from the boiler shall not exceed 0.516 pounds per MMBtu energy input.

This limitation is based on the following equation:

$$Pt = \frac{1.09}{Q^{0.26}} \quad Pt = \text{Pounds of particulate matter emitted per million (lb/MMBtu) heat input.}$$
$$Q = \text{Total source maximum operating capacity rating in million Btu per hour (MMBtu/hr) heat input. (Q = 17.7 MMBtu/hr)}$$

Testing Requirements

- (a) The Permittee shall perform NOx stack tests utilizing methods as approved by the Commissioner. These tests shall be performed in accordance with Section C - Performance Testing, and repeated the earlier of 3,000 unit operating hours or once every five (5) years from the date of this valid compliance demonstration. NOx stack testing was last conducted on September 16, 2005.
- (b) The Permittee shall perform NOx stack tests utilizing methods as approved by the Commissioner. These tests shall be performed during the summer months (May through September), in accordance with Section C - Performance Testing, and repeated the earlier of 3,000 unit operating hours or once every five (5) years from valid compliance demonstration. If the NOx stack tests required in (a) of this condition are performed during the summer months (May through September), the separate NOx tests described here are not required. NOx stack testing was last conducted on September 16, 2005.
- (c) The Permittee shall perform CO stack tests utilizing methods as approved by the Commissioner. These tests shall be performed in accordance with Section C - Performance Testing, and repeated once every five (5) years from the date of this valid compliance demonstration. CO stack testing was last conducted on September 16, 2005.
- (d) The Permittee shall perform VOC stack tests utilizing methods as approved by the Commissioner. Separate testing shall be performed during the summer months (May through September) and winter months (October through April). These tests shall be performed in accordance with Section C - Performance Testing, and repeated once every five (5) years from valid compliance demonstration. VOC stack testing was last conducted on September 16, 2005.

Compliance Determination and Monitoring Requirements

Permits issued under 326 IAC 2-7 are required to ensure that sources can demonstrate compliance with all applicable state and federal rules on a continuous basis. All state and federal rules contain compliance provisions, however, these provisions do not always fulfill the requirement for a continuous demonstration. When this occurs IDEM, OAQ, in conjunction with the source, must develop specific conditions to satisfy 326 IAC 2-7-5. As a result, Compliance Determination Requirements are included in the permit. The Compliance Determination Requirements in Section D of the permit are those conditions that are found directly within state and federal rules and the violation of which serves as grounds for enforcement action.

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

The compliance monitoring requirements applicable to this source are as follows

The four (4) simple cycle natural gas-fired turbines, identified as Turbines 1 through 4, using No. 2 fuel oil as a back-up fuel, have applicable compliance determination conditions as specified

below:

- (a) Pursuant to 326 IAC 3-7-4 (Fuel Oil Sampling; Analysis Methods), the Permittee shall demonstrate sulfur dioxide emission limits by:
- (1) Providing vendor analysis of fuel delivered, if accompanied by a vendor certification, or;
 - (2) Analyzing the oil sample to determine the sulfur content of the oil via the procedures in 40 CFR 60, Appendix A, Method 19.
 - (A) Oil samples may be collected from the fuel tank immediately after the fuel tank is filled and before any oil is combusted; and
 - (B) If a partially empty fuel tank is refilled, a new sample and analysis would be required upon filling.

Compliance may also be determined by conducting a stack test for sulfur dioxide emissions from one of the turbines, using 40 CFR 60, Appendix A, Method 6 in accordance with the procedures in 326 IAC 3-6.

- (b) Pursuant to 40 CFR Part 60, Subpart GG (Stationary Gas Turbines), and EPA approval issued December 7, 2000, the Permittee shall comply with the following custom monitoring schedule:

Determine the sulfur content of the fuel being fired in the turbines semiannually. This determination shall be conducted during the first and third quarters of each calendar year and will be made using methods approved by the Commissioner. If any sulfur analysis indicates noncompliance with the applicable section D.1.3 of the permit, the Permittee shall notify IDEM of such excess emissions and this custom schedule shall be re-examined. Sulfur monitoring shall be conducted weekly while the custom schedule is re-examined. If there is a change in fuel supply (supplier), IDEM, OAQ shall be notified of the change and the fuel shall be sampled daily for a period of two weeks to re-establish that the fuel supply is low in sulfur content. If the fuel supply's low sulfur content is re-established, then the custom monitoring schedule can resume.

The analyses required above may be performed by the owner or operator, the fuel vendor or any other qualified agency.

- (c) Pursuant to 40 CFR 72.9 (Permits Regulation) and 40 CFR 75.11 (Continuous Emissions Monitoring), the Permittee has elected to monitor SO₂ emissions from the turbines pursuant to 40 CFR 75, Appendix D. Appendix D includes, but is not limited to, the following requirements:
- (1) For each hour when the unit is combusting fuel, the Permittee shall measure and record the flow of fuel combusted by the unit with an in-line flowmeter and automatically record the data with a data acquisition and handling system. This shall be performed in accordance with the procedures specified in Section 2.1 of Appendix D.
 - (2) Pursuant to 40 CFR 75.11(d)(2), the Permittee shall measure and record SO₂ emissions using the applicable procedures specified in Appendix D to 40 CFR 75 for estimating hourly SO₂ mass emissions.
 - (3) The Permittee shall provide information on the contractual sulfur content from the pipeline gas supplier in the monitoring plan for the unit, demonstrating that the

gas has a hydrogen sulfide content of 1 grain/100 scf or less, and a total sulfur content of 20 grain/100 scf or less.

- (d) Pursuant to 40 CFR 72.9 and 40 CFR 75.12, the Permittee has elected to monitor NOx emissions from the turbines pursuant to 40 CFR 75, Appendix E, which is used for peaking units. Appendix E includes, but is not limited to, the following requirements:
- (1) The Permittee shall perform initial performance tests for each turbine to measure NOx emission rates at heat input rate levels corresponding to different load levels, measure the heat input rate, and plot the correlation between heat input rate and NOx emission rate, in order to determine the emission rate of the units. This testing shall be performed in accordance with section 2.1 of Appendix E.
 - (2) The Permittee shall retest the NOx emission rate of the turbines prior to the earlier of 3,000 unit operating hours or the 5 year anniversary and renewal of its operating permit under 40 CFR 72.
 - (3) The Permittee shall record the time (hour and minute), load (MWge or steam load in 1000 lb/hr), fuel flow rate and heat input rate (using the procedures in section 2.1.3 of Appendix E) for each hour during which the unit combusts fuel. The Permittee shall calculate the total hourly heat input using equation E-1 of Appendix E and record the heat input rate for each fuel to the nearest 0.1 MMBtu/hr. During partial unit operating hours, heat input must be represented as an hourly rate in MMBtu/hr, as if the fuel were combusted for the entire hour at that rate in order to ensure proper correlation with the NOx emission rate graph.
 - (4) The Permittee shall use the graph of the baseline correlation results to determine the NOx emissions rate (lb/MMBtu) corresponding to the heat input rate (MMBtu/hr) and input this correlation into the data acquisition and handling system for the turbines. The data shall be linearly interpolated to 0.1 MMBtu/hr heat input rate and 0.01 lb/MMBtu.

If a combustion turbine exceeds a capacity factor of 20 percent in any given year, or an average capacity factor of 10 percent for the previous 3 years, then the Permittee shall install, certify, and operate a NOx continuous emission monitoring (CEM) system by December 31 of the following calendar year. The NOx CEM system shall meet the minimum requirements of 40 CFR Part 75 and 326 IAC 3-5.

- (e) Visible Emissions Notations
- (1) Visible emission notations of the turbine stack exhausts shall be performed once per day during normal daylight operations when combusting fuel oil. A trained employee shall record whether emissions are normal or not.
 - (2) 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.
 - (3) 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.
 - (4) 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.
 - (5) If abnormal emissions are observed, 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.

These monitoring conditions are necessary to ensure compliance with 40 CFR 60, Subpart GG, 40 CFR 72.9, 40 CFR 75.12, and 326 IAC 3-5, and render the requirements of 40 CFR 52.21 and 326 IAC 2-2 (Prevention of Significant Deterioration) not applicable.

Recommendation

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

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

An application for the purposes of this review was received on August 29, 2007.

Conclusion

The operation of this 180 MW merchant electric generating peaking station shall be subject to the conditions of the attached Part 70 Operating Permit Renewal No. T055-25209-00034.

Emissions Summary

Company Name: Worthington Generation
Address City IN Zip: South of Intersection 67/237 and Rte 57, Worthington IN 47471
Permit Number: T055-25209-00034
Reviewer: Summer Keown
Date: January 16, 2008

Uncontrolled Potential Emissions (tons/year)

Emissions Generating Activity						
Pollutant	Four (4) Turbines*	Boiler	Diesel Generator**	Insignificant Activity Generator**	Fugitive Emissions from Unpaved Roads	TOTAL
PM	805.9	0.15	1.65	0.12	9.06	816.88
PM10	805.9	0.59	1.65	0.12	9.06	817.32
SO2	4,069.90	0.05	1.54	0.11	0.00	4,071.60
NOx	1,370.10	7.75	23.25	3.42	0.00	1,404.52
VOC	128.90	0.43	1.85	0.13	0.00	131.31
CO	786.17	6.51	5.01	1.56	0.00	799.25
total HAPs	14.91	0.15	0.00	0.00	0.00	15.06
worst case single HAP	4.40	0.01				4.4

(hexane)

(hexane)

(hexane)

Total emissions based on rated capacity at 8,760 hours/year.

*Natural gas is used for the four (4) turbines, with No. 2 fuel oil as backup. The highest potential emission rate from the two fuels is used in this table.

**Generator emissions are based on 500 operating hours per year.

Controlled / Limited Potential Emissions (tons/year)

Emissions Generating Activity						
Pollutant	Four (4) Turbines	Boiler	Diesel Generator*	Insignificant Activity Generator	Fugitive Emissions from Unpaved Roads	TOTAL
PM	134.1	0.15	0.99	0.12	9.06	144.42
PM10	134.1	0.59	0.99	0.12	9.06	144.86
SO2	203.9	0.05	0.92	0.11	0.00	204.98
NOx**	<224.8	7.75	13.95	3.42	0.00	<250
VOC	23.40	0.43	1.11	0.13	0.00	25.07
CO**	<238.9	6.51	3.01	1.56	0.00	<250
total HAPs	4.65	0.15	0.00	0.00	0.00	4.80

Total emissions based on rated capacity at 8,760 hours/year, after control.

*Limited to 300 operating hours per year.

**Total NOx and CO limited to less than 250 tons/year by

**Appendix A: Emission Calculations
Natural Gas Combustion Only
MMBTU/HR >100**

**Four (4) 460 MMBtu/hr Turbines
Company Name: Worthington Generation
Address City IN Zip: South of Intersection 67/237 and Rte 57, Worthington IN 47471
Permit Number: T055-25209-00034
Reviewer: Summer Keown
Date: January 16, 2008**

Heat Input Capacity MMBtu/hr	Potential Throughput MMCF/yr	Limited Throughput MMCF/yr	Sulfur Content (S) %
1840.0	15802.4	4930.0	0.000681

Emission Factor in lb/MMCF	Pollutant					
	PM*	PM10*	SO2	NOx	VOC	CO
7.1	7.1	0.653 (0.94S)	92.4	9.5	99.5	
Potential Emission in tons/year	56.10	56.10	5.16	730.07	75.06	786.17
Limited Potential to Emit (tons/year)	17.5	17.5	1.6	227.8	23.4	245.3

Methodology

All emission factors are based on normal firing.

MMBtu = 1,000,000 Btu

MMCF = 1,000,000 Cubic Feet of Gas

All emissions are based on worst case operation during summer months (May to September)

Emission factors for NOx, CO, VOC and PM/PM10 are from vendor of the gas turbines. These will be verified by stack tests.

Emission Factor for SO2 is from AP 42, Chapter 3.1, Table 3.1-1

Potential Throughput (MMCF/yr) = Heat Input Capacity (MMBtu/hr) x 8,760 hrs/yr x 1 MMCF/1,020 MMBtu

Potential to Emit (tons/yr) = Potential Throughput (MMCF/yr) * Emission Factor (lb/MMCF) / 2,000 lb/ton

Limited Potential to Emit (tons/year) = Limited Throughput (MMCF/yr) * Emission Factor (lb/MMCF) / 2000

**Appendix A: Emission Calculations
Natural Gas Combustion Only
MMBTU/HR >100
Four (4) Natural Gas-fired Turbines
HAPs Emissions**

**Company Name: Worthington Generation
Address City IN Zip: South of Intersection 67/237 and Rte 57, Worthington IN 47471
Permit Number: T055-25209-00034
Reviewer: Summer Keown
Date: January 16, 2008**

HAPs - Organics					
Emission Factor in lb/MMcf	Benzene 2.1E-03	Dichlorobenzene 1.2E-03	Formaldehyde 7.5E-02	Hexane 1.8E+00	Toluene 3.4E-03
Potential Emission in tons/yr	1.66E-02	9.48E-03	5.93E-01	1.42E+01	2.69E-02
Limited Potential to Emit in tons/yr	5.2E-03	3.0E-03	1.8E-01	4.4E+00	8.4E-03

HAPs - Metals					
Emission Factor in lb/MMcf	Lead 5.0E-04	Cadmium 1.1E-03	Chromium 1.4E-03	Manganese 3.8E-04	Nickel 2.1E-03
Potential Emission in tons/yr	3.95E-03	8.69E-03	1.11E-02	3.00E-03	1.66E-02
Limited Potential to Emit in tons/yr	1.2E-03	2.7E-03	3.5E-03	9.4E-04	5.2E-03

Methodology is the same as previous page.

**Total HAPs for Natural Gas-fired Turbines: 14.91
Total Limited HAPs for Natural Gas-fired Turbines: 4.65**

The five highest organic and metal HAPs emission factors are provided above.
Additional HAPs emission factors are available in AP-42, Chapter 1.4.

Appendix A: Emissions Calculations
Commercial/Institutional/Residential Combustors (< 100 mmBtu/hr)

Company Name: Worthington Generation
Address, City IN Zip: South of Intersection 67/237 and Rte 57, Worthington IN 47471
Permit Number: T055-25209-00034
Reviewer: Summer Keown
Date: January 16, 2008

Unrestricted Potential to Emit While Using No. 2 Fuel Oil

Heat Input Capacity
MMBtu/hr

S = Weight % Sulfur

1840

0.5

Emission Factor in lb/kgal	Pollutant					
	PM*	PM10*	SO2*	NOx**	VOC**	CO**
	0.10 (lbs/MMBtu)	0.10 (lbs/MMBtu)	0.505 (1.01 S lbs/MMBtu)	0.17 (lbs/MMBtu)	0.016 (lbs/MMBtu)	0.056 (lbs/MMBtu)
Potential Emission in tons/yr	805.9	805.9	4069.9	1370.1	128.9	451.3

*Emission factors for PM/PM10 and SO2 are for large stationary diesel fuel engines in AP-42, Table 3.4-1 (AP-42, 10/96)

**Emission factors for NOx, VOC and CO are from the vendor's information. Assume all hydrocarbons emitted are VOC emissions. These emission than the ones in AP-42, Table 3.4-1 (AP-4s, 10/96). However, the source will perform stack testing to evaluate these emission factors.

Methodology

PTE (tons/year) = Max. Heat Input (MMBtu/hr) * Emission Factor (lbs/MMBtu) * 8760 hours/year * 1 ton/2000 lbs
 See following page for HAPs emission calculations.

Limited Potential to Emit While Using No. 2 Fuel Oil

Fuel Usage Limit
kgals/year

S = Weight % Sulfur

19,300

0.15

Emission Factor in lb/kgal	Pollutant					
	PM*	PM10*	SO2*	NOx**	VOC**	CO**
	0.10 (lbs/MMBtu)	0.10 (lbs/MMBtu)	0.152 (1.01 S lbs/MMBtu)	0.17 (lbs/MMBtu)	0.016 (lbs/MMBtu)	0.056 (lbs/MMBtu)
Potential Emission in tons/yr	134.1	134.1	203.9	228.0	21.5	75.1

*Emission factors for PM/PM10 and SO2 are for large stationary diesel fuel engines in AP-42, Table 3.4-1 (AP-42 10/96).

**Emission factors for NOx, VOC and CO are from the vendor's information. Assume all hydrocarbons emitted are VOC emissions. These emission than the ones in AP-42, Table 3.4-1 (AP-42, 10/96). However, the source will perform stack testing to evaluate these emission factors.

1 kilo gallon of No. 2 Fuel Oil has a heating value of 139 MMBtu.

Methodology

PTE (tons/year) = Max. Heat Input (MMBtu/hr) * Emission Factor (lbs/MMBtu) * 8760 hours/year * 1 ton/2000 lbs

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

Worthington Generation
Address, City IN Zip: South of Intersection 67/237 and Rte 57, Worthington IN 47471
Permit Number: T055-25209-00034
Reviewer: Summer Keown
Date: January 16, 2008

	HAPs - Metals				
Emission Factor in lb/mmBtu	Arsenic 4.0E-06	Beryllium 3.0E-06	Cadmium 3.0E-06	Chromium 3.0E-06	Lead 9.0E-06
Potential Emission in tons/yr	3.22E-02	2.42E-02	2.42E-02	2.42E-02	7.25E-02

	HAPs - Metals (continued)			
Emission Factor in lb/mmBtu	Mercury 3.0E-06	Manganese 6.0E-06	Nickel 3.0E-06	Selenium 1.5E-05
Potential Emission in tons/yr	2.42E-02	4.84E-02	2.42E-02	1.21E-01

Total HAPs for No. 2 Fuel Oil: 0.39

Methodology

No data was available in AP-42 for organic HAPs.

Potential Emissions (tons/year) = Throughput (mmBtu/hr)*Emission Factor (lb/mmBtu)*8,760 hrs/yr / 2,000 lb/ton

**Appendix A: Emissions Calculations
Natural Gas Combustion Only
MM BTU/HR <100**

**Company Name: Worthington Generation
Address City IN Zip: South of Intersection 67/237 and Rte 57, Worthington IN 47471
Permit Number: T055-25209-00034
Reviewer: Summer Keown
Date: January 16, 2008**

Heat Input Capacity
MMBtu/hr

Potential Throughput
MMCF/yr

17.7

155.1

Emission Factor in lb/MMCF	Pollutant					
	PM*	PM10*	SO2	NOx	VOC	CO
	1.9	7.6	0.6	100.0 **see below	5.5	84.0
Potential Emission in tons/yr	0.15	0.59	0.05	7.75	0.43	6.51

*PM emission factor is filterable PM only. PM10 emission factor is filterable and condensable PM10 combined.

**Emission Factors for NOx: Uncontrolled = 100, Low NOx Burner = 50, Low NOx Burners/Flue gas recirculation = 32

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 MMBtu

Emission Factors are from AP 42, Chapter 1.4, Tables 1.4-1, 1.4-2, 1.4-3, SCC #1-02-006-02, 1-01-006-02, 1-03-006-02, and 1-03-006-03 (SUPPLEMENT D 3/98)

Emission (tons/yr) = Throughput (MMCF/yr) x Emission Factor (lb/MMCF)/2,000 lb/ton

See page 2 for HAPs emissions calculations.

**Appendix A: Emissions Calculations
 Natural Gas Combustion Only
 MM BTU/HR <100
 HAPs Emissions**

**Company Name: Worthington Generation
 Address City IN Zip: South of Intersection 67/237 and Rte 57, Worthington IN 47471
 Permit Number: T055-25209-00034
 Reviewer: Summer Keown
 Date: January 16, 2008**

HAPs - Organics					
Emission Factor in lb/MMcf	Benzene 2.1E-03	Dichlorobenzene 1.2E-03	Formaldehyde 7.5E-02	Hexane 1.8E+00	Toluene 3.4E-03
Potential Emission in tons/yr	1.628E-04	9.303E-05	5.814E-03	1.395E-01	2.636E-04

HAPs - Metals					
Emission Factor in lb/MMcf	Lead 5.0E-04	Cadmium 1.1E-03	Chromium 1.4E-03	Manganese 3.8E-04	Nickel 2.1E-03
Potential Emission in tons/yr	3.876E-05	8.528E-05	1.085E-04	2.946E-05	1.628E-04

Methodology is the same as page 1.

Total HAPs: 0.15

The five highest organic and metal HAPs emission factors are provided above.
 Additional HAPs emission factors are available in AP-42, Chapter 1.4.

Appendix A: Emission Calculations
Diesel-fired emergency generator: 3,000 Horse Power

Company Name: Worthington Generation
Address, City IN Zip: South of Intersection 67/237 and Rte 57, Worthington IN 47471
Permit No.: T055-25209-00034
Reviewer: Summer Keown
Date: January 16, 2008

Potential to Emit: 500 operating hours per year

Power Output
Horse Power (HP)

3000.0

Emission Factor in lb/MMBtu	Pollutant					
	PM*	PM10*	SO2	NOx	VOC**	CO
Potential Emission in tons/yr	2.20E-03	2.20E-03	2.05E-03	3.10E-02	2.47E-03	6.68E-03
Limited Potential to Emit in tons/yr***	28.91	28.91	26.94	407.34	32.46	87.78
	1.65	1.65	1.54	23.25	1.85	5.01

*Assume PM = PM10
*Assume TOC (total organic compounds) emissions are equal to VOC emissions.
***Limited potential to emit is based on an operating time of 500 hours per year.
Emission factors are from AP-42, Chapter 3.3, Table 3.3-1

Methodology

Limited PTE (tons/yr) = Power Output (HP) * Emission Factor (lb/HP-hr) * Operation Limit (hr/yr) * 1 ton/2000 lbs

Restricted Potential to Emit: 300 operating hours per year

Power Output
Horse Power (HP)

3000.0

Emission Factor in lb/MMBtu	Pollutant					
	PM*	PM10*	SO2	Nox	VOC**	CO
Potential Emission in tons/yr	2.20E-03	2.20E-03	2.05E-03	3.10E-02	2.47E-03	6.68E-03
Limited Potential to Emit in tons/yr***	28.91	28.91	26.94	407.34	32.46	87.78
	0.99	0.99	0.92	13.95	1.11	3.01

*Assume PM = PM10
*Assume TOC (total organic compounds) emissions are equal to VOC emissions.
***Limited potential to emit is based on an operating time of 300 hours per year.
Emission factors are from AP-42, Chapter 3.3, Table 3.3-1

Methodology

Limited PTE (tons/yr) = Power Output (HP) * Emission Factor (lb/HP-hr) * Operation Limit (hr/yr) * 1 ton/2000 lbs

Appendix A: Emission Calculations

Insignificant activity: One (1) 588 hp diesel-fired emergency generator

Company Name: Worthington Generation

Address, City IN Zip: South of Intersection 67/237 and Rte 57, Worthington IN 47471

Permit No.: T055-25209-00034

Reviewer: Summer Keown

Date: January 16, 2008

Heat Input Capacity
MMBtu/hr

1.5

	Pollutant					
	PM*	PM10*	SO2	NOx*	VOC	CO*
Emission Factor in lb/MMBtu	0.31	0.31	0.29	9.11	0.35	4.15
Potential Emission in tons/yr	2.04	2.04	1.91	59.85	2.30	27.27
Limited Potential to Emit in tons/yr**	0.12	0.12	0.11	3.42	0.13	1.56

* The manufacturer supplied NOx and CO emission rates of 4139 grams NOx/hr (9.11 lb/hr) and 1888 grams CO/hr (4.15 lb/hr) These emission rates were used to estimate the NOx and CO emissions from the generator.

** The limited potential to emit is based on 500 operating hours per year. See TSD and permit for further information.
588 hp equals 1.5 MMBtu/hr

Methodology

PM/PM10, SO2 and VOC emission factors are from AP-42, Table 3.3-1 10-96

PM emission factor is equivalent to the PM10 emission factor listed in AP-42

Emission (tons/year) = Heat input (MMBtu/hr) * Emission factor (lb/MMBtu) * 8760 hours/year * 1/2,000 lb/ton

Limited Emission (tons/year) = Potential to Emit (tons/year) * 500 hours/year * 1/8760 hours/year

Appendix A: Emission Calculations
Fugitive Emissions from Unpaved Roads
Water Treatment Trucks, Service Trucks and Cars

App A page 10 of 10

Company Name: Worthington Generation
Address, City IN Zip: South of Intersection 67/237 and Rte 57, Worthington IN 47471
Permit No.: T055-25209-00034
Reviewer: Summer Keown
Date: January 16, 2008

A. The following calculations determine the amount of emissions created by water treatment delivery systems on unpaved roads, based on 8760 hours of use and AP-42, Ch. 13.2.2

$$E_f = k * 5.98 (s/12) * S/30 * (W/3)^{0.7} * (w/4)^{0.5} * ((365-p)/365)$$
$$E_f = 4.40 \text{ lb/mile}$$

where:

k = 0.8 size multiplier

s = 4.8 % silt content

p = 125 days of rain greater than or equal to 0.01 inches

S = 10 miles/hr vehicle speed

W = 30 tons average vehicle weight

w = 18 wheels

$$\text{miles per year} = 1 \text{ trip/hr} * 0.15 \text{ miles/trip} * 2 \text{ (round trip)} * 8760 \text{ hours/year}$$

$$\text{miles per year} = 2628$$

$$(4.40 \text{ lb/mile} * 2628 \text{ miles/year}) / 2000 \text{ lb/ton} = \mathbf{5.78 \text{ tons per year}}$$

B. The following calculations determine the amount of emissions created by cars and service trucks on unpaved roads, based on 8760 hours of use and AP-42, Ch. 13.2.2

$$E_f = k * 5.98 (s/12) * S/30 * (W/3)^{0.7} * (w/4)^{0.5} * ((365-p)/365)$$
$$E_f = 0.62 \text{ lb/mile}$$

where:

k = 0.8 size multiplier

s = 4.8 % silt content

p = 125 days of rain greater than or equal to 0.01 inches

S = 10 miles/hr vehicle speed

W = 2 tons average vehicle weight

w = 4 wheels

$$\text{miles per year} = 1 \text{ trip/hr} * 0.15 \text{ miles/trip} * 2 \text{ (round trip)} * 8760 \text{ hours/year}$$

$$\text{miles per year} = 2628$$

$$(0.62 \text{ lb/mile} * 10512 \text{ miles/year}) / 2000 \text{ lb/ton} = \mathbf{3.28 \text{ tons per year}}$$

Total Fugitive Emissions from Unpaved Roads = 9.06