



Joseph E. Kernan
Governor

Lori F. Kaplan
Commissioner

July 21, 2004

100 North Senate Avenue
P.O. Box 6015
Indianapolis, Indiana 46206-6015
(317) 232-8603
(800) 451-6027
www.in.gov/idem

TO: Interested Parties / Applicant

RE: Worthington Generation LLC / 055-18803-00034

FROM: Paul Dubenetzky
Chief, Permits Branch
Office of Air Quality

Notice of Decision: Approval - Effective Immediately

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

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

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

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

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

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

Enclosures
FNPER.dot 9/16/03



INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

We make Indiana a cleaner, healthier place to live.

Joseph E. Kernan
Governor

Lori F. Kaplan
Commissioner

100 North Senate Avenue
P. O. Box 6015
Indianapolis, Indiana 46206-6015
(317) 232-8603
(800) 451-6027
www.state.in.us/idem

July 21, 2004

Mr. Paul Reynolds
Worthington Generation, LLC
RR1, Box 37B
Switz City, Indiana 47465

Re: 055-18803-00034
Second Significant Permit Modification to:
Part 70 permit No.: T055-14484-00034

Dear Mr. Reynolds:

Worthington Generation, LLC was issued a Part 70 permit T055-14484-00034 on May 28, 2003 for a merchant power plant. A letter requesting changes to this permit was received on February 4, 2004. Pursuant to 326 IAC 2-7-12, a significant permit modification to this permit is hereby approved as described in the attached Technical Support Document.

This modification consists of using No. 2 fuel oil as a back-up fuel for the existing four (4) natural gas combustion turbines and an additional diesel fired emergency generator and a No. 2 fuel oil storage tank.

All other conditions of the permit shall remain unchanged and in effect. Please find attached a copy of the revised permit.

Pursuant to Contract No. A305-0-00-36, IDEM, OAQ has assigned the processing of this application to Eastern Research Group, Inc., (ERG). Therefore, questions should be directed to Yu-Lien Chu, ERG, 1600 Perimeter Park Drive, Morrisville, North Carolina 27560, or call (919) 468-7871 to speak directly to Ms. Chu. Questions may also be directed to Duane Van Laningham at IDEM, OAQ, 100 North Senate Avenue, P.O. Box 6015, Indianapolis, Indiana, 46206-6015, or call (800) 451-6027, and ask for Duane Van Laningham or extension 3-6878, or dial (317) 233-6878.

Sincerely,
Original signed by

Paul Dubenetzky, Chief
Permits Branch
Office of Air Quality

Attachments

ERG/YC

cc: File - Greene County
U.S. EPA, Region V
Greene County Health Department
Air Compliance Section Inspector - Jim Thorpe
Compliance Data Section
Administrative and Development -Sara Cloe
Technical Support and Modeling - Michele Boner



Joseph E. Kernan
Governor

Lori F. Kaplan
Commissioner

100 North Senate Avenue
P. O. Box 6015
Indianapolis, Indiana 46206-6015
(317) 232-8603
(800) 451-6027
www.state.in.us/idem

PART 70 OPERATING PERMIT OFFICE OF AIR QUALITY

Worthington Generation, LLC South of Intersection of Routes 67/237 and Route 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.

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.: T055-14484-00034	
Issued by: Janet G. McCabe, Assistant Commissioner Office of Air Quality	Issuance Date: May 28, 2003 Expiration Date: May 28, 2008

First Significant Permit Modification No.: 055-17372-00034, issued on November 14, 2003

Second Significant Permit Modification No.: 055-18803-00034	Affected Pages: 5, 6, 26-31, 33-35, 37-39
Issued by: Original signed by Paul Dubenetzky, Branch Chief Office of Air Quality	Issuance Date: July 21, 2004

TABLE OF CONTENTS

SECTION A	SOURCE SUMMARY	5
A.1	General Information [326 IAC 2-7-4(c)] [326 IAC 2-7-5(15)] [326 IAC 2-7-1(22)]	
A.2	Emission Units and Pollution Control Equipment Summary [326 IAC 2-7-4(c)(3)] [326 IAC 2-7-5(15)]	
A.3	Specifically Regulated Insignificant Activities [326 IAC 2-7-1(21)] [326 IAC 2-7-4(c)] [326 IAC 2-7-5(15)]	
A.4	Part 70 Permit Applicability [326 IAC 2-7-2]	
SECTION B	GENERAL CONDITIONS	7
B.1	Definitions [326 IAC 2-7-1]	
B.2	Permit Term [326 IAC 2-7-5(2)] [326 IAC 2-1.1-9.5]	
B.3	Enforceability [326 IAC 2-7-7]	
B.4	Termination of Right to Operate [326 IAC 2-7-10] [326 IAC 2-7-4(a)]	
B.5	Severability [326 IAC 2-7-5(5)]	
B.6	Property Rights or Exclusive Privilege [326 IAC 2-7-5(6)(D)]	
B.7	Duty to Supplement and Provide Information [326 IAC 2-7-4(b)] [326 IAC 2-7-5(6)(E)] [326 IAC 2-7-6(6)]	
B.8	Compliance with Permit Conditions [326 IAC 2-7-5(6)(A)] [326 IAC 2-7-5(6)(B)]	
B.9	Certification [326 IAC 2-7-4(f)] [326 IAC 2-7-6(1)] [326 IAC 2-7-5(3)(C)]	
B.10	Annual Compliance Certification [326 IAC 2-7-6(5)]	
B.11	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]	
B.12	Emergency Provisions [326 IAC 2-7-16]	
B.13	Permit Shield [326 IAC 2-7-15] [326 IAC 2-7-20] [326 IAC 2-7-12]	
B.14	Prior Permits Superseded [326 IAC 2-1.1-9.5]	
B.15	Deviations from Permit Requirements and Conditions [326 IAC 2-7-5(3)(C)(ii)]	
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]	
B.17	Permit Renewal [326 IAC 2-7-4]	
B.18	Source Modification [326 IAC 1-2-42] [326 IAC 2-7-10.5]	
B.19	Permit Amendment or Modification [326 IAC 2-7-11] [326 IAC 2-7-12] [40 CFR 72]	
B.20	Permit Revision Under Economic Incentives and Other Programs [326 IAC 2-7-5(8)] [326 IAC 2-7-12 (b)(2)]	
B.21	Operational Flexibility [326 IAC 2-7-20] [326 IAC 2-7-10.5]	
B.22	Inspection and Entry [326 IAC 2-7-6] [IC 13-14-2-2]	
B.23	Transfer of Ownership or Operational Control [326 IAC 2-7-11]	
B.24	Annual Fee Payment [326 IAC 2-7-19] [326 IAC 2-7-5(7)] [326 IAC 2-1.1-7]	
SECTION C	SOURCE OPERATION CONDITIONS	18
	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 [40 CFR 52 Subpart P] [326 IAC 6-3-2]	
C.2	Opacity [326 IAC 5-1]	
C.3	Open Burning [326 IAC 4-1] [IC 13-17-9]	
C.4	Incineration [326 IAC 4-2] [326 IAC 9-1-2]	
C.5	Fugitive Dust Emissions [326 IAC 6-4]	
C.6	Operation of Equipment [326 IAC 2-7-6(6)]	
C.7	Stack Height [326 IAC 1-7]	
C.8	Asbestos Abatement Projects [326 IAC 14-10] [326 IAC 18] [40 CFR 61, Subpart M]	
	Testing Requirements [326 IAC 2-7-6(1)]	
C.9	Performance Testing [326 IAC 3-6]	

TABLE OF CONTENTS (Continued)

Compliance Requirements [326 IAC 2-1.1-11]

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

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

C.11 Compliance Monitoring [326 IAC 2-7-5(3)] [326 IAC 2-7-6(1)]

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

C.13 Maintenance of Continuous Emission Monitoring Equipment [326 IAC 2-7-5(3)(A)]

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]

C.15 Risk Management Plan [326 IAC 2-7-5(12)] [40 CFR 68.215]

C.16 Compliance Response Plan - Preparation, Implementation, Records, and Reports
[326 IAC 2-7-5] [326 IAC 2-7-6]

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

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]

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

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

Stratospheric Ozone Protection

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

SECTION D.1 FACILITY OPERATION CONDITIONS - Turbines 26

Emissions Limitation and Standards [326 IAC 2-7-5(1)]

D.1.1 Fuel Usage Limitations [326 IAC 2-2] [40 CFR 52.21]

D.1.2 General Provisions Relating to NSPS [326 IAC 12-1] [40 CFR Part 60, Subpart A]

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

D.1.4 Emission Rate Limitations [326 IAC 2-2] [40 CFR 52.21] [326 IAC 8-1-6]

D.1.5 Water-to-Fuel Ratio Monitoring [40 CFR 60.330, Subpart GG]

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

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

Compliance Determination Requirements

D.1.8 Testing Requirements [326 IAC 2-7-6(1),(6)] [326 IAC 2-1.1-11] [40 CFR 75.12]

D.1.9 Sulfur Dioxide Emissions and Sulfur Content

Compliance Monitoring Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

D.1.10 Visible Emissions Notations

D.1.11 Nitrogen Oxides Monitoring Requirement [326 IAC 10-4-4(b)(1)] [326 IAC 10-4-12(b)
and (c)] [40 CFR 75]

D.1.12 Sulfur Content and Nitrogen Content Monitoring [40 CFR Part 60, Subpart GG]

D.1.13 SO₂ and NO_x Monitoring Requirements [40 CFR Part 72.9] [40 CFR Part 75]

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

D.1.14 Record Keeping Requirements

D.1.15 Nitrogen Oxides Budget Permit Application Submittal Requirement
[326 IAC 10-4-4(a)(1)] [326 IAC 10-4-9(e)]

D.1.16 Reporting Requirements

TABLE OF CONTENTS (Continued)

SECTION D.2 FACILITY OPERATION CONDITIONS - Insignificant Activities 33

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]

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

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

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

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

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

 D.2.6 Record Keeping Requirements

 D.2.7 Reporting Requirements

SECTION E ACID RAIN PROGRAM CONDITIONS 35

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

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

Certification 36

Quarterly Reports 37-39

Emergency Occurrence Report 40

Quarterly Deviation and Compliance Monitoring Report 42

Appendix A Acid Rain Permit #055-11032-00034

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 180 MW merchant electric generating peaking station.

Responsible Official:	Manager, Generation Technical Services
Source Address:	South of Intersection of Routes 67/237 and Route 57, Worthington, Indiana 47471
Mailing Address:	RR1, Box 37B, Switz City, Indiana 47465
Source Phone Number:	812-875-9707
SIC Code:	4911
County Location:	Greene
Source Location Status:	Attainment for all criteria pollutants
Source Status:	Part 70 Permit Program Minor Source, under PSD 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.

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

SECTION B GENERAL CONDITIONS

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]

This permit 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.3 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.4 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.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 Supplement and Provide Information [326 IAC 2-7-4(b)] [326 IAC 2-7-5(6)(E)] [326 IAC 2-7-6(6)]

(a) The Permittee, upon becoming aware that any relevant facts were omitted or incorrect information was submitted in the permit application, shall promptly submit such supplementary facts or corrected information to:

Indiana Department of Environmental Management
Permits Branch, Office of Air Quality
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

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

(b) 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.

(c) 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 Compliance with Permit Conditions [326 IAC 2-7-5(6)(A)] [326 IAC 2-7-5(6)(B)]

- (a) The Permittee must comply with all conditions of this permit. Noncompliance with any provisions of this permit is grounds for:
 - (1) Enforcement action;
 - (2) Permit termination, revocation and reissuance, or modification; or
 - (3) Denial of a permit renewal application.
- (b) Noncompliance with any provision of this permit, except any provision specifically designated as not federally enforceable, constitutes a violation of the Clean Air Act.
- (c) 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.
- (d) 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.

B.9 Certification [326 IAC 2-7-4(f)] [326 IAC 2-7-6(1)] [326 IAC 2-7-5(3)(C)]

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

B.10 Annual Compliance Certification [326 IAC 2-7-6(5)]

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

Indiana Department of Environmental Management
Compliance Branch, Office of Air Quality
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

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.11 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 prepare and maintain Preventive Maintenance Plans (PMPs) within thirty (30) days after issuance of this permit, including the following information on each facility:
- (1) Identification of the individual(s) responsible for inspecting, maintaining, and repairing emission control devices;
 - (2) A description of the items or conditions that will be inspected and the inspection schedule for said items or conditions; and
 - (3) Identification and quantification of the replacement parts that will be maintained in inventory for quick replacement.

If, due to circumstances beyond the Permittee's control, the PMPs cannot be prepared and maintained within the above time frame, the Permittee may extend the date an additional thirty (30) days provided the Permittee notifies:

Indiana Department of Environmental Management
Compliance Branch, Office of Air Quality
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

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

- (b) The Permittee shall implement the PMPs as necessary to ensure that failure to implement a PMP does not cause or contribute to a violation of any limitation on emissions or potential to emit.
- (c) A copy of the PMPs shall be submitted to IDEM, OAQ, upon request and within a reasonable time, and shall be subject to review and approval by IDEM, OAQ. IDEM, OAQ, may require the Permittee to revise its PMPs whenever lack of proper maintenance causes or contributes to any violation. The submittal of the PMP and the

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

- (d) Records of preventive maintenance shall be retained for a period of at least five (5) years. These records shall be kept 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.12 Emergency Provisions [326 IAC 2-7-16]

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

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

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

Indiana Department of Environmental Management
Compliance Branch, Office of Air Quality
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

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) 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.13 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 in 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.14 Prior Permits Superseded [326 IAC 2-1.1-9.5]

- (a) All terms and conditions of previous permits issued pursuant to permitting programs approved into the state implementation plan have been either
- (1) incorporated as originally stated,
 - (2) revised, or
 - (3) deleted
- by this permit.
- (b) All previous registrations and permits are superseded by this permit, except for permits issued pursuant to Title IV of the Clean Air Act and 326 IAC 21 (Acid Deposition Control).

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 Branch, Office of Air Quality
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

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

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

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

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

- (a) This permit may be modified, reopened, revoked and reissued, or terminated for cause. The filing of a request by the Permittee for a Part 70 permit modification, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay any condition of this permit. [326 IAC 2-7-5(6)(C)] The notification by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).
- (b) This permit shall be reopened and revised under any of the circumstances listed in IC 13-15-7-2 or if IDEM, OAQ, determines any of the following:
 - (1) That this permit contains a material mistake.
 - (2) That inaccurate statements were made in establishing the emissions standards or other terms or conditions.
 - (3) That this permit must be revised or revoked to assure compliance with an applicable requirement. [326 IAC 2-7-9(a)(3)]
- (c) Proceedings by IDEM, OAQ, to reopen and revise this permit shall follow the same procedures as apply to initial permit issuance and shall affect only those parts of this permit for which cause to reopen exists. Such reopening and revision shall be made as expeditiously as practicable. [326 IAC 2-7-9(b)]
- (d) The reopening and revision of this permit, under 326 IAC 2-7-9(a), shall not be initiated before notice of such intent is provided to the Permittee by IDEM, OAQ, at least thirty (30) days in advance of the date this permit is to be reopened, except that IDEM, OAQ, may provide a shorter time period in the case of an emergency. [326 IAC 2-7-9(c)]

B.17 Permit Renewal [326 IAC 2-7-4]

- (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, P.O. Box 6015
Indianapolis, Indiana 46206-6015

- (b) Timely Submittal of Permit Renewal [326 IAC 2-7-4(a)(1)(D)]
 - (1) A timely renewal application is one that is:
 - (A) Submitted at least nine (9) months prior to the date of the expiration of this permit; and

- (B) 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.
- (2) If IDEM, OAQ, upon receiving a timely and complete 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.
- (c) **Right to Operate After Application for Renewal [326 IAC 2-7-3]**
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.
- (d) **United States Environmental Protection Agency Authority [326 IAC 2-7-8(e)]**
If IDEM, OAQ, fails to act in a timely way on a Part 70 permit renewal, the U.S. EPA may invoke its authority under Section 505(e) of the Clean Air Act to terminate or revoke and reissue a Part 70 permit.

B.18 Source Modification [326 IAC 1-2-42] [326 IAC 2-7-10.5]

- (a) The Permittee shall obtain approval as required by 326 IAC 2-7-10.5 from the OAQ prior to making any modification to the source. Pursuant to 326 IAC 1-2-42, "Modification" means one (1) or more of the following activities at an existing source:
 - (1) A physical change or change in the method of operation of any existing emissions unit that increases the potential to emit any regulated pollutant that could be emitted from the emissions unit, or that results in emissions of any regulated pollutant not previously emitted.
 - (2) Construction of one (1) or more new emissions units that have the potential to emit regulated air pollutants.
 - (3) Reconstruction of one (1) or more existing emission units that increases the potential to emit of any regulated air pollutant.
- (b) Any application requesting a source modification shall be submitted to:

Indiana Department of Environmental Management
Permits Branch, Office of Air Quality
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

Any such application shall be certified by the "responsible official" as defined by 326 IAC 2-7-1(34).
- (c) The Permittee shall also comply with the applicable provisions of 326 IAC 2-7-11 (Administrative Permit Amendments) or 326 IAC 2-7-12 (Permit Modification) prior to operating the approved modification.

B.19 Permit Amendment or Modification [326 IAC 2-7-11] [326 IAC 2-7-12] [40 CFR 72]

- (a) Permit amendments and modifications are governed by the requirements of 326 IAC 2-7-11 or 326 IAC 2-7-12 whenever the Permittee seeks to amend or modify this permit.
- (b) Pursuant to 326 IAC 2-7-11(b) and 326 IAC 2-7-12(a), administrative Part 70 permit amendments and permit modifications for purposes of the acid rain portion of a Part 70 permit shall be governed by regulations promulgated under Title IV of the Clean Air Act. [40 CFR 72]
- (c) Any application requesting an amendment or modification of this permit shall be submitted to:
- Indiana Department of Environmental Management
Permits Branch, Office of Air Quality
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015
- Any such application shall be certified by the "responsible official" as defined by 326 IAC 2-7-1(34).
- (d) The Permittee may implement administrative amendment changes addressed in the request for an administrative amendment immediately upon submittal of the request. [326 IAC 2-7-11(c)(3)]

B.20 Permit Revision Under Economic Incentives and Other Programs [326 IAC 2-7-5(8)] [326 IAC 2-7-12 (b)(2)]

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

B.21 Operational Flexibility [326 IAC 2-7-20] [326 IAC 2-7-10.5]

- (a) The Permittee may make any change or changes at the source that are described in 326 IAC 2-7-20(b), (c), or (e), without a prior permit revision, if each of the following conditions is met:
- (1) The changes are not modifications under any provision of Title I of the Clean Air Act;
 - (2) Any preconstruction approval required by 326 IAC 2-7-10.5 has been obtained;
 - (3) The changes do not result in emissions which exceed the emissions allowable under 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, P. O. Box 6015
Indianapolis, Indiana 46206-6015

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 which document, on a rolling five (5) year basis, all such changes and emissions trading that are subject to 326 IAC 2-7-20(b), (c), or (e) and makes such records available, upon reasonable request, for public review.

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

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

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

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

- (c) Emission Trades [326 IAC 2-7-20(c)]
The Permittee may trade increases and decreases in emissions in the source, where the applicable SIP provides for such emission trades without requiring a permit revision, subject to the constraints of Section (a) of this condition and those in 326 IAC 2-7-20(c).
- (d) Alternative Operating Scenarios [326 IAC 2-7-20(d)]
The Permittee may make changes at the source within the range of alternative operating scenarios that are described in the terms and conditions of this permit in accordance with 326 IAC 2-7-5(9). No prior notification of IDEM, OAQ, or U.S. EPA is required.

B.22 Inspection and Entry [326 IAC 2-7-6] [IC 13-14-2-2]

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) Have access to and copy any records that must be kept under the conditions of this permit;
- (c) Inspect any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit;
- (d) Sample or monitor substances or parameters for the purpose of assuring compliance with this permit or applicable requirements; and
- (e) 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, P.O. Box 6015
Indianapolis, Indiana 46206-6015

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, I/M & Billing Section), to determine the appropriate permit fee.

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 [40 CFR 52 Subpart P] [326 IAC 6-3-2]
- (a) Pursuant to 40 CFR 52 Subpart P, the allowable particulate matter emissions rate from any process not already regulated by 326 IAC 6-1 or any New Source Performance Standard, and which has a maximum process weight rate less than 100 pounds per hour shall not exceed 0.551 pounds per hour.
- (b) Pursuant to 326 IAC 6-3-2(e)(2), the allowable particulate emissions rate 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. This condition is not federally enforceable.
- C.2 Opacity [326 IAC 5-1]
- Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary Alternative Opacity Limitations), opacity shall meet the following, unless otherwise stated in this permit:
- (a) Opacity shall not exceed an average of forty percent (40%) in any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.
- (b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.
- C.3 Open Burning [326 IAC 4-1] [IC 13-17-9]
- The Permittee shall not open burn any material except as provided in 326 IAC 4-1-3, 326 IAC 4-1-4 or 326 IAC 4-1-6. The previous sentence notwithstanding, the Permittee may open burn in accordance with an open burning approval issued by the Commissioner under 326 IAC 4-1-4.1. 326 IAC 4-1-3 (a)(2)(A) and (B) are not federally enforceable.
- C.4 Incineration [326 IAC 4-2] [326 IAC 9-1-2]
- The Permittee shall not operate an incinerator or incinerate any waste or refuse except as provided in 326 IAC 4-2 and 326 IAC 9-1-2. 326 IAC 9-1-2 is not federally enforceable.
- C.5 Fugitive Dust Emissions [326 IAC 6-4]
- The Permittee shall not allow fugitive dust to escape beyond the property line or boundaries of the property, right-of-way, or easement on which the source is located, in a manner that would violate 326 IAC 6-4 (Fugitive Dust Emissions). 326 IAC 6-4-2(4) is not federally enforceable.
- C.6 Operation of Equipment [326 IAC 2-7-6(6)]
- Except as otherwise provided by statute or rule, or in this permit, all air pollution control equipment listed in this permit and used to comply with an applicable requirement shall be operated at all times that the emission units vented to the control equipment are in operation.
- C.7 Stack Height [326 IAC 1-7]
- The Permittee shall comply with the applicable provisions of 326 IAC 1-7 (Stack Height Provisions), for all exhaust stacks through which a potential (before controls) of twenty-five (25) tons per year or more of particulate matter or sulfur dioxide is emitted. The provisions of 326

IAC 1-7-2, 326 IAC 1-7-3(c) and (d), 326 IAC 1-7-4(d), (e), and (f), and 326 IAC 1-7-5(d) are not federally enforceable.

C.8 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, P.O. Box 6015
Indianapolis, Indiana 46206-6015

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) 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 that the inspector be accredited, pursuant to the provisions of 40 CFR 61, Subpart M, is federally enforceable.

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

C.9 Performance Testing [326 IAC 3-6]

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

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

Indiana Department of Environmental Management
Compliance Branch, Office of Air Quality
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

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 source submits to IDEM, OAQ, a reasonable written explanation not later than five (5) days prior to the end of the initial forty-five (45) day period.

Compliance Requirements [326 IAC 2-1.1-11]

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

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

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

C.11 Compliance Monitoring [326 IAC 2-7-5(3)] [326 IAC 2-7-6(1)]

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

Indiana Department of Environmental Management
Compliance Branch, Office of Air Quality
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

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

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

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

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

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. In addition, prompt corrective action shall be initiated whenever indicated.
- (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 is down for maintenance or repairs, the following shall be used as an alternative to continuous data collection:
 - (1) If the CEMS is required for monitoring NO_x or SO₂ emissions pursuant to 40 CFR 75 (Title IV Acid Rain program) or 326 IAC 10-4 (NO_x Budget Trading Program), the Permittee shall comply with the relevant requirements of 40 CFR 75 Subpart D - Missing Data Substitution Procedures.
 - (2) If the CEMS is not used to monitor NO_x or SO₂ emissions pursuant to 40 CFR 75 or 326 IAC 10-4, then supplemental or intermittent monitoring of the parameter shall be implemented as specified in Section D of this permit until such time as the emission monitor system 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.

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 shall prepare written emergency reduction plans (ERPs) consistent with safe operating procedures.
- (b) These ERPs shall be submitted for approval to:

Indiana Department of Environmental Management
Compliance Branch, Office of Air Quality

100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

within ninety (90) days after the date of issuance of this permit.

The ERP does require the certification by the “responsible official” as defined by 326 IAC 2-7-1(34).

- (c) If the ERP is disapproved by IDEM, OAQ, the Permittee shall have an additional thirty (30) days to resolve the differences and submit an approvable ERP.
- (d) These ERPs shall state those actions that will be taken, when each episode level is declared, to reduce or eliminate emissions of the appropriate air pollutants.
- (e) Said ERPs shall also identify the sources of air pollutants, the approximate amount of reduction of the pollutants, and a brief description of the manner in which the reduction will be achieved.
- (f) 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 68.215]

If a regulated substance, subject to 40 CFR 68, is present at a source in more than a threshold quantity, 40 CFR 68 is an applicable requirement and the Permittee shall submit:

- (a) A compliance schedule for meeting the requirements of 40 CFR 68; or
- (b) As a part of the annual compliance certification submitted under 326 IAC 2-7-6(5), a certification statement that the source is in compliance with all the requirements of 40 CFR 68, including the registration and submission of a Risk Management Plan (RMP);

All documents submitted pursuant to this condition shall include the certification by the “responsible official” as defined by 326 IAC 2-7-1(34).

C.16 Compliance Response Plan - Preparation, Implementation, Records, and Reports [326 IAC 2-7-5] [326 IAC 2-7-6]

- (a) The Permittee is required to prepare a Compliance Response Plan (CRP) for each compliance monitoring condition of this permit. A CRP shall be submitted to IDEM, OAQ upon request. The CRP shall be prepared within ninety (90) days after issuance of this permit by the Permittee, supplemented from time to time by the Permittee, maintained on site, and comprised of:
 - (1) Reasonable response steps that may be implemented in the event that a response step is needed pursuant to the requirements of Section D of this permit; and an expected timeframe for taking reasonable response steps.
 - (2) If, at any time, the Permittee takes reasonable response steps that are not set forth in the Permittee's current Compliance Response Plan and the Permittee documents such response in accordance with subsection (e) below, the Permittee shall amend its Compliance Response Plan to include such response steps taken.
- (b) For each compliance monitoring condition of this permit, reasonable response steps shall be taken when indicated by the provisions of that compliance monitoring condition as follows:

- (1) Reasonable response steps shall be taken as set forth in the Permittee's current Compliance Response Plan; or
 - (2) If none of the reasonable response steps listed in the Compliance Response Plan is applicable or responsive to the excursion, the Permittee shall devise and implement additional response steps as expeditiously as practical. Taking such additional response steps shall not be considered a deviation from this permit so long as the Permittee documents such response steps in accordance with this condition.
 - (3) If the Permittee determines that additional response steps would necessitate that the emissions unit or control device be shut down, the IDEM, OAQ shall be promptly notified of the expected date of the shut down, the status of the applicable compliance monitoring parameter with respect to normal, and the results of the actions taken up to the time of notification.
 - (4) Failure to take reasonable response steps shall constitute a violation of the permit.
- (c) The Permittee is not required to take any further response steps for any of the following reasons:
- (1) A false reading occurs due to the malfunction of the monitoring equipment and prompt action was taken to correct the monitoring equipment.
 - (2) The Permittee has determined that the compliance monitoring parameters established in the permit conditions are technically inappropriate, has previously submitted a request for a minor permit modification to the permit, and such request has not been denied.
 - (3) An automatic measurement was taken when the process was not operating.
 - (4) The process has already returned or is returning to operating within "normal" parameters and no response steps are required.
- (d) When implementing reasonable steps in response to a compliance monitoring condition, if the Permittee determines that an exceedance of an emission limitation has occurred, the Permittee shall report such deviations pursuant to Section B-Deviations from Permit Requirements and Conditions.
- (e) The Permittee shall record all instances when response steps are taken. In the event of an emergency, the provisions of 326 IAC 2-7-16 (Emergency Provisions) requiring prompt corrective action to mitigate emissions shall prevail.
- (f) Except as otherwise provided by a rule or provided specifically in Section D, all monitoring as required in Section D shall be performed when the emission unit is operating, except for time necessary to perform quality assurance and maintenance activities.

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 and 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 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) The Permittee shall submit an annual emission statement certified pursuant to the requirements of 326 IAC 2-6, that must be received by July 1 of each year and must comply with the minimum requirements specified in 326 IAC 2-6-4. The annual emission statement shall meet the following requirements:
 - (1) Indicate estimated actual emissions of criteria pollutants from the source, in compliance with 326 IAC 2-6 (Emission Reporting);
 - (2) Indicate estimated actual emissions of other regulated pollutants (as defined by 326 IAC 2-7-1) from the source, for purposes of Part 70 fee assessment.
 - (b) The annual emission statement covers the twelve (12) consecutive month time period starting January 1 and ending December 31. The annual emission statement must be submitted to:

Indiana Department of Environmental Management
Technical Support and Modeling Section, Office of Air Quality
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015
 - (c) The annual 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.

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

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

-
- (a) Records of all required data, reports and support information 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 kept 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 source 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 Branch, Office of Air Quality
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015
- (c) Unless otherwise specified in this permit, any notice, report, or other submission required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ, on or before the date it is due.
- (d) Unless otherwise specified in this permit, all reports required in Section D of this permit shall be submitted within thirty (30) days of the end of the reporting period. All reports do require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).
- (e) The first report shall cover the period commencing on the date of issuance of this permit and ending on the last day of the reporting period. Reporting periods are based on calendar years.

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.

SECTION D.1

FACILITY OPERATION CONDITIONS

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

- (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 facility description box is descriptive information and does not constitute enforceable conditions.)

Emissions Limitation 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.

Combined with the CO and NO_x emission limits in Condition D.1.4, this is equivalent to 245 tons/yr of CO emissions and 228 tons/yr of NO_x emissions. Combined with the CO and NO_x emissions from the boiler, the emergency generators, and the insignificant activities, the CO and NO_x emissions from the entire source are each limited to 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) combustion turbines are subject to 40 CFR Part 60, Subpart GG 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] [40 CFR 52.21] [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) rules, 326 IAC 2-2 and 40 CFR 52.21, do not apply.
- (b) The NO_x emissions from the turbines shall be limited to the following:
- (1) The NO_x emissions shall not exceed 92.4 lbs/MMBtu during the summer months (May through September) and shall not exceed 217 lbs/MMBtu 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.

Combined with Condition D.1.1, this is equivalent to 228 tons/yr of NO_x emissions. Combined with the NO_x emissions from the boiler, the emergency generators, and the insignificant activities, the NO_x 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.

- (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.

Combined with Condition D.1.1, this is equivalent to 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.

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 ±5.0 percent and shall be approved by the IDEM, OAQ. [40 CFR 60.334(b)]

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

Pursuant 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 Preventive Maintenance Plan [326 IAC 1-6-3]

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

Compliance Determination Requirements

D.1.8 Testing Requirements [326 IAC 2-7-6(1),(6)] [326 IAC 2-1.1-11] [40 CFR 75.12]

- (a) Prior to October 14, 2005, and in order to demonstrate compliance with Conditions D.1.3 and D.1.4(b) 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.
- (b) Prior to October 14, 2005, and in order to demonstrate compliance with Conditions D.1.3 and D.1.4(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.
- (c) Prior to September 27, 2005, and in order to demonstrate compliance with Condition D.1.4(a), 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.
- (d) Prior to September 27, 2005, and in order to demonstrate compliance with Condition D.1.4(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.

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(3)] [326 IAC 2-7-19]

D.1.10 Visible Emissions Notations

- (a) Visible emission notations of the turbine stack exhausts shall be performed once per shift 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) The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when an abnormal emission is observed. Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation Records and Reports shall be considered a deviation from this permit.

D.1.11 Nitrogen Oxides Monitoring Requirement [326 IAC 10-4-4(b)(1)] [326 IAC 10-4-12(b) and (c)] [40 CFR 75]

The Permittee shall meet the monitoring requirements of 326 IAC 10-4-12(b)(1) through (b)(3) that are applicable to their monitoring systems for the NO_x budget units on or before May 1, 2003. The Permittee shall record, report, and quality assure the data from the monitoring systems on and after May 1, 2003 in accordance with 326 IAC 10-4-12 and 40 CFR 75.

D.1.12 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.1.13 shall satisfy the monitoring requirements for the purposes of 40 CFR Part 60, Subpart GG.

D.1.13 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 Part 72.
 - (3) The Permittee shall record the time (hr. and min.), 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 0.01lb/MMBtu.

If either 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.1.14 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(b), D.1.4(c), D.1.6, D.1.12, and D.1.13, 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; and
- (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 recordings 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.
- (f) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

D.1.15 Nitrogen Oxides Budget Permit Application Submittal Requirement [326 IAC 10-4-4(a)(1)]
[326 IAC 10-4-9(e)]

- (a) For NO_x budget units that commenced operation prior to January 1, 2001, the NO_x authorized account representative shall submit a complete NO_x budget permit application in accordance with 326 IAC 10-4-7 at least two hundred seventy (270) days prior to May 31, 2004. This application shall be submitted by the NO_x authorized account representative to:

Indiana Department of Environmental Management
Permits Branch, Office of Air Quality
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

- (b) For the NO_x budget units that commenced operation on or after May 1, 2000, the NO_x authorized account representative shall submit a request for NO_x allowances in accordance with 326 IAC 10-4-9(e) by September 1 of the calendar year that is one (1) year in advance of the first ozone control period for which the NO_x allowance allocation is requested. The NO_x authorized account representative shall submit a request each year that the units will require allowances from the new unit set aside until the units are allocated allowances from the existing source pool. These requests shall be submitted by the NO_x authorized account representative to:

Indiana Department of Environmental Management
Compliance Branch, Office of Air Quality
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

D.1.16 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 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.
- (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

FACILITY OPERATION CONDITIONS

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

- (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]
- (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.
- (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 facility description box is descriptive information and does not constitute enforceable conditions.)

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

D.2.1 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]

- (a) The operating hours for the 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 this limit, along with the fuel usage limitation for the turbines and boiler (Condition D.1.1), 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 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

A Preventive Maintenance Plan, in accordance with Section B - Preventive 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 2.4, the Permittee shall maintain records for the life of the source in accordance with (1) through (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

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

- (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 facility 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 055-11032-00034, issued May 1, 2000, are incorporated by reference into this Part 70 permit and is attached as Appendix 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.

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

**PART 70 OPERATING PERMIT
CERTIFICATION**

Source Name: Worthington Generation, LLC
Source Address: South of the intersection of Route 67/237 and Route 57, Worthington, IN 47471
Mailing Address: RR1, Box 37B, Switz City, IN 47465
Part 70 Permit No.: T055-14484-00034

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 Data Section

Quarterly Report

Source Name: Worthington Generation, LLC
 Source Address: South of the intersection of Route 67/237 and Route 57, Worthington, IN 47471
 Mailing Address: RR1, Box 37B, Switz City, IN 47465
 Part 70 Permit No.: T055-14484-00034
 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

Quarterly Report

Source Name: Worthington Generation, LLC
Source Address: South of the intersection of Route 67/237 and Route 57, Worthington, IN 47471
Mailing Address: RR1, Box 37B, Switz City, IN 47465
Part 70 Permit No.: T055-14484-00034
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

Quarterly Report

Source Name: Worthington Generation, LLC
Source Address: South of the intersection of Route 67/237 and Route 57, Worthington, IN 47471
Mailing Address: RR1, Box 37B, Switz City, IN 47465
Part 70 Permit No.: T055-14484-00034
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 BRANCH
100 North Senate Avenue
P.O. Box 6015
Indianapolis, Indiana 46206-6015
Phone: 317-233-5674
Fax: 317-233-5967**

**PART 70 OPERATING PERMIT
EMERGENCY OCCURRENCE REPORT**

Source Name: Worthington Generation, LLC
Source Address: South of the intersection of Route 67/237 and Route 57, Worthington, IN 47471
Mailing Address: RR1, Box 37B, Switz City, IN 47465
Part 70 Permit No.: T055-14484-00034

This form consists of 2 pages

Page 1 of 2

- 9** This is an emergency as defined in 326 IAC 2-7-1(12)
- C The Permittee must notify the Office of Air Quality (OAQ), within four (4) business hours (1-800-451-6027 or 317-233-5674, ask for Compliance Section); and
 - C The Permittee must submit notice in writing or by facsimile within two (2) working days (Facsimile Number: 317-233-5967), and follow the other requirements of 326 IAC 2-7-16.

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

Facility/Equipment/Operation:

Control Equipment:

Permit Condition or Operation Limitation in Permit:

Description of the Emergency:

Describe the cause of the Emergency:

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

Page 2 of 2

Date/Time Emergency started:
Date/Time Emergency was corrected:
Was the facility being properly operated at the time of the emergency? Y N Describe:
Type of Pollutants Emitted: TSP, PM-10, SO ₂ , VOC, NO _x , CO, Pb, other:
Estimated amount of pollutant(s) emitted during emergency:
Describe the steps taken to mitigate the problem:
Describe the corrective actions/response steps taken:
Describe the measures taken to minimize emissions:
If applicable, describe the reasons why continued operation of the facilities 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 Branch**

**PART 70 OPERATING PERMIT
QUARTERLY DEVIATION AND COMPLIANCE MONITORING REPORT**

Source Name: Worthington Generation, LLC
Source Address: South of the intersection of Route 67/237 and Route 57, Worthington, IN 47471
Mailing Address: RR1, Box 37B, Switz City, IN 47465
Part 70 Permit No.: T055-14484-00034

Months: _____ to _____ Year: _____

Page 1 of 2

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. Deviations that are required to be reported by an applicable requirement shall be reported according to the schedule stated in the applicable requirement and do not need to be included in this report. Additional pages may be attached if necessary. If no deviations occurred, please specify in the box marked "No deviations occurred this reporting period".

NO DEVIATIONS OCCURRED THIS REPORTING PERIOD.

THE FOLLOWING DEVIATIONS OCCURRED THIS REPORTING PERIOD

Permit Requirement (specify permit condition #)

Date of Deviation:

Duration of Deviation:

Number of Deviations:

Probable Cause of Deviation:

Response Steps Taken:

Permit Requirement (specify permit condition #)

Date of Deviation:

Duration of Deviation:

Number of Deviations:

Probable Cause of Deviation:

Response Steps Taken:

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

Form Completed By: _____

Title/Position: _____

Date: _____

Phone: _____

Attach a signed certification to complete this report.

Appendix A: Phase II Acid Rain Permit

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT Office of Air Management

Source Name: Worthington Generation, L.L.C.
Source Location: South of the Intersection of Routes 67/231
and Route 57 in Greene County,
near Worthington, Indiana
Operated by: Worthington Generation, L.L.C.
ORIS Code: 55148

The above company is hereby authorized to operate subject to the conditions contained herein, four (4) natural gas-fired turbines, identified as Turbines 1, 2, 3, and 4, each with a net generating capacity of approximately 45 MW and a maximum design heat input capacity of approximately 460 million Btus per hour, with water injection for control of NO_x emissions. Combustion emissions will be exhausted through a stack for each unit designated as 1, 2, 3, and 4.

Operation Permit No.: AR 055-11032-00034	
Issued by: Janet G. McCabe, Assistant Commissioner Office of Air Management	Issuance Date: May 18, 2000 Expiration Date: May 18, 2005

Section E Title IV Acid Rain

326 IAC 21 and 40 CFR 72 through 40 CFR 78, and 58 FR 3590

Facilities Description:

four (4) natural gas-fired turbines, identified as Turbines 1, 2, 3, and 4, each with a net generating capacity of approximately 45 megawatts and a maximum design heat input capacity of 460 million Btus per hour, with water injection for control of NO_x emissions. Combustion emissions will be exhausted through a stack for each unit designated as 1, 2, 3, and 4.

E.1.1 Statement of Basis

Statutory and Regulatory Authorities: In accordance with IC 13-17-3-4, IC 13-17-3-11, IC 13-17-8-1, and IC 13-17-8-2 as well as Title IV - Acid Deposition Control - Section 400 of the Clean Air Act, the Indiana Department of Environmental Management (IDEM), Office of Air Management (OAM) issues this permit pursuant to 326 IAC 2 and 326 IAC 21 (incorporates by reference 40 CFR 72 through 78).

E.1.2 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 owners and operators of each affected source and each affected unit shall operate the unit in compliance with this Acid Rain permit.

E.1.3 Monitoring Requirements [326 IAC 21]

- (a) The owners and operators and, to the extent applicable, the designated representative of each affected source and each affected unit at the source shall comply with the monitoring requirements as provided in 40 CFR 75.
- (b) The emissions measurements shall be recorded and reported in accordance with 40 CFR 75 and 72.9(b)(1) and (2) to determine compliance by the unit with the Acid Rain emissions limitations and emissions reduction requirements for sulfur dioxide and nitrogen oxides under the Acid Rain Program.
- (c) The requirements of 40 CFR 75 shall not affect the responsibility of the owners and operators to monitor emissions of other pollutants or emissions characteristics at the unit required by the Clean Air Act and any provisions of the operating permit for the source.

E.1.4 Sulfur Dioxide Requirements [326 IAC 21]

- (a) The owners and operators of each source and each affected unit at the source shall:
 - (1) Hold allowances, as of the allowance transfer deadline (as defined in 40 CFR 72.2), in the unit's compliance subaccount, after deductions under 40 CFR 73.34(c), not less than the total annual emissions of sulfur dioxide for the previous calendar year from the unit; 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) An affected unit shall be subject to the requirements under paragraph (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 later 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 transferred among Allowance Tracking System accounts in accordance with the Acid Rain Program.
- (e) These units were not allocated allowances by United States Environmental Protection Agency (U.S. EPA) under 40 CFR part 73. However, these units must still comply with the requirement to hold allowances to account for sulfur dioxide emissions under E.1.4(a) and 326 IAC 21.
- (f) 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. Pursuant to 40 CFR 72.9(c)(7), allowances allocated by U.S. EPA do not constitute a property right.
- (g) 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).

E.1.5 Nitrogen Oxides Requirements [326 IAC 21]

Pursuant to 40 Code of Federal Regulations (CFR) 76, Acid Rain Nitrogen Oxides Emission Reduction Program, the units are not subject to the nitrogen oxide limitations set out in 40 CFR 76.

E.1.6 Excess Emissions Requirements for Sulfur Dioxide [326 IAC 21]

- (a) The designated representative of an affected unit that has excess emissions of sulfur dioxide in any calendar year shall submit a proposed offset plan to U.S. EPA and IDEM, OAM as required under 40 CFR 77 and 326 IAC 21.
- (b) The designated representative shall submit such required information to:

Indiana Department of Environmental Management
Compliance Data Section, Office of Air Management
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

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
Acid Rain Program (6204J)
Attn.: Annual Reconciliation
401 M Street, SW
Washington, DC 20460

- (c) The owners and operators of an affected unit that has excess emissions in any calendar year 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.

E.1.7 Record Keeping and Reporting Requirements [326 IAC 21]

- (a) Unless otherwise provided, the owners and operators of the source and each affected unit at the source shall keep on site at the source 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 5 years, in writing by U.S. EPA or IDEM, OAM:
 - (1) The certificate of representation for the designated representative for the source and each affected unit at the source 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, in accordance with 40 CFR 75;
 - (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 an affected source and each affected unit at the source 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.

E.1.8 Submissions [326 IAC 21]

- (a) The designated representative shall submit a certificate of representation and any superseding certificate of representation to U.S. EPA in accordance with 40 CFR 72 and 326 IAC 21.
- (b) The designated representative shall submit such required information to:

Indiana Department of Environmental Management
Compliance Data Section, Office of Air Management
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

and

U.S. Environmental Protection Agency
Acid Rain Program (6204J)

Attn.: Designated Representative
401 M Street, SW
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 statement, which shall be included verbatim:
 - (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 a source shall notify each owner and operator of the source and of an affected unit at the source:
 - (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, OAM, and
 - (3) Provided that the submission or determination covers the source or the unit.
- (f) The designated representative of a source shall provide each owner and operator of an affected unit at the source a copy of any submission or determination under condition (d) of this section, unless the owner or operator expressly waives the right to receive a copy.

E.1.9 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)].

E.1.10 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 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 and 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) Each affected source and each affected unit shall meet the requirements of the Acid Rain Program.
- (e) Any provision of the Acid Rain Program that applies to an affected source, including a provision applicable to the designated representative of an affected source, shall also apply to the owners and operators of such source and of the affected units at the source.
- (f) Any provision of the Acid Rain Program that applies to an affected unit, including a provision applicable to the designated representative of an affected unit, shall also apply to the owners and operators of such unit. Except as provided under 40 CFR 72.44 (Phase II repowering extension plans) and 40 CFR 76.11 (NO_x 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 owners and operators 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, 76, 77, and 78 by an affected source or affected unit, or by an owner or operator or designated representative of such source or unit, shall be a separate violation of the Clean Air Act.

E.1.11 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 owners and operators and, to the extent applicable, the designated representative of an affected source or affected unit 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 791a 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 Significant Source Modification and a
Part 70 Significant Permit Modification**

Source Background and Description

Source Name:	Worthington Generation, LLC
Source Location:	South of Intersection of Routes 67/237 and Route 57, near Worthington, Indiana 47471
Mailing Address:	RR1, Box 37B, Switz City, Indiana 47465
County:	Greene
SIC Code:	4911
Operation Permit No.:	T055-14484-00034
Operation Permit Issuance Date:	May 28, 2003
Significant Source Modification No.	055-18572-00034
Significant Permit Modification No:	055-18803-00034
Permit Reviewer:	ERG/YC

The Office of Air Quality (OAQ) has reviewed a modification application from Worthington Generation, LLC relating to combust No. 2 fuel oil as a back-up fuel for the following emission units:

Four (4) simple cycle natural gas-fired turbines, identified as Turbines 1 through 4, constructed in 2000, each with a maximum heat input capacity of 460 MMBtu/hr and a generating capacity of 45 MW, using water-injection to control NO_x emissions, and exhausting to four (4) stacks, designated as S-1 through S-4, respectively.

The source also proposed to construct and operate the following new emission units:

- (a) One (1) diesel fired emergency generator, constructed in 2004, with a maximum power output rate of 3,000 horsepower.
- * (b) One (1) No. 2 fuel oil storage tank, constructed in 2004, with a maximum capacity of 950,000 gallons.

*Note: This is considered an insignificant unit as defined in 326 IAC 2-7-1(21).

History

Worthington Generation, LLC is an existing power plant with four (4) natural gas-fired turbines. A Part 70 permit (T055-14484-00034) was issued to this source on May 28, 2003. On February 24, 2004, the source submitted an application requesting to use No. 2 fuel oil as a back-up fuel for the four (4) existing natural gas-fired turbines and to construct and operate an additional diesel fired emergency generator and a No. 2 fuel oil storage tank.

Pursuant to T055-14484-00034, issued on May 28, 2003, the potential to emit CO and NO_x from the entire source is limited to less than 250 tons/yr by limiting the total natural gas use. Therefore, this existing power plant is a PSD minor source. The source proposed to maintain their PSD

minor source status by limiting the total fuel usage (including natural gas and No. 2 fuel oil), limiting NO_x, CO, and SO₂ emissions on a lb/MMBtu basis, and by limiting the operating hours for the emergency generators.

Enforcement Issue

There are no enforcement actions pending.

Recommendation

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

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

An application for the purposes of this review was received on February 24, 2004. Additional information was received on March 18, 2004.

Emission Calculations

See Appendix A of this document for detailed emissions calculations (pages 1 through 3).

Potential To Emit of Modification

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

This table reflects the PTE before controls. Control equipment is not considered federally enforceable until it has been required in a federally enforceable permit.

Pollutant	*Potential To Emit (tons/year)
PM	808
PM-10	808
SO ₂	4,072
VOC	132
CO	456
NO _x	1,393

HAP's	*Potential To Emit (tons/year)
Propylene	22.5
Benzene	6.25
Toluene	2.26
Xylene	1.56
Naphthalene	1.05
TOTAL	33.6

*Note: Since the use of natural gas in the existing turbines has been permitted, the potential to emit listed here only includes the PTE of the turbines while using No. 2 fuel oil, the new emergency generator, and the new fuel oil storage tank.

Justification for Modification

This modification is being performed through a Part 70 Significant Source Modification pursuant to 326 IAC 2-7-10.5(f) as (1) the potential to emit PM, PM10, VOC, NO_x and SO₂ is each greater than 25 tons per year; (2) the potential to emit CO is greater than 100 tons per year; and (3) the potential to emit HAPs is greater than 10 tons/yr for a single HAP and greater than 25 tons/yr for total HAPs. The permit modification is being performed through a Significant Permit Modification pursuant to 326 IAC 2-7-12(d) because this is a modification under provisions of Title I of CAA.

County Attainment Status

The source is located in Greene County.

Pollutant	Status
PM-10	attainment
SO ₂	attainment
NO ₂	attainment
Ozone	attainment
CO	attainment
Lead	attainment

- (a) Volatile organic compounds (VOC) are precursors for the formation of ozone. Therefore, VOC emissions are considered when evaluating the rule applicability relating to the ozone standards. Greene County has been designated as attainment or unclassifiable for ozone. Therefore, VOC emissions were reviewed pursuant to the requirements for 326 IAC 2-2 (Prevention of Significant Deterioration (PSD)).
- (b) Greene County has been classified as attainment or unclassifiable for all other criteria pollutants. Therefore, these emissions were reviewed pursuant to the requirements for 326 IAC 2-2 (Prevention of Significant Deterioration (PSD)).
- (c) Fugitive Emissions
 This type of operation is not in one of the 28 source categories under 326 IAC 2-2 (this source does not use steam as the working fluid and is not considered a steam electric plant). However, 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 applicability.

Source Status

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

Pollutant	Emissions (tons/year)
PM	27.2
PM-10	27.2
SO ₂	1.75
VOC	23.9
CO	less than 250
NO _x	less than 250

- (a) This existing source is not a major stationary source because no attainment regulated pollutant is emitted at a rate of 250 tons per year or more, and it is not in one of the 28 listed source categories.
- (b) These emissions are based upon the potential to emit (PTE) of the entire source in the Technical Support Document (TSD) for the Significant Permit Modification #055-17372-00034, issued on November 14, 2003.

Potential to Emit of the Modification After Issuance

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

Process/facility	Potential to Emit (tons/year)						
	PM	PM-10	SO ₂	VOC	CO	NO _x	HAPs
*Modified Four (4) Turbines	Less than 47.5 134	Less than 47.5 134	Less than 1.60 204	Less than 23.4	Less than 245	Less than 245 228	Less than 5.01
**Existing natural gas Boiler	0.59	0.59	0.05	0.43			Negligible
New Emergency Generator	Less than 0.99	Less than 0.99	Less than 0.92	Less than 1.11	Less than 3.01	Less than 14.0	Negligible
**Existing Emergency Generator	Negligible	Negligible	Less than 0.10	Less than 0.14	Less than 1.00	Less than 2.28	Negligible
New Storage Tank (Insignificant)	-	-	-	Less than 1.0	-	-	Negligible
**Existing Fugitive Emissions	9.06	9.06	-	-	-	-	-
Total PTE of Entire Source After this Modification	Less than 145	Less than 145	Less than 204	Less than 26.1	Less than 249	Less than 244	Less than 5.01
PSD Significant Thresholds	250	250	250	250	250	250	NA

Note: (*) The PTE for the turbines is the worst case scenario between using No. 2 fuel oil and natural gas.

(**) The PTE for the existing units is from the TSD for MSM# 055-17772-00034, issued on September 29, 2003.

This modification to an existing minor stationary source is not major because the existing source is a PSD minor source and the potential to emit of each criteria pollutant from the proposed modification is less than the PSD significant thresholds of 250 tons/yr. Therefore, pursuant to 326 IAC 2-2, the PSD requirements do not apply. The source will maintain their PSD minor status after this modification.

Federal Rule Applicability

- (a) The four existing natural gas-fired turbines were constructed after October 3, 1977 and each has a heat input at peak load greater than 10 MMBtu/hr, based on the lower heating value of the fuel fired. Therefore, these turbines are subject to the New Source Performance Standards for Stationary Gas Turbines (326 IAC 12, 40 CFR 60.330-335, Subpart GG). Pursuant to 40 CFR 60, Subpart GG, the Permittee shall comply with the following applicable requirements:

- (1) Pursuant to 40 CFR 60.332(b), the Permittee shall comply with the emission limits in 40 CFR 60.332(a)(1) for each turbine with a maximum heat input rate greater than 100 MMBtu/hr. Pursuant to 40 CFR 60.332(a)(1), the NO_x emissions from each affected unit shall not exceed the following:

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

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 40 CFR 60.332(a)(3).

- (2) Pursuant to 40 CFR 60.333, the Permittee shall limit SO₂ emissions to less than 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) Pursuant to 40 CFR 60.334(a), the Permittee shall install a continuous monitoring system to monitor and record the fuel consumption and the ratio of water to fuel being fired in the turbines.
- (4) Pursuant to 40 CFR 60.334(b), the Permittee shall monitor the sulfur content and nitrogen content of the fuel being fired in the turbines.
- (5) Pursuant to 40 CFR 60.334(c), the Permittee shall report periods of excess emissions.
- (b) 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 permit AR 055-11032-00034, issued May 18, 2000, and have been included as Appendix A to the source's Title V permit (T055-14484-00034, issued May 28, 2003).
- (c) The proposed No. 2 fuel oil storage tank has a capacity greater than 75 cubic meters (19,813 gallons). Therefore, this storage tank is subject to the requirements of New Source Performance Standards for Volatile Organic Liquid Storage Vessels for which construction, reconstruction, or modification commenced after July 23, 1984 (326 IAC 12, 40 CFR 60.110b - 117b, Subpart Kb).

The proposed tank is a fixed roof tank and the vapor pressure of the liquid stored in this tank is less than 76.6 kPa (11 psi). Therefore, the requirements in 40 CFR 60.112b are not applicable to this tank. Pursuant to 40 CFR 60.116b, the Permittee shall keep readily accessible records of the following, for the life time of the source, for the proposed fuel oil storage tank:

- (1) The dimension of the storage vessel; and
- (2) An analysis showing the capacity of the storage vessel.
- (d) The potential to emit HAPs from this source is limited to less than 10 tons/yr for a single HAP and less than 25 tons/yr for total HAPs. Therefore, the National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines (40 CFR 63, Subpart ZZZZ) are not applicable to the proposed emergency generator.

- (e) This modification involves pollutant-specific emissions units (turbines) as defined in 40 CFR 64.1:
 - (1) With the potential to emit before controls equal to or greater than the major source threshold;
 - (2) That is subject to an emission limitation or standard; and
 - (3) Uses a control device as defined in 40 CFR 64.1 to comply with that emission limitation or standard.

However, since these turbines are subject to Acid Rain Program, they are exempt from the requirements of 40 CFR 64 (Compliance Assurance Monitoring), pursuant to 40 CFR 64.2(b)(1).

State Rule Applicability - Four (4) Turbines Using No. 2 Fuel Oil

326 IAC 2-2 (PSD)

This source was constructed in 2000 and modified in 2003 and 2004 (this modification). Pursuant to SPM #055-17059-00034, issued on November 14, 2003, the existing turbines have the following requirements:

- (a) The total "weighted" natural gas usage for the existing turbine and the boiler shall be limited to less than 4,930 MMSCF/yr.
- (b) For every 1.0 MMSCF consumed by the existing boiler, the "weighted" natural gas limit shall be reduced by 1.08 MMSCF.
- (c) 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) The CO emissions shall not exceed 99.5 lbs/MMBtu during the summer months (May through September) and shall not exceed 233.8 lbs/MMBtu during the winter months (October through April).
- (e) The NO_x emissions shall not exceed 99.5 lbs/MMBtu during the summer months (May through September) and shall not exceed 233.8 lbs/MMBtu during the winter months (October through April).

This is equivalent to 245 tons/yr of CO and NO_x emissions. Combined with the emissions from other existing units, the CO and NO_x emissions from the entire source are each limited to less than 250 tons/yr. Therefore the existing source is a PSD minor source.

The source proposed to use No. 2 fuel oil as a back-up fuel in the existing turbines. The potential to emit NO_x, SO₂, CO, PM and PM10 of this modification is each greater than 250 tons/yr. In order to maintain a PSD minor status, the source shall comply with the following additional requirements for the existing turbines:

- (a) When using natural gas as fuel, the NO_x emissions shall not exceed 92.4 lbs/MMBtu during the summer months (May through September) and shall not exceed 217 lbs/MMBtu during the winter months (October through April).

Combined with the "weighted" natural gas usage limit of 4,930 MMSCF/yr, this is equivalent to 228 tons/yr of NO_x emissions.

- (b) The NO_x emissions shall not exceed 0.17 lbs/MMBtu while using No. 2 fuel oil with a maximum heat heating value of 139,000 Btu/gal.

When using No. 2 fuel oil only, the maximum No. 2 fuel oil usage limit is 19,300 kgal/yr.

$$[228 \text{ tons/yr} \times 2000 \text{ lbs/ton} / (0.17 \text{ lbs/MMBtu}) / (139 \text{ MMBtu/kgal}) = 19,300 \text{ kgal/yr}]$$

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

Assuming all the fuel used is No. 2 fuel oil and combined with the maximum fuel oil usage limit of 19,300 kgal/yr, this is equivalent to 204 tons/yr of SO₂ emissions.

$$[19,300 \text{ kgal/yr} \times 139 \text{ MMBtu/kgal} \times 0.152 \text{ lbs/MMBtu} \times 1 \text{ ton}/2000 \text{ lbs} = 204 \text{ tons/yr}]$$

While using natural gas, the potential to emit SO₂ from the turbines is less than 1.6 tons/yr (see the TSD for T055-14484-00034, issued on May 28, 2003), which is less than the PTE of SO₂ for this modification. Therefore, the PTE of SO₂ for the turbines becomes 204 tons/yr after this modification.

- (d) Every kilogallon (1,000 gallons) of No. 2 fuel oil consumed by the turbines is equivalent to 0.255 MMSCF of "weighted" natural gas usage.

$$[(4,930 \text{ MMCF/yr while using natural gas}) / (19,300 \text{ kgal/yr while using No. 2 fuel oil}) = 0.255 \text{ MMCF/kgal}]$$

- (e) The CO emission factor is 0.056 lbs/MMBtu while using No. 2 fuel oil (this is provided by the vendor and will be verified by stack tests). Combined with the fuel usage limit of 19,300 kgal/yr, this is equivalent to 75.1 tons/yr of CO emissions.

$$[19,300 \text{ kgal/yr} \times 139 \text{ MMBtu/kgal} \times 0.056 \text{ lbs/MMBtu} \times 1 \text{ ton}/2000 \text{ lbs} = 75.1 \text{ tons/yr}]$$

While using natural gas, the PTE of CO for the turbines is limited to less than 245 tons/yr (see the TSD for T#055-14484-00034, issued on May 28, 2003), which is greater than the PTE of CO for this modification. Therefore, the PTE of CO for the turbines remains 245 tons/yr after this modification.

- (e) The PM/PM10 emission factor is 0.10 lbs/MMBtu while using No. 2 fuel oil according to AP-42, Table 3.4-1. Combined with the fuel usage limit of 19,300 kgal/yr, this is equivalent to 134 tons/yr of PM/PM10 emissions.

$$[19,300 \text{ kgal/yr} \times 139 \text{ MMBtu/kgal} \times 0.1 \text{ lbs/MMBtu} \times 1 \text{ ton}/2000 \text{ lbs} = 134 \text{ tons/yr}]$$

While using natural gas, the PTE of PM/PM10 for the turbines is limited to less than 17.5 tons/yr (see the TSD for T#055-14484-00034, issued on May 28, 2003), which is less than the PTE of PM/PM10 for this modification. Therefore, the PTE of PM/PM10 for the turbines becomes 134 tons/yr after this modification.

Combined with the emissions from the existing boiler, the emergency generators, and the insignificant activities, the NO_x, SO₂, CO, PM and PM10 emissions from the entire source are each limited to less than 250 tons/yr. Therefore, this source is minor under 326 IAC 2-2 (PSD).

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

This source was constructed in 2000 and modified in 2003 and 2004 (this modification). With the fuel usage limit, the potential to emit HAPs from this modification is limited to less than 10 tons/yr for a single HAP and less than 25 tons/yr for total HAPs. Therefore, the requirements of 326 IAC 2-4.1 (MACT) are not applicable to this modification.

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

The gas turbines at this source are not utilized as a source of indirect heating. Therefore, the requirements of 326 IAC 6-2 are not applicable.

326 IAC 7-1.1-2 (SO₂ Emission Limitations)

The potential to emit SO₂ for each turbine is greater than 25 tons per year. Therefore, these turbines are subject to the requirements of 326 IAC 7-1.1. Pursuant to 326 IAC 7-1.1-2, sulfur dioxide 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):

With the fuel usage limit, the potential to emit VOC from each turbine is less than 25 tons/yr. Therefore, the requirements of 326 IAC 8-1-6 (BACT) are not applicable to these turbines.

326 IAC 9-1 (CO Emission Requirements)

This source is not among the listed source categories in 326 IAC 9-1-2. Therefore, the requirements of 326 IAC 9-1 are not applicable.

326 IAC 10-1-3 (Nitrogen Oxide Emission Requirements)

This source is not located in Clark or Floyd County. Therefore, the requirements of 326 IAC 10-1-3 are not applicable.

326 IAC 10-4 (NO_x Budget Trading Program)

Pursuant to 326 IAC 10-4-2(16), the turbines at this source are considered "electricity generating units (EGU)" because they commenced operation 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 NO_x budget unit. Because this source meets the criteria of having one (1) or more NO_x budget units, it is a NO_x budget source. The Permittee shall be subject to the requirements of this rule.

Since the turbines at this source commenced operation after May 1, 2000, these units were not allocated NO_x allowances for the 2004, 2005, and 2006 ozone seasons from the existing EGU budget under 326 IAC 10-4-9(b)(1)(A). Therefore, if the NO_x authorized account representative requires NO_x allowances to be allocated, the NO_x authorized account representative shall submit a written request to the IDEM, OAQ for NO_x allowances in accordance with 326 IAC 10-4-9(e)(2) and (3).

Pursuant to 326 IAC 10-4-12(c), the Permittee shall install the appropriate monitoring systems and complete all certification tests as required by 326 IAC 10-4-12(b)(1) through (3) on or before May 1, 2003. The Permittee shall record, report, and quality assure the data from the monitoring systems on and after May 1, 2003.

326 IAC 3-5 (Continuous Monitoring of Emissions)

If continuous emissions monitors are used to meet the requirements of 40 CFR Part 60, Subpart GG or 40 CFR Part 75, the Permittee shall install, calibrate, certify, operate and maintain a continuous emission monitoring system (CEMS) for measuring NO_x and SO₂ emissions rates from stacks S-1 through S-4 in accordance with 326 IAC 3-5-2 and 326 IAC 3-5-3. However, this source currently is not required to install CEMs.

State Rule Applicability - Diesel Fueled Emergency Generator

326 IAC 2-2 (PSD)

In order to maintain a PSD minor status, the operating hours for the new 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. This is equivalent to 14.0 tons/yr of NO_x emissions and 3.01 tons/yr of CO emissions. Combined with the NO_x and CO emissions from the existing turbines, the existing boiler, and the insignificant activities, the NO_x and CO emissions from the entire source are each limited to less than 250 tons/yr. Therefore, this source is minor under 326 IAC 2-2 (PSD).

326 IAC 7-1.1-2 (SO₂ Emission Limitations)

The potential to emit SO₂ for the proposed diesel fueled emergency generator is less than 25 tons per year. Therefore, the requirements of 326 IAC 7-1.1 are not applicable to this generator.

326 IAC 9-1 (CO Emission Requirements)

This source is not among the listed source categories in 326 IAC 9-1-2. Therefore, the requirements of 326 IAC 9-1 are not applicable to this generator.

326 IAC 10-1-3 (Nitrogen Oxide Emission Requirements)

This source is not located in Clark or Floyd County. Therefore, the requirements of 326 IAC 10-1-3 are not applicable to this generator.

State Rule Applicability - Fuel Oil Storage Tank (Insignificant Activity)

326 8-4-3 (Petroleum Liquid Storage Facilities)

This new tank will be used to store No. 2 fuel oil, which has a vapor pressure less than 10.5 kPa. Therefore, the requirements of 326 IAC 8-4-3 are not applicable to this tank.

326 IAC 8-9 (Volatile Organic Liquid Storage Vessels)

This source is not located in Clark, Floyd, Lake, or Porter County. Therefore, the requirements of 326 IAC 8-9-1 are not applicable to this new tank.

Compliance Requirements

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

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

1. The four (4) existing turbines have applicable compliance monitoring conditions as specified below:
 - (a) Visible emissions notations of the turbine stacks (stacks #1 through 4) shall be performed once per shift during normal daylight operations. A trained employee will record whether emissions are normal or abnormal. For processes operated continuously "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time. In the case of batch or discontinuous operations, readings

shall be taken during that part of the operation that would normally be expected to cause the greatest emissions. A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process. The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when an abnormal emission is observed.

- (b) The Permittee shall meet the monitoring requirements of 326 IAC 10-4-12(b)(1) through (b)(3) that are applicable to their monitoring systems for the NO_x budget units on or before May 1, 2003. The Permittee shall record, report, and quality assure the data from the monitoring systems on and after May 1, 2003 in accordance with 326 IAC 10-4-12 and 40 CFR 75.
- (c) Pursuant to 40 CFR Part 60.334(a), 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 ±5.0 percent and shall be approved by the IDEM, OAQ.
- (d) Pursuant to 40 CFR Part 60.334 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 limit specified in 40 CFR 60, Subpart GG, 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, 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 shall satisfy the monitoring requirements for the purposes of 40 CFR Part 60, Subpart GG.

- (e) Pursuant to CP #055-10724-00034, issued July 15, 1999, and 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.

- (f) Pursuant to CP #055-10724-00034, issued July 15, 1999, 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 Part 72.
 - (3) The Permittee shall record the time (hr. and min.), 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 either 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.

These monitoring conditions are necessary to ensure compliance with 326 IAC 2-2 (PSD), 326 IAC 10-4 (NO_x Budget Trading Program), 40 CFR 60, Subpart GG, 40 CFR 72.9, and 40 CFR 75.12.

Proposed Changes

Language with a line through it has been deleted, and new language is in bold.

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 180 MW merchant electric generating peaking station.

Responsible Official: Vice President, Hoosier Energy REC
Source Address: South of Intersection of Routes 67/237 and Route 57, near
Worthington, Indiana 47471

Mailing Address: RR1, Box 37B, Switz City, Indiana 47465
Source Phone Number: 812-875-9707
SIC Code: 4911
County Location: Greene
Source Location Status: Attainment for all criteria pollutants
Source Status: Part 70 Permit Program
Minor Source, under PSD
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)]

- (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:
...
 - (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]**

SECTION D.1 FACILITY OPERATION CONDITIONS

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

- (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 facility description box is descriptive information and does not constitute enforceable conditions.)

Emissions Limitation and Standards [326 IAC 2-7-5(1)]

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

Pursuant to ~~GP 055-10724-00034~~, issued July 15, 1999:

- (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.

Based on a higher heating value for natural gas of 1,020 Btu per cubic foot, compliance with these limitations, in addition to the operating hour limitation on the emergency generator (Section D.2), is equivalent to NO_x and CO emissions of less than 250 tons, per pollutant, during any twelve (12) consecutive month period and will render the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration) not applicable.

- (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.

Combined with the CO and NO_x emission limits in Condition D.1.4, this is equivalent to 245 tons/yr of CO emissions and 228 tons/yr of NO_x emissions. Combined with the CO and NO_x emissions from the boiler, the emergency generators, and the insignificant activities, the CO and NO_x emissions from the entire source are each limited to less than 250 tons/yr. Therefore, the requirements of 326 IAC 2-2 (PSD) are not applicable.

D.1.4 Emission Rate Limitations [326 IAC 2-2] [40 CFR 52.21] [326 IAC 8-1-6]

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

- (a) Pursuant to CP 055-10724-00034, issued July 15, 1999, the CO and NO_x emission rates 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 and NO_x emission rates 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) rules, 326 IAC 2-2 and 40 CFR 52.21, do not apply.
- (b) The NO_x emissions from the turbines shall be limited to the following:
 - (1) The NO_x emissions shall not exceed 92.4 lbs/MMBtu during the summer months (May through September) and shall not exceed 217 lbs/MMBtu 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.

Combined with Condition D.1.1, this is equivalent to 228 tons/yr of NO_x emissions. Combined with the NO_x emissions from the boiler, the emergency generators, and the insignificant activities, the NO_x 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.

- (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.**

Combined with Condition D.1.1, this is equivalent to 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.

- (bd) **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(b) will ensure that 326 IAC 8-1-6 (BACT) does not apply.**

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

Pursuant 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.1.67 Preventive Maintenance Plan [326 IAC 1-6-3]

D.1.78 Testing Requirements [326 IAC 2-7-6(1),(6)] [326 IAC 2-1.1-11] [40 CFR 75.12]

- (a) Prior to October 14, 2005, and in order to demonstrate compliance with Conditions ~~D.1.1~~, D.1.3 and D.1.4(~~a~~b) 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.
- (b) Prior to October 14, 2005, and in order to demonstrate compliance with Conditions ~~D.1.1~~, D.1.3 and D.1.4(~~a~~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.
- (c) Prior to September 27, 2005, and in order to demonstrate compliance with Conditions ~~D.1.1~~, and D.1.4(a) 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.
- (d) Prior to September 27, 2005, and in order to demonstrate compliance with Condition D.1.4(~~b~~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.

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(3)] [326 IAC 2-7-19]

D.1.10 Visible Emissions Notations

- (a) **Visible emission notations of the turbine stack exhausts shall be performed once per shift 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) **The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when an abnormal emission is observed. Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation Records and Reports shall be considered a deviation from this permit.**

D.1.811 Nitrogen Oxides Monitoring Requirement [326 IAC 10-4-4(b)(1)] [326 IAC 10-4-12(b) and (c)] [40 CFR 75]

D.1.912 Sulfur Content and Nitrogen Content Monitoring [40 CFR Part 60, Subpart GG]

-
- (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.1.4013 shall satisfy the monitoring requirements for the purposes of 40 CFR Part 60, Subpart GG.

D.1.4013 SO₂ and NO_x Monitoring Requirements [40 CFR Part 72.9] [40 CFR Part 75]

- (a) Pursuant to ~~GP 055-10724-00034, issued July 15, 1999,~~ and 40 CFR 72.9 and 40 CFR 75.11, the Permittee has elected to monitor SO₂ emissions from the ~~natural gas-fired combustion~~ turbines pursuant to 40 CFR 75, Appendix D. Appendix D includes, but is not limited to, the following requirements:
- ...
- (2) ~~The Permittee shall use the default SO₂ emission rate of 0.0006 lb/MMBtu and the hourly input from pipeline natural gas in MMBtu/hr, as determined using the procedures in section 5.5 of Appendix F to 40 CFR Part 75. The Permittee shall calculate SO₂ emissions using equation D-5 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.**
- ...
- (b) Pursuant to ~~GP 055-10724-00034, issued July 15, 1999,~~ 40 CFR 72.9, and 40 CFR 75.12, the Permittee has elected to monitor NO_x emissions from the ~~natural gas-fired combustion~~ 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:

D.1.4114 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.1.1, D.1.3, D.1.4(b), D.1.4(c), D.1.6, D.1.9, D.1.12, and D.1.13,~~ 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; and**

- (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 recordings for continuous monitoring instrumentation, and copies of all reports required by this permit.

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

D.1.4215 Nitrogen Oxides Budget Permit Application Submittal Requirement [326 IAC 10-4-4(a)(1)]
[326 IAC 10-4-9(e)]

D.1.4316 Reporting Requirements

SECTION D.2

FACILITY OPERATION CONDITIONS

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

- (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]
- (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.
- (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 facility description box is descriptive information and does not constitute enforceable conditions.)

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

- (a) **The operating hours for the 588 hp emergency generator shall be is limited to less than 500 hours of operation per twelve (12) month 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 this limit, along with the ~~natural gas~~ **fuel** usage limitation for the turbines and boiler (Condition D.1.1), 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.2.4 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.2.45 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

D.2.56 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 ~~in which the~~ **for each** emergency generator ~~generated~~ ~~operated~~ each month; and
...

- (b) To document compliance with Condition 2.4, the Permittee shall maintain records for the life of the source in accordance with (1) through (2) below:**

- (1) **The dimension of the storage vessel; and**
(2) **An analysis showing the capacity of the storage vessel.**

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

D.2.67 Reporting Requirements

SECTION E ACID RAIN PROGRAM CONDITIONS

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

- (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 facility description box is descriptive information and does not constitute enforceable conditions.)

Indiana Department of Environmental Management Office of Air Management Quality Compliance Data Section

Quarterly Report

Source Name: Worthington Generation, LLC
 Source Address: South of the intersection of Route 67/237 and Route 57, near Worthington, IN 47471
 Mailing Address: RR1, Box 37B, Switz City, IN 47465
 Part 70 Permit No.: T055-14484-00034
 Facility: Turbines and boiler
 Pollutant-Parameter: ~~NO_x, CO~~ **Weighted natural gas usage**
 Parameter-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 usge (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 Management Quality
Compliance Data Section**

Quarterly Report

Source Name: Worthington Generation, LLC
Source Address: South of the intersection of Route 67/237 and Route 57, near Worthington, IN 47471
Mailing Address: RR1, Box 37B, Switz City, IN 47465
Part 70 Permit No.: T055-14484-00034
Facility: **588 hp** Emergency Generator
~~Pollutant:~~ ~~Parameter:~~ **NO_x, CO Operating hours**
Parameter: **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 Management Quality
Compliance Data Section**

Quarterly Report

Source Name: Worthington Generation, LLC
Source Address: South of the intersection of Route 67/237 and Route 57, Worthington, IN 47471
Mailing Address: RR1, Box 37B, Switz City, IN 47465
Part 70 Permit No.: T055-14484-00034
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.

Conclusion

This proposed modification shall be subject to the conditions of the attached proposed Part 70 Significant Source Modification No. 055-18572-00034 and Significant Permit Modification No. 055-18803-00034.

**Appendix A: Emission Calculations
Utility Boilers (> 100 MMBtu/hr)
No. 2 Fuel Oil Combustion
From Four (4) 460 MMBtu/hr Turbines**

**Company Name: Worthington Generation, LLC
Address: South of Intersection of Routes 67/237 and Route 57, Worthington, IN 47471
SPM: 055-18803-00034
Reviewer: ERG/YC
Date: April 22, 2004**

1. Unrestricted Potential to Emit While Using No.2 Fuel Oil:

Heat Input Capacity
MMBtu/hr

S = Weight % Sulfur
0.5

1,840 (4 units total)

Emission Factor	Pollutant					
	*PM 0.10 (lbs/MMBtu)	*PM10 0.10 (lbs/MMBtu)	*SO ₂ 0.505 (1.01 S lbs/MMBtu)	**NO _x 0.17 (lbs/MMBtu)	**VOC 0.016 (lbs/MMBtu)	**CO 0.056 (lbs/MMBtu)
Potential to Emit in tons/yr	806	806	4,070	1,370	129	451

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

** Emission factors for NO_x, VOC and CO are from the vendor's information. Assume all hydrocarbon emitted are VOC emissions. These emissions factors are less 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.

Methodology

PTE of (tons/yr) = Max. Heat Input (MMBtu/hr) x Emission Factor (lbs/MMBtu) x 8760 hrs/yr x 1 ton/2000 lbs

2. Limited Potential to Emit While Using No.2 Fuel Oil:

Fuel Usage Limit
kgals/year

Sulfur Content Limit (S)
0.15 %

19,300 (4 units total)

Emission Factor	Pollutant					
	*PM 0.10 (lbs/MMBtu)	*PM10 0.10 (lbs/MMBtu)	*SO ₂ 0.152 (1.01 S lbs/MMBtu)	**NO _x 0.17 (lbs/MMBtu)	**VOC 0.016 (lbs/MMBtu)	**CO 0.056 (lbs/MMBtu)
Potential to Emit in tons/yr	134	134	203	228	21.5	75.1

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

** Emission factors for NO_x, VOC and CO are from the vendor's information. Assume all hydrocarbon emitted are VOC emissions. These emissions factors are less 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/yr) = Fuel Usage Limit (kgal/yr) x 139 MMBtu/kgal x Emission Factor (lbs/MMBtu) x 1 ton/2000 lbs

**Appendix A: Emission Calculations
Utility Boilers (> 100 MMBtu/hr)
No. 2 Fuel Oil Combustion
From Four (4) 460 MMBtu/hr Turbines**

**Company Name: Worthington Generation, LLC
Address: South of Intersection of Routes 67/237 and Route 57
Worthington, IN 47471
SPM: 055-18803-00034
Reviewer: ERG/YC
Date: April 22, 2004**

1. Unrestricted Potential to Emit While Using No.2 Fuel Oil:

Heat Input Capacity
MMBtu/hr

1,840 (4 units total)

Emission Factor in lbs/MMBtu	Pollutants				
	Propylene 2.79E-03	Benzene 7.76E-04	Toluene 2.81E-04	Xylene 1.93E-04	Naphthalene 1.30E-04
Potential to Emit in tons/yr	22.5	6.25	2.26	1.56	1.05

Emission Factors are from AP-42, Table 3.4-3 (AP-42, 10/96).

Total Potential to Emit HAPs = 33.6 tons/yr

Methodology

PTE (tons/yr) = Max. Heat Input (MMBtu/hr) x Emission Factor (lbs/MMBtu) x 8760 hrs/yr x 1 ton/2000 lbs

2. Limited Potential to Emit While Using No.2 Fuel Oil:

Fuel Usage Limit
kgals/year

18,400 (4 units total)

Emission Factor in lbs/MMBtu	Pollutants				
	Propylene 2.79E-03	Benzene 7.76E-04	Toluene 2.81E-04	Xylene 1.93E-04	Naphthalene 1.30E-04
Potential to Emit in tons/yr	3.57	0.99	0.36	0.25	0.17

Emission Factors are from AP-42, Table 3.4-3 (AP-42, 10/96).

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

Total Limited Potential to Emit HAPs = 5.33 tons/yr

Methodology

PTE of (tons/yr) = Fuel Usage Limit (kgal/yr) x 139 MMBtu/kgal x Emission Factor (lbs/MMBtu) x 1 ton/2000 lbs

**Appendix A: Emission Calculations
Internal Combustion Engines**

From the One (1) Diesel Emergency Generator

Company Name: Worthington Generation, LLC

Address: South of Intersection of Routes 67/237 and Route 57, Worthington, IN 47471

SPM: 055-18803-00034

Reviewer: ERG/YC

Date: April 22, 2004

1. Potential to Emit

Power Output
Horse Power (HP)

Operation Limit for Emergency Generators
hr/yr

3,000

500

Emission Factor in lb/HP-hr	Pollutant					
	PM*	PM10*	SO ₂	NO _x	**VOC	CO
	2.20E-03	2.20E-03	2.05E-03	3.10E-02	2.47E-03	6.68E-03
Potential to Emit Emit in tons/yr	1.65	1.65	1.54	23.3	1.85	5.01

*Assume PM10 emissions are equal to PM emissions.

** Assume TOC (total organic compounds) emissions are equal to VOC emissions.

Emission factors are from AP-42, Chapter 3.3, Table 3.3-1, SCC #2-02-001-02 and 2-03-001-01 (AP-42 Supplement B, 10/96).

Note: As defined in the September 6, 1995 memorandum from John S. Seitz of US EPA on the subject of "Calculating Potential to Emit for Emergency Generators", an emergency generator's sole function is to provide back-up power when power from the local utility is interrupted. The only circumstances under which an emergency generator would operate when utility power is available are during operator training or brief maintenance checks. The generator's potential to emit is based on an operating time of 500 hours per year as set forth in the EPA memo.

Methodology

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

2. Restricted Potential to Emit

Power Output
Horse Power (HP)

Proposed Operation Limit
hr/yr

3,000

300

Emission Factor in lb/HP-hr	Pollutant					
	PM*	PM10*	SO ₂	NO _x	**VOC	CO
	2.20E-03	2.20E-03	2.05E-03	3.10E-02	2.47E-03	6.68E-03
Potential to Emit Emit in tons/yr	0.99	0.99	0.92	14.0	1.11	3.01

*Assume PM10 emissions are equal to PM emissions.

** Assume TOC (total organic compounds) emissions are equal to VOC emissions.

Emission factors are from AP-42, Chapter 3.3, Table 3.3-1, SCC #2-02-001-02 and 2-03-001-01 (AP-42 Supplement B, 10/96).

Methodology

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