



Mitchell E. Daniels, Jr.
Governor

Thomas W. Easterly
Commissioner

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

TO: Interested Parties / Applicant
DATE: August 28, 2008
RE: DPL Energy / 179-25609-00026
FROM: Matthew Stuckey, Deputy Branch Chief
Permits Branch
Office of Air Quality

Notice of Decision: Approval – Effective Immediately

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

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

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

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

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

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

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

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

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

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

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

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



INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

We Protect Hoosiers and Our Environment.

Mitchell E. Daniels Jr.
Governor

Thomas W. Easterly
Commissioner

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

PART 70 OPERATING PERMIT RENEWAL OFFICE OF AIR QUALITY

DPL Energy Montpelier Electric Generating Station 8495 South 450 West Poneto, Indiana 46781

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

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

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

Operation Permit Renewal No.: T179-25609-00026	
Issued by: Original Signed By: Donald F. Robin, P.E., Section Chief Permits Branch Office of Air Quality	Issuance Date: August 28, 2008 Expiration Date: August 28, 2013

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SECTION A SOURCE SUMMARY

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

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

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

Source Address: 8495 South 450 West, Poneto, Indiana 46781
Mailing Address: 1065 Woodman Drive, Dayton, Ohio 45432
Source Telephone: (937) 259-7880
SIC Code: 4911
County Location: Wells
Source Location Status: Attainment for all criteria pollutants
Source Status: Part 70 Permit Program
Minor Source, under PSD Rules;
Minor Source, Section 112 of the Clean Air Act
Not 1 of 28 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:

Four (4) FT-8 Pratt & Whitney Twin-Pac units, installed in February 2001, consisting of eight (8) simple cycle natural gas-fired combustion turbines, utilizing No. 2 diesel oil as a back-up fuel source, and four (4) electric generators. Each generator is directly connected to two (2) combustion turbines. The generators are designated as units G1 through G4, and the two (2) combustion turbines directly connected to each generator are designated as CT1 and CT2. Each of the eight (8) combustion turbines has an anticipated maximum heat input capacity of 270.9 MMBTU/hr (Lower Heating Value, LHV), a nominal output of 25 MW, water-injection for NO_x emissions control, and exhausts to one (1) dedicated stack respectively designated as G1CT1S1 through G4CT2S2. Each stack is equipped with a continuous emissions monitoring system (CEMS) to measure NO_x and CO emissions.

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) Paved and unpaved roads and parking lots.
- (b) Other emergency equipment as stationary fire pumps, specifically including:
 - One (1) diesel-fired emergency fire pump, with a maximum heat input capacity of 1.0 MMBtu/hr, exhausting to the atmosphere.

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

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

- (a) It is a major source, as defined in 326 IAC 2-7-1(22);

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

SECTION B GENERAL CONDITIONS

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

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

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

- (a) This permit, T179-25609-00026, is issued for a fixed term of five (5) years from the issuance date of this permit, as determined in accordance with IC 4-21.5-3-5(f) and IC 13-15-5-3. Subsequent revisions, modifications, or amendments of this permit do not affect the expiration date of this permit or of permits issued pursuant to Title IV of the Clean Air Act and 326 IAC 21 (Acid Deposition Control).
- (b) If IDEM, OAQ, upon receiving a timely and complete renewal permit application, fails to issue or deny the permit renewal prior to the expiration date of this permit, this existing permit shall not expire and all terms and conditions shall continue in effect, including any permit shield provided in 326 IAC 2-7-15, until the renewal permit has been issued or denied.

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

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

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

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

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

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

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

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

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

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

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

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

- (a) Where specifically designated by this permit or required by an applicable requirement, any application form, report, or compliance certification submitted shall contain certification by 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. One (1) certification can cover multiple forms in one (1) submittal.
- (c) A responsible official is defined at 326 IAC 2-7-1(34).

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

- (a) The Permittee shall annually submit a compliance certification report which addresses the status of the source's compliance with the terms and conditions contained in this permit, including emission limitations, standards, or work practices. All certifications shall cover the time period from January 1 to December 31 of the previous year, and shall be submitted 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
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251

and

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

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

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

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

- (a) If required by specific condition(s) in Section D of this permit, the Permittee shall maintain and implement Preventive Maintenance Plans (PMPs) including the following information on each facility:
- (1) Identification of the individual(s) responsible for inspecting, maintaining, and repairing emission control devices;
 - (2) A description of the items or conditions that will be inspected and the inspection schedule for said items or conditions; and
 - (3) Identification and quantification of the replacement parts that will be maintained in inventory for quick replacement.
- (b) A copy of the PMPs shall be submitted to IDEM, OAQ, upon request and within a reasonable time, and shall be subject to review and approval by IDEM, OAQ. IDEM, OAQ, may require the Permittee to revise its PMPs whenever lack of proper maintenance causes or is the primary contributor to an exceedance of any limitation on emissions or potential to emit. The PMP does not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).
- (c) To the extent the Permittee is required by 40 CFR Part 63 to have an Operation, Maintenance, and Monitoring (OMM) Plan for a unit, such Plan is deemed to satisfy the PMP requirements of 326 IAC 1-6-3 for that unit.

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

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

IDEM Main Office
Telephone Number: 1-800-451-6027 (ask for Office of Air Quality,
Compliance Section), or
Telephone Number: 317-233-0178 (ask for Compliance Section)
Facsimile Number: 317-233-6865.

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

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

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

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

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

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

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

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

- (a) Pursuant to 326 IAC 2-7-15, the Permittee has been granted a permit shield. The permit shield provides that compliance with the conditions of this permit shall be deemed compliance with any applicable requirements as of the date of permit issuance, provided that either the applicable requirements are included and specifically identified in this

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

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

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

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

- (a) All terms and conditions of permits established prior to T179-25609-00026 issued pursuant to permitting programs approved into the state implementation plan have been either:
 - (1) incorporated as originally stated,

- (2) revised under 326 IAC 2-7-10.5, or
 - (3) deleted under 326 IAC 2-7-10.5.
- (b) Provided that all terms and conditions are accurately reflected in this permit, all previous registrations and permits are superseded by this Part 70 operating permit.

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

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

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

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

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

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

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

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

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

- (a) This permit may be modified, reopened, revoked and reissued, or terminated for cause. The filing of a request by the Permittee for a Part 70 permit modification, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay any condition of this permit. [326 IAC 2-7-5(6)(C)] The notification by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).
- (b) This permit shall be reopened and revised under any of the circumstances listed in IC 13-15-7-2 or if IDEM, OAQ, determines any of the following:
- (1) That this permit contains a material mistake.
 - (2) That inaccurate statements were made in establishing the emissions standards or other terms or conditions.
 - (3) That this permit must be revised or revoked to assure compliance with an applicable requirement. [326 IAC 2-7-9(a)(3)]
- (c) Proceedings by IDEM, OAQ, to reopen and revise this permit shall follow the same procedures as apply to initial permit issuance and shall affect only those parts of this

permit for which cause to reopen exists. Such reopening and revision shall be made as expeditiously as practicable. [326 IAC 2-7-9(b)]

- (d) The reopening and revision of this permit, under 326 IAC 2-7-9(a), shall not be initiated before notice of such intent is provided to the Permittee by IDEM, OAQ, at least thirty (30) days in advance of the date this permit is to be reopened, except that IDEM, OAQ, may provide a shorter time period in the case of an emergency. [326 IAC 2-7-9(c)]

B.17 Permit Renewal [326 IAC 2-7-3] [326 IAC 2-7-4]

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

Request for renewal shall be submitted to:

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

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

B.18 Permit Amendment or Modification [326 IAC 2-7-11] [326 IAC 2-7-12] [40 CFR 72]

- (a) Permit amendments and modifications are governed by the requirements of 326 IAC 2-7-11 or 326 IAC 2-7-12 whenever the Permittee seeks to amend or modify this permit.
- (b) Pursuant to 326 IAC 2-7-11(b) and 326 IAC 2-7-12(a), administrative Part 70 permit amendments and permit modifications for purposes of the acid rain portion of a Part 70 permit shall be governed by regulations promulgated under Title IV of the Clean Air Act. [40 CFR 72]

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

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

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

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

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

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

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

- (a) The Permittee may make any change or changes at the source that are described in 326 IAC 2-7-20(b), (c), or (e), without a prior permit revision, if each of the following conditions is met:
- (1) The changes are not modifications under any provision of Title I of the Clean Air Act;
 - (2) Any preconstruction approval required by 326 IAC 2-7-10.5 has been obtained;
 - (3) The changes do not result in emissions which exceed the 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
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251

and

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

Chicago, Illinois 60604-3590

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

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

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

- (b) The Permittee may make Section 502(b)(10) of the Clean Air Act changes (this term is defined at 326 IAC 2-7-1(36)) without a permit revision, subject to the constraint of 326 IAC 2-7-20(a). For each such Section 502(b)(10) of the Clean Air Act change, the required written notification shall include the following:
- (1) A brief description of the change within the source;
 - (2) The date on which the change will occur;
 - (3) Any change in emissions; and
 - (4) Any permit term or condition that is no longer applicable as a result of the change.

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

- (c) Emission Trades [326 IAC 2-7-20(c)]
The Permittee may trade 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.
- (e) Backup fuel switches specifically addressed in, and limited under, Section D of this permit shall not be considered alternative operating scenarios. Therefore, the notification requirements of part (a) of this condition do not apply.

B.21 Source Modification Requirement [326 IAC 2-7-10.5] [326 IAC 2-2-2]

- (a) A modification, construction, or reconstruction is governed by the requirements of 326 IAC 2 and 326 IAC 2-7-10.5.
- (b) Any modification at an existing major source is governed by the requirements of 326 IAC 2-2-2.

B.22 Inspection and Entry [326 IAC 2-7-6] [IC 13-14-2-2] [IC 13-17-3-2] [IC 13-30-3-1]

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

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

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

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

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

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

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

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

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

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

B.25 Credible Evidence [326 IAC 2-7-5(3)] [326 IAC 2-7-6] [62 FR 8314] [326 IAC 1-1-6]

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

SECTION C SOURCE OPERATION CONDITIONS

Entire Source

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

- C.1 Particulate Emission Limitations For Processes with Process Weight Rates Less Than One Hundred (100) Pounds per Hour [326 IAC 6-3-2]
-
- Pursuant to 326 IAC 6-3-2(e)(2), particulate emissions from any process not exempt under 326 IAC 6-3-1(b) or (c) which has a maximum process weight rate less than 100 pounds per hour and the methods in 326 IAC 6-3-2(b) through (d) do not apply shall not exceed 0.551 pounds per hour.
- C.2 Opacity [326 IAC 5-1]
-
- Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary Alternative Opacity Limitations), opacity shall meet the following, unless otherwise stated in this permit:
- (a) Opacity shall not exceed an average of forty percent (40%) in any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.
 - (b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.
- C.3 Open Burning [326 IAC 4-1] [IC 13-17-9]
-
- The Permittee shall not open burn any material except as provided in 326 IAC 4-1-3, 326 IAC 4-1-4 or 326 IAC 4-1-6. The previous sentence notwithstanding, the Permittee may open burn in accordance with an open burning approval issued by the Commissioner under 326 IAC 4-1-4.1.
- C.4 Incineration [326 IAC 4-2] [326 IAC 9-1-2]
-
- The Permittee shall not operate an incinerator or incinerate any waste or refuse except as provided in 326 IAC 4-2 and 326 IAC 9-1-2.
- C.5 Fugitive Dust Emissions [326 IAC 6-4]
-
- The Permittee shall not allow fugitive dust to escape beyond the property line or boundaries of the property, right-of-way, or easement on which the source is located, in a manner that would violate 326 IAC 6-4 (Fugitive Dust Emissions). 326 IAC 6-4-2(4) is not federally enforceable.
- C.6 Fugitive Particulate Matter Emission Limitations [326 IAC 6-5]
-
- Pursuant to 326 IAC 6-5 (Fugitive Particulate Matter Emissions Limitations), fugitive particulate matter emissions shall be controlled according to the plan submitted on February 16, 2000.
- This plan consists of wet suppression of dust from roads on an as needed basis.
- 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 1-7-1(3), 326 IAC 1-7-2, 326 IAC 1-7-3(c) and (d), 326 IAC 1-7-4, and 326 IAC 1-7-5 (a), (b) and (d) are not federally enforceable.

C.8 Asbestos Abatement Projects [326 IAC 14-10] [326 IAC 18] [40 CFR 61, Subpart M]

The Permittee shall comply with the applicable requirements of 326 IAC 14-10, 326 IAC 18, and 40 CFR 61.140.

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

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

- (b) The Permittee shall notify IDEM, OAQ of the actual test date at least fourteen (14) days prior to the actual test date. The notification submitted by the Permittee does not require certification by the "responsible official" as defined by 326 IAC 2-7-1(34).
- (c) Pursuant to 326 IAC 3-6-4(b), all test reports must be received by IDEM, OAQ, not later than forty-five (45) days after the completion of the testing. An extension may be granted by IDEM, OAQ, if the 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 326 IAC 2-1.1-11. Any monitoring or testing shall be performed in accordance with 326 IAC 3 or other methods approved by the commissioner or the U. S. EPA.

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

C.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
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251

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

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

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

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

- (a) The Permittee shall calibrate, maintain, and operate all necessary continuous emission monitoring systems (CEMS) and related equipment.
- (b) All continuous emission monitoring systems shall meet all applicable performance specifications of 40 CFR 60, 40 CFR 75, or any other performance specification, and are subject to monitor system certification requirements pursuant to 326 IAC 3-5-3.
- (c) 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.
- (d) 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 CEM 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 CEM 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.
- (e) 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, or 40 CFR 75, and New Source Construction/MSOP No. 179-12321-00026, issued December 29, 2000.

C.13 Monitoring Methods [326 IAC 3] [40 CFR 60] [40 CFR 63] [40 CFR 75]

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, 40 CFR 75, or other approved methods as specified in this permit.

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

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

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

- (a) The Permittee prepared and submitted written emergency reduction plans (ERPs) consistent with safe operating procedures on January 22, 2002.
- (b) Upon direct notification by IDEM, OAQ, that a specific air pollution episode level is in effect, the Permittee shall immediately put into effect the actions stipulated in the approved ERP for the appropriate episode level. [326 IAC 1-5-3]

C.15 Risk Management Plan [326 IAC 2-7-5(12)] [40 CFR 68]

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

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

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

- (3) corrective actions taken.

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

- (a) When the results of a stack test performed in conformance with Section C - Performance Testing, of this permit exceed the level specified in any condition of this permit, the Permittee shall take appropriate response actions. The Permittee shall submit a description of these response actions to IDEM, OAQ, within thirty (30) days of receipt of the test results. The Permittee shall take appropriate action to minimize excess emissions from the affected facility while the response actions are being implemented.
- (b) A retest to demonstrate compliance shall be performed within one hundred twenty (120) days of receipt of the original test results. Should the Permittee demonstrate to IDEM, OAQ that retesting in one-hundred 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 response action documents submitted pursuant to this condition do require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

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

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

- (a) In accordance with the compliance schedule specified in 326 IAC 2-6-3(b)(1), starting in 2004 and every three (3) years thereafter, the Permittee shall submit by July 1 an emission statement covering the previous calendar year. The emission statement shall contain, at a minimum, the information and must comply as specified in 326 IAC 2-6-4(c) and shall meet the following requirements:
- (1) Indicate estimated actual emissions of all pollutants listed in 326 IAC 2-6-4(a);
- (2) Indicate estimated actual emissions of regulated pollutants as defined by 326 IAC 2-7-1(32) ("Regulated pollutant which is used only for purposes of Section 19 of this rule") from the source, for purposes of fee assessment.

The statement must be submitted to:

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

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

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

C.19 General Record Keeping Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-6] [326 IAC 2-2-1]
[326 IAC 2-3-1]

- (a) Records of all required monitoring data, reports and support information required by this Permit shall be retained for a period of at least five (5) years from the date of monitoring sample, measurement, report, or application. These records shall be physically present or electronically accessible at the source location for a minimum of three (3) years. The records may be stored elsewhere for the remaining two (2) years as long as they are available upon request. If the Commissioner makes a request for records to the Permittee, the Permittee shall furnish the records to the Commissioner within a reasonable time.
- (b) Unless otherwise specified in this permit, all record keeping requirements not already legally required shall be implemented within ninety (90) days of permit issuance.
- (c) If there is a reasonable possibility (as defined in 40 CFR 51.165(a)(6)(vi)(A), 40 CFR 51.165(a)(6)(vi)(B), 40 CFR 51.166(r)(6)(vi)(a), and/or 40 CFR 51.166(r)(6)(vi)(b)) that a "project" (as defined in 326 IAC 2-2-1(qq) and/or 326 IAC 2-3-1(II)) at an existing emissions unit, other than projects at a source with a Plantwide Applicability Limitation (PAL), which is not part of a "major modification" (as defined in 326 IAC 2-2-1(ee) and/or 326 IAC 2-3-1(z)) may result in significant emissions increase and the Permittee elects to utilize the "projected actual emissions" (as defined in 326 IAC 2-2-1(rr) and/or 326 IAC 2-3-1(mm)), the Permittee shall comply with following:
 - (1) Before beginning actual construction of the "project" (as defined in 326 IAC 2-2-1(qq) and/or 326 IAC 2-3-1(II)) at an existing emissions unit, document and maintain the following records:
 - (A) A description of the project.
 - (B) Identification of any emissions unit whose emissions of a regulated new source review pollutant could be affected by the project.
 - (C) A description of the applicability test used to determine that the project is not a major modification for any regulated NSR pollutant, including:
 - (i) Baseline actual emissions;
 - (ii) Projected actual emissions;
 - (iii) Amount of emissions excluded under section 326 IAC 2-2-1(rr)(2)(A)(iii) and/or 326 IAC 2-3-1(mm)(2)(A)(iii); and
 - (iv) An explanation for why the amount was excluded, and any netting calculations, if applicable.
- (d) If there is a reasonable possibility (as defined in 40 CFR 51.165(a)(6)(vi)(A) and/or 40 CFR 51.166(r)(6)(vi)(a)) that a "project" (as defined in 326 IAC 2-2-1(qq) and/or 326 IAC 2-3-1(II)) at an existing emissions unit, other than projects at a source with a Plantwide Applicability Limitation (PAL), which is not part of a "major modification" (as defined in 326 IAC 2-2-1(ee) and/or 326 IAC 2-3-1(z)) may result in significant emissions increase and the Permittee elects to utilize the "projected actual emissions" (as defined in 326 IAC 2-2-1(rr) and/or 326 IAC 2-3-1(mm)), the Permittee shall comply with following:

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

C.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 Data Section, Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251
- (c) Unless otherwise specified in this permit, any notice, report, or other submission required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ, on or before the date it is due.
- (d) Unless otherwise specified in this permit, all reports required in Section D of this permit shall be submitted within thirty (30) days of the end of the reporting period. All reports do require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).
- (e) Reporting periods are based on calendar years. For the purpose of this permit "calendar year" means the twelve (12) month period from January 1 to December 31 inclusive.
- (f) If the Permittee is required to comply with the recordkeeping provisions of (d) in Section C- General Record Keeping Requirements for any "project" (as defined in 326 IAC 2-2-1 (qq) and/or 326 IAC 2-3-1 (ll)) at an existing emissions unit, and the project meets the following criteria, then the Permittee shall submit a report to IDEM, OAQ:
 - (1) The annual emissions, in tons per year, from the project identified in (c)(1) in Section C- General Record Keeping Requirements exceed the baseline actual emissions, as documented and maintained under Section C- General Record Keeping Requirements (c)(1)(C)(i), by a significant amount, as defined in 326 IAC 2-2-1 (xx) and/or 326 IAC 2-3-1 (qq), for that regulated NSR pollutant, and
 - (2) The emissions differ from the preconstruction projection as documented and maintained under Section C- General Record Keeping Requirements (c)(1)(C)(ii).

- (g) The report for project at an existing emissions unit shall be submitted within sixty (60) days after the end of the year and contain the following:
- (1) The name, address, and telephone number of the major stationary source.
 - (2) The annual emissions calculated in accordance with (d)(1) and (2) in Section C - General Record Keeping Requirements.
 - (3) The emissions calculated under the actual-to-projected actual test stated in 326 IAC 2-2-2(d)(3) and/or 326 IAC 2-3-2(c)(3).
 - (4) Any other information that the Permittee deems fit to include in this report.

Reports required in this part shall be submitted to:

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

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

Stratospheric Ozone Protection

C.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)]

Four (4) FT-8 Pratt & Whitney Twin-Pac units, installed in February 2001, consisting of eight (8) simple cycle natural gas-fired combustion turbines, utilizing No. 2 diesel oil as a back-up fuel source, and four (4) electric generators. Each generator is directly connected to two (2) combustion turbines. The generators are designated as units G1 through G4, and the two (2) combustion turbines directly connected to each generator are designated as CT1 and CT2. Each of the eight (8) combustion turbines has an anticipated maximum heat input capacity of 270.9 MMBTU/hr (Lower Heating Value, LHV), a nominal output of 25 MW, water-injection for NO_x emissions control, and exhausts to one (1) dedicated stack respectively designated as G1CT1S1 through G4CT2S2. Each stack is equipped with a continuous emissions monitoring system (CEMS) to measure NO_x and CO emissions.

Insignificant Activities

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

- (b) Other emergency equipment as stationary fire pumps, specifically including:

One (1) diesel-fired emergency fire pump, with a maximum heat input capacity of 1.0 MMBtu/hr, exhausting to the atmosphere.

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

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

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

Pursuant to New Source Construction/MSOP No. 179-12321-00026, issued December 29, 2000, the Permittee shall comply as follows:

- (a) The potential to emit of NO_x and CO from the eight (8) combustion turbines and one (1) diesel-fired emergency fire pump shall be limited to less than 250 tons per twelve (12) consecutive month period per pollutant, with compliance demonstrated at the end of each month. By limiting NO_x and CO emissions to less than 250 tons per year, the SO₂ and PM emissions are also limited to less than 250 tons per year. Therefore, the Prevention of Significant Deterioration (PSD) rules, 326 IAC 2-2, will not apply.
- (b) The NO_x and CO emissions shall be limited by the following equation:
- (1) NO_x emissions (tons per twelve (12) consecutive month period) =
Emissions from combustion turbines (tons/12-months, based on CEMs data) +
fuel oil usage from emergency fire pump (kgals/12-months) * appropriate AP-42
emission factor.
- (2) CO emissions (tons per twelve (12) consecutive month period) =
Emissions from combustion turbines (tons/12-months, based on CEMs data) +
fuel oil usage from emergency fire pump (kgals/12-months) * appropriate AP-42
emission factor.

- (c) The source shall operate a continuous emissions monitoring system on each combustion turbine in accordance with 326 IAC 3-5, to demonstrate compliance with the NO_x and CO limits.
- (d) The sulfur content of the fuel oil shall not exceed 0.05 percent by weight.

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 eight (8) combustion turbines described in this section except when otherwise specified in 40 CFR Part 60, Subpart GG.

D.1.3 New Source Performance Standard (NSPS) [326 IAC 12-1] [40 CFR Part 60, Subpart GG]

- (a) The eight (8) 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.
- (b) Pursuant to 326 IAC 12-1 and 40 CFR 60, Subpart GG (Stationary Gas Turbines), the Permittee shall:
 - (1) limit nitrogen oxides emissions, as required by 40 CFR 60.332, to:

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

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

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

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

- (2) limit sulfur dioxide emissions, as required by 40 CFR 60.333, to 0.015 percent by volume at 15 percent oxygen on a dry basis, or use natural gas fuel with a sulfur content less than or equal to 0.8 percent by weight.
- (c) On March 24, 2000, the Montpelier Electric Generating Station was issued an alternative monitoring and custom schedule approval for 40 CFR 60, Subpart GG by the USEPA, Region V. Pursuant to this EPA approval, the Permittee shall comply with Section D.1.10 of this Operating Permit as follows:
 - (1) Use natural gas as the primary fuel for the combustion turbines;
 - (2) Use number 2 fuel oil as a back-up fuel source only. The source shall take a total gallons per year limit on the diesel fuel. The limitation is as follows:

The total input of number 2 fuel oil to each of the eight (8) combustion turbines shall be limited to 197.7 kilo-gallons per twelve (12) consecutive month period per turbine, with compliance demonstrated at the end of each month. This usage limitation is equivalent to 5.9 tons of SO₂ per year and 18.8 tons of NO_x per year.

Compliance with these limits, combined with the potential to emit VOC from other emission units at the source, shall limit the VOC from the entire source to less than 25 tons per twelve (12) consecutive month period and render 326 IAC 8-1-6 not applicable.

D.1.4 Hazardous Air Pollutants (HAPs) [326 IAC 2-4.1-1] [40 CFR 63.2]

- (a) Pursuant to Minor Permit Revision No. 179-15577-00026, issued May 16, 2002, the formaldehyde emission rate from each stack shall not exceed 0.00203 pounds per million Btu of heat input (lb/MMBtu). Compliance with this emission rate shall limit the source-wide potential to emit a single HAP to less than 10 tons per twelve (12) consecutive month period, based on compliance with Condition D.1.1 that effectively limits fuel usage at this source.
- (b) Any change or modification which may increase the source-wide potential to emit the combination of HAPs to twenty-five (25) tons per twelve (12) consecutive month period shall require OAQ's prior approval before such change can take place.

Compliance with this condition and D.1.1 shall make the requirements of 326 IAC 2-4.1-1 (New Source Toxics Control) not applicable, and shall make the source an area source, pursuant to the definition of such at 40 CFR 63.2.

D.1.5 Sulfur Dioxide (SO₂) [326 IAC 7-1.1]

Pursuant to 326 IAC 7-1.1, sulfur dioxide emissions from fuel combustion facilities shall be limited to five-tenths (0.5) pounds per million Btu for distillate oil combustion.

D.1.6 Carbon Monoxide Emission Limitations [326 IAC 9-1]

This source is subject to 326 IAC 9-1 because it is a stationary source of CO emissions commencing operation after March 21, 1972. There are no applicable CO emission limits, under this state rule, established for this type of operation.

D.1.7 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

A Preventive Maintenance Plan (PMP), in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for eight (8) combustion turbines and their emission control devices.

Compliance Determination Requirements

D.1.8 Continuous Emissions Monitoring [326 IAC 3-5]

Pursuant to New Source Construction/MSOP No. 179-12321-00026, issued December 29, 2000, in order to demonstrate compliance with the limits specified in Condition D.1.1 the source shall comply as follows:

- (a) Pursuant to 326 IAC 3-5-1(d)(1), the Permittee shall calibrate, certify, operate and maintain a continuous monitoring system for measuring NO_x and CO emissions rates in pounds per hour from the eight (8) stacks in accordance with 326 IAC 3-5-2 and 326 IAC 3-5-3.
- (b) Pursuant to 326 IAC 3-5-4, the Permittee shall submit to IDEM, OAQ, any updates made to the continuous monitoring standard operating procedure (SOP) document submitted to IDEM, OAQ, on August 31, 2001.
- (c) The Permittee shall record the output of the system and shall perform the required record keeping, pursuant to 326 IAC 3-5-6, and reporting, pursuant to 326 IAC 3-5-7.
- (d) Whenever a continuous emission monitoring system (CEMS) is malfunctioning or down, the Permittee shall:

- (1) use a data substitution procedure for the CO CEMS that is consistent with the requirements of 40 CFR 75.33(b), *Standard Missing Data Substitution Procedures for SO₂ Concentration Data*; and
- (2) use the *Standard Missing Data Substitution Procedures for NO_x Concentration Data* of 40 CFR 75.33(c) for the NO_x CEMS,

to respectively demonstrate compliance with the CO and NO_x emission limits established in D.1.1.

- (e) The Permittee may submit to IDEM, OAQ, alternative emission factors based on the source's CEMS data, to use in instances of downtime. The alternative emissions factors must be approved by IDEM, OAQ, prior to use in calculating emissions for the limitations established in this permit. The alternative emission factors shall be based upon collected monitoring and test data supplied from an approved continuous emission monitoring system and/or approved performance tests. In the event that the information submitted does not contain sufficient data to establish appropriate emission factors, the Permittee shall continue to collect data until appropriate emission factors can be established. During this period of time, the source shall continue to use the CO and NO_x Missing Data Substitution Procedures specified in 40 CFR Part 75, Subpart D, in periods of downtime

D.1.9 Sulfur Dioxide Emissions and Sulfur Content [326 IAC 3] [326 IAC 7-2] [326 IAC 7-1.1-2]

Pursuant to New Source Construction/MSOP No. 179-12321-00026, issued December 29, 2000, the Permittee shall comply as follows:

- (a) Pursuant to 326 IAC 7-1.1-2 and 326 IAC 7-2-1(c)(3), the Permittee shall demonstrate that the sulfur dioxide emissions do not exceed the equivalent of 0.5 pounds per million Btu using a calendar month average.
- (b) The Permittee shall perform sampling and analysis of fuel oil samples in accordance with 326 IAC 3-7-4(a).
 - (1) The Permittee may rely upon vendor analysis of fuel delivered, if accompanied by a vendor certification [326 IAC 3-7-4(b)]; or,
 - (2) 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.
- (c) Upon written notification of a facility owner or operator to IDEM, continuous emission monitoring data collected and reported pursuant to 326 IAC 3-5 may be used as the means for determining compliance. Upon such notification, the other requirements of 326 IAC 7 shall not apply. [326 IAC 7-2-1(g)]

D.1.10 NSPS Compliance Requirements [326 IAC 12] [40 CFR Part 60.334 (Subpart GG)]

Pursuant to 40 CFR Part 60, Subpart GG (Stationary Gas Turbines), the Permittee shall monitor combustion turbine operations as follows:

- (a) Pursuant to 40 CFR 60.334(b), the Permittee shall install, certify, maintain, operate, and quality-assure a continuous emission monitoring system (CEMS) consisting of NO_x and O₂ monitors. The CEMS shall be installed, certified, maintained and operated as follows:
- (1) Each CEMS must be installed and certified according to PS 2 and 3 (for diluent) of 40 CFR part 60, appendix B, except the 7-day calibration drift is based on unit operating days, not calendar days. Appendix F, Procedure 1 is not required. The relative accuracy test audit (RATA) of the NO_x and diluent monitors may be performed individually or on a combined basis.
 - (2) As specified in 40 CFR 60.13(e)(2), during each full unit operating hour, each monitor must complete a minimum of one cycle of operation (sampling, analyzing, and data recording) for each 15-minute quadrant of the hour, to validate the hour. For partial unit operating hours, at least one valid data point must be obtained for each quadrant of the hour in which the unit operates. For unit operating hours in which required quality assurance and maintenance activities are performed on the CEMS, a minimum of two valid data points (one in each of two quadrants) are required to validate the hour.
 - (3) For purposes of identifying excess emissions, CEMS data must be reduced to hourly averages as specified in 40 CFR 60.13(h).
- (b) Pursuant to 40 CFR 60.334(h) and (i), the Permittee shall monitor the total sulfur content of the fuel being fired in the turbine daily, except if the gaseous fuel is demonstrated to meet the definition of natural gas in 40 CFR 60.331(u). The sulfur content of the fuel must be determined using total sulfur methods described in 40 CFR 60.335(b)(10). Alternatively, if the total sulfur content of the gaseous fuel during the most recent performance test was less than 0.4 weight percent (4000 ppmw), ASTM D4084–82, 94, D5504–01, D6228–98, or Gas Processors Association Standard 2377–86 (all of which are incorporated by reference-see 40 CFR 60.17), which measure the major sulfur compounds may be used.
- (c) On March 24, 2000, the Montpelier Electric Generating Station was issued an alternative monitoring and custom schedule approval for 40 CFR 60, Subpart GG by the USEPA, Region V. Pursuant to this EPA approval, the Permittee shall comply with (a) and (b) of this condition as follows:
- (1) The Permittee shall continuously monitor the SO₂ and NO_x emissions from each turbine per the requirements of 40 CFR Part 75. To satisfy this requirement, and in lieu of continuous water to fuel ratio monitoring, the Permittee shall use continuous emission monitoring systems (CEMS) for nitrogen oxides (NO_x). The requirements of 40 CFR Part 75 include, but are not limited to, 40 CFR Parts 75.10, 75.11 and 75.12.

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

D.1.11 Record Keeping Requirements

- (a) To document compliance with Conditions D.1.1, D.1.3, D.1.5, D.1.8, D.1.9, and D.1.10, the Permittee shall maintain records of the following:
- (1) amount of natural gas combusted in million cubic feet (MMCF) and amount of fuel oil combusted in gallons, per unit (i.e., each turbine and emergency fire pump), during each month;

- (2) the percent sulfur content of the natural gas (if other than pipeline quality natural gas which is defined as natural gas that is provided by a supplier through a pipeline; 40 CFR Part 72.2) and fuel oil of each unit (turbine and emergency fire pump);
- (3) continuous emissions monitoring data, pursuant to 326 IAC 3-5, including the emission rates of NO_x and CO in pounds per hour, with records maintained pursuant to 326 IAC 3-5-6 such that they may be inspected by IDEM, OAQ, or the U.S. EPA, if so requested or required.
- (4) the following information, recorded during periods of NO_x and CO CEM system downtime:
 - (A) calendar dates and beginning and ending times of CEM downtime during the compliance determination period;
 - (B) actual natural gas and diesel fuel oil usage, per turbine unit, during CEM downtime;
 - (C) documentation of emission rates of NO_x and CO in pounds per hour, as determined in accordance with Condition D.1.8 (d) and (e);
- (5) total NO_x and CO emitted in tons per month, per unit (i.e., each turbine and emergency fire pump), for each compliance period.

(b) To document compliance with Condition D.1.5, the Permittee shall maintain records in accordance with (1) through (6) below. Records maintained for (1) through (6) shall be taken monthly and shall be complete and sufficient to establish compliance with the SO₂ emission limit established in Condition D.1.5

- (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) A certification, signed by the owner or operator, that the records of the fuel supplier certifications represent all of the fuel combusted during the period. The natural gas fired facility certification does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34); and

If the fuel supplier certification is used to demonstrate compliance 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.

(c) To document compliance with Condition D.1.7, the Permittee shall maintain records of any additional inspections prescribed by the Preventive Maintenance Plan.

(d) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit. Records taken to demonstrate compliance with emission

limitations and standards specified in Section D shall be available to IDEM, OAQ, within 30 days of the end of each compliance period.

D.1.12 Reporting Requirements

- (a) The Permittee shall submit a quarterly excess emissions report, if applicable, based on the continuous emissions monitor (CEM) data for NO_x and CO, pursuant to 326 IAC 3-5-7. These reports shall be submitted within thirty (30) calendar days following the end of each calendar quarter and in accordance with Section C - General Reporting Requirements of this permit.
- (b) A quarterly summary of the information to document compliance with D.1.1 and D.1.10(c)(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.
- (c) The Permittee shall report periods of excess emissions, as required by 40 CFR 60.334(c).
- (d) The Permittee shall submit upon request reports of calendar month average sulfur content, heat content, fuel consumption, and sulfur dioxide emission rate in pounds per million Btu, based on fuel sampling and analysis data in accordance with procedures specified under 326 IAC 3-7, to document compliance with D.1.5.
- (e) The 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 reports submitted by the Permittee do require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

D.1.13 Reporting Requirements

The natural gas-fired facility certification 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 its equivalent, within thirty (30) days after the end of the semi-annual calendar period being reported. The natural gas-fired facility certification does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

SECTION E

TITLE IV CONDITIONS

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

Four (4) Twin Pac combustion turbine generator units, consisting of eight (8) simple cycle turbines and four (4) generators, each generator directly connected to two (2) combustion turbines. The generators are designated as units G1 through G4, and the two (2) combustion turbines, which are directly connected to each generator, are designated as CT1 and CT2. The eight (8) combustion turbines have an anticipated maximum heat input capacity of 270.9 MMBtu/hr (Lower Heating Value, LHV) per turbine unit, a maximum nominal output of 25 MW per turbine, with water-injection for NO_x emissions control, and exhaust to eight (8) stacks designated as G1CT1S1 through G4CT2S2.

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

Acid Rain Program

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

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

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 to noncompliance with any other applicable requirement.
- (c) Any such allowance shall be accounted for according to the procedures established in regulations promulgated under Title IV of the Clean Air Act.

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

ORIS Code: 055229

NO_x Budget Source [326 IAC 2-7-5(15)]

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

This NO_x budget permit is deemed to incorporate automatically the definitions of terms under 326 IAC 10-4-2.

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

- (a) The owners and operators of the NO_x budget source and each NO_x budget unit shall operate each unit in compliance with this NO_x budget permit.
- (b) The NO_x budget units subject to this NO_x budget permit are: eight (8) natural gas fired combustion turbines.

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

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

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

- (a) The owners and operators of the NO_x budget source and each NO_x budget unit at the source shall hold NO_x allowances available for compliance deductions under 326 IAC 10-4-10(j), as of the NO_x allowance transfer deadline, in each unit's compliance account and the source's overdraft account in an amount:
 - (1) Not less than the total NO_x emissions for the ozone control period from the unit, as determined in accordance with 40 CFR 75 and 326 IAC 10-4-12;
 - (2) To account for excess emissions for a prior ozone control period under 326 IAC 10-4-10(k)(5); or
 - (3) To account for withdrawal from the NO_x budget trading program, or a change in regulatory status of a NO_x budget opt-in unit.
- (b) Each ton of NO_x emitted in excess of the NO_x budget emissions limitation shall constitute a separate violation of the Clean Air Act (CAA) and 326 IAC 10-4.
- (c) NO_x allowances shall be held in, deducted from, or transferred among NO_x allowance tracking system accounts in accordance with 326 IAC 10-4-9 through 11, 326 IAC 10-4-13, and 326 IAC 10-4-14.
- (d) A NO_x allowance shall not be deducted, in order to comply with the requirements under (a) above and 326 IAC 10-4-4(c)(1), for an ozone control period in a year prior to the year for which the NO_x allowance was allocated.

- (e) A NO_x allowance allocated under the NO_x budget trading program is a limited authorization to emit one (1) ton of NO_x in accordance with the NO_x budget trading program. No provision of the NO_x budget trading program, the NO_x budget permit application, the NO_x budget permit, or an exemption under 326 IAC 10-4-3 and no provision of law shall be construed to limit the authority of the U.S. EPA or IDEM, OAQ to terminate or limit the authorization.
- (f) A NO_x allowance allocated under the NO_x budget trading program does not constitute a property right.
- (g) Upon recordation by the U.S. EPA under 326 IAC 10-4-10, 326 IAC 10-4-11, or 326 IAC 10-4-13, every allocation, transfer, or deduction of a NO_x allowance to or from each NO_x budget unit's compliance account or the overdraft account of the source where the unit is located is deemed to amend automatically, and become a part of, this NO_x budget permit of the NO_x budget unit by operation of law without any further review.

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

The owners and operators of each NO_x budget unit that has excess emissions in any ozone control period shall do the following:

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

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

Unless otherwise provided, the owners and operators of the NO_x budget source and each NO_x budget unit at the source shall keep, either on site at the source or at a central location within Indiana for those owners or operators with unattended sources, each of the following documents for a period of five (5) years:

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

This period may be extended for cause, at any time prior to the end of five (5) years, in writing by IDEM, OAQ or the U.S. EPA. Records retained at a central location within Indiana shall be available immediately at the location and submitted to the department or U.S. EPA within three (3) business days following receipt of a written request. Nothing in 326 IAC 10-4-4(e) shall alter the

record retention requirements for a source under 40 CFR 75. Unless otherwise provided, all records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

Documents available electronically, including DPLE databases and related U.S. EPA databases (currently referred to as Clean Air Markets or CAMD), are considered to be immediately available at the location.

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

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

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

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

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

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

The owners and operators of each NO_x budget source shall be liable as follows:

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

- (c) No permit revision shall excuse any violation of the requirements of the NO_x budget trading program that occurs prior to the date that the revision takes effect.
- (d) Each NO_x budget source and each NO_x budget unit shall meet the requirements of the NO_x budget trading program.
- (e) Any provision of the NO_x budget trading program that applies to a NO_x budget source, including a provision applicable to the NO_x authorized account representative of a NO_x budget source, shall also apply to the owners and operators of the source and of the NO_x budget units at the source.
- (f) Any provision of the NO_x budget trading program that applies to a NO_x budget unit, including a provision applicable to the NO_x authorized account representative of a NO_x budget unit, shall also apply to the owners and operators of the unit. Except with regard to the requirements applicable to units with a common stack under 40 CFR 75 and 326 IAC 10-4-12, the owners and operators and the NO_x authorized account representative of one (1) NO_x budget unit shall not be liable for any violation by any other NO_x budget unit of which they are not owners or operators or the NO_x authorized account representative and that is located at a source of which they are not owners or operators or the NO_x authorized account representative.

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

No provision of the NO_x budget trading program, a NO_x budget permit application, a NO_x budget permit, or an exemption under 326 IAC 10-4-3 shall be construed as exempting or excluding the owners and operators and, to the extent applicable, the NO_x authorized account representative of a NO_x budget source or NO_x budget unit from compliance with any other provision of the applicable, approved state implementation plan, a federally enforceable permit, or the CAA.

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT OFFICE OF AIR QUALITY

PART 70 OPERATING PERMIT CERTIFICATION

Source Name: DPL Energy Montpelier Electric Generating Station
Source Address: 8495 South 450 West, Poneto, Indiana 46781
Mailing Address: 1065 Woodman Drive, Dayton, Ohio 45432
Part 70 Permit No.: T179-25609-00026

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:

Telephone:

Date:

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

**PART 70 OPERATING PERMIT
EMERGENCY OCCURRENCE REPORT**

Source Name: DPL Energy Montpelier Electric Generating Station
Source Address: 8495 South 450 West, Poneto, Indiana 46781
Mailing Address: 1065 Woodman Drive, Dayton, Ohio 45432
Part 70 Permit No.: T179-25609-00026

This form consists of 2 pages

Page 1 of 2

- | |
|---|
| <p><input type="checkbox"/> This is an emergency as defined in 326 IAC 2-7-1(12)</p> <ul style="list-style-type: none">• The Permittee must notify the Office of Air Quality (OAQ), within four (4) business hours (1-800-451-6027 or 317-233-0178, ask for Compliance Section); and• The Permittee must submit notice in writing or by facsimile within two (2) working days (Facsimile Number: 317-233-6865), and follow the other requirements of 326 IAC 2-7-16. |
|---|

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

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

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

Page 2 of 2

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

Telephone: _____

A certification is not required for this report.

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

**PART 70 OPERATING PERMIT
SEMI-ANNUAL NATURAL GAS FIRED FACILITY CERTIFICATION**

Source Name: DPL Energy Montpelier Electric Generating Station
Source Address: 8495 South 450 West, Poneto, Indiana 46781
Mailing Address: 1065 Woodman Drive, Dayton, Ohio 45432
Part 70 Permit No.: T179-25609-00026

<input type="checkbox"/> Natural Gas Only
<input type="checkbox"/> Alternate Fuel burned
From: _____ To: _____

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:
Telephone:
Date:

A certification by the responsible official as defined by 326 IAC 2-7-1(34) is required for this report.

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

Part 70 Quarterly Report

Source Name: DPL Energy Montpelier Electric Generating Station
 Source Address: 8495 South 450 West, Poneto, Indiana 46781
 Mailing Address: 1065 Woodman Drive, Dayton, Ohio 45432
 Part 70 Permit No.: T179-25609-00026
 Facility: Eight (8) combustion turbines & one (1) diesel-fired emergency fire pump
 Parameter: CO
 Limit: less than 250 tons per twelve (12) consecutive month period

Year: _____

Month	CO Emissions (tons/month)		Total CO Emissions for previous 11-month period (tons)	Total CO Emissions for 12-month period (tons)
	Eight (8) turbines	One (1) diesel-fired emergency fire pump		
Month 1				
Month 2				
Month 3				

- No deviation occurred in this month.
- Deviation/s occurred in this month.
 Deviation has been reported on: _____

Submitted by: _____

Title/Position: _____

Signature: _____

Date: _____

Telephone: _____

Attach a signed certification to complete this report.

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

Part 70 Quarterly Report

Source Name: DPL Energy Montpelier Electric Generating Station
 Source Address: 8495 South 450 West, Poneto, Indiana 46781
 Mailing Address: 1065 Woodman Drive, Dayton, Ohio 45432
 Part 70 Permit No.: T179-25609-00026
 Facility: Eight (8) combustion turbines & one (1) diesel-fired emergency fire pump
 Parameter: NO_x
 Limit: less than 250 tons per twelve (12) consecutive month period

Year: _____

Month	NO _x Emissions (tons/month)		Total NO _x Emissions for previous 11-month period (tons)	Total NO _x Emissions for 12-month period (tons)
	Eight (8) turbines	One (1) diesel-fired emergency fire pump		
Month 1				
Month 2				
Month 3				

- No deviation occurred in this month.
- Deviation/s occurred in this month.
 Deviation has been reported on: _____

Submitted by: _____

Title/Position: _____

Signature: _____

Date: _____

Telephone: _____

Attach a signed certification to complete this report.

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

Part 70 Quarterly Report

Source Name: DPL Energy Montpelier Electric Generating Station
 Source Address: 8495 South 450 West, Poneto, Indiana 46781
 Mailing Address: 1065 Woodman Drive, Dayton, Ohio 45432
 Part 70 Permit No.: T179-25609-00026
 Facility: Eight (8) combustion turbines, identified as G1CT1 through G4CT2
 Parameter: No. 2 diesel fuel oil usage (surrogate for NO_x and SO₂ emissions)
 Limit: 197.7 kilo-gallons per twelve (12) consecutive month period per turbine

Year: _____

Month	Fuel Oil Usage this Month per Turbine (gallons/month)				Fuel Oil Usage Previous 11-Months Per Turbine (gallons)				Fuel Oil Usage for 12-month Period per Turbine (gallons)			
	G1CT1	G1CT2	G2CT1	G2CT2	G1CT1	G1CT2	G2CT1	G2CT2	G1CT1	G1CT2	G2CT1	G2CT2
Month 1												
Month 2												
Month 3												

Month	Fuel Oil Usage this Month per Turbine (gallons/month)				Fuel Oil Usage Previous 11-Months Per Turbine (gallons)				Fuel Oil Usage for 12-month Period per Turbine (gallons)			
	G3CT1	G3CT2	G4CT1	G4CT2	G3CT1	G3CT2	G4CT1	G4CT2	G3CT1	G3CT2	G4CT1	G4CT2
Month 1												
Month 2												
Month 3												

- No deviation occurred in this month.
- Deviation/s occurred in this month.
 Deviation has been reported on: _____

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

Attach a signed certification to complete this report.

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

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

Source Name: DPL Energy Montpelier Electric Generating Station
Source Address: 8495 South 450 West, Poneto, Indiana 46781
Mailing Address: 1065 Woodman Drive, Dayton, Ohio 45432
Part 70 Permit No.: T179-25609-00026

Months: _____ to _____ Year: _____

Page 1 of 2

<p>This report shall be submitted quarterly based on a calendar year. Any deviation from the requirements, the date(s) of each deviation, the probable cause of the deviation, and the response steps taken must be reported. 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".</p>	
<input type="checkbox"/> NO DEVIATIONS OCCURRED THIS REPORTING PERIOD.	
<input type="checkbox"/> THE FOLLOWING DEVIATIONS OCCURRED THIS REPORTING PERIOD	
Permit Requirement (specify permit condition #)	
Date of Deviation:	Duration of Deviation:
Number of Deviations:	
Probable Cause of Deviation:	
Response Steps Taken:	
Permit Requirement (specify permit condition #)	
Date of Deviation:	Duration of Deviation:
Number of Deviations:	
Probable Cause of Deviation:	
Response Steps Taken:	

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

Form Completed By: _____

Title/Position: _____

Date: _____

Telephone: _____

Attach a signed certification to complete this report.

**Indiana Department of Environmental Management
Office of Air Quality**

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

Source Background and Description

Source Name:	DPL Energy Montpelier Electric Generating Station
Source Location:	8495 South 450 West
County:	Wells
SIC Code:	4911
Permit Renewal No.:	T179-25609-00026
Permit Reviewer:	John Haney

The Office of Air Quality (OAQ) has reviewed the operating permit renewal application from DPL Energy Montpelier Electric Generating Station relating to the operation of a stationary electric generating station.

History

On November 30, 2007, DPL Energy Montpelier Electric Generating Station submitted an application to the OAQ requesting to renew its operating permit. DPL Energy Montpelier Electric Generating Station was issued a Part 70 Operating Permit on September 2, 2003.

Permitted Emission Units and Pollution Control Equipment

- (a) Four (4) FT-8 Pratt & Whitney Twin-Pac units, installed in February 2001, consisting of eight (8) simple cycle natural gas-fired combustion turbines, utilizing No. 2 diesel oil as a back-up fuel source, and four (4) electric generators. Each generator is directly connected to two (2) combustion turbines. The generators are designated as units G1 through G4, and the two (2) combustion turbines directly connected to each generator are designated as CT1 and CT2. Each of the eight (8) combustion turbines has an anticipated maximum heat input capacity of 270.9 MMBtu/hr (Lower Heating Value, LHV), a nominal output of 25 MW, water-injection for NO_x emissions control, and exhausts to one (1) dedicated stack respectively designated as G1CT1S1 through G4CT2S2. Each stack is equipped with a continuous emissions monitoring system (CEMS) to measure NO_x and CO emissions.

Insignificant Activities

- (a) Paved and unpaved roads and parking lots.
- (b) Other emergency equipment as stationary fire pumps, specifically including:
 - One (1) diesel-fired emergency fire pump, with a maximum heat input capacity of 1.0 MMBtu/hr, exhausting to the atmosphere.

Existing Approvals

Since the issuance of the Part 70 Operating Permit T179-15228-00026 on September 2, 2003, the source has constructed or has been operating under the following approvals as well:

- (a) First Significant Permit Modification No. 179-20348-00026 issued on July 7, 2005; and
- (b) Acid Rain Operating Permit Renewal No. AR179-21346-00026 issued on May 10, 2006.

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

The following terms and conditions from previous approvals have been determined no longer applicable; therefore, were not incorporated into this Part 70 Operating Permit Renewal:

- (a) All construction conditions from all previously issued permits.

Reason not incorporated: All facilities previously permitted have already been constructed; therefore, the construction conditions are no longer necessary as part of the operating permit. Any facilities that were previously permitted but have not yet been constructed would need new pre-construction approval before beginning construction.

Enforcement Issue

There are no enforcement actions pending.

Emission Calculations

See TSD Appendices A and B of this document for detailed emission calculations.

County Attainment Status

The source is located in Wells County

Pollutant	Designation
SO ₂	Better than national standards.
CO	Unclassifiable or attainment effective November 15, 1990.
O ₃	Unclassifiable or attainment effective June 15, 2004, for the 8-hour ozone standard. ¹
PM ₁₀	Unclassifiable effective November 15, 1990.
NO ₂	Cannot be classified or better than national standards.
Pb	Not designated.

¹Unclassifiable or attainment effective October 18, 2000, for the 1-hour ozone standard which was revoked effective June 15, 2005.
Unclassifiable or attainment effective April 5, 2005, for PM2.5.

- (a) Ozone Standards

- (1) On October 25, 2006, the Indiana Air Pollution Control Board finalized a rule revision to 326 IAC 1-4-1 revoking the one-hour ozone standard in Indiana.
- (2) On September 6, 2007, the Indiana Air Pollution Control Board finalized a temporary emergency rule to re-designate Allen, Clark, Elkhart, Floyd, LaPorte, and St. Joseph as attainment for the 8-hour ozone standard.
- (3) On November 9, 2007, the Indiana Air Pollution Control Board finalized a temporary emergency rule to re-designate Boone, Clark, Elkhart, Floyd, LaPorte, Hamilton, Hancock, Hendricks, Johnson, Madison, Marion, Morgan, Shelby, and St. Joseph as attainment for the 8-hour ozone standard.

- (4) Volatile organic compounds (VOC) and Nitrogen Oxides (NO_x) are regulated under the Clean Air Act (CAA) for the purposes of attaining and maintaining the National Ambient Air Quality Standards (NAAQS) for ozone. Therefore, VOC and NO_x emissions are considered when evaluating the rule applicability relating to ozone. Wells County has been designated as attainment or unclassifiable for ozone. Therefore, VOC and NO_x emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2.
- (b) PM2.5
Wells County has been classified as attainment for PM2.5. U.S. EPA has not yet established the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2 for PM2.5 emissions. Therefore, until the U.S. EPA adopts specific provisions for PSD review for PM2.5 emissions, it has directed states to regulate PM10 emissions as a surrogate for PM2.5 emissions.
- (c) Other Criteria Pollutants
Wells County has been classified as attainment or unclassifiable in Indiana for all other criteria pollutants. Therefore, these emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2.
- (d) Fugitive Emissions
Since this type of operation is not one of the twenty-eight (28) listed source categories under 326 IAC 2-2 or 326 IAC 2-3, fugitive emissions are not counted toward the determination of PSD and Emission Offset applicability.

Unrestricted Potential Emissions

See TSD Appendix A, Emissions Calculation Spreadsheets, for detailed calculations for the emergency fire pump, unpaved roads and hazardous air pollutants from the eight (8) turbines. See TSD Appendix B, Turbine Emissions Calculations, for detailed calculations for the criteria air pollutants from the eight (8) turbines.

- (a) The potential to emit (as defined in 326 IAC 2-7-1(29)) of CO, NO_x, PM10, SO₂, and VOC are each equal to or greater than 100 tons per year. Therefore, the source is subject to the provisions of 326 IAC 2-7.
- (b) The potential to emit (as defined in 326 IAC 2-7-1(29)) of the worse-case single HAP (formaldehyde) is equal to or greater than ten (10) tons per year. Therefore, the source is subject to the provisions of 326 IAC 2-7.

Since this type of operation is not one of the twenty-eight (28) listed source categories under 326 IAC 2-7, fugitive emissions are not counted toward the determination of Part 70 applicability.

Part 70 Permit Conditions

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

- (a) Emission limitations and standards, including those operational requirements and limitations that assure compliance with all applicable requirements at the time of issuance of Part 70 permits.

- (b) Monitoring and related record keeping requirements which assume that all reasonable information is provided to evaluate continuous compliance with the applicable requirements.

Potential to Emit After Issuance

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

Process/ Emission Unit	Potential to Emit (tons/year)							Total HAPs
	PM	PM ₁₀	SO ₂	VOC	CO	NO _x	Single HAP	
Eight (8) Turbines	9.25	9.25	6.49	14.80	249.30	115.39	1.87	2.13
Diesel-Fired Emergency Fire Pump	0.08	0.08	0.07	0.09	0.24	1.10	negl.	negl.
Unpaved Roads	0.44	0.14	0.00	0.00	0.00	0.00	0.00	0.00
Total	9.77	9.47	6.56	14.89	<250	116.49	<10	<25
Major Source Threshold	250	250	250	250	250	250	N/A	N/A

- (a) This existing stationary source is not major for PSD because the emissions of each criteria pollutant are less than two hundred fifty (<250) tons per year, and it is not one of the twenty-eight (28) listed source categories.
- (b) Fugitive Emissions
Since this type of operation is not one of the twenty-eight (28) listed source categories under 326 IAC 2-2 or 326 IAC 2-3, fugitive emissions are not counted toward the determination of PSD and Emission Offset applicability.

Federal Rule Applicability

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

Each of the eight (8) combustion turbines at this Part 70 source has an uncontrolled PTE of NO_x greater than 100 tons per year, and uses water-injection to control NO_x emissions to comply with the applicable limits of 326 IAC 60, Subpart GG. However, pursuant to 40 CFR 64.2(b)(iii) and (vi), *Exemptions*, the requirements of Part 64 do not apply to sources

subject to the Acid Rain Program, nor to sources with an emission limit or standard for which a Part 70 permit specifies a continuous compliance determination method (i.e., Conditions D.1.1(c) of this Part 70 operating permit).

Based on this evaluation, the requirements of 40 CFR Part 64, CAM are not applicable to any of the existing units as part of this Part 70 permit renewal.

- (b) The eight (8) combustion turbines are subject to 40 CFR Part 60, Subpart GG (Stationary Gas Turbines), 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, the Permittee shall:

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

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

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

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

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

- (2) limit sulfur dioxide emissions, as required by 40 CFR 60.333, to 0.015 percent by volume at 15 percent oxygen on a dry basis, or use natural gas fuel with a sulfur content less than or equal to 0.8 percent by weight;

- (3) monitor operations pursuant to 40 CFR 60.334:

(A) Pursuant to 40 CFR 60.334(b), the Permittee shall install, certify, maintain, operate, and quality-assure a continuous emission monitoring system (CEMS) consisting of NO_x and O₂ monitors. The CEMS shall be installed, certified, maintained and operated as follows:

- (1) Each CEMS must be installed and certified according to PS 2 and 3 (for diluent) of 40 CFR part 60, appendix B, except the 7-day calibration drift is based on unit operating days, not calendar days. Appendix F, Procedure 1 is not required. The relative accuracy test audit (RATA) of the NO_x and diluent monitors may be performed individually or on a combined basis.
- (2) As specified in 40 CFR 60.13(e)(2), during each full unit operating hour, each monitor must complete a minimum of one cycle of operation (sampling, analyzing, and data recording) for each 15-minute quadrant of the hour, to validate the hour. For partial unit operating hours, at least one valid data point must be obtained for each quadrant of the hour in which the unit operates. For unit operating hours in which required quality assurance and maintenance activities are performed on the

CEMS, a minimum of two valid data points (one in each of two quadrants) are required to validate the hour.

- (3) For purposes of identifying excess emissions, CEMS data must be reduced to hourly averages as specified in 40 CFR 60.13(h).
- (B) Pursuant to 40 CFR 60.334(h) and (i), the Permittee shall monitor the total sulfur content of the fuel being fired in the turbine daily, except if the gaseous fuel is demonstrated to meet the definition of natural gas in 40 CFR 60.331(u). The sulfur content of the fuel must be determined using total sulfur methods described in 40 CFR 60.335(b)(10). Alternatively, if the total sulfur content of the gaseous fuel during the most recent performance test was less than 0.4 weight percent (4000 ppmw), ASTM D4084-82, 94, D5504-01, D6228-98, or Gas Processors Association Standard 2377-86 (all of which are incorporated by reference-see 40 CFR 60.17), which measure the major sulfur compounds may be used.
- (4) On March 24, 2000, the Montpelier Electric Generating Station was issued an alternative monitoring and custom schedule approval for 40 CFR 60, Subpart GG by the USEPA, Region V. Pursuant to this EPA approval, the Permittee shall comply with (3)(A) and (3)(B) as follows:
 - (A) Use natural gas as the primary fuel for the combustion turbines;
 - (B) Use number 2 fuel oil as a back-up fuel source only. The source shall take a total gallons per year limit on the diesel fuel. The limitation is as follows:

The total input of number 2 fuel oil to each of the eight (8) combustion turbines shall be limited to 197.7 kilo-gallons per twelve (12) consecutive month period per turbine, with compliance demonstrated at the end of each month. This usage limitation is equivalent to 5.9 tons of SO₂ per year and 18.8 tons of NO_x per year; and
 - (C) The Permittee shall continuously monitor the SO₂ and NO_x emissions from each turbine per the requirements of 40 CFR Part 75. To satisfy this requirement, and in lieu of continuous water to fuel ratio monitoring, the Permittee shall use continuous emission monitoring systems (CEMS) for nitrogen oxides (NO_x). The requirements of 40 CFR Part 75 include, but are not limited to, 40 CFR Parts 75.10, 75.11 and 75.12; and
- (5) report periods of excess emissions, as required by 40 CFR 334(c).
- (c) This source is not subject to the requirements of 40 CFR Part 60, Subparts K, Ka, and Kb (Standards of Performance for Petroleum Liquid Storage Vessels and Volatile Liquid Storage Vessels).

The storage tanks with capacity less than or equal to 1,000 gallons and annual throughputs less than 12,000 gallons are not subject to the requirements of 326 IAC 12 (40 CFR Parts 60.110, 110a - 115a or 110b - 117b, as Subparts K, Ka, and Kb, respectively), since the 1,000 gallon storage capacity is below the minimum applicable threshold to the three rules (i.e., 40 cubic meters (10,568 gallons)).

Portable fuel oil tank trucks used by this source to supply fuel oil to the turbines are not subject to 40 CFR Part 60, Subpart Kb. This rule is not applicable to vessels permanently attached to mobile vehicles, including trucks, pursuant to 40 CFR 60.110b(d)(1).

- (d) This source is not subject to the requirements of 40 CFR Part 60, Subpart HHHH (Emission Guidelines and Compliance Times for Coal-Fired Electric Steam Generating Units). This source does not combust coal or coal-derived fuel.
- (e) This source is not subject to the requirements of 40 CFR Part 60, Subpart IIII (Standards of Performance for Stationary Compression Ignition Internal Combustion Engines). The diesel-fired emergency fire pump was constructed in 2001, prior to the various applicability dates in the rule.
- (f) This source is not subject to the requirements of 40 CFR Part 60, Subparts JJJJ (Standards of Performance for Stationary Spark Ignition Internal Combustion Engines). All engines at this facility were constructed in 2001, prior to the various applicability dates in the rule.
- (g) This source is not subject to the requirements of 40 CFR Part 60, Subparts KKKK (Standards of Performance for Stationary Combustion Turbines). The eight (8) simple cycle natural gas-fired combustion turbines were constructed in February, 2001, prior to the rule applicability date of February 18, 2005.
- (h) Although the source includes units that belong to a source category affected by the Section 112(j) Maximum Achievable Control Technology (MACT) Hammer date of May 15, 2002, the requirements of Section 112(j) of the Clean Air Act (40 CFR Part 63.50 through 63.56) are not applicable to this source because the source has a limited potential to emit of less than 10 tons per year of a single HAP and less than 25 tons per year of the combination of HAPs.
- (i) This source is subject to the requirements of 40 CFR Part 72-80 (Acid Rain Program). The requirements of this program are detailed in the Title IV (Acid Rain) Permit, which is found in Appendix A to this Part 70 operating permit.
- (j) There are no National Emission Standards for Hazardous Air Pollutants (NESHAP) (326 IAC 14, 326 IAC 20 and 40 CFR Part 63) included in this permit renewal.

This source is not subject to the requirements of 40 CFR 63, Subpart YYYYY (Stationary Combustion Turbines) because the source has accepted enforceable limits on its emissions of HAPs and is not a major source of HAPs.

State Rule Applicability - Entire Source

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

The source has submitted an Emergency Reduction Plan (ERP) on January 22, 2002. The ERP has been verified to fulfill the requirements of 326 IAC 1-5-2 (Emergency Reduction Plans).

326 IAC 1-6-3 (Preventive Maintenance Plan)

The source is subject to 326 IAC 1-6-3.

326 IAC 1-7 (Stack Height Provisions)

Stacks designated as G1CT1S1 - G4CT2S2 are subject to the requirements of 326 IAC 1-7 (Stack Height Provisions) because the potential PM and SO₂ emissions (before controls) exhausting through the stacks are each greater than 25 tons per year per stack. This rule requires that the stack be constructed using Good Engineering Practice (GEP), unless field studies or other methods of modeling show to the satisfaction of IDEM that no excessive ground level concentrations, due to less than adequate stack height, will result. An air dispersion modeling analysis was conducted in support of MSOP No. 179-12321-00026, issued on December 29, 2000. This analysis demonstrated that the affected stacks, which are below the formula Good Engineering Practice (GEP) stack heights, will not result in excessive modeled air concentrations. The source therefore complies with this rule.

326 IAC 2-2 (PSD)

Pursuant to 326 IAC 2-2 (PSD), this source, which was constructed in 2001 after the rule applicability date of August 7, 1980, is not considered a major source. This source is not one of the 28 listed source categories, and it does not have the potential to emit of 250 tons per year or more of any criteria pollutant, pursuant to the following:

- (a) The potential to emit of NO_x and CO from the eight (8) combustion turbines and one (1) diesel-fired emergency fire pump shall be limited to less than 250 tons per twelve (12) consecutive month period per pollutant, with compliance demonstrated at the end of each month. By limiting NO_x and CO emissions to less than 250 tons per year, the SO₂ and PM emissions are also limited to less than 250 tons per year. Therefore, the Prevention of Significant Deterioration (PSD) rules, 326 IAC 2-2, will not apply.
- (b) The NO_x and CO emissions shall be limited by the following equation:
 - (1) NO_x emissions (tons per twelve (12) consecutive month period) =
Emissions from combustion turbines (tons/12-months, based on CEMs data) + fuel oil usage from emergency fire pump (kgals/12-months) * appropriate AP-42 emission factor.
 - (2) CO emissions (tons per twelve (12) consecutive month period) =
Emissions from combustion turbines (tons/12-months, based on CEMs data) + fuel oil usage from emergency fire pump (kgals/12-months) * appropriate AP-42 emission factor.
- (c) The source shall operate a continuous emissions monitoring system in accordance with 326 IAC 3-5, to demonstrate compliance with the above mentioned NO_x and CO limits.
- (d) The sulfur content of the fuel oil shall not exceed 0.05 percent by weight.

326 IAC 2-6 (Emission Reporting)

This source is subject to 326 IAC 2-6 (Emission Reporting) because it is required to have an operating permit under 326 IAC 2-7, Part 70 program. Pursuant to this rule, the Permittee shall submit an emission statement certified pursuant to the requirements of 326 IAC 2-6. In accordance with the compliance schedule specified in 326 IAC 2-6-3, an emission statement must be submitted triennially by July 1 beginning in 2004 and every 3 years after. Therefore, the next emission statement for this source must be submitted by July 1, 2010. The emission statement shall contain, at a minimum, the information specified in 326 IAC 2-6-4.

326 IAC 3-5 (Continuous Monitoring of Emissions)

Pursuant to MSOP No. 179-12321-00026, issued on December 29, 2000, the source shall comply as follows in order to demonstrate compliance with the limits specified in Condition D.1.1.1:

- (a) Pursuant to 326 IAC 3-5-1(d)(1), the Permittee shall install, calibrate, certify, operate and maintain a continuous monitoring system for measuring NO_x and CO emissions rates in pounds per hour from the eight (8) stacks in accordance with 326 IAC 3-5-2 and 326 IAC 3-5-3.
- (b) Pursuant to 326 IAC 3-5-4, the Permittee shall submit to IDEM, OAQ, on a biennial basis any updates made to the continuous monitoring standard operating procedure (SOP) document submitted to IDEM, OAQ, on August 31, 2001.
- (c) The Permittee shall record the output of the system and shall perform the required record keeping, pursuant to 326 IAC 3-5-6, and reporting, pursuant to 326 IAC 3-5-7.
- (d) Whenever a continuous emission monitoring system (CEMS) is malfunctioning or down for repairs or adjustments, the Permittee shall:
 - (1) use a data substitution procedure for the CO CEMS that is consistent with the requirements of 40 CFR 75.33(b), *Standard Missing Data Substitution Procedures for SO₂ Concentration Data*; and
 - (2) use the *Standard Missing Data Substitution Procedures for NO_x Concentration Data* of 40 CFR 75.33(b) for the NO_x CEMS,

to respectively demonstrate compliance with the CO and NO_x emission limits established in D.1.1.

- (e) The Permittee may submit to IDEM, OAQ, alternative emission factors based on the source's CEMS data, to use in instances of downtime. The alternative emissions factors must be approved by IDEM, OAQ, prior to use in calculating emissions for the limitations established in this permit. The alternative emission factors shall be based upon collected monitoring and test data supplied from an approved continuous emission monitoring system and/or approved performance tests. In the event that the information submitted does not contain sufficient data to establish appropriate emission factors, the Permittee shall continue to collect data until appropriate emission factors can be established. During this period of time, the source shall continue to use the CO and NO_x Missing Data Substitution Procedures specified in 40 CFR Part 75, Subpart D, in periods of downtime.

This condition shall determine continuous compliance with the NO_x and CO emission limits established in this permit, such that the requirements of 326 IAC 2-2 (PSD) do not apply. By limiting NO_x and CO emissions to less than 250 tons per year, the SO₂ and PM emissions are also limited to less than 250 tons per year. Therefore, the Prevention of Significant Deterioration (PSD) rules, 326 IAC 2-2, will not apply.

326 IAC 5-1 (Opacity Limitations)

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

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

326 IAC 6-4 (Fugitive Dust Emissions)

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 6-5 (Fugitive Particulate Matter Emission Limitations)

Pursuant to 326 IAC 6-5 (Fugitive Particulate Matter Emissions Limitations), fugitive particulate matter emissions shall be controlled according to the plan submitted on February 16, 2000.

This plan consists of wet suppression of dust from roads on an as needed basis.

326 IAC 7-3-1 (Ambient Monitoring)

The Source is not subject to 326 IAC 7-3-1 because the total SO₂ actual emissions are not greater than (10,000) tons per year.

State Rule Applicability – Individual Facilities

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

Pursuant to 326 IAC 2-4.1-1 (New Source Toxics Control), any new process or production unit, which in and of itself emits or has the PTE 10 tons per year of any HAP or 25 tons per year of the combination of HAPs, and is constructed or reconstructed after July 27, 1997, must be controlled using technologies consistent with Maximum Achievable Control Technology (MACT).

The source was constructed in 2001 and shall comply as follows:

- (a) Pursuant to Minor Permit Revision No. 179-15577-00026, issued May 16, 2002, the formaldehyde emission rate from each stack shall not exceed 0.00203 pounds per million Btu of heat input (lb/MMBtu). This emission rate in combination with the emission limitations specified in Condition D.1.1, shall ensure that single HAP emissions, as formaldehyde, do not exceed 10 tons per year.

Compliance with this condition and D.1.1 shall make the requirements of 326 IAC 2-4.1-1 (New Source Toxics Control) not applicable.

326 IAC 7-1.1 (Sulfur Dioxide Emission Limitations)

This rule requires all facilities with a potential to emit (PTE) at or greater than twenty-five (25) tons per year or ten (10) pounds per hour of sulfur dioxide (SO₂) to comply with the emission limitations and test compliance methods stated in the rule. The eight (8) turbines are each subject to the requirements of this rule since they have a potential sulfur dioxide (SO₂) emission rate greater than 10 pounds per hour. Therefore, the source shall comply as follows:

- (a) Pursuant to 326 IAC 7-1.1-2, sulfur dioxide emissions from fuel combustion facilities shall be limited to five-tenths (0.5) pounds per million Btu for distillate oil combustion.

- (b) Pursuant to 326 IAC 7-2-1(c)(3), owners or operators of sources or facilities subject to 326 IAC 7-1.2, shall submit to the Commissioner upon request the following reports based on fuel sampling and analysis data in accordance with procedures specified under 326 IAC 3-7:
- Reports of calendar month average sulfur content, heat content, fuel consumption, and sulfur dioxide emission rate in pounds per million Btu.
- (c) Pursuant to 326 IAC 7-1.1-2 and 326 IAC 7-2-1(c)(3), the Permittee shall demonstrate that the sulfur dioxide emissions do not exceed the equivalent of 0.5 pounds per million Btu using a calendar month average.
- (d) The Permittee shall perform sampling and analysis of fuel oil samples in accordance with 326 IAC 3-7-4(a).
- (1) The Permittee may rely upon vendor analysis of fuel delivered, if accompanied by a vendor certification [326 IAC 3-7-4(b)]; or,
- (2) 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.
- (e) Upon written notification of a facility owner or operator to IDEM, continuous emission monitoring data collected and reported pursuant to 326 IAC 3-5 may be used as the means for determining compliance. Upon such notification, the other requirements of 326 IAC 7 shall not apply. [326 IAC 7-2-1(g)]

The source shall continue to comply with the limit of 326 IAC 7-1.1 by using fuel oil with a sulfur content of 0.05 percent by weight.

326 IAC 8-1-6 (New facilities; general reduction requirements)

This rule applies to facilities located anywhere in the state that were constructed on or after January 1, 1980, which have potential volatile organic compound (VOC) emissions of 25 tons per year or more, and which are not otherwise regulated by another provision of Article 8.

The source will utilize NO_x and CO continuous emission monitoring systems (CEMS) to ensure compliance with the source-wide operation limitation on NO_x and CO emissions of less than 250 tons per year emission limit for both pollutants. In effect, this emission limit on NO_x and CO restricts the amount of fuel used in the turbines such that the emissions for remaining pollutants are limited as well. By limiting NO_x and CO emissions to less than 250 tons per year, the VOC emissions are being limited to less than 25 tons per year. Therefore, the requirements of this rule do not apply to this source.

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

Pursuant to 326 IAC 8-4-1 (Applicability) and 326 IAC 8-4-3 (Petroleum Liquid Storage Facilities), all petroleum liquid storage vessels located in a specified county or new as of January 1, 1980, and having capacities greater than one hundred fifty thousand (150,000) liters (39,000 gallons)

containing VOC whose true vapor pressure is greater than 10.5 kPa (1.52 psi), are subject to the rule. Such affected facilities shall comply with the applicable requirements for external fixed and floating roof tanks and the specified record keeping and reporting requirements. This source uses portable storage facilities (i.e., tanker trucks) to supply and store fuel oil for combustion purposes. Since both the true vapor pressure of the fuel oil is less than the rule applicability threshold of 10.5 kPa, and the capacity of a tanker truck is less than 39,000 gallons, this rule does not apply to this source.

326 IAC 9 (Carbon Monoxide Emission Limits)

Pursuant to 326 IAC 9 (Carbon Monoxide Emission Limits), the source would be subject to this rule because it is a stationary source which emits CO emissions and commenced operation after March 21, 1972. There is no rule specific emission limit applicable to the source, since it is not a process operation listed under 326 IAC 9-1-2.

326 IAC 10 (Nitrogen Oxide Rules)

(a) 326 IAC 10-3 (NO_x Reduction Program for Specific Source Categories)

Pursuant to 326 IAC 10-3-1 (Applicability), the requirements of this rule apply to any of the specifically listed source categories. This source is not one of the specifically listed sources, and, therefore, this rule is not applicable to this source.

(b) 326 IAC 10-4 (NO_x Budget Trading Program)

Pursuant to 326 IAC 10-4-2(16), each of the eight (8) combustion turbines G1CT1 through G4CT2 is considered as an *electricity generating unit* (EGU) because each unit commenced operation on or after January 1, 1999 and serves a generator at any time that has a nameplate capacity greater than twenty-five (25) megawatts that produces electricity for sale under a firm contract to the electric grid. Pursuant to 326 IAC 10-4-1(a)(1), an "EGU" is a 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. The NO_x authorized account representative has already submitted the permit application, which was received by IDEM, OAQ, on October 22, 2001.

Since the eight (8) combustion turbines G1CT1 through G4CT2 commenced operation after May 1, 2000, the 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.

Compliance Determination and Monitoring Requirements

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

Requirements in Section D of the permit are those conditions that are found directly within state and federal rules and the violation of which serves as grounds for enforcement action.

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

While IDEM may require compliance testing at any specific time to determine if the source is in compliance with an applicable limit or standard, additional testing as a condition of this Part 70 approval is deemed as unnecessary. The source conducted initial compliance and continuous emission monitor (CEM) certification testing on June 18, 2001. Results of that test demonstrated compliance with the criteria pollutants, and the formaldehyde emission factor was adjusted in Minor Permit Revision No. 179-15577-00026, issued May 16, 2002, to be the highest factor determined during testing. Overall, compliance with the permit limits established for this source will be demonstrated through the operation of NO_x and CO CEMs. Such limits will in effect restrict corresponding fuel usage at this source such that other pollutant emissions will be well below applicable standards and limits. Specified parameter monitoring, record keeping, and reporting requirements will be used to ensure such compliance. Therefore, there are no emissions testing requirements in this Part 70 permit.

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

The eight (8) simple cycle combustion turbines, identified as units G1CT1 through G4CT2, have applicable compliance monitoring conditions as specified below:

Pursuant to NSPS Subpart GG, the Permittee shall:

- (a) Pursuant to 40 CFR 60.334(b), the Permittee shall install, certify, maintain, operate, and quality-assure a continuous emission monitoring system (CEMS) consisting of NO_x and O₂ monitors. The CEMS shall be installed, certified, maintained and operated as follows:
 - (1) Each CEMS must be installed and certified according to PS 2 and 3 (for diluent) of 40 CFR part 60, appendix B, except the 7-day calibration drift is based on unit operating days, not calendar days. Appendix F, Procedure 1 is not required. The relative accuracy test audit (RATA) of the NO_x and diluent monitors may be performed individually or on a combined basis.
 - (2) As specified in 40 CFR 60.13(e)(2), during each full unit operating hour, each monitor must complete a minimum of one cycle of operation (sampling, analyzing, and data recording) for each 15-minute quadrant of the hour, to validate the hour. For partial unit operating hours, at least one valid data point must be obtained for each quadrant of the hour in which the unit operates. For unit operating hours in which required quality assurance and maintenance activities are performed on the CEMS, a minimum of two valid data points (one in each of two quadrants) are required to validate the hour.
 - (3) For purposes of identifying excess emissions, CEMS data must be reduced to hourly averages as specified in 40 CFR 60.13(h).
- (b) Pursuant to 40 CFR 60.334(h) and (i), the Permittee shall monitor the total sulfur content of the fuel being fired in the turbine daily, except if the gaseous fuel is demonstrated to meet the definition of natural gas in 40 CFR 60.331(u). The sulfur content of the fuel must

be determined using total sulfur methods described in 40 CFR 60.335(b)(10). Alternatively, if the total sulfur content of the gaseous fuel during the most recent performance test was less than 0.4 weight percent (4000 ppmw), ASTM D4084–82, 94, D5504–01, D6228–98, or Gas Processors Association Standard 2377–86 (all of which are incorporated by reference-see 40 CFR 60.17), which measure the major sulfur compounds may be used.

- (c) On March 24, 2000, the Montpelier Electric Generating Station was issued an alternative monitoring and custom schedule approval for 40 CFR 60, Subpart GG by the USEPA, Region V. Pursuant to this EPA approval, the Permittee shall comply with (a) and (b) of this condition as follows:
- (1) Use natural gas as the primary fuel for the combustion turbines;
 - (2) Use number 2 fuel oil as a back-up fuel source only. The source shall take a total gallons per year limit on the diesel fuel. The limitation is as follows:

The total input of number 2 fuel oil to each of the eight (8) combustion turbines shall be limited to 197.7 kilo-gallons per twelve (12) consecutive month period per turbine, with compliance demonstrated at the end of each month. This usage limitation is equivalent to 5.9 tons of SO₂ per year and 18.8 tons of NO_x per year; and
 - (3) The Permittee shall continuously monitor the SO₂ and NO_x emissions from each turbine per the requirements of 40 CFR Part 75. To satisfy this requirement, and in lieu of continuous water to fuel ratio monitoring, the Permittee shall use continuous emission monitoring systems (CEMS) for nitrogen oxides (NO_x). The requirements of 40 CFR Part 75 include, but are not limited to, 40 CFR Parts 75.10, 75.11 and 75.12.

These monitoring conditions are necessary because the turbines must operate properly to ensure compliance with 40 CFR 60, Subpart GG, 326 IAC 7-1, 326 IAC 2-2, and 326 IAC 2-7 (Part 70).

Recommendation

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

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

An application for the purposes of this review was received on December 4, 2007. Additional information was received on April 22, 2008.

Conclusion

The operation of this stationary electric generating station shall be subject to the conditions of the attached Part 70 Operating Permit Renewal No. T179-25609-00026.

TSD Appendix A: Emissions Calculations
Commercial/Institutional/Residential Combustors
#1 and #2 Fuel Oil
One (1) Diesel-Fired Emergency Fire Pump (Engine)

Company Name: DPL Energy, Montpelier Electric Generating Station
Address City IN Zip: 8495 South 450 West, Poneto, IN 46781
Part 70 No.: T179-25609-00026
Reviewer: John Haney
Date: April 17, 2008

Heat Input Capacity Potential Throughput S = Weight % Sulfur
MMBtu/hr kgals/year

Pollutant	PM	SO2	VOC	CO	NOx
Emission Factor (lb/MMBTU)	0.31	0.29	0.36	0.95	4.41
Potential to Emit (tons/yr)	0.078	0.073	0.090	0.238	1.103

Methodology

*****Potential throughput reflects 500 hours per year of fuel use for an emergency unit***

Emission Factors are from AP 42, Table 3.3-1 (SCC 2-02-001-02, 2-02-003-01) 10/96

PM Emission Factor is equivalent to the PM-10 emission factor listed in AP-42.

1 gallon of No. 2 Fuel Oil has a heating value of 140,000 Btu

Potential Throughput (kgals/year) = Heat Input Capacity (MMBtu/hr) x 500 hrs/yr x 1kgal per 1000 gallon x 1 gal per 0.140 MMBtu

Potential to Emit (tons/yr) = Heat input (MMBtu/hr) x Emission Factor (lb/MMBtu) x 500 hr/yr / 2,000 lb/ton

HAPs	Benzene	Toluene	Xylene	Propylene	Formaldehyde
Emission Factor (lb/MMBTU)	933.0E-6	409.0E-6	285.0E-6	2.6E-3	1.2E-3
Potential to Emit (tons/yr)	2.333E-04	1.023E-04	7.125E-05	6.450E-04	2.950E-04

HAPs	Acetaldehyde	Acrolein	1,3 Butadiene	Total PAH	Total HAPs
Emission Factor (lb/MMBTU)	767.0E-6	92.5E-6	39.1E-6	168.0E-6	---
Potential to Emit (tons/yr)	1.918E-04	2.313E-05	9.775E-06	4.200E-05	1.613E-03

Methodology

Emission Factors are from AP 42, Table 3.3-2, 10/96.

Potential to Emit (tons/year) = Throughput (MMBtu/hr) x Emission Factor (lb/MMBtu) x 500 hrs/yr / 2,000 lb/ton

TSD Appendix A: Emissions Calculations

**** Unpaved Roads ****

Company Name: DPL Energy, Montpelier Electric Generating Station
Address City IN Zip: 8495 South 450 West, Poneto, IN 46781
Part 70 No.: T179-25609-00026
Reviewer: John Haney
Date: April 22, 2008

The following calculations determine the amount of emissions created by unpaved roads, based on 8760 hours of use and AP-42, Ch 13.2.2 (Supplement E, 9/98).

$$0.125 \text{ trip/hr} \times 0.33 \text{ mile/trip} \times 2 \text{ (round trip)} \times 8760 \text{ hr/yr} = 722.7 \text{ miles per year}$$

PM10

$$E_f = k \cdot [(s/12)^{0.8}] \cdot [(W/3)^b] / [(Mdry/0.2)^c] \cdot [(365-p)/365] \cdot (S/15) = 0.39 \text{ lb/mile PM10}$$

where k = 2.6 (particle size multiplier for PM-10) (k=10 for PM-30 or TSP)

s = 6.4 mean % silt content of unpaved roads

b = 0.4 Constant for PM-10 (b = 0.5 for PM-30 or TSP)

c = 0.3 Constant for PM-10 (c = 0.4 for PM-30 or TSP)

W = 4 tons average vehicle weight

Mdry = 2 surface material moisture content, % (default 0.2 (dry conditions) when using rainfall parameter)

p = 125 number of days with at least 0.01 in of precipitation per year

S = 10 mph speed limit

$$0.39 \text{ lb/mi} \times 722.7 \text{ mi/yr} \div 2000 \text{ lb/ton} = \boxed{0.14 \text{ tons/yr PM10}}$$

PM

$$E_f = k \cdot [(s/12)^{0.8}] \cdot [(W/3)^b] / [(M/0.2)^c] = 1.22 \text{ lb/mile PM}$$

where k = 10 (particle size multiplier for PM) (k=10 for PM-30 or TSP)

s = 6.4 mean % silt content of unpaved roads

b = 0.5 Constant for PM (b = 0.5 for PM-30 or TSP)

c = 0.4 Constant for PM (c = 0.4 for PM-30 or TSP)

W = 4 tons average vehicle weight

Mdry = 2 surface material moisture content, % (default 0.2 (dry conditions) when using rainfall parameter)

p = 125 number of days with at least 0.01 in of precipitation per year

S = 10 mph speed limit

$$1.22 \text{ lb/mi} \times 722.7 \text{ mi/yr} \div 2000 \text{ lb/ton} = \boxed{0.44 \text{ tons/yr PM}}$$

**TSD Appendix A: Emissions Calculations
HAPs Emissions for Natural Gas-Fired Turbines**

**Company Name: DPL Energy, Montpelier Electric Generating Station
Address City IN Zip: 8495 South 450 West, Poneto, IN 46781
Part 70 No.: T179-25609-00026
Reviewer: John Haney
Date: April 17, 2008**

Total Heat
Input Capacity: 2167.2 MMBtu/hr (Eight (8) combustion turbines @ 270.9 MMBtu/hr each)

Pollutant	Emission Factor (lbs/MMBtu)	Total Emissions (tons/yr)	Emissions Per Turbine (tons/yr)	Total Limited Emissions (tons/yr)	Limited Emissions Per Turbine (tons/yr)
1,3 Butadiene	4.30E-07	0.004	0.001	0.000	0.000
Acetaldehyde	4.00E-05	0.380	0.047	0.037	0.005
Acrolein	6.40E-06	0.061	0.008	0.006	0.001
Benzene	1.20E-05	0.114	0.014	0.011	0.001
Ethylbenzene	3.20E-05	0.304	0.038	0.030	0.004
Formaldehyde	2.03E-03	19.269	2.409	1.874	0.234
PAHs	2.20E-06	0.021	0.003	0.002	0.000
Propylene Oxide	2.90E-05	0.275	0.034	0.027	0.003
Toluene	1.30E-04	1.234	0.154	0.120	0.015
Xylene	2.60E-05	0.247	0.031	0.024	0.003
TOTAL		21.909	2.739	2.131	0.266
Naphthalene	1.30E-06	0.012	0.002	0.001	0.000

Methodology

Except for formaldehyde, emission factors are from AP42 (final, 4/00), Table 3.1-3. Emission Factor for formaldehyde is from June 18 - 21, 2001 performance test. Minor Permit Revision No. 179-15577, issued on May 16, 2002, approved the use of this tested formaldehyde emission factor.

Emissions (tons/yr) = Heat input rate (MMBtu/hr) x Emission Factor (lb/MMBtu) x 8760 hr/yr / 2,000 lb/ton

Limited HAP Emissions (tons/yr) = Heat input rate (MMBtu/hr) x Emission Factor (lb/MMBtu) x 852 hr/yr / 2,000 lb/ton

Naphthalene is considered a PAH, therefore naphthalene emissions were also accounted for under the PAH emissions.

**TSD Appendix A: Emissions Calculations
HAPs Emissions for Distillate Oil-Fired Turbines**

**Company Name: DPL Energy, Montpelier Electric Generating Station
Address City IN Zip: 8495 South 450 West, Poneto, IN 46781
Part 70 No.: T179-25609-00026
Reviewer: John Haney
Date: April 17, 2008**

Total Heat
Input Capacity: 2167.2 MMBtu/hr (Eight (8) combustion turbines @ 270.9 MMBtu/hr each)

Pollutant	Emission Factor (lbs/MMBtu)	Total Emissions (tons/yr)	Emissions Per Turbine (tons/yr)	Total Limited Emissions (tons/yr)	Limited Emissions Per Turbine (tons/yr)
1,3 Butadiene	1.60E-05	0.152	0.019	0.002	0.000
Arsenic	1.10E-05	0.104	0.013	0.001	0.000
Benzene	5.50E-05	0.522	0.065	0.006	0.001
Beryllium	3.10E-07	0.003	0.000	0.000	0.000
Cadmium	4.80E-06	0.046	0.006	0.001	0.000
Chromium	1.10E-05	0.104	0.013	0.001	0.000
Formaldehyde	2.80E-04	2.658	0.332	0.030	0.004
Lead	1.40E-05	0.133	0.017	0.002	0.000
Manganese	7.90E-04	7.499	0.937	0.086	0.011
Mercury	1.20E-06	0.011	0.001	0.000	0.000
Nickel	4.60E-06	0.044	0.005	0.000	0.000
PAH	4.00E-05	0.380	0.047	0.004	0.001
Selenium	2.50E-05	0.237	0.030	0.003	0.000
TOTAL		11.893	1.487	0.136	0.017
Naphthalene	3.50E-05	0.332	0.042	0.0038	0.0005

Methodology

Emission Factors are from AP-42 (final, 4/00), Tables 3.1-4 and 3.1-5.

Emissions (tons/yr) = Heat input rate (MMBtu/hr) x Emission Factor (lb/MMBtu) * 8760 hr/yr / 2,000 lb/ton

Limited Emissions (tons/yr) = Heat input rate (MMBtu/hr) x Emission Factor (lb/MMBtu) * 100 hr/yr (equivalent hours, based on custom schedule) / 2,000 lb/ton

Naphthalene is considered a PAH, therefore naphthalene emissions were also accounted for under the PAH emissions.

TSD Appendix B: Turbine Emission Calculations

Criteria pollutant emissions for the turbines are shown below, based on the worst case operating conditions (information supplied by the Pratt and Whitney, the vendor). Compliance shall be demonstrated by use of a continuous emissions monitoring system for CO and NO_x. The hazardous air pollutant (HAP) emission calculations are based on the final AP-42 (Section 3.1 Stationary Gas Turbines, 4/00) emission factors for organic and metal HAPs. The emission factor for formaldehyde from natural gas combustion is taken from the June 18 - 21, 2001 performance test. Minor Permit Revision No. 179-15577-00026, issued on May 16, 2002, approved the use of this tested formaldehyde emission factor, which represents the single highest HAP emission factor determined during the testing.

Potential To Emit (PTE) of the Eight (8) Combustion Turbines

The following emission calculations are taken from the Technical Support Document to Title V OP No. 179-15228-00026, issued September 2, 2003.

PM/PM₁₀ PTE:

Worst case emissions are based on using **fuel oil** (at 100% load and 51°F) at all times.

$$7.0 \text{ pounds of PM/PM}_{10} \text{ per hour per turbine} * 8760 \text{ hours per year} * 1 \text{ ton/2000 pounds} = \\ 30.66 \text{ tons per year per turbine} * 8 \text{ (total number of turbines)} = \mathbf{245.28 \text{ tons per year}}$$

SO₂ PTE:

Worst case emissions are based on using **fuel oil** (at 100% load and 51°F) at all times.

$$15.0 \text{ pounds of SO}_2 \text{ per hour per turbine} * 8760 \text{ hours per year} * 1 \text{ ton/2000 pounds} = \\ 65.7 \text{ tons per year per turbine} * 8 \text{ (total number of turbines)} = \mathbf{525.60 \text{ tons per year}}$$

VOC PTE:

Worst case emissions are based on using **natural gas** (at 75% load and 30°F) at all times.

$$4.25 \text{ pounds of VOC per hour per turbine} * 8760 \text{ hours per year} * 1 \text{ ton/2000 pounds} = \\ 18.62 \text{ tons per year per turbine} * 8 \text{ (total number of turbines)} = \mathbf{148.96 \text{ tons per year}}$$

CO PTE:

Worst case emissions are based on using **natural gas** (at 75% load and 31°F) at all times.

$$73.15 \text{ pounds of CO per hour per turbine} * 8760 \text{ hours per year} * 1 \text{ ton/2000 pounds} = \\ 320.40 \text{ tons per year per turbine} * 8 \text{ (total number of turbines)} = \mathbf{2563.20 \text{ tons per year}}$$

NO_x PTE:

Worst case emissions are based on using **fuel oil** (at 100% load and 51°F) at all times

$$47.0 \text{ pounds of NO}_x \text{ per hour per turbine} * 8760 \text{ hours per year} * 1 \text{ ton/2000 pounds} = \\ 205.86 \text{ tons per year per turbine} * 8 \text{ (total number of turbines)} = \mathbf{1646.88 \text{ tons per year}}$$

TSD Appendix B: Turbine Emission Calculations

Total PTE Calculations

$$\text{PM} = 245.28 \text{ tons/yr (turbines)} + 0.08 \text{ tons/yr (fire pump)} + 0.44 \text{ tons/yr (unpaved roads)} = \mathbf{245.80 \text{ tons/yr}}$$

$$\text{PM}_{10} = 245.28 \text{ tons/yr (turbines)} + 0.08 \text{ tons/yr (fire pump)} + 0.14 \text{ tons/yr (unpaved roads)} = \mathbf{245.50 \text{ tons/yr}}$$

$$\text{SO}_2 = 525.60 \text{ tons/yr (turbines)} + 0.7 \text{ tons/yr (fire pump)} = \mathbf{526.30 \text{ tons/yr}}$$

$$\text{VOC} = 148.96 \text{ tons/yr (turbines)} + 0.09 \text{ tons/yr (fire pump)} = \mathbf{149.05 \text{ tons/yr}}$$

$$\text{CO} = 2563.20 \text{ tons/yr (turbines)} + 0.24 \text{ tons/yr (fire pump)} = \mathbf{2563.44 \text{ tons/yr}}$$

$$\text{NO}_x = 1646.88 \text{ tons/yr (turbines)} + 1.10 \text{ tons/yr (fire pump)} = \mathbf{1647.98 \text{ tons/yr}}$$

Based on vendor information, emissions during turbine startup and shutdown cycles will not exceed the maximum pounds per hour rates during "normal operations". Therefore, the above listed turbine emission rates represent the worst case emission rates at any load and temperature during operation of the units.

Based on the PTE, all criteria pollutants are subject to PSD review. However, the source has decided to limit the emissions in order to maintain a minor PSD source status, as specified in MSOP No. 179-12321-00026, issued December 29, 2000. The limited PTE of the combustion turbines, unpaved roads, and diesel-fired emergency fire pump is based on determining the highest pollutant emission rate when burning fuel oil and natural gas. In the first scenario, CO has the highest emission rate of all criteria pollutants when burning natural gas. By limiting the CO emissions below 250 tons per year the other criteria pollutants will also be less than 250 tons per year. In the second scenario, NO_x has the highest emission rate of all criteria pollutants when burning fuel oil. Therefore, by limiting the NO_x emissions below 250 tons per year, the other criteria pollutants will also be less than 250 tons per year. Since no criteria pollutant will exceed 250 tons per year, the PSD permitting requirements do not apply.

Limited PTE Calculations

1. When the turbines burn natural gas, CO has the highest pollutant emission rate. Limit usage to 852 hr/yr in order to keep the CO emissions to less than 250 tons per year.

$$\begin{aligned} \text{Limited CO} &= 73.15 \text{ lb/hr/turbine} * 8 \text{ (total turbines)} = 585.20 \text{ lb/hr;} \\ &585.20 \text{ lb/hr} * 852 \text{ hr/yr} * \text{ton}/2000 \text{ lb} = \mathbf{249.30 \text{ tons per year}} \end{aligned}$$

Based on this 852 hr/yr limit using natural gas, the following limited emissions are determined:

$$\begin{aligned} \text{Limited PM/PM}_{10} &= 2.0 \text{ lb/hr/turbine} * 8 \text{ (total turbines)} = 16.0 \text{ lb/hr;} \\ &16.0 \text{ lb/hr} * 852 \text{ hr/yr} * \text{ton}/2000 \text{ lb} = \mathbf{6.82 \text{ tons per year}} \end{aligned}$$

$$\begin{aligned} \text{Limited SO}_2 &= 0.19 \text{ lb/hr/turbine} * 8 \text{ (total turbines)} = 1.52 \text{ lb/hr;} \\ &1.52 \text{ lb/hr} * 852 \text{ hr/yr} * \text{ton}/2000 \text{ lb} = \mathbf{0.65 \text{ tons per year}} \end{aligned}$$

$$\begin{aligned} \text{Limited VOC} &= 4.25 \text{ lb/hr/turbine} * 8 \text{ (total turbines)} = 34.0 \text{ lb/hr;} \\ &34.0 \text{ lb/hr} * 852 \text{ hr/yr} * \text{ton}/2000 \text{ lb} = \mathbf{14.48 \text{ tons per year}} \end{aligned}$$

$$\begin{aligned} \text{Limited NO}_x &= 29.96 \text{ lb/hr/turbine} * 8 \text{ (total turbines)} = 239.68 \text{ lb/hr;} \\ &239.68 \text{ lb/hr} * 852 \text{ hr/yr} * \text{ton}/2000 \text{ lb} = \mathbf{102.10 \text{ tons per year}} \end{aligned}$$

TSD Appendix B: Turbine Emission Calculations

2. When the turbines burn fuel oil, NOx has the highest pollutant emission rate. Pursuant to MSOP No. 179-12321-00026, issued December 29, 2000, the U.S. EPA's March 24, 2000 approval for alternative monitoring under 40 CFR Part 60 Subpart GG requires that oil be a back-up fuel limited to 197.7 thousand gallons per year per turbine. This usage limit effectively limits each turbine to 100 hours per year of fuel oil firing, with emission rates as follows:

$$\begin{aligned} \text{Limited NOx} &= 47.0 \text{ lb/hr/turbine} * 8 \text{ (total turbines)} = 376.0 \text{ lb/hr;} \\ &376.0 \text{ lb/hr} * 100 \text{ hr/yr} * \text{ton}/2000 \text{ lb} = \mathbf{18.80 \text{ tons per year}} \end{aligned}$$

Based on this 100 hr/yr limit using fuel oil, the following limited emissions are determined:

$$\begin{aligned} \text{Limited PM/PM}_{10} &= 7.0 \text{ lb/hr/turbine} * 8 \text{ (total turbines)} = 56.0 \text{ lb/hr;} \\ &56.0 \text{ lb/hr} * 100 \text{ hr/yr} * \text{ton}/2000 \text{ lb} = \mathbf{2.80 \text{ tons per year}}. \end{aligned}$$

$$\begin{aligned} \text{Limited SO}_2 &= 14.7 \text{ lb/hr/turbine} * 8 \text{ (total turbines)} = 117.6 \text{ lb/hr;} \\ &117.6 \text{ lb/hr} * 100 \text{ hr/yr} * \text{ton}/2000 \text{ lb} = \mathbf{5.88 \text{ tons per year}}. \end{aligned}$$

$$\begin{aligned} \text{Limited VOC} &= 2.75 \text{ lb/hr/turbine} * 8 \text{ (total turbines)} = 22.0 \text{ lb/hr;} \\ &22.0 \text{ lb/hr} * 100 \text{ hr/yr} * \text{ton}/2000 \text{ lb} = \mathbf{1.10 \text{ tons per year}}. \end{aligned}$$

$$\begin{aligned} \text{Limited CO} &= 33.0 \text{ lb/hr/turbine} * 8 \text{ (total turbines)} = 264.0 \text{ lb/hr;} \\ &264.0 \text{ lb/hr} * 100 \text{ hr/yr} * \text{ton}/2000 \text{ lb} = \mathbf{13.20 \text{ tons per year}}. \end{aligned}$$

Worst case limited PTE

CO is the worst case pollutant limited to 249.30 ton/yr, based on natural gas firing at an equivalent 852 hours per year per turbine. Based on this, the worst case limited PTE of all other pollutants reflects the higher of natural gas firing at an equivalent 852 hours per year per turbine, or a combination of maximum allowable fuel oil firing and natural gas firing at hours equivalent to the CO limit of 249.30 ton/yr. These hours of equivalency are determined as follows:

$$\begin{aligned} \text{Limited CO} &= 249.30 \text{ tons/yr (turbine burning natural gas)} - 13.20 \text{ tons/yr (turbine burning} \\ &\text{limited fuel oil)} = 236.10 \text{ tons/yr;} \\ &852 \text{ hours (natural gas)} * 236.10/249.30 = \mathbf{806 \text{ hours natural gas firing, when} \\ &\mathbf{also firing fuel oil up to allowable equivalent of 100 hours per year per} \\ &\mathbf{turbine; therefore,}} \\ &249.30 \text{ tons/yr (turbines)} + 0.24 \text{ tons/yr (fire pump)} = \mathbf{249.54 \text{ tons/yr}} \end{aligned}$$

The worst case limited emissions of the other pollutants are determined as follows:

$$\begin{aligned} \text{Limited PM} &= 2.80 \text{ tons/yr (turbine burning limited fuel oil)} + (2.0 \text{ lb/hr/unit (gas)} * 8 \text{ units} * \\ &806 \text{ hr/yr} * \text{ton}/2000 \text{ lb}) = \mathbf{9.25 \text{ tons per year, which is greater than natural gas} \\ &\mathbf{alone at 6.82 tons per year; therefore,}} \\ &9.25 \text{ tons/yr (turbine burning natural gas \& oil)} + 0.08 \text{ tons/yr (fire pump)} + \\ &0.44 \text{ tons/yr (unpaved roads)} = \mathbf{9.77 \text{ tons/yr}} \end{aligned}$$

$$\begin{aligned} \text{Limited PM}_{10} &= 2.80 \text{ tons/yr (turbine burning limited fuel oil)} + (2.0 \text{ lb/hr/unit (gas)} * 8 \text{ units} * \\ &806 \text{ hr/yr} * \text{ton}/2000 \text{ lb}) = \mathbf{9.25 \text{ tons per year, which is greater than natural gas} \\ &\mathbf{alone at 6.82 tons per year; therefore,}} \\ &9.25 \text{ tons/yr (turbine burning natural gas \& oil)} + 0.08 \text{ tons/yr (fire pump)} + \\ &0.14 \text{ tons/yr (unpaved roads)} = \mathbf{9.47 \text{ tons/yr}} \end{aligned}$$

Permit Reviewer: John Haney

TSD Appendix B: Turbine Emission Calculations

Limited SO₂ = 5.88 tons/yr (turbine burning limited fuel oil) + (0.19 lb/hr/unit (gas) * 8 units * 806 hr/yr * ton/2000 lb) = **6.49 tons per year, which is greater than natural gas alone at 0.65 tons per year; therefore,**
6.49 tons/yr (turbine burning natural gas & oil) + 0.07 tons/yr (fire pump) =
6.56 tons/yr

Limited VOC = 1.10 tons/yr (turbine burning limited fuel oil) + (4.25 lb/hr/unit (gas) * 8 units * 806 hr/yr * ton/2000 lb) = **14.80 tons per year, which is greater than natural gas alone at 14.48 tons per year; therefore,**
14.80 tons/yr (turbine burning natural gas & oil) + 0.09 tons/yr (fire pump) =
14.89 tons/yr

Limited NO_x = 18.80 tons/yr (turbine burning limited fuel oil) + (29.96 lb/hr/unit (gas) * 8 units * 806 hr/yr * ton/2000 lb) = **115.39 tons per year, which is greater than natural gas alone at 102.10 tons per year; therefore,**
115.39 tons/yr (turbine burning natural gas & oil) + 1.10 tons/yr (fire pump) =
116.49 tons/yr

**** Please Note:** Limited turbine natural gas and oil firing may actually occur at more hours than what is determined above. In order to maintain a minor PSD source status, the source must limit all criteria pollutant emissions below 250 tons per year. The source will utilize NO_x and CO continuous emission monitoring systems (CEMS) to ensure compliance with this annual emission limit for both pollutants. In effect, this emission limit on NO_x and CO restricts the amount of fuel used in the turbines such that the emissions for remaining pollutants are limited to well below 250 tons per year, as shown above. The hours of operation shown above are estimates that equate to the annual emission limit of 250 tons per year, and are not limitations on allowed hours of emission unit operation. The actual hours of operation can fluctuate above or below what is determined above, provided the emissions are maintained below 250 tons per year.