



*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: March 1, 2007  
RE: Rensselaer Municipal Electric Utility / 073-17725-00020  
FROM: Nisha Sizemore  
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, Room 1049, 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.



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## Part 70 Operating Permit Renewal OFFICE OF AIR QUALITY

**Rensselaer Municipal Electric Utility  
425 N. Van Rensselaer St.  
Rensselaer, Indiana 47978**

(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. This permit also addresses certain new source review requirements for existing equipment and is intended to fulfill the new source review procedures pursuant to 326 IAC 2-2 and 326 IAC 2-7-10.5, applicable to those conditions.

Operation Permit No.: T 073-17725-00020	
Issued by: <i>Nisha Sizemore</i> Nisha Sizemore, Chief Permits Branch Office of Air Quality	Issuance Date: March 1, 2007  Expiration Date: March 1, 2012

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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 an electric power generation source.

Responsible Official:	Mayor, City of Rensselaer
Source Address:	425 N. Van Rensselaer St., Rensselaer, Indiana 47978
Mailing Address:	122 S. Van Rensselaer St., P.O. Box 280, Rensselaer, Indiana 47978
General Source Phone Number:	(219) 866-8475
SIC Code:	4911
County Location:	Jasper
Source Location Status:	Attainment for all criteria pollutants
Source Status:	Part 70 Operating Permit Program Minor Source, under PSD Rules Minor Source, Section 112 of the Clean Air Act

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

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

- (a) One (1) two cycle, low sulfur diesel-fired compression ignition reciprocating generator, identified as Generator 5, constructed in 1950, exhausting to Stack #5, capacity: 1,980 kW (name plate), 20.3 million British thermal units heat input and 2,800 horsepower output.
- (b) One (1) two cycle, low sulfur diesel-fired compression ignition reciprocating generator, identified as Generator 6, constructed in 1957, exhausting to Stack #6, capacity: 2,500 kW (name plate), 25.2 million British thermal units heat input and 3,500 horsepower output.
- (c) One (1) two cycle, low sulfur diesel-fired compression ignition reciprocating generator, identified as Generator 10, constructed in 1971, exhausting to Stack #10, capacity: 2,070 kW (name plate), 21.0 million British thermal units heat input and 2,880 horsepower output.
- (d) One (1) two cycle, low sulfur diesel-fired compression ignition reciprocating generator, identified as Generator 11, constructed in 1971, exhausting to Stack #11, capacity: 2,070 kW (name plate), 21.0 million British thermal units heat input and 2,880 horsepower output.
- (e) One (1) four cycle, low sulfur diesel and natural gas-fired compression ignition reciprocating generator, identified as Generator 14, constructed in 1994, exhausting to Stack #14, capacity: 5,000 kW (name plate), 50.8 million British thermal units heat input and 7,920 horsepower output.
- (f) One (1) four stroke, lean burn, natural gas-fired spark ignition reciprocating generator, identified as Generator 15, constructed in 2006, equipped with a catalytic unit, exhausting to Stack #15, capacity: 8,040 kW (name plate) and 72.3 million British thermal units per hour (72,319 cubic feet of natural gas per hour).

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

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

- (a) Degreasing operations that do not exceed 145 gallons per 12 months, except if subject to 326 IAC 20-6 (One (1) batch, cold cleaner degreasing operation, constructed in 1987, using 15 gallons of cleaning solvent per year, exhausting to the building). [326 IAC 8-3-2]

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

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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).

## **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, 073-17725-00020, 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.
- (b) If IDEM, OAQ, upon receiving a timely and complete renewal permit application, fails to issue or deny the permit renewal prior to the expiration date of this permit, this existing permit shall not expire and all terms and conditions shall continue in effect, including any permit shield provided in 326 IAC 2-7-15, until the renewal permit has been issued or denied.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Indiana Department of Environmental Management  
Compliance Branch, Office of Air Quality  
100 North Senate Avenue  
Indianapolis, Indiana 46204-2251

and

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

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

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

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

- (a) If required by specific condition(s) in Section D of this permit, the Permittee shall maintain and implement Preventive Maintenance Plans (PMPs) including the following information on each facility:
- (1) Identification of the individual(s) responsible for inspecting, maintaining, and repairing emission control devices;
  - (2) A description of the items or conditions that will be inspected and the inspection schedule for said items or conditions; and
  - (3) Identification and quantification of the replacement parts that will be maintained in inventory for quick replacement.
- (b) A copy of the PMPs shall be submitted to IDEM, OAQ upon request and within a reasonable time, and shall be subject to review and approval by IDEM, OAQ. IDEM, OAQ may require the Permittee to revise its PMPs whenever lack of proper maintenance causes or is the primary contributor to an exceedance of any limitation on emissions or potential to emit. The PMPs do not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).
- (c) To the extent the Permittee is required by 40 CFR Part 60/63 to have an Operation Maintenance, and Monitoring (OMM) Plan for a unit, such Plan is deemed to satisfy the PMP requirements of 326 IAC 1-6-3 for that unit.

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

- (a) An emergency, as defined in 326 IAC 2-7-1(12), is not an affirmative defense for an action brought for noncompliance with a federal or state health-based emission limitation.
- (b) An emergency, as defined in 326 IAC 2-7-1(12), constitutes an affirmative defense to an action brought for noncompliance with a technology-based emission limitation if the affirmative defense of an emergency is demonstrated through properly signed, contemporaneous operating logs or other relevant evidence that describe the following:
- (1) An emergency occurred and the Permittee can, to the extent possible, identify the causes of the emergency;
  - (2) The permitted facility was at the time being properly operated;
  - (3) During the period of an emergency, the Permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards or other requirements in this permit;
  - (4) For each emergency lasting one (1) hour or more, the Permittee notified IDEM, OAQ within four (4) daytime business hours after the beginning of the emergency, or after the emergency was discovered or reasonably should have been discovered;  
  
Telephone Number: 1-800-451-6027 (ask for Office of Air Quality, Compliance Section), or  
Telephone Number: 317-233-0178 (ask for Compliance Section)  
Facsimile Number: 317-233-6865
  - (5) For each emergency lasting one (1) hour or more, the Permittee submitted the attached Emergency Occurrence Report Form or its equivalent, either by mail or facsimile to:

Indiana Department of Environmental Management  
Compliance Branch, Office of Air Quality  
100 North Senate Avenue  
Indianapolis, Indiana 46204-2251

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

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

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

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

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

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

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

defense against an alleged violation of any law, regulation or standard, except for the requirement to obtain a Part 70 permit under 326 IAC 2-7 or for applicable requirements for which a permit shield has been granted.

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

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

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

- (a) All terms and conditions of permits established prior to 073-17725-00020 and issued pursuant to permitting programs approved into the state implementation plan have been either:
  - (1) incorporated as originally stated,
  - (2) revised under 326 IAC 2-7-10.5, or
  - (3) deleted under 326 IAC 2-7-10.5.

- (b) Provided that all terms and conditions are accurately reflected in this combined permit, all previous registrations and permits are superseded by this combined new source review and 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  
Indianapolis, Indiana 46204-2251

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

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

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

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

- (a) This permit may be modified, reopened, revoked and reissued, or terminated for cause. The filing of a request by the Permittee for a Part 70 Operating Permit modification, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay any condition of this permit. [326 IAC 2-7-5(6)(C)] The notification by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

- (b) This permit shall be reopened and revised under any of the circumstances listed in IC 13-15-7-2 or if IDEM, OAQ determines any of the following:

- (1) That this permit contains a material mistake.
- (2) That inaccurate statements were made in establishing the emissions standards or other terms or conditions.
- (3) That this permit must be revised or revoked to assure compliance with an applicable requirement. [326 IAC 2-7-9(a)(3)]

- (c) Proceedings by IDEM, OAQ to reopen and revise this permit shall follow the same procedures as apply to initial permit issuance and shall affect only those parts of this permit for which cause to reopen exists. Such reopening and revision shall be made as expeditiously as practicable. [326 IAC 2-7-9(b)]

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

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

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

Request for renewal shall be submitted to:

Indiana Department of Environmental Management  
Permits Branch, Office of Air Quality  
100 North Senate Avenue  
Indianapolis, Indiana 46204-2251

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

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

- (a) Permit amendments and modifications are governed by the requirements of 326 IAC 2-7-11 or 326 IAC 2-7-12 whenever the Permittee seeks to amend or modify this permit.
- (b) Any application requesting an amendment or modification of this permit shall be submitted to:
- Indiana Department of Environmental Management  
Permits Branch, Office of Air Quality  
100 North Senate Avenue  
Indianapolis, Indiana 46204-2251
- Any such application shall be certified by the "responsible official" as defined by 326 IAC 2-7-1(34).
- (c) The Permittee may implement administrative amendment changes addressed in the request for an administrative amendment immediately upon submittal of the request. [326 IAC 2-7-11(c)(3)]

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

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- (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]**

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- (a) The Permittee may make any change or changes at the source that are described in 326 IAC 2-7-20(b),(c), or (e) without a prior permit revision, if each of the following conditions is met:
  - (1) The changes are not modifications under any provision of Title I of the Clean Air Act;
  - (2) Any preconstruction approval required by 326 IAC 2-7-10.5 has been obtained;
  - (3) The changes do not result in emissions which exceed the limitations provided in this permit (whether expressed herein as a rate of emissions or in terms of total emissions);
  - (4) The Permittee notifies the:  
  
Indiana Department of Environmental Management  
Permits Branch, Office of Air Quality  
100 North Senate Avenue  
Indianapolis, Indiana 46204-2251  
  
and  
  
United States Environmental Protection Agency, Region V  
Air and Radiation Division, Regulation Development Branch - Indiana (AR-18J)  
77 West Jackson Boulevard  
Chicago, Illinois 60604-3590  
  
in advance of the change by written notification at least ten (10) days in advance of the proposed change. The Permittee shall attach every such notice to the Permittee's copy of this permit; and
  - (5) The Permittee maintains records on-site, on a rolling five (5) year basis, which document all such changes and emission trades that are subject to 326 IAC 2-7-20(b),(c), or (e). The Permittee shall make such records available, upon reasonable request, for public review.  
  
Such records shall consist of all information required to be submitted to IDEM, OAQ in the notices specified in 326 IAC 2-7-20(b)(1), (c)(1), and (e)(2).
- (b) The Permittee may make Section 502(b)(10) of the Clean Air Act changes (this term is defined at 326 IAC 2-7-1(36)) without a permit revision, subject to the constraint of 326 IAC 2-7-20(a). For each such Section 502(b)(10) of the Clean Air Act change, the required written notification shall include the following:

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

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

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

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

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

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

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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  
Indianapolis, Indiana 46204-2251
- The application which shall be submitted by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).
- (c) The Permittee may implement administrative amendment changes addressed in the request for an administrative amendment immediately upon submittal of the request. [326 IAC 2-7-11(c)(3)]

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

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

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

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

## SECTION C SOURCE OPERATION CONDITIONS

Entire Source

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

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

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

**C.2 Opacity [326 IAC 5-1]**

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

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

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

The Permittee shall not open burn any material except as provided in 326 IAC 4-1-3, 326 IAC 4-1-4 or 326 IAC 4-1-6. The previous sentence notwithstanding, the Permittee may open burn in accordance with an open burning approval issued by the Commissioner under 326 IAC 4-1-4.1. 326 IAC 4-1-3 (a)(2)(A) and (B) are not federally enforceable.

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

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

**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 Stack Height [326 IAC 1-7]**

The Permittee shall comply with the applicable provisions of 326 IAC 1-7 (Stack Height Provisions), for all exhaust stacks through which a potential (before controls) of twenty-five (25) tons per year or more of particulate matter or sulfur dioxide is emitted.

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

- (a) Notification requirements apply to each owner or operator. If the combined amount of regulated asbestos containing material (RACM) to be stripped, removed or disturbed is at least 260 linear feet on pipes or 160 square feet on other facility components, or at least thirty-five (35) cubic feet on all facility components, then the notification requirements of 326 IAC 14-10-3 are mandatory. All demolition projects require notification whether or not asbestos is present.

- (b) The Permittee shall ensure that a written notification is sent on a form provided by the Commissioner at least ten (10) working days before asbestos stripping or removal work or before demolition begins, per 326 IAC 14-10-3, and shall update such notice as necessary, including, but not limited to the following:
  - (1) When the amount of affected asbestos containing material increases or decreases by at least twenty percent (20%); or
  - (2) If there is a change in the following:
    - (A) Asbestos removal or demolition start date;
    - (B) Removal or demolition contractor; or
    - (C) Waste disposal site.
- (c) The Permittee shall ensure that the notice is postmarked or delivered according to the guidelines set forth in 326 IAC 14-10-3(2).
- (d) The notice to be submitted shall include the information enumerated in 326 IAC 14-10-3(3).

All required notifications shall be submitted to:

Indiana Department of Environmental Management  
Asbestos Section, Office of Air Quality  
100 North Senate Avenue  
Indianapolis, Indiana 46204-2251

The notice shall include a signed certification from the owner or operator that the information provided in this notification is correct and that only Indiana licensed workers and project supervisors will be used to implement the asbestos removal project. The notifications do not require a certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

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

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

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

- (a) All testing shall be performed according to the provisions of 326 IAC 3-6 (Source Sampling)

Procedures), except as provided elsewhere in this permit, utilizing any applicable procedures and analysis methods specified in 40 CFR 51, 40 CFR 60, 40 CFR 61, 40 CFR 63, 40 CFR 75, or other procedures approved by IDEM, OAQ.

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

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

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

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

#### **Compliance Requirements [326 IAC 2-1.1-11]**

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

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

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

##### **C.10 Compliance Monitoring [326 IAC 2-7-5(3)] [326 IAC 2-7-6(1)]**

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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  
Indianapolis, Indiana 46204-2251

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

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

Unless otherwise specified in the approval for the new emission unit(s), compliance monitoring for

new emission units or emission units added through a source modification shall be implemented when operation begins.

**C.11 Monitoring Methods [326 IAC 3] [40 CFR 60] [40 CFR 63]**

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

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

**C.12 Emergency Reduction Plans [326 IAC 1-5-2] [326 IAC 1-5-3]**

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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 March 31, 1999.
- (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.13 Risk Management Plan [326 IAC 2-7-5(12)] [40 CFR 68]**

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

**C.14 Response to Excursions or Exceedances [326 IAC 2-7-5] [326 IAC 2-7-6]**

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- (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.15 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.16 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 specified in 326 IAC 2-6-4(c) and shall meet the following requirements:
  - (1) Indicate estimated actual emissions of all pollutants listed in 326 IAC 2-6-4(a);
  - (2) Indicate estimated actual emissions of regulated pollutants as defined by 326 IAC 2-7-1 (32) ("Regulated pollutant, which is used only for purposes of Section 19 of this rule") from the source, for purpose of fee assessment.

The statement must be submitted to:

Indiana Department of Environmental Management  
Technical Support and Modeling Section, Office of Air Quality  
100 North Senate Avenue  
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.17 General Record Keeping Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-6]

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

C.18 General Reporting Requirements [326 IAC 2-7-5(3)(C)] [326 IAC 2-1.1-11]

- (a) The Permittee shall submit the attached Quarterly Deviation and Compliance Monitoring Report or its equivalent. Any deviation from permit requirements, the date(s) of each deviation, the cause of the deviation, and the response steps taken must be reported. This report shall be submitted within thirty (30) days of the end of the reporting period. The Quarterly Deviation and Compliance Monitoring Report shall include the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).
- (b) The report required in (a) of this condition and reports required by conditions in Section D of this permit shall be submitted to:  
  
Indiana Department of Environmental Management  
Compliance Data Section, Office of Air Quality  
100 North Senate Avenue  
Indianapolis, Indiana 46204-2251
- (c) Unless otherwise specified in this permit, any notice, report, or other submission required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ on or before the date it is due.
- (d) Unless otherwise specified in this permit, all reports required in Section D of this permit shall be submitted within thirty (30) days of the end of the reporting period. All reports do require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).
- (e) Reporting periods are based on calendar years, unless otherwise specified in this permit. For the purpose of this permit "calendar year" means the twelve (12) month period from January 1 to December 31 inclusive.

**Stratospheric Ozone Protection**

C.19 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 EMISSIONS UNIT OPERATION CONDITIONS

### Emissions Unit Description: Generators

- (a) One (1) two cycle, low sulfur diesel-fired compression ignition reciprocating generator, identified as Generator 5, constructed in 1950, exhausting to Stack #5, capacity: 1,980 kW (name plate), 20.3 million British thermal units heat input and 2,800 horsepower output.
- (b) One (1) two cycle, low sulfur diesel-fired compression ignition reciprocating generator, identified as Generator 6, constructed in 1957, exhausting to Stack #6, capacity: 2,500 kW (name plate), 25.2 million British thermal units heat input and 3,500 horsepower output.
- (c) One (1) two cycle, low sulfur diesel-fired compression ignition reciprocating generator, identified as Generator 10, constructed in 1971, exhausting to Stack #10, capacity: 2,070 kW (name plate), 21.0 million British thermal units heat input and 2,880 horsepower output.
- (d) One (1) two cycle, low sulfur diesel-fired compression ignition reciprocating generator, identified as Generator 11, constructed in 1971, exhausting to Stack #11, capacity: 2,070 kW (name plate), 21.0 million British thermal units heat input and 2,880 horsepower output.
- (e) One (1) four cycle, low sulfur diesel and natural gas-fired compression ignition reciprocating generator, identified as Generator 14, constructed in 1994, exhausting to Stack #14, capacity: 5,000 kW (name plate), 50.8 million British thermal units heat input and 7,920 horsepower output.
- (f) One (1) four stroke, lean burn, natural gas-fired spark ignition reciprocating generator, identified as Generator 15, constructed in 2006, equipped with a catalytic unit, exhausting to Stack #15, capacity: 8,040 kW (name plate) and 72.3 million British thermal units per hour (72,319 cubic feet of natural gas per hour).

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

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

#### D.1.1 PSD Minor Limits [326 IAC 2-2]

Pursuant to CP 073-2461-00020, issued on July 22, 1992, and SPM 073-23227-00020, issued on September 29, 2006, and revised by this permit, the following limits are applicable to the six (6) generators, identified as Generators 5, 6, 10, 11, 14 and 15:

- (a) The combined amount of diesel fuel combusted in Generators 5, 6, 10, 11 and 14 shall be limited to less than 830,000 gallons per twelve (12) consecutive month period, with compliance determined at the end of each month.
- (b) The combined usage of natural gas in Generators 14 and 15 shall be limited to less than 192,000,000 cubic feet per twelve (12) consecutive month period, with compliance determined at the end of each month.
- (c) The following limits shall apply to the six (6) generators, identified as Generators 5, 6, 10, 11, 14, and 15:
  - (1) The emission rate of NO<sub>x</sub> for diesel fuel shall not exceed 0.578 pound per gallon;
  - (2) The emission rate of NO<sub>x</sub> for Generator 14, when operating on natural gas, shall not exceed 0.002 pound per cubic feet of natural gas;

- (3) The emission rate of NO<sub>x</sub> for Generator 15, when operating on natural gas, shall not exceed 0.0025 pound per cubic feet of natural gas;
  - (4) The emission rate of SO<sub>2</sub> for diesel fuel shall not exceed 0.081 pound per gallon;
  - (5) The emission rate of SO<sub>2</sub> for natural gas shall not exceed 0.0000006 pound per cubic feet of natural gas;
  - (6) The emission rate of CO for diesel fuel shall not exceed 0.106 pound per gallon; and
  - (5) The emission rate of CO for natural gas shall not exceed 0.002 pound per cubic feet of natural gas.
- (d) Natural gas shall not be combusted in Generators 5, 6, 10, and 11.
  - (e) Usage of 231 cubic feet of natural gas shall be considered equal to using one (1) gallon of diesel fuel.

Compliance with the above limits shall render the requirements of 326 IAC 2-2, PSD, not applicable to Generators 5, 6, 10, 11, 14, and 15.

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

Pursuant to 326 IAC 6-3-2, the particulate from the five (5) generators, identified as Generators 5, 6, 10, 11 and 14, shall not exceed the following:

Generator ID	Equivalent Throughput (tons/hr)	Limited Particulate Emissions based on 326 IAC 6-3-2 (lbs/hr)
5	0.575	2.83
6	0.714	3.27
10	0.595	2.90
11	0.595	2.90
14	1.44	5.23

These limitations are based upon the following:

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

$$E = 4.10 P^{0.67} \quad \text{where} \quad \begin{array}{l} E = \text{rate of emission in pounds per hour and} \\ P = \text{process weight rate in tons per hour} \end{array}$$

D.1.3 Sulfur Dioxide [326 IAC 7-1.1] [40 CFR 72.7]

- (a) Pursuant to 326 IAC 7-1.1-2, the SO<sub>2</sub> emissions from each of the five (5) generators operating on diesel fuel, Generators 5, 6, 10, 11 and 14, shall be limited to five-tenths (0.5) pound per MMBtu for distillate oil combustion.
- 
- (b) Pursuant to 40 CFR 72.7, the two (2) generators, identified as Generators 14 and 15, shall be limited to the following in order to comply with the Acid Rain Program exemption:
    - (1) The nameplate capacity of the source shall not exceed twenty-five (25) megawatts,

total;

- (2) The generators shall not combust coal or a coal-derived fuel; and
- (3) The annual average weight percentage sulfur content of the fuels used at the two (2) generators, identified as Generators 14 and 15, shall not exceed 0.05. This will also ensure compliance with 326 IAC 7-1.1-2 for the two (2) generators, identified as Generators 14 and 15.

#### D.1.4 Volatile Organic Compounds [326 IAC 8-1-6]

Pursuant to SPM 073-23227-00020, issued on September 29, 2006, the following limits shall apply to Generators 14 and 15:

- (a) The usage of natural gas in Generators 14 and 15 shall be limited to less than 192,000,000 cubic feet per twelve (12) consecutive month period, each, with compliance determined at the end of each month.
- (b) The emission rate of VOC shall not exceed 0.00025 pounds of VOC per cubic feet of natural gas.
- (c) Usage of one (1) gallon of diesel fuel at Generator 14 shall be considered equal to using 78.5 cubic feet of natural gas.

Compliance with the above limits shall render the requirements of 326 IAC 8-1-6 not applicable to Generators 14 and 15.

#### D.1.5 Hazardous Air Pollutants (HAPs) [326 IAC 2-4.1-1] [40 CFR 63, Subpart ZZZZ]

- (a) The following limits shall apply to Generator 14 and Generator 15, when combusting natural gas:
  - (1) The Formaldehyde emissions shall not exceed 5.28E-5 lbs/cf of natural gas.
  - (2) The total HAPs emissions shall not exceed 7.21E-5 lbs/cf of natural gas.
- (b) The following limits shall apply to Generators 5, 6, 10, and 11, and Generator 14, when combusting diesel fuel:
  - (1) The Propylene emissions shall not exceed 2.58E-3 lbs/MMBtu.
  - (2) The total HAPs emissions shall not exceed 6.45E-3 lbs/MMBtu.

In combination with the fuel use limitations in Condition D.1.1, this shall limit the potential to emit each individual HAP from this source to less than ten (10) tons per year and total HAP emissions to less than twenty-five (25) tons per year. Therefore, the requirements of 326 IAC 2-4.1-1 and 40 CFR 63, Subpart ZZZZ, are not applicable.

#### D.1.6 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for these facilities.

### **Compliance Determination Requirements**

#### D.1.7 Sulfur Dioxide Emissions and Sulfur Content

Compliance with Conditions D.1.3 shall be determined utilizing one of the following options.

- (a) Pursuant to 326 IAC 3-7-4, the Permittee shall demonstrate that the sulfur dioxide emissions do not exceed five-hundredths (0.5) pounds per million British thermal units heat input and 0.05% by:
- (1) Providing vendor analysis of fuel delivered, if accompanied by a vendor certification, or;
  - (2) Analyzing the oil sample to determine the sulfur content of the oil via the procedures in 40 CFR 60, Appendix A, Method 19.
    - (A) Oil samples may be collected from the fuel tank immediately after the fuel tank is filled and before any oil is combusted; and
    - (B) If a partially empty fuel tank is refilled, a new sample and analysis would be required upon filling.
- (b) Compliance may also be determined by conducting a stack test for sulfur dioxide emissions, using 40 CFR 60, Appendix A, Method 6 in accordance with the procedures in 326 IAC 3-6.

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

#### D.1.8 CO Control

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In order to comply with Condition D.1.1, the catalytic unit for CO control shall be in operation and control emissions from Generator 15 at all times that Generator 15 is in operation.

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

#### D.1.9 Visible Emissions Notations

- 
- (a) Visible emission notations of the generator stack exhausts for Generators 5, 6, 10, 11 and 14 shall be performed once per day during normal daylight operations when operating on diesel fuel. A trained employee shall record whether emissions are normal or abnormal.
  - (b) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.
  - (c) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.
  - (d) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.
  - (e) If abnormal emissions are observed, the Permittee shall take reasonable response steps in accordance with Section C - Response to Excursions or Exceedances. Failure to take response steps in accordance with Section C - Response to Excursions or Exceedances shall be considered a deviation from this permit.
- 

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

#### D.1.10 Record Keeping Requirements

- 
- (a) To document compliance with Conditions D.1.1, D.1.3, D.1.4 and D.1.5, the Permittee shall maintain records in accordance with (1) through (6) below.

- (1) Calendar dates covered in the compliance determination period;
  - (2) Actual diesel fuel and natural gas usage since last compliance determination period;
  - (3) If supplier certifications are used to demonstrate compliance with Condition D.1.3, fuel supplier certifications for sulfur content and the name of the fuel supplier;
  - (4) The sulfur content of the diesel fuel and each sample taken; and
  - (5) Total CO, SO<sub>2</sub> and NO<sub>2</sub>, individual HAP and total HAPs emissions for each compliance determination period.
  - (6) To document compliance with Condition D.1.4, the Permittee shall maintain records of the VOC emissions from each of the two (2) generators, identified as Generators 14 and 15.
- (b) To document compliance with Condition D.1.9, the Permittee shall maintain records of visible emission notations of the generator stack exhausts for Generators 5, 6, 10, 11 and 14 once per day when operating on diesel fuel.
- (c) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

#### D.1.11 Reporting Requirements

- (a) A quarterly summary of the information to document compliance with the fuel usage limitations in Conditions D.1.1 and D.1.5 shall be submitted to the address listed in Section C - General Reporting Requirements, of this permit, using the reporting forms located at the end of this permit, or their equivalent, within thirty (30) days after the end of the quarter being reported. The report submitted by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).
- (b) Quarterly summaries of the information to document compliance with the fuel usage limitations in Condition D.1.4 shall be submitted to the address listed in Section C - General Reporting Requirements, of this permit, using the reporting forms located at the end of this permit, or their equivalent, within thirty (30) days after the end of the quarter being reported. The report submitted by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

## SECTION D.2

## FACILITY OPERATION CONDITIONS

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

- (a) Degreasing operations that do not exceed 145 gallons per 12 months, except if subject to 326 IAC 20-6 (One (1) batch, cold cleaner degreasing operation, constructed in 1987, using 15 gallons of cleaning solvent per year, exhausting to the building). [326 IAC 8-3-2]

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

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

#### D.2.1 Volatile Organic Compounds (VOC) [326 IAC 8-3-2]

Pursuant to 326 IAC 8-3-2, the Permittee shall:

- (a) equip the cleaner with a cover;
- (b) equip the cleaner with a facility for draining cleaned parts;
- (c) close the degreaser cover whenever parts are not being handled in the cleaner;
- (d) drain cleaned parts for at least fifteen (15) seconds or until dripping ceases;
- (e) provide a permanent, conspicuous label summarizing the operating requirements;
- (f) store waste solvent only in covered containers and not dispose of waste solvent or transfer it to another party, in such a manner that greater than twenty percent (20%) of the waste solvent (by weight) can evaporate into the atmosphere.

#### D.2.2 Volatile Organic Compounds (VOC) [40 CFR 63, Subpart T] [326 IAC 20-6-1]

Pursuant to T 073-7642-00020, issued on November 9, 1998, the Permittee shall not use any cleaning agent containing the following halogenated HAPs at the degreasing facility, or any combination in a total concentration greater than five percent (5%) by weight:

- (a) methylene chloride (CAS No. 75-09-2),
- (b) perchloroethylene (CAS No. 127-18-4),
- (c) trichloroethylene (CAS No. 79-01-6),
- (d) 1,1,1 - trichloroethane (CAS No. 71-55-6),
- (e) carbon tetrachloride (CAS No. 56-23-5), and
- (f) chloroform (CAS No. 67-66-3).

This limitation will ensure that the requirements of 40 CFR 63.460 (Halogenated Cleaning Solvent NESHAP) do not apply.

**Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [26 IAC 2-7-19]**

**D.2.3 Volatile Organic Compounds (VOC) [40 CFR 63, Subpart T]**

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- (a) To document compliance with Condition D.2.2, the Permittee shall maintain records of the HAP content of each cleaning material and solvent used. Records shall include purchase orders, invoices, and material safety data sheets (MSDS) necessary to verify the type used.
  
- (b) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

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

**PART 70 OPERATING PERMIT  
CERTIFICATION**

Source Name: Rensselaer Municipal Electric Utility  
Source Address: 425 N. Van Rensselaer St., Rensselaer, Indiana 47978  
Mailing Address: 122 S. Van Rensselaer St., P.O. Box 280, Rensselaer, Indiana 47978  
Part 70 Permit No.: T 073-17725-00020

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

Please check what document is being certified:

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

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

Signature:

Printed Name:

Title/Position:

Phone:

Date:

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

**PART 70 OPERATING PERMIT  
EMERGENCY OCCURRENCE REPORT**

Source Name: Rensselaer Municipal Electric Utility  
Source Address: 425 N. Van Rensselaer St., Rensselaer, Indiana 47978  
Mailing Address: 122 S. Van Rensselaer St., P.O. Box 280, Rensselaer, Indiana 47978  
Part 70 Permit No.: T 073-17725-00020

**This form consists of 2 pages**

**Page 1 of 2**

<input type="checkbox"/>	This is an emergency as defined in 326 IAC 2-7-1(12)
X	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
X	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 <sub>2</sub> , VOC, NO <sub>x</sub> , CO, Pb, other:
Estimated amount of pollutant(s) emitted during emergency:
Describe the steps taken to mitigate the problem:
Describe the corrective actions/response steps taken:
Describe the measures taken to minimize emissions:
If applicable, describe the reasons why continued operation of the facilities are necessary to prevent imminent injury to persons, severe damage to equipment, substantial loss of capital investment, or loss of product or raw materials of substantial economic value:

Form Completed by: \_\_\_\_\_  
Title / Position: \_\_\_\_\_  
Date: \_\_\_\_\_  
Phone: \_\_\_\_\_

A certification is not required for this report.

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

**Part 70 Quarterly Report**

Source Name: Rensselaer Municipal Electric Utility  
 Source Address: 425 N. Van Rensselaer St., Rensselaer, Indiana 47978  
 Mailing Address: 122 S. Van Rensselaer St., P.O. Box 280, Rensselaer, Indiana 47978  
 Part 70 Permit No.: T 073-17725-00020  
 Facilities: Generators 5, 6, 10, 11, 14 and 15  
 Parameter: Total fuel usage  
 Limit: Less than 830,000 gallons of diesel fuel per twelve (12) consecutive month period with compliance determined at the end of each month

Usage of 231 cubic feet of natural gas shall be considered equal to using one (1) gallon of diesel fuel. Therefore, for each 231 cubic feet of natural gas used, the allowable diesel fuel limit shall be decreased by one (1) gallon.

YEAR: \_\_\_\_\_

Month	Total natural gas usage (cf)	Total diesel usage (gal)	Total natural gas usage (cf)	Total diesel usage (gal)	Total natural gas usage (cf)	Total diesel usage (gal)
	This month		Previous 11 Months		12 Month Total	

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

Submitted by: \_\_\_\_\_  
 Title/Position: \_\_\_\_\_  
 Signature: \_\_\_\_\_  
 Date: \_\_\_\_\_  
 Phone: \_\_\_\_\_

Attach a signed certification to complete this report.

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

**Part 70 Quarterly Report**

Source Name: Rensselaer Municipal Electric Utility  
 Source Address: 425 N. Van Rensselaer St., Rensselaer, Indiana 47978  
 Mailing Address: 122 S. Van Rensselaer St., P.O. Box 280, Rensselaer, Indiana 47978  
 Part 70 Permit No.: T 073-17725-00020  
 Facility: Generator 14  
 Parameter: Fuel usage  
 Limit: Less than 192,000,000 cubic feet of natural gas per twelve (12) consecutive month period with compliance determined at the end of each month

For each one (1) gallon of diesel fuel used, the allowable natural gas usage rate will be decreased by 78.5 cubic feet of natural gas

YEAR: \_\_\_\_\_

Month	Natural gas usage (cf)	Diesel usage (gal)	Natural gas usage (cf)	Diesel usage (gal)	Natural gas usage (cf)	Diesel usage (gal)
	This month		Previous 11 Months		12 Month Total	

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

Submitted by: \_\_\_\_\_  
 Title/Position: \_\_\_\_\_  
 Signature: \_\_\_\_\_  
 Date: \_\_\_\_\_  
 Phone: \_\_\_\_\_

Attach a signed certification to complete this report.

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

**Part 70 Quarterly Report**

Source Name: Rensselaer Municipal Electric Utility  
Source Address: 425 N. Van Rensselaer St., Rensselaer, Indiana 47978  
Mailing Address: 122 S. Van Rensselaer St., P.O. Box 280, Rensselaer, Indiana 47978  
Part 70 Permit No.: T 073-17725-00020  
Facility: Generator 15  
Parameter: Fuel usage  
Limit: Less than 192,000,000 cubic feet of natural gas per twelve (12) consecutive month period with compliance determined at the end of each month

YEAR: \_\_\_\_\_

Month	Natural gas usage (cf)	Natural gas usage (cf)	Natural gas usage (cf)
	This month	Previous 11 Months	12 Month Total

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

Submitted by: \_\_\_\_\_  
Title/Position: \_\_\_\_\_  
Signature: \_\_\_\_\_  
Date: \_\_\_\_\_  
Phone: \_\_\_\_\_

Attach a signed certification to complete this report.

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

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

Source Name: Rensselaer Municipal Electric Utility  
 Source Address: 425 N. Van Rensselaer St., Rensselaer, Indiana 47978  
 Mailing Address: 122 S. Van Rensselaer St., P.O. Box 280, Rensselaer, Indiana 47978  
 Part 70 Permit No.: T 073-17725-00020

**Months:** \_\_\_\_\_ **to** \_\_\_\_\_ **Year:** \_\_\_\_\_

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

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

Form Completed By: \_\_\_\_\_

Title/Position: \_\_\_\_\_

Date: \_\_\_\_\_

Phone: \_\_\_\_\_

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**

<b>Source Name:</b>	<b>Rensselaer Municipal Electric Utility</b>
<b>Source Location:</b>	<b>425 N. Van Rensselaer St., Rensselaer, Indiana 47978</b>
<b>County:</b>	<b>Jasper</b>
<b>SIC Code:</b>	<b>4911</b>
<b>Operation Permit No.:</b>	<b>T 073-7642-00020</b>
<b>Operation Permit Issuance Date:</b>	<b>November 9, 1998</b>
<b>Permit Renewal No.:</b>	<b>T 073-17725-00020</b>
<b>Permit Reviewer:</b>	<b>CarrieAnn Paukowits</b>

The Office of Air Quality (OAQ) has reviewed a Part 70 Operating Permit Renewal application from Rensselaer Municipal Electric Utility relating to the operation of an electric power generation source. This Part 70 Operating Permit contains provisions intended to satisfy the requirements of the construction permit rules for a correction in the equivalency of natural gas to diesel fuel.

**Permitted Emission Units and Pollution Control Equipment**

The source consists of the following permitted emission units and pollution control devices:

- (a) One (1) two cycle, low sulfur diesel-fired compression ignition reciprocating generator, identified as Generator 5, constructed in 1950, exhausting to Stack #5, capacity: 1,980 kW (name plate), 20.3 million British thermal units heat input and 2,800 horsepower output.
- (b) One (1) two cycle, low sulfur diesel-fired compression ignition reciprocating generator, identified as Generator 6, constructed in 1957, exhausting to Stack #6, capacity: 2,500 kW (name plate), 25.2 million British thermal units heat input and 3,500 horsepower output.
- (c) One (1) two cycle, low sulfur diesel-fired compression ignition reciprocating generator, identified as Generator 10, constructed in 1971, exhausting to Stack #10, capacity: 2,070 kW (name plate), 21.0 million British thermal units heat input and 2,880 horsepower output.
- (d) One (1) two cycle, low sulfur diesel-fired compression ignition reciprocating generator, identified as Generator 11, constructed in 1971, exhausting to Stack #11, capacity: 2,070 kW (name plate), 21.0 million British thermal units heat input and 2,880 horsepower output.
- (e) One (1) four cycle, low sulfur diesel and natural gas-fired compression ignition reciprocating generator, identified as Generator 14, constructed in 1994, exhausting to Stack #14, capacity: 5,000 kW (name plate), 50.8 million British thermal units heat input and 7,920 horsepower output.
- (f) One (1) four stroke, lean burn, natural gas-fired spark ignition reciprocating generator, identified as Generator 15, constructed in 2006, equipped with a catalytic unit, exhausting to Stack #15, capacity: 8,040 kW (name plate) and 72.3 million British thermal units per hour (72,319 cubic feet of natural gas per hour).

Generators 6, 10 and 11 were permitted to also combust natural gas. However, the mechanics used for gas generation have been removed from all three and they have not used natural gas in the past twenty-two (22) years. Therefore, natural gas combustion has been removed from the

unit descriptions. Any change or modification that allows those units to burn natural gas in the future would require prior IDEM, OAQ, approval.

### **Unpermitted Emission Units and Pollution Control Equipment**

There are no unpermitted emission units operating at this source during this review process.

### **New Emission Units and Pollution Control Equipment Receiving Advanced Source Modification Approval**

There are no proposed emission units during this review process.

### **Insignificant Activities**

The source also consists of the following insignificant activities, as defined in 326 IAC 2-7-1(21):

- (a) Degreasing operations that do not exceed 145 gallons per 12 months, except if subject to 326 IAC 20-6 (One (1) batch, cold cleaner degreasing operation, constructed in 1987, using 15 gallons of cleaning solvent per year, exhausting to the building). [326 IAC 8-3-2]
- (b) The following equipment related to manufacturing activities not resulting in the emission of HAPs: brazing equipment, cutting torches, soldering equipment, welding equipment.
- (c) One (1) antifreeze storage tank, identified as Antifreeze, currently empty, constructed in 1968, exhausting through a vent to the ambient air, capacity: 8,000 gallons.
- (d) One (1) diesel fuel storage tank, identified as Diesel #1, constructed in 1976, exhausting through a vent to the ambient air, capacity: 26,000 gallons.
- (e) Two (2) diesel fuel storage tanks, identified as Diesel #2 and Diesel #3, constructed in 1976, each exhausting through a vent to the ambient air, capacity: 20,000 gallons.
- (f) Paved and unpaved roads and parking lots with public access.
- (g) Equipment powered by internal combustion engines of capacity equal to or less than 500,000 Btu/hour, except where total capacity of equipment operated by one stationary source exceeds 2,000,000 Btu/hour, including two (2) gasoline-powered trash pumps.
- (h) Cleaners and solvents characterized as having a vapor pressure equal to or less than 2 kPa; 15 mm Hg; or 0.3 psi measured at 38 degrees C (100 degrees F) and the use of which all cleaners and solvents combined does not exceed 145 gallons per 12 months.
- (i) Cleaners and solvents characterized as having vapor pressure equal to or less than 0.7 kPa; 5 mm Hg; or 0.1 psi measured at 20 degrees C (68 degrees F) and the use of which all cleaners and solvents combined does not exceed 145 gallons per 12 months.
- (j) Equipment used exclusively for filling drums, pails or other packaging containers with lubricating oils, waxes, and greases.
- (k) Equipment used exclusively for packaging lubricants and greases.
- (l) Equipment used to collect any material that might be released during a malfunction, process upset, or spill cleanup, including catch tanks, temporary liquid separators, tanks and fluid handling equipment.

- (m) Machining where an aqueous cutting coolant continuously floods the machining interface.
- (n) Solvent recycling systems with batch capacity less than or equal to 100 gallons.
- (o) VOC and HAP storage tanks with capacity less than or equal to 1,000 gallons and annual throughputs less than 12,000 gallons.
- (p) VOC and HAP vessels storing lubricating oils, hydraulic oils, machining oils, and machining fluids.

### Existing Approvals

The source has been operating under the previous Part 70 Operating Permit, T 073-7642-00020, issued on November 9, 1998, with an expiration date of November 9, 2003, and the following amendments and modifications:

- (a) Administrative Amendment 073-10695-00020, issued on April 5, 1999;
- (b) Administrative Amendment 073-11738-00020, issued on March 16, 2000;
- (c) Response to Review Request 073-14488-00020, mailed on June 29, 2001;
- (d) Reopening 073-13328-00020, issued on January 2, 2002;
- (e) Significant Source Modification 073-20394-00020, issued on April 18, 2005;
- (f) Significant Permit Modification 073-20317-00020, issued on May 2, 2005; and
- (g) Significant Permit Modification 073-23227-00020, issued on September 29, 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 proposed permit. All previous registrations and permits are superseded by this permit.

The following terms and conditions from previous approvals have been revised in this Part 70 Operating Permit:

Condition D.1.1(c): For every 0.257 thousand cubic feet of natural gas burned, the yearly allowable oil use shall decrease by one (1) gallon.

Reason revised: Due to a calculation error in a previous approval, the fuel equivalency has been revised. Usage of 231 cubic feet of natural gas shall be considered equal to using one (1) gallon of diesel fuel. Therefore, for each 231 cubic feet of natural gas used, the allowable diesel fuel limit shall be decreased by one (1) gallon.

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

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

IDEM is aware that the source did not apply for a Part 70 Operating Permit renewal in a timely manner. An agreed order, CAUSE NO. 2003-13089-A, was signed on March 11, 2004, which imposed a monetary penalty.

There are no enforcement actions pending.

### Recommendation

The staff recommends to the Commissioner that the Part 70 Operating Permit 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 administratively complete Part 70 Operating Permit renewal application for the purposes of this review was received on May 13, 2003. Additional information was received on November 6, 2006.

### Emission Calculations

See pages 1 through 6 of Appendix A of this document for detailed emission calculations.

### Unrestricted Potential Emissions

The following is the unrestricted potential emissions from this source (the most the source can emit without considering the limitations in the permit):

Pollutant	Potential to Emit (tons/yr)
PM	46.6
PM <sub>10</sub>	49.6
SO <sub>2</sub>	333
VOC	188
CO	1,274
NO <sub>x</sub>	3,585

HAPs	Potential to Emit (tons/yr)
Formaldehyde	30.1
1,1,2,2-Tetrachloroethane, 1,1,2-Trichloroethane, 1,3-Butadiene, 1,3-Dichloropropene, 2,2,4-Trimethylpentane, Acetaldehyde, Acrolein, Benzene, Biphenyl, Carbon Tetrachloride, Chlorobenzene, Chloroethane, Chloroform, Ethylbenzene, Ethylene Dibromide, Methanol, Methylene Chloride, n-Hexane, Naphthalene, Phenol, Styrene, Toluene, Vinyl Chloride, Xylenes, Propylene, Total PAH	< 10.0, each
Total	45.1

- (a) The potential to emit (as defined in 326 IAC 2-7-1(29)) of NO<sub>x</sub> and CO is equal to or greater than one hundred (100) tons per year. Therefore, the source is subject to the provisions of 326 IAC 2-7.
- (b) Fugitive Emissions  
Pursuant to 326 IAC 2-7-2(e), the fugitive particulate matter (PM), PM<sub>10</sub> and volatile organic compound (VOC) emissions are counted toward determination of 326 IAC 2-7-2 (c) applicability.

**Potential to Emit of the Source after Issuance**

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

The source was issued a Part 70 Operating Permit on November 9, 1998. 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 the original Part 70 Operating 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/yr)						
	PM	PM <sub>10</sub>	SO <sub>2</sub>	VOC	CO	NO <sub>x</sub>	HAPs
Six (6) Generators	5.61	5.61	33.6	32.1	236	240	5.07 form- aldehyde; 7.30 total
Insignificant Activities (engines, welding, degreasing, storage tanks, and unpaved roads)	13.8	13.7	4.56	11.0	4.56	4.56	1.90 form- aldehyde; 4.28 total
Total Emissions	19.5	19.3	38.2	43.1	241	245	6.97 form- aldehyde; 11.6 total

The emissions in this table represent the unrestricted potential emissions from the insignificant activities and the limited potential to emit from the six (6) generators (see 326 IAC 2-2 in the State Rule Applicability - Entire Source section of this document).

### Actual Emissions

The following table shows the actual emissions from the source. This information reflects the 2003 OAQ emission data.

Pollutant	Actual Emissions (tons/year)
PM	Not reported
PM <sub>10</sub>	0
SO <sub>2</sub>	0
VOC	1
CO	1
NO <sub>x</sub>	4
HAPs	Not reported

### County Attainment Status

The source is located in Jasper County.

Pollutant	Status
PM <sub>2.5</sub>	attainment
PM <sub>10</sub>	attainment
SO <sub>2</sub>	attainment
NO <sub>2</sub>	attainment
8-Hour Ozone	attainment

Pollutant	Status
CO	attainment
Lead	attainment

- (a) Volatile organic compounds (VOC) and nitrogen oxides (NO<sub>x</sub>) 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<sub>x</sub> emissions are considered when evaluating the rule applicability relating to ozone. Jasper County has been designated as attainment or unclassifiable for ozone. Therefore, VOC and NO<sub>x</sub> emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2. See the State Rule Applicability - Entire Source section of this document.
- (b) Jasper County has been classified as unclassifiable or attainment for PM<sub>2.5</sub>. U.S. EPA has not yet established the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2 for PM<sub>2.5</sub> emissions. Therefore, until the U.S.EPA adopts specific provisions for PSD review for PM<sub>2.5</sub> emissions, it has directed states to regulate PM<sub>10</sub> emissions as a surrogate for PM<sub>2.5</sub> emissions. See the State Rule Applicability - Entire Source section of this document.
- (c) Jasper County has been classified as attainment or unclassifiable in Indiana for all remaining criteria pollutants. Therefore, these emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2. See the State Rule Applicability - Entire Source section of this document.
- (d) On October 25, 2006, the Indiana Air Pollution Control Board finalized a rule revision to 326 IAC 1-4-1 redesignating Delaware, Greene, Jackson, Vanderburgh, Vigo and Warrick Counties to attainment for the eight-hour ozone standard, redesignating Lake County to attainment for the sulfur dioxide standard, and revoking the one-hour ozone standard in Indiana.

### Part 70 Operating 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 Operating Permits.
- (b) Monitoring and related record keeping requirements which assure that all reasonable information is provided to evaluate continuous compliance with the applicable requirements.

### Federal Rule Applicability

- (a) This source does involve a pollutant-specific emissions units as defined in 40 CFR 64.1 that have the potential to emit before controls equal to or greater than the major source threshold for NO<sub>x</sub> for which it is subject to an emission limitation or standard for NO<sub>x</sub>. However, the emission units (Generators 5, 6, 10, 11, 14 and 15) do not use a control device as defined in 40 CFR Part 64.1 to comply with that emission limitation or standard.

This source does involve a pollutant-specific emissions unit as defined in 40 CFR 64.1 that has the potential to emit before controls equal to or greater than the major source

threshold for SO<sub>2</sub> for which it is subject to an emission limitation or standard for SO<sub>2</sub>. However, the emission unit (Generator 14) does not use a control device as defined in 40 CFR Part 64.1 to comply with that emission limitation or standard.

Therefore, the requirements of 40 CFR Part 64, Compliance Assurance Monitoring, are not applicable to this source.

- (b) There are no New Source Performance Standards (NSPS) (326 IAC 12 and 40 CFR Part 60) applicable to this source.
- (c) The requirements of the New Source Performance Standard, 326 IAC 12 (40 CFR 60 Subpart K) are not included in the permit for this source. Construction of the one (1) anti-freeze storage tank commenced prior to June 11, 1973, and all other tanks have capacities less than forty thousand (40,000) gallons, each.
- (d) The requirements of the New Source Performance Standard, 326 IAC 12 (40 CFR 60 Subpart Ka) are not included in the permit for this source. Construction of the one (1) antifreeze storage tank and three (3) diesel fuel storage tanks commenced prior to May 19, 1978, and all other tanks have capacities less than forty thousand (40,000) gallons, each.
- (e) The requirements of the New Source Performance Standard, 326 IAC 12 (40 CFR 60 Subpart Kb) are not included in the permit for this source. Construction of the one (1) antifreeze storage tank and three (3) diesel fuel storage tanks commenced prior to July 23, 1984, all other tanks have a capacity less than seventy-five (75) cubic meters.
- (f) The requirements of 40 CFR 63, Subpart T, National Emissions Standards for Hazardous Air Pollutants for Halogenated Solvent Cleaning, are not included in the permit for this source. The insignificant degreaser does not use any halogenated solvents.
- (g) The six (6) generators, identified as Generators 5, 6, 10, 11, 14 and 15, are not steam generating units. Therefore, the requirements of 40 CFR 60, Subparts D, Da, Db and Dc, are not included in the permit.
- (h) The five (5) generators, identified as Generators 5, 6, 10, 11 and 14, are compression ignition generators. However, the five (5) generators were manufactured before April 1, 2006 and the model year is prior to 2007. Therefore, the requirements of 40 CFR 60, Subpart IIII, Standards of Performance for Stationary Compression Ignition Internal Combustion Engines, are not included in the permit.
- (i) The requirements of the New Source Performance Standard, 40 CFR 60, Subpart KKKK, Standards of Performance for Stationary Combustion Turbines, are not included in the permit for this source because the engines are reciprocating engines, not turbine engines.
- (j) The requirements of the New Source Performance Standard, 326 IAC 12 (40 CFR 60.330, Subpart GG), are not included in the permit for this source because the engines are reciprocating engines, not turbine engines.
- (k) The requirements of the National Emission Standard for Hazardous Air Pollutants, 326 IAC 20 (40 CFR 63.330, Subpart YYYY), are not included in the permit for this source because the engines at this source are reciprocating engines, not turbine engines.
- (l) The fuel usage limitations at this source limit the potential to emit each individual HAP to less than ten (10) tons per year and the potential to emit total HAPs to less than twenty-five (25) tons per year. Therefore, the requirements of 40 CFR 63.6580, Subpart ZZZZ,

National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines, are not included in the permit for this source. The fuel usage limits existing in the permit of less than 192,000,000 cubic feet of natural gas per twelve (12) consecutive month period and less than 830,000 gallons of diesel fuel per twelve (12) consecutive month period in Condition D.1.1, limits the potential to emit each individual HAP from this source to less than ten (10) tons per year and total HAP emissions to less than twenty-five (25) tons per year, based on the AP-42 emission factors of 5.28E-5 lbs/cf for Formaldehyde and 7.21E-5 lbs/cf for total HAPs for natural gas and 2.58E-3 lbs/MMBtu for Propylene and 6.45E-3 for total HAPs from diesel fuel combustion.

- (m) Generators 5, 6, 10 and 11 commenced commercial operation before November 15, 1990 and did not, as of November 15, 1990, and do not currently, serve a generator with a nameplate capacity of greater than 25 MW. Therefore, the four (4) generators, identified as Generators 5, 6, 10 and 11 are not affected sources pursuant to 40 CFR 72.6, and are not required to obtain a Title IV Acid Rain Permit at this time.

Pursuant to 40 CFR 72.7, one (1) or more generators, otherwise affected sources under 40 CFR 72.6, with nameplate capacities of less than or equal to twenty-five (25) megawatts, total, not burning coal or a coal derived fuel, and combusting a gaseous or nongaseous fuel with an annual average sulfur content of 0.05 percent or less by weight shall be exempt from being required to obtain a Title IV Acid Rain Permit.

- (1) The two (2) generators, identified as Generators 14 and 15 comply with the exemption requirements of 40 CFR 72.7 (the source nameplate capacity is 21.66 megawatts, total) and therefore, Rensselaer Municipal Electric Utility will not be required to obtain a Title IV Acid Rain Permit.
- (2) Pursuant to 40 CFR 75.2, this source will not be required to have Continuous Emission Monitoring System (CEMS), because this source does not contain affected facilities subject to the Title IV Acid Rain Program.
- (3) Pursuant to 40 CFR 72.7, the two (2) generators, identified as Generators 14 and 15, shall be limited to the following in order to comply with the Acid Rain Program exemption:
  - (A) The nameplate capacity of the source shall not exceed twenty-five (25) megawatts, total;
  - (B) The two (2) generators, identified as Generators 14 and 15, shall not combust coal or a coal-derived fuel; and
  - (C) The annual average weight percentage sulfur content of the fuels used at the two (2) generators, identified as Generators 14 and 15, shall not exceed 0.05.
  - (4) Pursuant to 40 CFR 72.7(f)(3), to document compliance with the Acid Rain Exemption Limitations, the Permittee shall retain at the source the unit records for a period of five (5) years from the date the records are created. The five (5) year period for record keeping may be extended for cause, at any time period during the end of the period, in writing by IDEM, OAQ. These records shall be kept for each fuel delivery and shall include:
    - (A) The type of fuel;

- (B) The sulfur content; and
- (C) The sulfur content of each sample taken.

### **State Rule Applicability – Entire Source**

#### **326 IAC 2-6 (Emission Reporting)**

This source is subject to 326 IAC 2-6 (Emission Reporting) because it is required to have an operating permit pursuant to 326 IAC 2-7, Part 70. The potential to emit NO<sub>x</sub>, CO, and SO<sub>2</sub> from the source is less than 2,500 tons per year, each, and the potential to emit PM<sub>10</sub> and VOC is less than 250 tons per year, each. In accordance with the compliance schedule in 326 IAC 2-6-3, an emission statement must be submitted triennially by July 1, beginning July 1, 2004. The emission statement shall contain, at a minimum, the information specified in 326 IAC 2-6-4.

#### **326 IAC 5-1 (Opacity Limitations)**

Pursuant to 326 IAC 5-1-2 (Opacity limitations), except as provided in 326 IAC 5-1-3 (Temporary alternative opacity limitations), 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.

### **State Rule Applicability – Individual Facilities**

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

- (a) This source was constructed prior to August 7, 1977. By August 7, 1977, the potential to emit NO<sub>x</sub> was greater than 250 tons per year. Therefore, this source was a major source pursuant to 326 IAC 2-2, PSD, but PSD review was not required.
- (b) CP 073-2461-00020, issued on July 22, 1992, limited the potential to emit to less than 250 tons per year of NO<sub>x</sub> and SO<sub>2</sub> including the addition of the one (1) diesel or natural gas-fired generator, identified as Generator 14, constructed in 1994. Therefore, this source became a minor source pursuant to 326 IAC 2-2, PSD.
- (c) One (1) four stroke, lean burn, natural gas-fired generator, identified as Generator 15, was constructed in 2006. Limitations from SPM 073-20317-00020, issued on May 2, 2005, were revised in SPM 073-23227-00020, issued on September 29, 2006. Those modifications continued to limit the potential to emit SO<sub>2</sub> and NO<sub>x</sub> from the entire source to less than 250 tons per year. The addition of the Generator 15 increased the unrestricted potential CO emissions to greater than 250 tons per year. SPM 073-23227-00020, issued on September 29, 2006, also limited the potential to emit CO to less than 250 tons per year.

The following limits are applicable to the six (6) generators, identified as Generators 5, 6, 10, 11, 14 and 15:

- (1) The combined amount of diesel fuel combusted in Generators 5, 6, 10, 11 and 14 shall be limited to less than 830,000 gallons per twelve (12) consecutive month period, with compliance determined at the end of each month.
- (2) The combined usage of natural gas in Generators 14 and 15 shall be limited to less than 192,000,000 cubic feet per twelve (12) consecutive month period, with compliance determined at the end of each month.
- (3) The following limits shall apply to the six (6) generators, identified as Generators 5, 6, 10, 11, 14, and 15:
  - (A) The emission rate of NO<sub>x</sub> for diesel fuel shall not exceed 0.578 pound per gallon;
  - (B) The emission rate of NO<sub>x</sub> for Generator 14, when operating on natural gas, shall not exceed 0.002 pound per cubic feet of natural gas;
  - (C) The emission rate of NO<sub>x</sub> for Generator 15, when operating on natural gas, shall not exceed 0.0025 pound per cubic feet of natural gas;
  - (D) The emission rate of SO<sub>2</sub> for diesel fuel shall not exceed 0.081 pound per gallon;
  - (E) The emission rate of SO<sub>2</sub> for natural gas shall not exceed 0.000006 pound per cubic feet of natural gas;
  - (F) The emission rate of CO for diesel fuel shall not exceed 0.106 pound per gallon; and
  - (G) The emission rate of CO for natural gas shall not exceed 0.002 pound per cubic feet of natural gas.
- (4) Natural gas shall not be combusted in Generators 5, 6, 10, and 11.
- (5) Usage of 231 cubic feet of natural gas shall be considered equal to using one (1) gallon of diesel fuel (see page 5 of Appendix A of this document).

Therefore, the total NO<sub>x</sub>, SO<sub>2</sub> and CO emissions shall not exceed 240, 33.6 and 236 tons per year, respectively, from the six (6) generators. The catalytic unit for CO control shall be in operation and control emissions from Generator 15 at all times that Generator 15 is in operation. This will limit the source-wide emissions of NO<sub>x</sub>, SO<sub>2</sub> and CO to less than 250 tons per year (see page 6 of Appendix A of this document). Compliance with the above limits shall render the requirements of 326 IAC 2-2, PSD, not applicable to Generators 5, 6, 10, 11, 14, and 15.

The diesel fuel emission limitations (lbs/gal diesel fuel) are based on the approved emission factors for NO<sub>x</sub> and SO<sub>2</sub> at Generator 14 and the AP-42 emission factor for CO in lbs/hp-hr converted to lbs/gal based on the horsepower rating and maximum fuel usage capacity of each diesel powered generator. These emission factors are the highest for each pollutant among the emission factors previously approved based on manufacturer data and the AP-42 emission factors. Generator 14 was tested on September 14, 1994, and the results demonstrated compliance with the NO<sub>x</sub> emission limitation. There is no additional testing required for the diesel fuel limitations.

The natural gas emission limitations (lbs/cf natural gas) are the AP-42 emission factor for SO<sub>2</sub> in lbs/MMBtu converted to lbs/cf, and the requested emission limitations for NO<sub>x</sub> and CO based on the manufacturer's data for each generator. Pursuant to SPM 073-20317-00020, issued on May 2, 2005, testing of the Generator 15 was required to determine compliance with the NO<sub>x</sub> and CO emission limitations. Tests performed on May 31, 2006, demonstrated that Generator 15 can comply with these limitations. The emission limitations for Generator 14 were determined to be the emission factors for that unit in the review for T 073-7642-00020, issued on November 9, 1998, and no testing was required. The NO<sub>x</sub> limit for Generator 15 is different from the NO<sub>x</sub> limit for Generator 14 because it was specifically requested by the applicant during the review for SPM 073-23227-00020, issued on September 29, 2006.

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

- (a) The one (1) four stroke, lean burn, natural gas-fired generator, identified as Generator 15, was constructed after July 27, 1997 and has potential HAP emissions greater than ten (10) tons per year of an individual HAP. The fuel usage limit existing in the permit of less than 192,000,000 cubic feet of natural gas per twelve (12) consecutive month period, limits the potential to emit each individual HAP from this facility to less than ten (10) tons per year, based on the AP-42 emission factors of 5.28E-5 lbs/cf for formaldehyde and 7.21E-5 for total HAPs. Therefore, the requirements of 326 IAC 2-4.1-1 are not applicable to the one (1) four stroke, lean burn, natural gas-fired generator, identified as Generator 15. Generator 15 cannot operate on diesel fuel. Therefore, no diesel fuel limit is required.
- (b) All other facilities at this source were constructed prior to July 27, 1997. Therefore, the requirements of 326 IAC 2-4.1 are not applicable to those facilities.

#### 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes)

- (a) The insignificant welding at this source does not use more than 625 pounds of weld wire or rod per day. Therefore, pursuant to 326 IAC 6-3-1(b)(9), the welding is exempt from the requirements of 326 IAC 6-3.
- (b) The insignificant torch cutting at this source does not use more than 3,400 inches of stock one inch thick or less. Therefore, pursuant to 326 IAC 6-3-1(b)(10), the torch cutting is exempt from the requirements of 326 IAC 6-3.
- (c) The insignificant brazing and soldering have potential particulate emissions less than 0.551 pounds per hour. Therefore, pursuant to 326 IAC 6-3-1(b)(14), those insignificant activities are exempt from the requirements of 326 IAC 6-3.
- (d) The six (6) generators produce electricity as a product. The one (1) generator, identified as Generator 15, has potential particulate emissions less than 0.551 pounds per hour. Therefore, pursuant to 326 IAC 6-3-1(b)(14), the one (1) generator, identified as Generator 15, is exempt from the requirements of 326 IAC 6-3. Pursuant to 326 IAC 6-3-2, the particulate from the five (5) generators, identified as Generators 5, 6, 10, 11 and 14, shall not exceed the following:

Generator ID	Throughput (gallons/hr)	Equivalent Throughput (tons/hr)*	Limited Particulate Emissions based on 326 IAC 6-3-2 (lbs/hr)	Unrestricted Potential to Emit (lbs/hr)
5	145	0.575	2.83	1.96
6	180	0.714	3.27	1.40
10	150	0.595	2.90	0.863
11	150	0.595	2.90	0.863
14	363	1.44	5.23	2.37

\*The tons/hr throughput is based on a fuel oil density of 7.93 lbs/gallon.

According to this evaluation, the five (5) generators, identified as Generators 5, 6, 10, 11 and 14, can comply with this rule. These limitations are based upon the following:

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

$$E = 4.10 P^{0.67} \quad \text{where } E = \text{rate of emission in pounds per hour and} \\ P = \text{process weight rate in tons per hour}$$

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

This source was constructed prior to December 13, 1985, in an attainment county for particulate. Therefore, the requirements of 326 IAC 6-5 are not applicable.

#### 326 IAC 7-1.1 (Sulfur Dioxide Emission Limitations)

- (a) The potential SO<sub>2</sub> emissions from each of the five (5) generators operating on diesel fuel, Generators 5, 6, 10, 11 and 14, are greater than ten (10) pounds per hour and twenty-five (25) tons per year. Therefore, the requirements of 326 IAC 7-1.1 are applicable to each of the generators. Pursuant to 326 IAC 7-1.1-2, sulfur dioxide emissions shall be limited to five-tenths (0.5) pound per MMBtu for distillate oil combustion.
- (b) The potential SO<sub>2</sub> emissions from the one (1) generator operating only on natural gas, Generator 15, are less than ten (10) pounds per hour and twenty-five (25) tons per year. Therefore, the requirements of 326 IAC 7-1.1 are not applicable to Generator 15.

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

- (a) Generators 5, 6, 10 and 11 were constructed prior to January 1, 1980. Therefore, the requirements of 326 IAC 8-1-6 are not applicable.
- (b) The unrestricted potential VOC emissions from the two (2) generators constructed after January 1, 1980, identified as Generators 14 and 15, are greater than twenty-five (25) tons per year, each. Pursuant to SPM 073-23227-00020, issued on September 29, 2006, the following limits shall apply to Generators 14 and 15:
  - (1) The usage of natural gas in Generators 14 and 15 shall be limited to less than 192,000,000 cubic feet per twelve (12) consecutive month period, each, with compliance determined at the end of each month.

- (2) The emission rate of VOC shall not exceed 0.00025 pounds of VOC per cubic feet of natural gas.
- (3) Usage of one (1) gallon of diesel fuel at Generator 14 shall be considered equal to using 78.5 cubic feet of natural gas.

These limitations will limit the potential to emit VOC to less than twenty-five (25) tons per year from each generator. Therefore, compliance with the above limits shall render the requirements of 326 IAC 8-1-6 not applicable to Generators 14 and 15.

Pursuant to SPM 073-20317-00020, issued on May 2, 2005, testing of the Generator 15 was required to determine compliance with the VOC emission limitation. Tests performed on May 31, 2006, demonstrated that Generator 15 can comply with this limitation.

#### 326 IAC 8-3 (Organic Solvent Degreasing Operations)

The one (1) batch, cold cleaning degreasing operation was constructed after January 1, 1980 in Jasper County. Therefore, the requirements of 326 IAC 8-3-2 are applicable to the degreaser. The degreaser was constructed prior to July 1, 1990. Therefore, the requirements of 326 IAC 8-3-5 are not applicable. Pursuant to 326 IAC 8-3-2, the Permittee shall:

- (a) equip the cleaner with a cover;
- (b) equip the cleaner with a facility for draining cleaned parts;
- (c) close the degreaser cover whenever parts are not being handled in the cleaner;
- (d) drain cleaned parts for at least fifteen (15) seconds or until dripping ceases;
- (e) provide a permanent, conspicuous label summarizing the operating requirements;
- (f) store waste solvent only in covered containers and not dispose of waste solvent or transfer it to another party, in such a manner that greater than twenty percent (20%) of the waste solvent (by weight) can evaporate into the atmosphere.

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

The insignificant storage tanks each have a capacity less than 39,000 gallons. Therefore, the requirements of 326 IAC 8-4-3 are not applicable.

#### 326 IAC 8-6 (Organic Solvent Emission Limitations)

This source commenced operation prior to October 7, 1974 and none of the facilities were constructed between October 7, 1974 and January 1, 1980. Therefore, the requirements of 326 IAC 8-6 are not applicable.

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

The storage vessels at this source do not store volatile organic liquids in Clark, Floyd, Lake, or Porter Counties. Therefore, the requirements of 326 IAC 8-9 are not applicable.

### 326 IAC 9-1 (Carbon Monoxide Emission Limits)

This source does not include a petroleum refinery, ferrous metal smelter or refuse incinerator. Therefore, the requirements of 326 IAC 9-1 are not applicable.

### 326 IAC 10-1 (Nitrogen Oxides Control in Clark and Floyd Counties)

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

### 326 IAC 10-4 (Nitrogen Oxides Budget Trading Program)

The six (6) generators at this source are not subject to 326 IAC 10-4-1 because they are not "Electricity Generating Units" or "EGUs" as defined in 326 IAC 10-4-2(16) and they are not "large affected units" as defined in 326 IAC 10-4-2(27). The six (6) generators are not EGUs because they do not serve a generator that has a nameplate capacity greater than twenty-five (25) megawatts and produces electricity for sale under a firm contract to the electric grid. The six (6) diesel generators are not large affected units because they do not have a maximum design heat input greater than two hundred fifty million (250,000,000) British thermal units per hour.

## Testing Requirements

- (a) Past stack test
  - (1) Generator 14 was tested on September 14, 1994, and the results demonstrated compliance with the NO<sub>x</sub> emission limitation that makes the requirements of 326 IAC 2-2, PSD, not applicable.
  - (2) Tests performed on May 31, 2006, demonstrated that Generator 15 can comply with the NO<sub>x</sub>, VOC and CO limitations that make 326 IAC 2-2, PSD, and 326 IAC 8-1-6, New facilities; General reduction requirements, not applicable.
- (b) The emission limitations in the permit were based upon the higher of the AP-42 emission factors and emission factors based on manufacturer data for each generator. The previous stack test for Generator 14, demonstrated compliance with the NO<sub>x</sub> emission limitation for diesel fuel at Generator 14, which had the highest manufacturer recommended diesel fuel emission factor. The previous stack test at Generator 15 demonstrated compliance with the NO<sub>x</sub>, VOC and CO emission limitations at Generator 15, which operates on natural gas. Only Generator 14 also operates on natural gas, and the emission limitation is less stringent than the limitation for Generator 15. Therefore, no further testing is proposed at this time.

## Compliance Requirements

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

Compliance Determination Requirements in Section D of the permit are those conditions that are found more or less directly within state and federal rules and the violation of which serves as grounds for enforcement action. If these conditions are not sufficient to demonstrate continuous

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

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

The five (5) generators, identified as Generators 5, 6, 10, 11 and 14, have applicable compliance monitoring conditions as specified below:

- (a) Visible emission notations of the generator stack exhausts for Generators 5, 6, 10, 11 and 14 shall be performed once per day during normal daylight operations when operating on diesel fuel. A trained employee shall record whether emissions are normal or abnormal.
- (b) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.
- (c) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.
- (d) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.
- (e) If abnormal emissions are observed, the Permittee shall take reasonable response steps in accordance with Section C - Response to Excursions or Exceedances. Failure to take response steps in accordance with Section C - Response to Excursions or Exceedances shall be considered a deviation from this permit.

The generators must operate properly to ensure compliance with 326 IAC 6-3 (Particulate Emission Limitations for Manufacturing Processes) and 326 IAC 2-7 (Part 70).

## **Conclusion**

The operation of this electric power generation source shall be subject to the conditions of this Part 70 Operating Permit Renewal T 073-17725-00020.

**Appendix A: Emissions Calculations  
Natural Gas Combustion Only  
Generators  
Unrestricted Potential Emissions**

**Company Name: Rensselaer Municipal Electric Utility  
Address City IN Zip: 425 N. Van Rensselaer Street, Rensselaer, IN 47978  
Approval No.: T 073-17725-00020  
Reviewer: CarrieAnn Paukowits  
Application Date: May 13, 2003**

Emission Factor in lb/MMBtu	Pollutant					
	PM*	PM10*	SO2	NOx	VOC	CO
	7.71E-05	9.99E-03	5.88E-04	4.08E+00	2.50E-01	2.00E+00

\*PM emission factor is filterable PM only. PM-10 emission factor is filterable and condensable PM-10 combined.

Equipment	Heat Input Capacity MMBtu/hr	Potential Throughput MMCF/yr	Potential Emission in tons/yr					
			PM*	PM10*	SO2	NOx	VOC	CO
Generator 14	50.80	445.008	0.017	2.222	0.131	907.816	55.626	445.008
Generator 15	72.30	633.348	0.024	3.163	0.186	1292.030	79.169	633.348
<b>Total</b>	<b>123.10</b>	<b>1078</b>	<b>0.042</b>	<b>5.38</b>	<b>0.317</b>	<b>2200</b>	<b>135</b>	<b>1078</b>

**Methodology**

HAP	Emission Factor Four stroke lean burn (lb/MMBtu)	Potential to Emit (tons/yr)
1,1,2,2-Tetrachloroethane	4.00E-05	0.022
1,1,2-Trichloroethane	3.18E-05	0.017
1,3-Butadiene	2.67E-04	0.144
1,3-Dichloropropene	2.64E-05	0.014
2,2,4-Trimethylpentane	2.50E-04	0.135
Acetaldehyde	8.36E-03	4.508
Acrolein	5.14E-03	2.771
Benzene	4.40E-04	0.237
Biphenyl	2.12E-04	0.114
Carbon Tetrachloride	3.67E-05	0.020
Chlorobenzene	3.04E-05	0.016
Chloroethane	1.87E-06	0.001
Chloroform	2.85E-05	0.015
Ethylbenzene	3.97E-05	0.021
Ethylene Dibromide	4.43E-05	0.024
Formaldehyde	5.28E-02	28.469
Methanol	2.50E-03	1.348
Methylene Chloride	2.00E-05	0.011
n-Hexane	1.11E-03	0.598
Naphthalene	7.44E-05	0.040
Phenol	2.40E-05	0.013
Styrene	2.36E-05	0.013
Toluene	4.08E-04	0.220
Vinyl Chloride	1.49E-05	0.008
Xylene	1.84E-04	0.099
<b>Total HAPs:</b>	<b>0.072</b>	<b>38.9</b>

**Methodology**

Emission Factors are from AP 42 Tables 3.2-1, 3.2-2 and 3.2-3, revised July 2000

The VOC and CO emission factors are more conservative than the AP-42 emission factors and are based on the manufacturer data for these generators, including Generator 15, which has a catalytic un

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

**Appendix A: Emissions Calculations  
Natural Gas Combustion Only  
Generators  
Limited Potential to Emit**

**Company Name: Rensselaer Municipal Electric Utility  
Address City IN Zip: 425 N. Van Rensselaer Street, Rensselaer, IN 47978  
Approval No.: T 073-17725-00020  
Reviewer: CarrieAnn Paukowitz  
Application Date: May 13, 2003**

Emission Factor in lb/MMBtu	Pollutant					
	PM*	PM10*	SO2	NOx	VOC	CO
	7.71E-05	9.99E-03	5.88E-04	limited below	2.50E-01	2.00E+00

\*PM emission factor is filterable PM only. PM-10 emission factor is filterable and condensable PM-10 combined.

Emission Factor in lb/cf	Pollutant					
	PM*	PM10*	SO2	NOx	VOC	CO
	7.71E-08	9.99E-06	5.88E-07	2.50E-03	2.50E-04	2.00E-03

Equipment	Heat Input Capacity MMBtu/hr	Potential Throughput MMCF/yr	Potential Emission in tons/yr					
			PM*	PM10*	SO2	NOx	VOC	CO
<b>Total</b>	<b>21.92</b>	<b>192</b>	<b>0.007</b>	<b>0.959</b>	<b>0.056</b>	<b>240</b>	<b>24.0</b>	<b>192</b>

**Methodology**

HAP	Emission Factor Four stroke lean burn (lb/MMBtu)	Emission Factor Four stroke lean burn (lb/cf)	Potential to Emit (tons/yr)
1,1,2,2-Tetrachloroethane	4.00E-05	4.00E-08	3.84E-03
1,1,2-Trichloroethane	3.18E-05	3.18E-08	3.05E-03
1,3-Butadiene	2.67E-04	2.67E-07	2.56E-02
1,3-Dichloropropene	2.64E-05	2.64E-08	2.53E-03
2,2,4-Trimethylpentane	2.50E-04	2.50E-07	2.40E-02
Acetaldehyde	8.36E-03	8.36E-06	8.03E-01
Acrolein	5.14E-03	5.14E-06	4.93E-01
Benzene	4.40E-04	4.40E-07	4.22E-02
Biphenyl	2.12E-04	2.12E-07	2.04E-02
Carbon Tetrachloride	3.67E-05	3.67E-08	3.52E-03
Chlorobenzene	3.04E-05	3.04E-08	2.92E-03
Chloroethane	1.87E-06	1.87E-09	1.80E-04
Chloroform	2.85E-05	2.85E-08	2.74E-03
Ethylbenzene	3.97E-05	3.97E-08	3.81E-03
Ethylene Dibromide	4.43E-05	4.43E-08	4.25E-03
Formaldehyde	5.28E-02	5.28E-05	5.07E+00
Methanol	2.50E-03	2.50E-06	2.40E-01
Methylene Chloride	2.00E-05	2.00E-08	1.92E-03
n-Hexane	1.11E-03	1.11E-06	1.07E-01
Naphthalene	7.44E-05	7.44E-08	7.14E-03
Phenol	2.40E-05	2.40E-08	2.30E-03
Styrene	2.36E-05	2.36E-08	2.27E-03
Toluene	4.08E-04	4.08E-07	3.92E-02
Vinyl Chloride	1.49E-05	1.49E-08	1.43E-03
Xylene	1.84E-04	1.84E-07	1.77E-02
<b>Total HAPs:</b>	<b>0.072</b>	<b>7.21E-05</b>	<b>6.92</b>

**Methodology**

Emission Factors are from AP 42 Tables 3.2-1, 3.2-2 and 3.2-3, revised July 2000

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

**Appendix A: Emissions Calculations  
Diesel Combustion Only  
Generators  
Unrestricted Potential Emissions**

**Company Name: Rensselaer Municipal Electric Utility  
Address City IN Zip: 425 N. Van Rensselaer Street, Rensselaer, IN 47978  
Approval No.: T 073-17725-00020  
Reviewer: CarrieAnn Paukowits  
Application Date: May 13, 2003**

	Pollutant					
	PM	PM10	SO2	NOx	VOC	CO
Emission Factor in lb/hp-hr for Generator 5	0.0007	0.0007	0.0040	0.024	0.00071	0.00550
Emission Factor in lb/hp-hr for Generator 6	0.0004	0.0004	0.0037	0.027	0.00070	0.00380
Emission Factor in lb/hp-hr for Generator 10	0.0003	0.0003	0.0037	0.027	0.00090	0.00260
Emission Factor in lb/hp-hr for Generator 11	0.0003	0.0003	0.0037	0.027	0.00090	0.00260
Emission Factor in lb/hp-hr for Generator 14	0.0003	0.0003	0.0037	0.027	0.00090	0.00260

**Emission factors converted to lb/gal**

	PM	PM10	SO2	NOx	VOC	CO
Emission Factor in lb/gal for Generator 5	0.014	0.014	0.078	0.463	0.014	0.106
Emission Factor in lb/gal for Generator 6	0.008	0.008	0.072	0.515	0.014	0.074
Emission Factor in lb/gal for Generator 10	0.006	0.006	0.071	0.509	0.017	0.050
Emission Factor in lb/gal for Generator 11	0.006	0.006	0.071	0.509	0.017	0.050
Emission Factor in lb/gal for Generator 14	0.007	0.007	0.081	0.578	0.020	0.057

Equipment	Output Rating Horsepower	Weight % Sulfur	Potential Emission in tons/yr					
			PM	PM10	SO2	NOx	VOC	CO
Generator 5	2800.00	0.5	8.585	8.585	49.608	294.336	8.646	67.452
Generator 6	3500.00	0.5	6.132	6.132	56.721	406.245	10.731	58.254
Generator 10	2880.00	0.5	3.784	3.784	46.673	334.282	11.353	32.797
Generator 11	2880.00	0.5	3.784	3.784	46.673	334.282	11.353	32.797
Generator 14	7920.00	0.05	10.407	10.407	128.352	919.274	31.221	90.193
<b>Total</b>	<b>19980.0</b>		<b>32.7</b>	<b>32.7</b>	<b>328</b>	<b>2288</b>	<b>73.3</b>	<b>281</b>

Equipment	Fuel Usage Capacity (gallons/hr)
Generator 5	145.00
Generator 6	180.00
Generator 10	150.00
Generator 11	150.00
Generator 14	363.00
<b>Total</b>	<b>988</b>

HAP	Emission Factor Diesel Engines (lb/MMBtu)	Emission Factor Diesel Engines (lb/gal)	Potential to Emit (tons/yr)
Benzene	9.33E-04	1.32E-04	0.572
Toluene	4.09E-04	5.79E-05	0.251
Xylenes	2.85E-04	4.03E-05	0.175
Propylene	2.58E-03	3.65E-04	1.58
1,3-Butadiene	3.91E-05	5.53E-06	0.024
Formaldehyde	1.18E-03	1.67E-04	0.723
Acetylaldehyde	7.67E-04	1.09E-04	0.470
Acrolein	9.25E-05	1.31E-05	0.057
Total PAH	1.68E-04	2.38E-05	0.103
<b>Total HAPs:</b>	<b>6.45E-03</b>	<b>9.14E-04</b>	<b>3.95</b>

**Methodology**

Potential Throughput (hp-hr/yr) = hp \* 8760 hr/yr

Emission Factors for Generator No. 5 are from AP 42 (Supplement B 10/96)Table 3.4-1 and Table 3.4-2

Emission Factors for Generators 6, 10, 11, and 14 were provided by the manufacturer and approved during the review for the initial Title V permit, T 073-7642-00020.

Emission (tons/yr) = [Potential Throughput (hp-hr/yr) x Emission Factor (lb/hp-hr)] / (2,000 lb/ton)

Emission factors (lbs/gal) = Emission factors lb/hp-hr x Output rating (horsepower) /fuel usage capacity (gal)

**Appendix A: Emissions Calculations  
Diesel Combustion Only  
Generators  
Limited Potential to Emit**

**Company Name: Rensselaer Municipal Electric Utility  
Address City IN Zip: 425 N. Van Rensselaer Street, Rensselaer, IN 47978  
Approval No.: T 073-17725-00020  
Reviewer: CarrieAnn Paukowits  
Application Date: May 13, 2003**

Worst-case Emission Factor in lb/gal from page 3	Pollutant					
	PM	PM10	SO2	NOx	VOC	CO
	0.014	0.014	0.081	0.578	0.020	0.106

Equipment	Fuel Usage (gallons/yr)	Weight % Sulfur	Potential Emission in tons/yr					
			PM*	PM10*	SO2	NOx	VOC	CO
<b>Total</b>	<b>830000</b>	<b>0.5</b>	<b>5.61</b>	<b>5.61</b>	<b>33.6</b>	<b>240</b>	<b>8.15</b>	<b>44.1</b>

	Diesel Emission factor (lb/gal)	Natural Gas Emission Factor (lb/cf)	cf of natural gas equivalent to 1 gal of fuel oil
PM	0.014	7.71E-08	175321
PM10	0.014	9.99E-06	1353
SO2	0.081	5.88E-07	137755
NOx	0.578	2.50E-03	231
VOC	0.020	2.50E-04	78.5
CO	0.106	2.00E-03	53.1

\* equivalency used in the limit

For VOC, CO and HAPs, the limited PTE is the sum of the limited PTE from natural gas and the limited PTE from diesel, which is conservative

HAP	Emission Factor Diesel Engines (lb/MMBtu)	Emission Factor Diesel Engines (lb/gal)	Potential to Emit (tons/yr)
Benzene	9.33E-04	1.32E-04	5.48E-02
Toluene	4.09E-04	5.79E-05	2.40E-02
Xylenes	2.85E-04	4.03E-05	1.67E-02
Propylene	2.58E-03	3.65E-04	1.52E-01
1,3-Butadiene	3.91E-05	5.53E-06	2.30E-03
Formaldehyde	1.18E-03	1.67E-04	6.93E-02
Acetaldehyde	7.67E-04	1.09E-04	4.51E-02
Acrolein	9.25E-05	1.31E-05	5.43E-03
Total PAH	1.68E-04	2.38E-05	9.87E-03
<b>Total HAPs:</b>	<b>6.45E-03</b>	<b>9.14E-04</b>	<b>0.379</b>

**Methodology**

Emission Factors are the worst-case emission factors from page 3.

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

**Appendix A: Emissions Calculations  
Unpaved Roads**

**Company Name: Rensselaer Municipal Electric Utility  
Address City IN Zip: 425 N. Van Rensselaer Street, Rensselaer, IN 47978  
Approval No.: T 073-17725-00020  
Reviewer: CarrieAnn Paukowits  
Application Date: May 13, 2003**

\*\* unpaved roads \*\*

The following calculations determine the amount of emissions created by unpaved roads, based on 8,760 hours of use and AP-42, Ch 13.2.2 (12/2003).

$$\begin{aligned}
 & 0.75 \text{ trip/hr} \times \\
 & 0.02 \text{ mile/trip} \times \\
 & 2 \text{ (round trip)} \times \\
 & 8760 \text{ hr/yr} = \qquad \qquad \qquad 262.8 \text{ miles per year}
 \end{aligned}$$

**PM**

**Method 1b:**

$$\begin{aligned}
 E_f &= [k \cdot (s/12)^{1.8} \cdot (S/30)^d / (M/0.5)^c] - C \\
 &= 1.85 \text{ lb/mile} \\
 \text{where } k &= 6.0 \text{ (particle size multiplier for PM)} \\
 s &= 4.8 \text{ mean \% silt content of unpaved roads} \\
 c &= 0.3 \text{ Constant for PM} \\
 d &= 0.3 \text{ Constant for PM} \\
 S &= 5 \text{ Mean vehicle speed (mph)} \\
 M &= 0.2 \text{ Surface material moisture content, \% (default is 0.2 for dry conditions)} \\
 C &= 0.00047 \text{ PM emission factor for 1980's vehicle fleet exhaust, brake wear and tire wear} \\
 \\
 E &= \frac{1.85 \text{ lb/mi} \times 262.8 \text{ mi/yr}}{2000 \text{ lb/ton}} = 0.242 \text{ tons/yr}
 \end{aligned}$$

Taking natural mitigation due to precipitation into consideration:

$$\begin{aligned}
 E_{ext} &= E \cdot [(365-p)/365] = 0.159 \text{ tons/yr} \\
 \text{where } p &= 125 \text{ days of rain greater than or equal to 0.01 inches (see Fig. 13.2.2-1)}
 \end{aligned}$$

**PM-10**

**Method 1b:**

$$\begin{aligned}
 E_f &= [k \cdot (s/12)^{1.8} \cdot (S/30)^d / (M/0.5)^c] - C \\
 &= 0.35 \text{ lb/mile} \\
 \text{where } k &= 1.8 \text{ (particle size multiplier for PM-10)} \\
 s &= 4.8 \text{ mean \% silt content of unpaved roads} \\
 c &= 0.2 \text{ Constant for PM-10} \\
 d &= 0.5 \text{ Constant for PM-10} \\
 S &= 5 \text{ Mean vehicle speed (mph)} \\
 M &= 0.2 \text{ Surface material moisture content, \% (default is 0.2 for dry conditions)} \\
 C &= 0.00047 \text{ PM-10 emission factor for 1980's vehicle fleet exhaust, brake wear and tire wear} \\
 \\
 E &= \frac{0.35 \text{ lb/mi} \times 262.8 \text{ mi/yr}}{2000 \text{ lb/ton}} = 0.046 \text{ tons/yr}
 \end{aligned}$$

Taking natural mitigation due to precipitation into consideration:

$$\begin{aligned}
 E_{ext} &= E \cdot [(365-p)/365] = 0.030 \text{ tons/yr} \\
 \text{where } p &= 125 \text{ days of rain greater than or equal to 0.01 inches (see Fig. 13.2.2-1)}
 \end{aligned}$$

**Appendix A: Emissions Calculations  
Totals**

**Company Name: Rensselaer Municipal Electric Utility  
Address City IN Zip: 425 N. Van Rensselaer Street, Rensselaer, IN 47978  
Approval No.: T 073-17725-00020  
Reviewer: CarrieAnn Paukowits  
Application Date: May 13, 2003**

**Unrestricted Potential Emissions (tons/yr)**

	PM	PM10	SO2	NOx	VOC	CO	Form- aldehyde	Propylene	Total HAPs
Generator 5	8.58	8.58	49.6	294	8.65	67.5			
Generator 6	6.13	6.13	56.7	406	10.7	58.3			
Generator 10	3.78	3.78	46.7	334	11.4	32.8			
Generator 11	3.78	3.78	46.7	334	11.4	32.8			
Generator 14	10.4	10.4	128	919	55.6	445			
Generator 15	0.024	3.16	0.186	1292	79.2	633			
<b>Total Significant</b>	<b>32.7</b>	<b>35.9</b>	<b>328</b>	<b>3580</b>	<b>177</b>	<b>1270</b>	<b>29.2</b>	<b>1.58</b>	<b>42.8</b>
<b>Insignificant Activities</b>									
Storage Tanks	0.00	0.00	0.00	0.00	2.74	0.00	0.900	0.00	2.28
Degreasing	0.00	0.00	0.00	0.00	5.48	0.00	0.00	0.00	0.00
Welding	9.13	9.13	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Insignificant Engines	4.56	4.56	4.56	4.56	2.74	4.56	0.00	0.00	0.00
Unpaved roads	0.159	0.030	0.00	0.00	0.00	0.00	0.00	0.00	0.00
<b>Total Insignificant</b>	<b>13.8</b>	<b>13.7</b>	<b>4.56</b>	<b>4.56</b>	<b>11.0</b>	<b>4.56</b>	<b>0.900</b>	<b>0.000</b>	<b>2.28</b>
<b>Overall total</b>	<b>46.6</b>	<b>49.6</b>	<b>333</b>	<b>3585</b>	<b>188</b>	<b>1274</b>	<b>30.1</b>	<b>1.58</b>	<b>45.1</b>

**Limited Potential to Emit (tons/yr)**

	PM	PM10	SO2	NOx	VOC	CO	Form- aldehyde	Propylene	Total HAPs
<b>Total Significant</b>	<b>5.61</b>	<b>5.61</b>	<b>33.6</b>	<b>240</b>	<b>32.1</b>	<b>236</b>	<b>5.14</b>	<b>0.152</b>	<b>7.30</b>
<b>Insignificant Activities</b>									
Storage Tanks	0.00	0.00	0.00	0.00	2.74	0.00	0.900	0.00	2.28
Degreasing	0.00	0.00	0.00	0.00	5.48	0.00	0.00	0.00	0.00
Welding	9.13	9.13	0.00	0.00	0.00	0.00	0.00	0.00	1.00
Insignificant Engines	4.56	4.56	4.56	4.56	2.74	4.56	1.00	0.00	1.00
Unpaved roads	0.159	0.030	0.00	0.00	0.00	0.00	0.00	0.00	0.00
<b>Total Insignificant</b>	<b>13.8</b>	<b>13.7</b>	<b>4.56</b>	<b>4.56</b>	<b>11.0</b>	<b>4.56</b>	<b>1.90</b>	<b>0.000</b>	<b>4.28</b>
<b>Overall total</b>	<b>19.5</b>	<b>19.3</b>	<b>38.2</b>	<b>245</b>	<b>43.1</b>	<b>241</b>	<b>7.04</b>	<b>0.152</b>	<b>11.6</b>

Emissions from insignificant activities, other than unpaved roads, were calculated during initial TV review and found to be conservative.