



*Mitchell E. Daniels, Jr.*  
Governor

*Thomas W. Easterly*  
Commissioner

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

TO: Interested Parties / Applicant  
DATE: August 24, 2006  
RE: Newton County Landfill / 111-22779-00017  
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 13-17-3-4 and 326 IAC 2, this permit modification 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 13-15-7-3 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 Environmental Adjudication, 100 North Senate Avenue, Government Center North, Room 1049, Indianapolis, IN 46204, **within eighteen (18) days of the mailing of this notice**. The filing of a petition for administrative review is complete on the earliest of the following dates that apply to the filing:

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

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

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

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

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

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

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



INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT  
*We make Indiana a cleaner, healthier place to live.*

---

*Mitchell E. Daniels, Jr.*  
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100 North Senate Avenue  
Indianapolis, Indiana 46204-2251  
(317) 232-8603  
(800) 451-6027  
[www.IN.gov/idem](http://www.IN.gov/idem)

Mr. Derek Mauntel  
Newton County Landfill  
865 Wheeler Street  
Crown Point, IN 46307

August 24, 2006

Re: 111-22779-00017  
First Significant Permit Modification to:  
Part 70 Permit Renewal No.: T111-17664-00017

Dear Mr. Mauntel:

Newton County Landfill was issued Part 70 operating permit renewal T111-17664-00017 on January 27, 2006 for a municipal solid waste disposal facility. An application to modify the source was received on March 2, 2006. Pursuant to the provisions of 326 IAC 2-7-12 a significant permit modification to this permit is hereby approved as described in the attached Technical Support Document.

The modification consists of changes to the compliance determination as well as record keeping and reporting conditions of the Part 70 Operating Permit as the conditions are applicable to a new control device. Facility descriptions have also been updated where required. All other conditions of the permit remain unchanged and in effect. The revised Part 70 Operating Permit is being issued for your convenience.

This decision is subject to the Indiana Administrative Orders and Procedures Act - IC 4-21.5-3-5. If you have any questions on this matter, please contact Don Robin, P.E., OAQ, 100 North Senate Avenue, Indianapolis, Indiana, 46204-2251, or call at (800) 451-6027 and ask for Don Robin or extension 3-5691, or dial (317) 233-5691.

Sincerely,  
Original signed by

Nisha Sizemore, Chief  
Permits Branch  
Office of Air Quality

Attachments

DFR

cc: File – Newton County  
Newton County Health Department  
Air Compliance Section Inspector-Wanda Stanfield  
Compliance Data Section  
Administrative and Development



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100 North Senate Avenue  
Indianapolis, Indiana 46204-2251  
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## PART 70 OPERATING PERMIT RENEWAL OFFICE OF AIR QUALITY

**Newton County Landfill  
2266 East 500 South Road  
Brook, Indiana 47922**

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

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

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

Operation Permit Renewal No.: T111-17664-00017	
Issued by: Paul Dubenetzky, Assistant Commissioner Office of Air Quality	Issuance Date: January 27, 2006 Expiration Date: January 27, 2011
First Significant Permit Modification No. 111-22779-00017	
Original signed by: Nisha Sizemore, Chief Permits Branch Office of Air Quality	Issuance Date: August 24, 2006 Expiration Date: January 27, 2011

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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)]

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The Permittee owns and operates a stationary municipal solid waste landfill.

Responsible Official:	District Manager
Source Address:	2266 East 500 South Road, Brook, Indiana 47922
Mailing Address:	865 Wheeler Street, Crown Point, Indiana 46307
General Source Phone Number:	(219) 662-8600
SIC Code:	4953
County Location:	Newton
Source Location Status:	Attainment for all criteria pollutants
Source Status:	Part 70 Permit Program Minor Source, under PSD Rules; Minor Source, Section 112 of the Clean Air Act Not 1 of 28 Source Categories

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

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

- (a) One (1) municipal solid waste landfill, identified as emissions unit #1, constructed in 1995 and modified in 2006, with a maximum design capacity of 20,683,404 megagrams (Mg).
- (b) Four (4) passive open flares, identified as emissions unit #2, constructed prior to 1999, with a maximum capacity of 200 standard cubic feet per minute (scfm) each (800 scfm total).
- (c) One (1) enclosed combustor for landfill gas combustion, identified as emissions unit #3, constructed in 2006, with a maximum capacity of 6,000 scfm.

### 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) Paved and unpaved roads and parking lots with public access. [326 IAC 6-4 and 326 IAC 6-5]
- (b) One (1) 55 gallon parts washing machine with monthly throughput of 30 gallons, and annual throughput of 360 gallons. [326 IAC 8-3-2 and 326 IAC 8-3-5]

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]

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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)]

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- (a) This permit, T111-17664-00017, 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]

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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]

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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)]

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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)]

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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)]

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

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

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

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

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

Indiana Department of Environmental Management  
Compliance Branch, Office of Air Quality  
100 North Senate Avenue  
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]

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- (a) If required by specific condition(s) in Section D of this permit, the Permittee shall prepare and maintain Preventive Maintenance Plans (PMPs) within ninety (90) days after issuance of this permit, including the following information on each facility:-
- (1) Identification of the individual(s) responsible for inspecting, maintaining, and repairing emission control devices;
  - (2) A description of the items or conditions that will be inspected and the inspection schedule for said items or conditions; and
  - (3) Identification and quantification of the replacement parts that will be maintained in inventory for quick replacement.
- (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]

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- (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 in compliance with any applicable requirements as of the date of permit issuance, provided that either the applicable requirements are included and specifically identified in this permit or the permit contains an explicit determination or concise summary of a determination that other specifically identified requirements are not applicable. The

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

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

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

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

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- (a) All terms and conditions of permits established prior to T111-17664-00017 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)]**

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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)]**

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- (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]**

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

expeditiously as practicable. [326 IAC 2-7-9(b)]

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

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

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- (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]**

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- (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]

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

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

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

- (a) Enter upon the Permittee's premises where a Part 70 source is located, or emissions related activity is conducted, or where records must be kept under the conditions of this permit;
- (b) As authorized by the Clean Air Act, IC 13-14-2-2, IC 13-17-3-2, and IC 13-30-3-1, have access to and copy any records that must be kept under the conditions of this permit;
- (c) As authorized by the Clean Air Act, IC 13-14-2-2, IC 13-17-3-2, and IC 13-30-3-1, inspect any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit;

- (d) As authorized by the Clean Air Act, IC 13-14-2-2, IC 13-17-3-2, and IC 13-30-3-1, sample or monitor substances or parameters for the purpose of assuring compliance with this permit or applicable requirements; and
- (e) As authorized by the Clean Air Act, IC 13-14-2-2, IC 13-17-3-2, and IC 13-30-3-1, utilize any photographic, recording, testing, monitoring, or other equipment for the purpose of assuring compliance with this permit or applicable requirements.

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

- (a) The Permittee must comply with the requirements of 326 IAC 2-7-11 whenever the Permittee seeks to change the ownership or operational control of the source and no other change in the permit is necessary.
- (b) Any application requesting a change in the ownership or operational control of the source shall contain a written agreement containing a specific date for transfer of permit responsibility, coverage and liability between the current and new Permittee. The application shall be submitted to:  
  
Indiana Department of Environmental Management  
Permits Branch, Office of Air Quality  
100 North Senate Avenue  
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. 326 IAC 9-1-2 is not federally enforceable.

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

The Permittee shall not allow fugitive dust to escape beyond the property line or boundaries of the property, right-of-way, or easement on which the source is located, in a manner that would violate 326 IAC 6-4 (Fugitive Dust Emissions). 326 IAC 6-4-2(4) is not federally enforceable.

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

Pursuant to 326 IAC 6-5 (Fugitive Particulate Matter Emission Limitations), fugitive particulate matter emissions shall be controlled according to the plan submitted on June 6, 2003. The plan is included as Attachment A.

**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]

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- (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]**

---

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

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

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

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

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

---

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

- (a) The Permittee prepared and submitted written emergency reduction plans (ERPs) consistent with safe operating procedures on March 13, 2000.
- (b) Upon direct notification by IDEM, OAQ, that a specific air pollution episode level is in effect, the Permittee shall immediately put into effect the actions stipulated in the approved ERP for the appropriate episode level.  
[326 IAC 1-5-3]

**C.14 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.15 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(s) (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.16 Actions Related to Noncompliance Demonstrated by a Stack Test [326 IAC 2-7-5] [326 IAC 2-7-6]**

- (a) When the results of a stack test performed in conformance with Section C - Performance Testing, of this permit exceed the level specified in any condition of this permit, the Permittee shall 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.17 Emission Statement [326 IAC 2-6] [326 IAC 2-7-5(3)(C)(iii)][326 IAC 2-7-5(7)][326 IAC 2-7-19(c)]**

- (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.18 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.19 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 21 inclusive.

### **Stratospheric Ozone Protection**

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

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

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

## SECTION D.1

## FACILITY OPERATION CONDITIONS

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

- (a) One (1) municipal solid waste landfill, identified as emissions unit #1, constructed in 1995 and modified in 2006, with a maximum design capacity of 20,683,404 megagrams (Mg).
- (b) Four (4) passive open flares, identified as emissions unit #2, constructed prior to 1999, with a maximum capacity of 200 standard cubic feet per minute (scfm) each (800 scfm total).
- (c) One (1) enclosed combustor for landfill gas combustion, identified as emissions unit #3, constructed in 2006, with a maximum capacity of 6,000 scfm.

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

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

#### D.1.1 General Provisions Relating to NSPS and NESHAP [326 IAC 12-1-1] [40 CFR Part 60, Subpart A] [326 IAC 20-1-1] [40 CFR 63, Subpart A] [326 IAC 14-1-1][40 CFR Part 61, Subpart A]

- (a) The provisions of 40 CFR Part 60, Subpart A - General Provisions, which are incorporated by reference in 326 IAC 12-1-1, apply to the facility described in this section except when otherwise specified in 40 CFR Part 60, Subpart WWW.
- (b) The provisions of 40 CFR Part 63, Subpart A - General Provisions, which are incorporated by reference in 326 IAC 20-1-1, apply to the facility described in this section except when otherwise specified in 40 CFR Part 63, Subpart AAAA.
- (c) The provisions of 40 CFR Part 61, Subpart A - General Provisions, which are incorporated as 326 IAC 14-1-1, apply to the facility described in this section except when otherwise specified in 40 CFR Part 61, Subpart M.

#### D.1.2 Operational Standards for Collection and Control Systems [40 CFR 60.753] [326 IAC 12]

In order to comply with 40 CFR 60.752 (b)(2)(ii), the Permittee shall:

- (a) Operate the collection system such that gas is collected from each area, cell, or group of cells in the municipal solid waste landfill in which solid waste has been in place for five years if active or two (2) years or more if closed or at final grade.
- (b) Operate the collection system with negative pressure at each wellhead except under the following conditions:
  - (1) Fire or increased well temperature. The Permittee shall record instances when positive pressure occurs in efforts to avoid a fire. These records shall be submitted with the annual reports as provided in 40 CFR 60.757(f)(1).
  - (2) Use of a geomembrane or synthetic cover. The Permittee shall develop acceptable pressure limits in the design plan.
  - (3) A decommissioned well. A well may experience a static positive pressure after shut down to accommodate for declining flows. All design changes shall be approved by the Office of Air Quality (OAQ).
- (c) Operate each interior wellhead in the collection system with a landfill gas temperature less than 55°C and with either a nitrogen level less than 20 percent or an oxygen level less

than 5 percent. However, pursuant to Significant Permit Modification 111-14717-00017, issued June 27, 2002, and Administrative Amendment 111-19698-00017, issued on September 8, 2004, the Permittee has established a higher operating temperature at wells #6, #14, #15, #19, #21, and #22. This higher operating temperature value demonstration up to 62.8°C (145°F) shows supporting data that the elevated parameter does not cause fires or significantly inhibit anaerobic decomposition by killing methanogens. The Permittee may establish a higher operating temperature, nitrogen or oxygen value at other particular wells. A higher operating value demonstration shall show supporting data that the elevated parameter does not cause fires or significantly inhibit anaerobic decomposition by killing methanogens.

- (1) The nitrogen level shall be determined using Method 3C, unless an alternative method is established as allowed by 40 CFR 60.752 (b)(2)(i).
  - (2) Unless an alternative test method is established as allowed by 40 CFR 60.752 (b)(2)(i), the oxygen shall be determined by an oxygen meter using Method 3A except that; the span shall be set so that the regulatory limit is between 20 and 50 percent of the span; a data recorder is not required; only two calibration gases are required, a zero and span, and ambient air may be used as the span; a calibration error check is not required; the allowable sample bias, zero drift, and calibration drift are ±10 percent.
- (d) Operate the collection system so that the methane concentration is less than 500 parts per million above background at the surface of the landfill. To determine if this level is exceeded, the Permittee shall conduct surface testing around the perimeter of the collection area and along a pattern that traverses the landfill at 30 meter intervals and where visual observations indicate elevated concentrations of landfill gas, such as distressed vegetation and cracks or seeps in the cover. The Permittee may establish an alternative traversing pattern that ensures equivalent coverage. A surface monitoring design plan shall be developed that includes a topographical map with the monitoring route and the rationale for any site-specific deviations from the 30 meter intervals. Areas with steep slopes or other dangerous areas may be excluded from the surface testing.
- (e) Operate the system such that all collected gases are vented to a control system designed and operated in compliance with 40 CFR 60.752(b)(2)(iii). In the event the collection or control system is inoperable, the gas mover system shall be shut down and all valves in the collection and control system contributing to venting of the gas to the atmosphere shall be closed within one hour.
- (f) Operate the control system at all times when the collected gas is routed to the system.
- (g) If monitoring demonstrates that the operational requirements in 40 CFR 60.753(b), (c), or (d) are not met, corrective action shall be taken as specified in 40 CFR 60.755(a)(3) through (5) or 40 CFR 60.755(c). If corrective actions are taken as specified in 40 CFR 60.755, the monitored exceedance is not a violation of the operational requirements in 40 CFR 60.753.

#### D.1.3 Monitoring [40 CFR 60.756] [326 IAC 12]

Except as provided in 40 CFR 60.752(b)(2)(i)(B),

- (a) The Permittee seeking to comply with 40 CFR 60.752(b)(2)(ii)(A) for an active gas collection system shall install a sampling port and a thermometer, other temperature measuring device or an access port for temperature measurements at each wellhead and:
- (1) Measure the gauge pressure in the gas collection header on a monthly basis as provided in 40 CFR 60.755(a)(3);

- (2) Monitor nitrogen or oxygen concentration in the landfill gas on a monthly basis as provided in 40 CFR 60.755(a)(5); and
  - (3) Monitor temperature of the landfill gas on a monthly basis as provided in 40 CFR 60.755(a)(5).
- (b) The Permittee seeking to comply with 40 CFR 60.752(b)(2)(iii) using an enclosed combustor shall calibrate, maintain, and operate according to the manufacturer's specifications, the following equipment.
- (1) A temperature monitoring device equipped with a continuous recorder and having a minimum accuracy of  $\pm 1$  percent of the temperature being measured expressed in degrees Celsius or  $\pm 0.5$  degrees Celsius, whichever is greater. A temperature monitoring device is not required for boilers or process heaters with design heat input capacity equal to or greater than 44 megawatts.
  - (2) A device that records flow to or bypass of the control device. The owner or operator shall either:
    - (A) Install, calibrate, and maintain a gas flow rate measuring device that shall record the flow to the control device at least every 15 minutes; or
    - (B) Secure the bypass line valve in the closed position with a car-seal or a lock-and-key type configuration. A visual inspection of the seal or closure mechanism shall be performed at least once every month to ensure that the valve is maintained in the closed position and that the gas flow is not diverted through the bypass line.
- (c) The Permittee seeking to comply with 40 CFR 60.752(b)(2)(iii) using an open flare shall install, calibrate, maintain, and operate according to the manufacturer's specifications the following equipment:
- (1) A heat sensing device, such as an ultraviolet beam sensor or thermocouple, at the pilot light or the flame itself to indicate the continuous presence of a flame.
  - (2) A device that records flow to or bypass of the flare. The owner or operator shall either:
    - (A) Install, calibrate, and maintain a gas flow rate measuring device that shall record the flow to the control device at least every 15 minutes; or
    - (B) Secure the bypass line valve in the closed position with a car-seal or a lock-and-key type configuration. A visual inspection of the seal or closure mechanism shall be performed at least once every month to ensure that the valve is maintained in the closed position and that the gas flow is not diverted through the bypass line.
- (d) The Permittee seeking to demonstrate compliance with 40 CFR 60.755(c), shall monitor surface concentrations of methane according to the instrument specifications and procedures provided in 40 CFR 60.755(d). Any closed landfill that has no monitored exceedances of the operational standard in three consecutive quarterly monitoring periods may skip to annual monitoring. Any methane reading of 500 ppm or more above background detected during the annual monitoring returns the frequency for that landfill to quarterly monitoring.

D.1.4 Municipal Solid Waste Landfill NESHAP [326 IAC 20] [40 CFR 63, Subpart AAAAA]

Pursuant to 40 CFR 63.1955, the Permittee shall:

- (a) Comply with the requirements of 40 CFR 60, Subpart WWW.
- (b) Comply with the general and continuing compliance requirements in 40 CFR 63.1960 through 40 CFR 63.1985.
- (c) For approval of collection and control systems that include any alternatives to the operational standards, test methods, procedures, compliance measures, monitoring, recordkeeping or reporting provisions, the Permittee must follow the procedures in 40 CFR 60.752(b)(2). If alternatives have already been approved under 40 CFR Part 60 subpart WWW or the Federal plan, or EPA approved and effective State or tribal plan, these alternatives can be used to comply with 40 CFR 63, Subpart AAAAA, except that all affected sources must comply with the startup, shutdown, and malfunction (SSM) requirements in Subpart A of 40 CFR 63 as specified in Table 1 of 40 CFR 63, Subpart AAAAA and all affected sources must submit compliance reports every 6 months as specified in 40 CFR 63.1980(a) and (b), including information on all deviations that occurred during the 6-month reporting period. Deviations (as defined in 40 CFR 63.1965) for continuous emission monitors or numerical continuous parameter monitors must be determined using a 3 hour monitoring block average (as defined in 40 CFR 63.1975).

D.1.5 NESHAP for Active Asbestos Waste Disposal Sites [40 CFR 61.154, Subpart M] [326 IAC 14]

Pursuant to the National Emissions Standards for Hazardous Air Pollutants 326 IAC 14-2-1, (40 CFR 61.154, Subpart M), any active waste disposal site that receives asbestos-containing waste material must either:

- (a) Allow no visible emissions to the outside air from any active waste disposal site where asbestos-containing waste material has been deposited, or comply with (b) or (c) below.
- (b) At least once every 24-hour period, asbestos-containing waste material that has been deposited during the previous 24-hour period must:
  - (1) Be covered with at least 15 centimeters (6 inches) of compacted nonasbestos containing material, or
  - (2) Be covered with a resinous or petroleum-based dust suppression agent that effectively binds dust and controls wind erosion. Such an agent shall be used in the manner and frequency recommended for the particular dust by the dust suppression agent manufacturer to achieve and maintain dust control. Other equally effective dust suppression agents may be used upon prior approval by the Administrator. Any used, spent, or other waste oil is not considered a dust suppression agent.
- (c) Use an alternate emissions control method that has received prior written approval by the Administrator according to the procedures described in 40 CFR 61.149(c)(2).
- (d) Also, unless a natural barrier deters access by the general public, warning signs and fencing must be installed or the requirements of paragraph (b)(1) above must be met. The perimeter of the disposal site must be fenced in a manner adequate to deter access by the general public. The warning signs must:
  - (1) Be posted in such a manner and location that a person can easily read the legend; and

- (2) Conform to the requirements of 51cm x 36 cm upright format signs specified in 29 CFR 1910.145(d)(4) and this paragraph; and
- (3) Display the information contained in the legend provided in 40 CFR 61.154(b)(1)(iii).

**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 this facility and its control device.

**Compliance Determination Requirements**

**D.1.7 Compliance Provisions [40 CFR 60.755] [326 IAC 12]**

(a) Except as provided in 40 CFR 60.752(b)(2)(i)(B), the specified methods below shall be used to determine whether the gas collection system is in compliance with 40 CFR 60.752(b)(2)(ii).

- (1) For the purpose of calculating the maximum expected gas generation flow rate from the landfill to determine compliance with 60.752(b)(2)(ii)(A)(1), one of the following equations shall be used. The k and Lo kinetic factors should be those published in the most recent Compilation of Air Pollution Emission Factors (AP-42) or other site-specific values demonstrated to be appropriate and approved by the Office of Air Quality (OAQ). If k has been determined as specified in 40 CFR 60.754(a)(4), the value of k determined from the test shall be used. A value of no more than 15 years shall be used for the intended use period of the gas mover equipment. The active life of the landfill is the age of the landfill plus the estimated number of years until closure.

For sites with unknown year-to-year solid waste acceptance rate:

$$Q_m = 2Lo R (e^{-kc} - e^{-kt})$$

where,

Q<sub>m</sub> = maximum expected gas generation flow rate, cubic meters per year  
Lo = methane generation potential, cubic meters per megagram solid waste  
R = average annual acceptance rate, megagrams per year  
k = methane generation rate constant, year<sup>-1</sup>  
t = age of the landfill at equipment installation plus the time the owner or operator intends to use the gas mover equipment or active life of the landfill, whichever is less. If the equipment is installed after closure, t is the age of the landfill at installation, years.  
c = time since closure, years (for an active landfill c = 0 and e<sup>-kc</sup> = 1)

For sites with known year-to-year solid waste acceptance rate:

$$Q_m = \sum_{i=1}^n 2 k Lo Mi (e^{-kti})$$

where,

Q<sub>m</sub> = maximum expected gas generation flow rate, cubic meters per year  
k = methane generation rate constant, year<sup>-1</sup>  
Lo = methane generation potential, cubic meters per megagram solid waste  
Mi = mass of solid waste in the ith section, megagrams  
ti = age of the ith section, years

If a collection and control system has been installed, actual flow data may be used to project the maximum expected gas generation flow rate instead of, or in conjunction with, the equations in 40 CFR 60.755(a)(1)(i) and (ii). If the landfill is still accepting waste, the actual measured flow data will not equal the maximum expected gas generation rate, so calculations using the equations in 40 CFR 60.755(a)(1)(i) or (ii) or other methods shall be used to predict the maximum expected gas generation rate over the intended period of use of the gas control system equipment.

- (2) For the purposes of determining sufficient density of gas collector for compliance with 40 CFR 60.752 (b)(2)(ii)(A)(2), the Permittee shall design a system of vertical wells, horizontal collectors, or other collection devices, satisfactory to the Office of Air Quality (OAQ), capable of controlling and extracting gas from all portions of the landfill sufficient to meet all operational and performance standards.
  - (3) For the purpose of demonstrating whether the gas collection system flow rate is sufficient to determine compliance with 40 CFR 60.752(b)(2)(ii)(A)(3), the Permittee shall measure gauge pressure in the gas collection header at each individual well, monthly. If a positive pressure exists, action shall be initiated to correct the exceedance within five (5) calendar days, except for the three conditions allowed under 40 CFR 60.753(b). If negative pressure cannot be achieved without excess air infiltration within fifteen (15) calendar days of the first measurement, the gas collection system shall be expanded to correct the exceedance within 120 days of the initial measurement of positive pressure. Any attempted corrective measure shall not cause exceedances of other operational or performance standards. An alternative timeline for correcting the exceedance may be submitted to the Administrator for approval.
  - (4) The Permittee is not required to expand the system as required in 40 CFR 60.755(a)(3) during the first 180 days after gas collection system start-up.
  - (5) For the purpose of identifying whether excess air infiltration into the landfill is occurring, the Permittee shall monitor each well monthly for temperature and nitrogen or oxygen as provided in 40 CFR 60.753(c). If a well exceeds one of these operating parameters, action shall be initiated to correct the exceedance within five (5) calendar days. If correction of the exceedance cannot be achieved within fifteen (15) calendar days of the first measurement, the gas collection system shall be expanded to correct the exceedance within 120 days of the initial exceedance. Any attempted corrective measure shall not cause exceedances of other operational or performance standards. An alternative timeline for correcting the exceedance may be submitted to the Administrator for approval.
  - (6) If the Permittee seeks to demonstrate compliance with 40 CFR 60.752(b)(2)(ii)(A)(4) through the use of a collection system not conforming to the specifications provided in 40 CFR 60.759, then the Permittee shall provide information satisfactory to the Office of Air Quality (OAQ) as specified in 40 CFR 60.752 (b)(2)(i)(C) demonstrating that off-site migration is being controlled.
- (b) For purposes of compliance with 40 CFR 60.753(a), the Permittee shall place each well or design component of a controlled landfill as specified in the approved design plan as provided in 40 CFR 60.752(b)(2)(i). Each well shall be installed no later than 60 days after the date on which the initial solid waste has been in place for a period of five (5) years or more if active or two (2) years or more if closed or at final grade.

- (c) The following procedures shall be used for compliance with the surface methane operational standard as provided in 40 CFR 60.753 (d):
- (1) After installation of the collection system, the Permittee shall monitor surface concentrations of methane along the entire perimeter of the collection area and along a pattern that traverses the landfill at 30 meter intervals (or a site-specific established spacing) for each collection area on a quarterly basis using an organic vapor analyzer, flame ionization detector, or other portable monitor meeting the specifications provided in 40 CFR 60.755(d).
  - (2) The background concentration shall be determined by moving the probe inlet upwind and downwind outside the boundary of the landfill at a distance of at least 30 meters from perimeter wells.
  - (3) Surface emission monitoring shall be performed in accordance with section 4.3.1 of Method 21 of appendix A of 40 CFR60, except that the probe inlet shall be placed within five (5) to ten (10) centimeters of the ground. Monitoring shall be performed during typical meteorological conditions.
  - (4) Any reading of 500 parts per million or more above background at any location shall be recorded as a monitored exceedance and the actions specified in 40 CFR 60.755(c)(4)(i) through (v) should be taken. As long as the specified actions are taken, the exceedance is not a violation of the operational requirements of 40 CFR 60.753(d).

The location of each monitored exceedance shall be marked and the location recorded.

Cover maintenance or adjustments to the vacuum of the adjacent wells to increase the gas collection in the vicinity of each exceedance shall be made and the location shall be re-monitored with ten (10) calendar days of detecting the exceedance.

If the re-monitoring of the location shows a second exceedance, additional corrective action shall be taken and the location shall be monitored again within ten (10) days of the second exceedance. If re-monitoring shows a third exceedance for the same location, the action specified in paragraph 40 CFR 60.755(c)(4)(v) shall be taken, and no further monitoring of that location is required until the action specified in 40 CFR 60.755(c)(4)(v) has been taken.

Any location that initially showed an exceedance but has a methane concentration less than 500 ppm methane above background at the 10-day re-monitoring specified in 40 CFR 60.755(c)(4)(ii) or (iii) shall be re-monitored one (1) month from the initial exceedance. If the one (1)-month re-monitoring shows a concentration less than 500 parts per million above background, no further monitoring of that location is required until the next quarterly monitoring period. If the one (1)-month re-monitoring shows an exceedance, the actions specified in 40 CFR 60.755(c)(4)(iii) or (v) shall be taken.

For any location where monitored methane concentration equals or exceeds 500 parts per million above background three times within a quarterly period, a new well or other collection device shall be installed within 120 calendar of the initial exceedance. An alternative remedy to the exceedance, such as upgrading the blower, header pipes or control device, and a corresponding timeline for installation may be submitted to the Office of Air Quality (OAQ) for approval.

- (5) The Permittee shall implement a program to monitor for cover integrity and implement cover repairs as necessary on a monthly basis.
- (d) The Permittee seeking to comply with the provisions of 40 CFR 60.755(c) shall comply with the following instrumentation specifications and procedures for surface emission monitoring devices:
  - (1) The portable analyzer shall meet the instrument specifications provided in section 3 of Method 21 of appendix A of 40 CFR 60, except that "methane" shall replace all references to volatile organic compound (VOC).
  - (2) The calibration gas shall be methane, diluted to a nominal concentration of 500 parts per million in air.
  - (3) To meet the performance evaluation requirements in section 3.1.3 of Method 21 of appendix A of 40 CFR 60, the instrument evaluation procedures of section 4.4 of Method 21 of appendix A of 40 CFR 60 shall be used.
  - (4) The calibration procedures provided in section 4.2 of Method 21 of appendix A of 40 CFR 60 shall be followed immediately before commencing a surface monitoring survey.
- (e) The provisions of 40 CFR 60.755 shall apply at all times, except during periods of start-up, shutdown, or malfunction, provided that the duration of start-up, shutdown, or malfunction, shall not exceed five (5) days for collection systems and shall not exceed one (1) hour for treatment or control devices.

D.1.8 Calculation of Non-Methane Organic Compound (NMOC) Rate [40 CFR 60.754] [326 IAC 12]

Pursuant to 40 CFR 60.754, the Permittee shall, when calculating emissions for PSD purposes, estimate the NMOC emission rate for comparison to the PSD major source and significance levels in 40 CFR 51.166 or 40 CFR 52.21 using AP-42 or other approved measurement procedures. If a collection system, which complies with the provisions of 40 CFR 60.752(b)(2) is already installed, the Permittee shall estimate the NMOC emission rate using the procedures provided in 40 CFR 60.754(b).

D.1.9 Testing Requirements [326 IAC 2-7-6(1),(6)] [40 CFR 60.754(b)] [326 IAC 12]

- (a) After installation of a collection and control system in compliance with 40 CFR 60.755, the Permittee shall calculate the non methane organic compound (NMOC) emission rate for purposes of determining when the system can be removed using the following equation:

$$M_{\text{NMOC}} = 1.89 \times 10^{-3} Q_{\text{LFG}} C_{\text{NMOC}}$$

Where:

$M_{\text{NMOC}}$  = mass emission rate of NMOC, megagrams per year

$Q_{\text{LFG}}$  = flow rate of landfill gas, cubic meters per minute

$C_{\text{NMOC}}$  = NMOC concentration, parts per million by volume as hexane

- (1) The flow rate of landfill gas,  $Q_{\text{LFG}}$ , shall be determined by measuring the total landfill gas flow rate at the common header pipe that leads to the control device using a gas flow measuring device calibrated according to the provisions of section 4 of Method 2E of appendix A of 40 CFR 60.
- (2) The average NMOC concentration,  $C_{\text{NMOC}}$ , shall be determined by collecting and analyzing landfill gas sampled from the common header pipe before the gas moving or condensate removal equipment using the procedures in Method 25C or

Method 18 of appendix A of 40 CFR 60. If using Method 18 of Appendix A of 40 CFR 60, the minimum list of compounds to be tested shall be those published in the most recent Compilation of Air Pollutant Emission Factors (AP-42). The sample location on the common header pipe shall be before any condensate removal or other gas refining units. The Permittee shall divide the NMOC concentration from Method 25C of Appendix A of 40 CFR 60 by six to convert from  $C_{\text{NMOC}}$  as carbon to  $C_{\text{NMOC}}$  as hexane.

- (3) The Permittee may use another method to determine landfill gas flow rate and NMOC concentration if the method has been approved by the Office of Air Quality (OAQ).
- (b) Pursuant to 40CFR 60.754(d):

For the performance testing required in 40CFR 60.752(b)(2)(iii)(B), Method 25 or Method 18 of appendix A of 40CFR 60 shall be used to determine compliance with 98 weight percent efficiency or the 20 ppmv outlet concentration level, unless another method to demonstrate compliance has been approved by the Office of Air Quality (OAQ) as provided by 40CFR 60.752(b)(2)(i)(B). If using Method 18 of appendix A, the minimum list of compounds to be tested shall be those published in the most recent Compilation of Air Pollutant Emission Factors (AP-42). The following equation shall be used to calculate efficiency:

$$\text{Control Efficiency} = (\text{NMOC}_{\text{in}} - \text{NMOC}_{\text{out}}) / (\text{NMOC}_{\text{in}})$$

where:

$\text{NMOC}_{\text{in}}$  = mass of NMOC entering the control device

$\text{NMOC}_{\text{out}}$  = mass of NMOC exiting control device

#### D.1.10 Compliance Determination [40 CFR 63.1960] [326 IAC 20]

Pursuant to 40 CFR 63.1960, compliance with 40 CFR 63, Subpart AAAA is determined by the following:

- (a) The same way it is determined for 40 CFR 60, Subpart WWW, including performance testing, monitoring of the collection system, continuous parameter monitoring, and other credible evidence.
- (b) Continuous parameter monitoring data, collected under 40 CFR 60.756(b)(1), (c)(1), and (d) of subpart WWW, are used to demonstrate compliance with the operating conditions for control systems. If a deviation (as defined in 40 CFR 63.1965) occurs, the Permittee has failed to meet the control device operating conditions described in 40 CFR 60, Subpart WWW and has deviated from the requirements of 40 CFR 63, Subpart AAAA.
- (c) The Permittee must develop and implement a written Startup, Shutdown and Malfunction (SSM) plan according to the provisions in 40 CFR 63.6(e)(3). A copy of the SSM plan must be maintained on site. Failure to write, implement, or maintain a copy of the SSM plan is a deviation from the requirements of 40 CFR 63, Subpart AAAA.

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

#### D.1.11 Record Keeping Requirements [326 IAC 12] [40 CFR 60.758]

Pursuant to 40 CFR 60.758, the Permittee shall:

- (a) Except as provided in 40 CFR 60.752(b)(2)(i)(B) the Permittee subject to 40 CFR 60.752(b) shall keep for at least five years up-to-date, readily accessible, continuous on-

site records of the design capacity report which triggered 40 CFR 60.752(b), the current amount of solid waste in-place, and the year-by-year waste acceptance rate. Off-site records may be maintained if they are retrievable within four (4) hours. Either paper copy or electronic formats are acceptable.

- (b) Except as provided in 40 CFR 60.752(b)(2)(i)(B) the Permittee of a controlled landfill shall keep up-to-date, readily accessible records for the life of the control equipment listed in paragraphs (1) through (3) below as measured during the initial performance test or compliance determination. Records of subsequent tests or monitoring shall be maintained for a minimum of five (5) years. Records of control device vendor specifications shall be maintained until removal.
- (1) Where a Permittee subject to the provisions of 40 CFR 60.758 seeks to demonstrate compliance with 40 CFR 60.752(b)(2)(ii):
- (A) The maximum expected gas generation flow rate as calculated in 40 CFR 60.755(a)(1). The Permittee may use another method to determine the maximum gas generation flow rate, if the method has been approved by the Office of Air Quality (OAQ).
- (B) The density of wells, horizontal collectors, surface collectors, or other gas extraction devices determined using the procedures specified in 40 CFR 60.759(a)(1).
- (2) Where a Permittee subject to the provisions of this subpart seeks to demonstrate compliance with 40 CFR 60.752(b)(2)(iii) through use of an enclosed combustion device other than a boiler or process heater with a design heat input capacity equal to or greater than 44 megawatts:
- (A) The average combustion temperature measured at least every 15 minutes and averaged over the same time period of the performance test.
- (B) The percent reduction of NMOC determined as specified in 40 CFR 60.752(b)(2)(iii)(B) achieved by the control device.
- (3) Where a Permittee subject to the provisions of 40 CFR 60, Subpart WWW seeks to demonstrate compliance with 40 CFR 60.752(b)(2)(iii)(A) through use of an open flare:
- (A) The flare type (i.e., steam-assisted, air-assisted, or nonassisted), all visible emission readings, heat content determination, flow rate or bypass flow rate measurements, and exit velocity determinations made during the performance test as specified in 40 CFR 60.18;
- (B) Continuous records of the flare pilot flame or flare flame monitoring and records of all periods of operations during which the pilot flame of the flare flame is absent.
- (c) Except as provided in 40 CFR 60.752(b)(2)(i)(B), the Permittee of a controlled landfill subject to the provisions of this subpart shall keep for five years up-to-date, readily accessible, continuous on-site records of the equipment operating parameters specified to be monitored in 40 CFR 60.756 as well as up-to-date, readily accessible records for periods of operation during which the parameter boundaries established during the most recent performance test are exceeded.

- (1) The following constitute exceedances that shall be recorded and reported under 40 CFR 60.757(f):

For enclosed combustors except for boilers and process heaters with design heat input capacity of 44 megawatts (150 million British thermal unit per hour) or greater, all 3-hour periods of operation during which the average combustion temperature was more than 28 °C below the average combustion temperature during the most recent performance test at which compliance with 40 CFR 60.752(b)(2)(iii) was determined.
- (2) The Permittee subject to 40 CFR 60.758 shall keep up-to-date, readily accessible continuous records of the indication of flow to the control device or the indication of bypass flow or records of monthly inspections of car-seals or lock-and-key configurations used to seal bypass lines, specified under 40 CFR 60.756.
- (3) Each Permittee seeking to comply with the provisions of 40 CFR 60, Subpart WWW by use of an open flare shall keep up-to-date, readily accessible continuous records of the flame or flare pilot flame monitoring specified under 40 CFR 60.756(c), and up-to-date, readily accessible records of all periods of operation in which the flame or flare pilot flame is absent.
- (d) Except as provided in 40 CFR 60.752(b)(2)(i)(B), the Permittee subject to the provisions of this subpart shall keep for the life of the collection system an up-to-date, readily accessible plot map showing each existing and planned collector in the system and providing a unique identification location label for each collector.
  - (1) The Permittee subject to the provisions of 40 CFR 60.758 shall keep up-to-date, readily accessible records of the installation date and location of all newly installed collectors as specified in 40 CFR 60.755 (b).
  - (2) The Permittee subject to the provisions of 40 CFR 60.758 shall keep readily accessible documentation of the nature, date of deposition, amount, and location of asbestos-containing or nondegradable waste excluded from collection as provided in 40 CFR 60.759 (a)(3)(i) as well as any non-productive areas excluded from collection as provided in 40 CFR 60.759 (a)(3)(ii).
- (e) Except as provided in 40 CFR 60.752(b)(2)(i)(B), the Permittee subject to the provisions of this subpart shall keep for at least five years up-to-date, readily accessible records of all collection and control system exceedances of the operational standards in 40 CFR 60.753, the reading in the subsequent month whether or not the second reading is an exceedance, and the location of each exceedance.
- (f) If the Permittee converts design capacity from volume to mass or mass to volume to demonstrate that landfill design capacity is less than 2.5 million megagrams or 2.5 million cubic meters, as provided in the definition of "design capacity", then the Permittee shall keep readily accessible, on-site records of the annual recalculation of site-specific density, design capacity, and the supporting documentation. Off-site records may be maintained if they are retrievable within 4 hours. Either paper copy or electronic formats are acceptable.

#### D.1.12 Reporting Requirements [40 CFR 60.757]

Pursuant to 40 CFR 60.757, except as provided in 40 CFR 60.752(b)(2)(i)(B), the Permittee shall:

- (a) Submit a closure report to the Office of Air Quality (OAQ) within thirty days of waste acceptance cessation. The Office of Air Quality (OAQ) may request additional information as may be necessary to verify that permanent closure has taken place in accordance with the requirements of 40 CFR 258.60. If a closure report has been submitted to the Office

of Air Quality (OAQ), no additional wastes may be placed into the landfill without filing a notification of modification as described under 40 CFR 60.7(a)(4).

- (b) Submit an equipment removal report to the Office of Air Quality (OAQ) thirty (30) days prior to removal or cessation of operation of the control equipment. The equipment removal report shall contain all of the following items: a copy of the closure report submitted in accordance with 40 CFR 60.757(d), a copy of the initial performance test report demonstrating that the fifteen (15) year minimum control period has expired, and dated copies of three (3) successive NMOC emission rate reports demonstrating that the landfill is no longer producing 50 megagrams or greater of NMOC per year. The Office of Air Quality (OAQ) may request such additional information as may be necessary to verify that all of the conditions for removal in 40 CFR 60.752(b)(2)(v) have been met.
- (c) Annual reports of the following recorded information. For enclosed combustion devices and flares, reportable exceedances are defined under 40 CFR 60.758(c).
  - (1) Value and length of time for exceedance of applicable parameters monitored under 40 CFR 60.756(a), (b), (c), and (d).
  - (2) Description and duration of all periods when the gas stream is diverted from the control device through a bypass line or the indication of bypass flow as specified under 40 CFR 60.756.
  - (3) Description and duration of all periods when the control device was not operating for a period exceeding one (1) hour and length of time the control device was not operating.
  - (4) All periods when the collection system was not operating in excess of five (5) days.
  - (5) Location of each exceedance of the 500 parts per million methane concentration as provided in 40 CFR 60.753(d) and the concentration recorded at each location for which an exceedance was recorded in the previous month.
  - (6) Date of installation and the location of each well or collection system expansion added pursuant to 40 CFR 60.755(a)(3), (b), and (c)(4).
- (d) The Permittee seeking to comply with 40 CFR 40.752(b)(2)(iii) shall include the following information with the initial performance test report required under 40 CFR 60.8:
  - (1) A diagram of the collection system showing collection system positioning including all wells, horizontal collectors, surface collectors, or other gas extraction devices, including the locations of any areas excluded from collection and the proposed sites for the future collection system expansion.
  - (2) The data upon which the sufficient density of wells, horizontal collectors, surface collectors, or other gas extraction devices and the gas mover equipment sizing are based.
  - (3) The documentation of the presence of asbestos or nondegradable material for each area from which collection wells have been excluded based on the presence of asbestos or nondegradable material.
  - (4) The sum of the gas generation flow rates for all areas from which collection wells have been excluded based on nonproductivity and the calculations of gas generation flow rate for each excluded area.

- (5) The provisions for increasing gas mover equipment capacity with increased gas generation flow rate, if the present gas mover equipment is inadequate to move the maximum flow rate expected over the life of the landfill
- (6) The provisions for the control of off-site migration.
- (e) A summary of the above information shall be submitted to the address listed in Section C - General Reporting Requirements, of this permit.
- (f) The reporting period for the annual report required in Condition D.1.12(c) shall be from January 1 to December 31. Reports must be submitted every twelve (12) months to IDEM, OAQ. The reports shall be due within 30 days of the end of the reporting period.

D.1.13 Record Keeping and Reporting Requirements for NESHAP for Municipal Solid Waste Landfills [40 CFR 63.1980] [326 IAC 20]

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Pursuant to 40 CFR 63.1980, the Permittee shall:

- (a) Keep records and reports as specified in 40 CFR 60, Subpart WWW, or in the Federal plan, EPA approved State plan that implements 40 CFR 60, Subpart Cc, whichever applies to this landfill, with one exception: The Permittee must submit the annual report described in 40 CFR 60.757(f) and Condition D.1.12(c) every 6 months.
- (b) Keep records and reports as specified in the general provisions of 40 CFR 60 and 40 CFR 63 as shown in Table 1 of 40 CFR 63, Subpart AAAA. Applicable records in the general provisions include items such as SSM plans and the SSM plan reports. The SSM Plan report is due semi-annually.
- (c) The reporting period for the semi-annual reports required in Conditions D.1.13(a) and (b) shall be from January 1 to June 30 and from July 1 to December 31. Reports must be submitted every six (6) months and the reports shall be due within 30 days of the end of the reporting period.

D.1.14 Record keeping and Reporting Requirements for NESHAP for Active Asbestos Waste Disposal Sites [40 CFR 61.154] [326 IAC 14]

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Pursuant to 40 CFR 61, Subpart M, the Permittee shall:

- (a) For all asbestos containing waste material received, the Permittee of the active waste disposal site shall:
  - (1) Maintain waste shipment records and include the following information:
    - (A) The name, address, and telephone number of the waste generator;
    - (B) The name, address, and telephone number of the transporter(s);
    - (C) The quantity of the asbestos containing waste material in cubic meters (cubic yards).
    - (D) The presence of improperly enclosed or uncovered waste, or any asbestos-containing waste material not sealed in leak-tight containers. Report in writing to the local, State, or EPA Regional office responsible for administering the asbestos NESHAP program for the waste generator (identified in the waste shipment record), and if different, the local, State, or EPA Regional office responsible for administering the asbestos NESHAP program for the disposal site, by the following working day, the

presence of a significant amount of improperly enclosed or uncovered waste. Submit a copy of the waste shipment record along with the report.

- (E) The date of the receipt.
- (2) As soon as possible and no longer than 30 days after receipt of the waste, send a copy of the signed waste shipment record to the waste generator.
- (3) Upon discovering a discrepancy between the quantity of waste designated on the waste shipment records and the quantity actually received, attempt to reconcile the discrepancy with the waste generator. If the discrepancy is not resolved within 15 days after receiving the waste, immediately report in writing to the local, State, or EPA Regional office responsible for administering the asbestos NESHAP program for the waste generator (identified in the waste shipment record), and if different, the local, State, or EPA Regional office responsible for administering the asbestos NESHAP program for the disposal site. Describe the discrepancy and attempts to reconcile it, and submit a copy of the waste shipment record along with the report.
- (4) Retain a copy of all records and reports required by this paragraph for at least 2 years.
- (b) Maintain until closure, records of the location, depth and area, and quantity in cubic meters (cubic yards) of asbestos-containing waste material within the disposal site on a map or diagram of the disposal area.
- (c) Upon closure, comply with all the provisions of 40 CFR 61.151.
- (d) Submit to the Administrator, upon closure of the facility, a copy of records of asbestos waste disposal locations and quantities.
- (e) Furnish upon request, and make available during normal business hours for inspection by the Administrator, all records required under this section.
- (f) Notify the Administrator in writing at least 45 days prior to excavating or otherwise disturbing any asbestos-containing waste material that has been deposited at a waste disposal site and is covered. If the excavation will begin on a date other than the one contained in the original notice, notice of the new start date must be provided to the Administrator at least 10 working days before excavation begins and in no event shall excavation begin earlier than the date specified in the original notification. Include the following information in the notice:
  - (1) Scheduled starting and completion dates.
  - (2) Reason for disturbing the waste.
  - (3) Procedures to be used to control emissions during the excavation, storage, transport, and ultimate disposal of the excavated asbestos-containing waste material. If deemed necessary, the Administrator may require changes in the emission control procedures to be used.
  - (4) Location of any temporary storage site and the final disposal site.

## SECTION D.2

## FACILITY OPERATION CONDITIONS

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

- (b) One (1) 55 gallon parts washing machine with monthly throughput of 30 gallons, and annual throughput of 360 gallons. [326 IAC 8-3-2 & 326 8-3-5].

(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 Compound (VOC)

##### 326 IAC 8-3-2 (Cold Cleaner Operations)

Pursuant to 326 IAC 8-3-2 (Cold Cleaner Operations), the owner or operator of a cold cleaning facility 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 operation 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 Compound (VOC)

##### 326 IAC 8-3-5 Cold Cleaner Degreaser Operation and Control

- (a) Pursuant to 326 IAC 8-3-5(a) (Cold Cleaner Degreaser Operation and Control), the owner or operator of a cold cleaner degreaser facility shall ensure that the following control equipment requirements are met:
  - (1) Equip the degreaser with a cover. The cover must be designed so that it can be easily operated with one (1) hand if:
    - (A) The solvent volatility is greater than two (2) kiloPascals (fifteen (15) millimeters of mercury or three-tenths (0.3) pounds per square inch measured at thirty-eight degrees Celsius (38°C) (one hundred degrees Fahrenheit (100°F)));
    - (B) The solvent is agitated; or
    - (C) The solvent is heated.
  - (2) Equip the degreaser with a facility for draining cleaned articles. If the solvent volatility is greater than four and three-tenths (4.3) kiloPascals (thirty-two (32) millimeters of mercury) or six-tenths (0.6) pounds per square inch measured at thirty-eight degrees Celsius (38°C) (one hundred degrees Fahrenheit (100°F)), then the drainage facility must be internal such that articles are enclosed under

the cover while draining. The drainage facility may be external for applications where an internal type cannot fit into the cleaning system.

- (3) Provide a permanent, conspicuous label which lists the operating requirements outlined in subsection (b).
  - (4) The solvent spray, if used, must be a solid, fluid stream and shall be applied at a pressure which does not cause excessive splashing.
  - (5) Equip the degreaser with one (1) of the following control devices if the solvent volatility is greater than four and three-tenths (4.3) kiloPascals (thirty-two (32) millimeters of mercury) or six-tenths (0.6) pounds per square inch) measured at thirty-eight degrees Celsius (38°C) (one hundred degrees Fahrenheit (100°F)), or if the solvent is heated to a temperature greater than forty-eight and nine-tenths degrees Celsius (48.9°C) (one hundred twenty degrees Fahrenheit (120°F)):
    - (A) A freeboard that attains a freeboard ratio of seventy-five hundredths (0.75) or greater.
    - (B) A water cover when solvent is used is insoluble in, and heavier than, water.
    - (C) Other systems of demonstrated equivalent control such as a refrigerated chiller or carbon adsorption. Such systems shall be submitted to the U.S. EPA as a SIP revision.
- (b) Pursuant to 326 IAC 8-3-5(b) (Cold Cleaner Degreaser Operation and Control), the owner or operator of a cold cleaning facility shall ensure that the following operating requirements are met:
- (1) Close the cover whenever articles are not being handled in the degreaser.
  - (2) Drain cleaned articles for at least fifteen (15) seconds or until dripping ceases.
  - (3) Store waste solvent only in covered containers and prohibit the disposal or transfer of waste solvent in any manner in which greater than twenty percent (20%) of the waste solvent by weight could evaporate.

## INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT OFFICE OF AIR QUALITY

### PART 70 OPERATING PERMIT CERTIFICATION

Source Name: Newton County Landfill  
Source Address: 2266 East 500 South Road, Brook, Indiana 47922  
Mailing Address: 865 Wheeler Street, Crown Point, Indiana 46307  
Part 70 Permit No.: T111-17664-00017

**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: Newton County Landfill  
Source Address: 2266 East 500 South Road, Brook, Indiana 47922  
Mailing Address: 865 Wheeler Street, Crown Point, Indiana 46307  
Part 70 Permit No.: T111-17664-00017

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

Source Name: Newton County Landfill  
Source Address: 2266 East 500 South Road, Brook, Indiana 47922  
Mailing Address: 865 Wheeler Street, Crown Point, Indiana 46307  
Part 70 Permit No.: T111-17664-00017

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

Page 1 of 2

<p>This report shall be submitted quarterly based on a calendar year. Any deviation from the requirements, the date(s) of each deviation, the probable cause of the deviation, and the response steps taken must be reported. 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.

Attachment A:

Fugitive Dust Control Plan

The Permittee shall control fugitive dust emissions according to the following plan:

- (a) Paving and periodic cleansing of primary access roads.
- (b) Periodic watering and, as necessary, application of dust palliatives to non-paved access roads.
- (c) Periodic watering of soil movement haul roads by the operator or construction contractor.
- (d) Requiring users to moisten or positively control potential dust emissions from a particular source of solid waste.

## Indiana Department of Environmental Management Office of Air Quality

### Addendum to the Technical Support Document (TSD) for a Significant Source Modification and Significant Permit Modification to a Part 70 Operating Permit.

Source Description and Location	
Source Name: Source Location:  County: SIC Code: Operation Permit Renewal No.: Renewal Operation Permit Issuance Date: Significant Source Modification No.: Significant Permit Modification No.: Permit Reviewer:	Newton County Landfill 2266 East 500 South Road Brook, Indiana 47922 Newton 4953 T111-17664-00017 January 27, 2006 111-22731-00017 111-22779-00017 Donald F. Robin, P.E. 317.233.5691 drobin@idem.IN.gov

On June 28, 2006, the Office of Air Quality (OAQ) had a notice published in the Newton County Enterprise, Kentland, Indiana stating that Newton County Landfill had applied for a significant source modification and significant permit modification to their existing Part 70 Operating Permit Renewal, T111-17664-00017. This notice was for an application related to the replacement of the existing 3,000 scfm flare with a 6,000 scfm flare and to increase the design capacity of the landfill by 16,039,770 cubic yards (or 9,458,269 megagrams) to 58,702,113 cubic yards. The notice also stated that OAQ proposed to issue a permit for this operation and provided information on how the public could review the proposed permit and other documentation. Finally, the notice informed interested parties that there was a period of thirty (30) days to provide comments on whether this permit should be issued as proposed.

Upon further review, IDEM has made the following revisions to this significant permit modification (deleted language appears as ~~striketroughs~~ and new language appears in **bold**):

#### Revision 1:

To better reflect the requirements of 326 IAC 2-6, the following revision has been made to the Emission Statement condition of the permit. The revised language quotes the rule instead of determining the emission statement schedule for the Permittee.

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

- (a) In accordance with the compliance schedule specified in 326 IAC 2-6-3(b)(1), starting in ~~2007~~ **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.

## Indiana Department of Environmental Management Office of Air Quality

### Technical Support Document (TSD) for a Part 70 Significant Source Modification and Significant Permit Modification.

#### Source Description and Location

Source Name:	Newton County Landfill
Source Location:	2266 East 500 South Road, Brook, Indiana 47922
County:	Newton
SIC Code:	4953
Operation Permit Renewal No.:	T111-17664-00017
Renewal Operation Permit Issuance Date:	January 27, 2006
Significant Source Modification No.:	111-22731-00017
Significant Permit Modification No.:	111-22779-00017
Permit Reviewer:	Donald F. Robin, P.E.

#### Existing Approvals

The source was issued Part 70 Operating Permit Renewal No. 111-17664-00017 on January 27, 2006. The source has received no additional approvals since the Part 70 Operating Permit Renewal.

#### County Attainment Status

The source is located in Newton County.

Pollutant	Status
PM10	Attainment
PM2.5	Attainment
SO <sub>2</sub>	Attainment
NO <sub>2</sub>	Attainment
1-hour Ozone	Attainment
8-hour Ozone	Attainment
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. Newton 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.
- (b) Newton County has been classified as 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.
- (c) Newton County has been classified as attainment or unclassifiable for all other pollutants. Therefore, these emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2.

- (d) Fugitive Emissions  
 Since this type of operation is not one of the twenty-eight (28) listed source categories under 326 IAC 2-2 or 326 IAC 2-3, fugitive emissions are not counted toward the determination of PSD and Emission Offset applicability.

**Source Status**

The table below summarizes the potential to emit of the entire source, prior to the proposed modification, after consideration of all enforceable limits established in the effective permits:

Process/emission unit	Potential to Emit (tons/year)						
	PM	PM-10	SO <sub>2</sub>	VOC	CO	NO <sub>x</sub>	HAPs
Landfill (#1) (fugitive)	-- <sup>a</sup>	-- <sup>a</sup>	0	53.3	2.99	0	8.18
Four (4) Passive Flares (#2)	1.64	1.64	1.76	0.78	72.5	3.87	3.98
Enclosed Combustor (#3)	6.17	6.17	6.59	2.92	145	36.3	
Paved and Unpaved Roads (fugitive)	56.1	14.3	0	0	0	0	0
<b>Total PTE</b>	<b>63.9</b>	<b>22.1</b>	<b>8.35</b>	<b>57.0</b>	<b>220</b>	<b>40.1</b>	<b>12.2</b>

<sup>a</sup> Negligible emissions

Source: TSD for Part 70 Operating Permit Renewal 111-17664-00017 issued January 27, 2006.

Note that the PTE for CO from Enclosed Combustor (#3) is 145 tons/year. This figure was based upon a guaranteed CO emission factor from the flare manufacturer of 0.2lb/MMBtu, landfill gas Btu content of 455 Btu/ft<sup>3</sup> (500 Btu/ft<sup>3</sup> for dry landfill gas) and the capacity of the existing flare (3,000 scfm).

- (a) The potential to emit (as defined in 326 IAC 2-7-1(29)) carbon monoxide is equal to or greater than 100 tons per year. Therefore, the source is subject to the provisions of 326 IAC 2-7.
- (b) Since this source is a municipal solid waste landfill that commenced construction after May 30, 1991, it is subject to 40 CFR 60, Subpart WWW Standards of Performance for Municipal Solid Waste Landfills. Pursuant to the New Source Performance Standard for Municipal Solid Waste Landfills, 40 CFR 60, Subpart WWW, the source is subject to the provisions of 326 IAC 2-7.
- (c) Fugitive Emissions  
 Since this type of operation is not one of the twenty-eight (28) listed source categories under 326 IAC 2-2 and since there are no applicable New Source Performance Standards that were in effect on August 7, 1980, the fugitive particulate matter (PM) and volatile organic compound (VOC) emissions are not counted toward determination of PSD applicability.
- (d) This existing source is not a major stationary source, under PSD (326 IAC 2-2), because no regulated pollutant is emitted at a rate of 250 tons per year or more, and it is not one of the twenty-eight (28) listed source categories, as specified in 326 IAC 2-2-1(gg)(1).
- (e) This existing source is not a major source of HAPs, as defined in 40 CFR 63.41, because HAPs emissions are less than ten (10) tons per year for any single HAP and less than twenty-five (25) tons per year of a combination of HAPs. Therefore, this source is an area source under Section 112 of the Clean Air Act (CAA).
- (f) These emissions are based upon the TSD for Part 70 Operating Permit Renewal 111-17664-00017 issued January 27, 2006.

The table below summarizes the potential to emit HAPs for the entire source, prior to the proposed modification, after consideration of all enforceable limits established in the effective permits:

HAPs	Potential To Emit (tons/year)
1,1,1-Trichloroethane (methyl chloroform)	0.052
1,1,2,2-Tetrachloroethane	0.152
1,1-Dichloroethane (ethylidene dichloride)	0.190
1,2-Dichloroethane (ethylene dichloride)	0.016
1,1-Dichloroethene (vinylidene chloride)	0.033
1,2-Dichloropropane (propylene dichloride)	0.017
Acrylonitrile	0.274
Carbon disulfide	0.036
Carbon tetrachloride	0.001
Carbonyl sulfide	0.024
Chlorobenzene	0.023
Chloroethane (ethyl chloride)	0.066
Chloroform	0.003
Dichloromethane (methylene chloride)	0.991
Ethylbenzene	0.399
Hexane	0.462
Methyl Ethyl Ketone	0.417
Methyl isobutyl ketone	0.153
Perchloroethylene (tetrachloroethene)	0.505
Trichloroethylene (trichloroethene)	0.302
Vinyl chloride	0.374
Benzene	0.122
Methyl chloride (Chloromethane)	0.05
Toluene	2.955
Xylene (isomers and mixture)	1.048
Mercury Compounds	0.000
**Hydrogen Chloride	3.493
<b>TOTAL</b>	<b>12.16</b>

Source: TSD for Part 70 Operating Permit Renewal 111-17664-00017 issued January 27, 2006.

This existing source is not a major source of HAPs, as defined in 40 CFR 63.41, because HAPs emissions are less than ten (10) tons per year for any single HAP and less than twenty-five (25) tons per year of a combination of HAPs. Therefore, this source is an area source under Section 112 of the Clean Air Act (CAA).

**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	---
PM10	21
SO <sub>2</sub>	2
VOC	11
CO	15
NO <sub>x</sub>	7
HAP	---

“---“ No emission data reported.

**Description of Proposed Modification**

The Office of Air Quality (OAQ) has reviewed a modification application, submitted by Newton County Landfill on March 2, 2006, relating to the replacement of the existing 3,000 scfm flare with a 6,000 scfm flare. In addition, on March 23, 2006, Newton County Landfill submitted an application to increase the design capacity of the landfill by 16,039,770 cubic yards (or 9,458,269 megagrams) to 58,702,113 cubic yards, an increase of 37.6%. The following is a list of the modified emission units and pollution control devices:

- (a) One (1) municipal solid waste landfill, identified as emissions unit #1, constructed in 1995 and modified in 2006, with a maximum design capacity of 20,683,404 megagrams (Mg).
- (b) One (1) enclosed combustor for landfill gas combustion, identified as emissions unit #3, constructed in 2006, with a maximum capacity of 6,000 scfm.

**Enforcement Issues**

There are no pending enforcement actions related to this modification.

**Stack Summary**

Stack ID	Operation	Height (feet)	Diameter (feet)	Flow Rate (acfm)	Temperature (°F)
#3	Landfill active vents	60	13	6,000	1,400

**Emission Calculations**

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

**Permit Level Determination – Part 70**

Pursuant to 326 IAC 2-1.1-1(16), Potential to Emit is defined as “the maximum capacity of a stationary source or emission unit 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, IDEM, or the appropriate local air pollution control agency.”

The following tables are used to determine the appropriate permit level under 326 IAC 2-7-10.5. This table reflects the PTE before controls. Control equipment is not considered federally enforceable until it has been required in a federally enforceable permit.

Process/emission unit	Potential to Emit (tons/year)					
	PM	PM-10	SO <sub>2</sub>	VOC	CO	NO <sub>x</sub>
Proposed 6,000 scfm enclosed combustor (#3)	13.3	13.3	13.2	2.3	157.7	47.3

Process/emission unit	Potential to Emit (tons/year)					
	PM	PM-10	SO <sub>2</sub>	VOC	CO	NO <sub>x</sub>
Proposed Landfill Expansion 9,458,269 megagrams (#1)	0.0	0.0	0.0	26.6	3.8	0.0

**Table Notes:**

1. The proposed landfill expansion involves an increase in the allowable waste disposal from 11,225,134.5 megagrams to 20,683,404 megagrams, or an increase of 9,458,269.5 megagrams.
2. Note that the figures in the second table represent potential fugitive emissions resulting from the proposed landfill expansion. These emissions are not included in the PSD Determination because they are fugitive emissions and Newton County Landfill is not one of the twenty-eight (28) listed source categories under 326 IAC 2-2 or 326 IAC 2-3.

This significant source modification is subject to 326 IAC 2-7-10.5(f)(4) because it is a modification with a potential to emit greater than or equal to twenty-five (25) tons per year of volatile organic compounds (VOC).

This significant source modification is also subject to 326 IAC 2-7-10.5(f)(7) because it is a modification with a potential to emit greater than or equal to one hundred (100) tons per year of carbon monoxide (CO).

Additionally, the modification will be incorporated into the Part 70 Operating Permit through a significant permit modification issued pursuant to 326 IAC 2-7-12(d):

- (1) Significant modification procedures shall be used for applications requesting Part 70 permit modifications that do not qualify as minor permit modifications or as administrative amendments. Every significant change in existing monitoring Part 70 permit terms or conditions and every relaxation of reporting or record keeping permit terms or conditions shall be considered significant.

**Permit Level Determination – PSD or Emission Offset**

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

Process/emission unit	Potential to Emit (tons/year)					
	PM	PM-10	SO <sub>2</sub>	VOC	CO	NO <sub>x</sub>
Existing Passive Flares (Source:111-17664-00017 TSD)	1.6	1.6	1.8	0.8	72.5	3.9
Proposed Enclosed Combustor (#3)	13.3	13.3	13.2	2.3	157.7	47.3
Source PTE (After Modification, Excluding Fugitive Emissions)	14.9	14.9	15.0	3.1	230.2	51.2
Significant Level or Major Source Threshold	250	250	250	250	250	250

This modification to an existing stationary minor source is not major because the emissions increase is less than the PSD major source threshold. Therefore, pursuant to 326 IAC 2-2, the PSD requirements do not apply. After this modification, the PTE for PM, PM10, SO2, NOx, CO and VOC from the entire source will remain less than 250 tons per year for each pollutant. The source will continue to be a minor PSD source after this modification.

**Federal Rule Applicability Determination**

This modification does not trigger any new Federal Rule Applicabilities.

**State Rule Applicability Determination**

This modification does not trigger any new State Rule Applicabilities.

**Compliance Determination and Monitoring Requirements**

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

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

The Compliance Determination Requirements applicable to this modification are as follows:

1. The active landfill gas collection system has applicable compliance monitoring conditions as specified below:
  - (a) Except as provided in 40 CFR 60.752(b)(2)(i)(B),
 

The Permittee seeking to comply with 40 CFR 60.752(b)(2)(ii)(A) for an active gas collection system shall install a sampling port and a thermometer, other

temperature measuring device, or an access port for temperature measurements at each wellhead and:

- (1) Measure the gauge pressure in the gas collection header on a monthly basis as provided in 40 CFR 60.755(a)(3); and
  - (2) Monitor nitrogen or oxygen concentration in the landfill gas on a monthly basis as provided in 40 CFR 60.755(a)(5); and
  - (3) Monitor temperature of the landfill gas on a monthly basis as provided in 40 CFR 60.755(a)(5).
- (b) The Permittee seeking to demonstrate compliance with 40 CFR 60.755(c), shall monitor surface concentrations of methane according to the instrument specifications and procedures provided in 40 CFR 60.755(d). Any closed landfill that has no monitored exceedances of the operational standard in three consecutive quarterly monitoring periods may skip to annual monitoring. Any methane reading of 500 ppm or more above background detected during the annual monitoring returns the frequency for that landfill to quarterly monitoring.

These monitoring conditions are necessary because the active collection system must operate properly to ensure compliance with 40 CFR 60, Subpart WWW (Standards of Performance for Municipal Solid Waste Landfills) and 40 CFR 63, Subpart AAAAA (National Emissions Standards for Hazardous Air Pollutants: Municipal Solid Waste Landfills).

2. The enclosed combustor and flares have applicable compliance monitoring conditions as specified below:

- (a) The Permittee seeking to comply with 40 CFR 60.752(b)(2)(iii) using an enclosed combustor shall calibrate, maintain, and operate according to the manufacturer's specifications, the following equipment:
- (1) A temperature monitoring device equipped with a continuous recorder and having minimum accuracy of  $\pm 1$  percent of the temperature being measured expressed in degrees Celsius of  $\pm 0.5$  °C, whichever is greater. A temperature monitoring device is not required for boilers or process heaters with design heat input capacity greater than 44 megawatts.
  - (2) A device that records flow to or bypass of the control device. The Permittee shall either; install, calibrate, and maintain a gas flow rate measuring device that shall record the flow to the control device at least every fifteen (15) minutes; or secure the bypass line valve in the closed position with a car-seal or a lock-and-key type configuration. A visual inspection of the seal or closure mechanism shall be performed at least once every month to ensure that the valve is maintained in the closed position and that the gas flow is not diverted through the bypass line.
- (b) The Permittee seeking to comply with 40 CFR 60,752(b)(2)(iii) using an open flare shall install, calibrate, maintain, and operate according to the manufacturer's specifications the following equipment:
- (1) A heat sensing device, such as an ultraviolet beam sensor or thermocouple, at the pilot light or the flame itself to indicate the continuous presence of a flame.

- (2) A device that records flow to or bypass of the flare. The Permittee shall either:
  - (A) Install, calibrate, and maintain a gas flow rate measuring device that shall record the flow to the control device at least every 15 minutes; or
  - (B) Secure the bypass line valve in the closed position with a car-seal or a lock-and-key type configuration. A visual inspection of the seal or closure mechanism shall be performed at least once every month to ensure that the valve is maintained in the closed position and that the gas flow is not diverted through the bypass line.

These monitoring conditions are necessary because the enclosed combustor and flares at the municipal solid waste landfill must operate properly to ensure compliance with 40 CFR 60, Subpart WWW (Standards of Performance for Municipal Solid Waste Landfills) and 40 CFR 63, Subpart AAAA (National Emissions Standards for Hazardous Air Pollutants: Municipal Solid Waste Landfills).

### Proposed Changes

The changes listed below have been made to Part 70 Operating Permit Renewal No. 111-17664-00017. Deleted language appears as ~~strikethroughs~~ and new language appears in **bold**:

1. Facility Descriptions in Sections A.2 and D.1 have been modified with the updated descriptions.

#### 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) municipal solid waste landfill, identified as emissions unit #1, constructed in 1995 and modified in ~~2004~~**2006**, with a maximum design capacity of ~~11,225,134.5~~**20,683,404** megagrams (Mg).
- (b) Four (4) passive open flares, identified as emissions unit #2, constructed prior to 1999, with a maximum capacity of 200 standard cubic feet per minute (scfm) each (800 scfm total).
- (c) One (1) ~~Vertical Vaporator™ system (enclosed combustor) for leachate disposal and~~ landfill gas combustion, identified as emissions unit #3, constructed in ~~1999~~**2006**, with a maximum capacity of ~~3,000~~**6,000** scfm.

#### SECTION D.1 FACILITY OPERATION CONDITIONS

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

- (a) One (1) municipal solid waste landfill, identified as emissions unit #1, constructed in 1995 and modified in ~~2004~~**2006**, with a maximum design capacity of ~~11,225,134.5~~**20,683,404** megagrams (Mg).
- (b) Four (4) passive open flares, identified as emissions unit #2, constructed prior to 1999, with a maximum capacity of 200 standard cubic feet per minute (scfm) each (800 scfm total).
- (c) One (1) ~~Vertical Vaporator™ system (enclosed combustor) for leachate disposal and~~ landfill gas combustion, identified as emissions unit #3, constructed in ~~1999~~**2006**, with a maximum capacity of ~~3,000~~**6,000** scfm.

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

2. IDEM has clarified the Operational Flexibility Condition as follows:

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

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

- ~~(1) The changes are not modifications under any provision of Title I of the Clean Air Act;~~
- ~~(2) Any preconstruction approval required by 326 IAC 2-7-10.5 has been obtained;~~
- ~~(3) The changes do not result in emissions which exceed the emissions allowable under this permit (whether expressed herein as a rate of emissions or in terms of total emissions);~~
- ~~(4) The Permittee notifies the:~~

~~Indiana Department of Environmental Management  
Permits Branch, Office of Air Quality  
100 North Senate Avenue  
Indianapolis, Indiana 46204-2254~~

~~and~~

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

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

- ~~(5) The Permittee maintains records on-site which document, on a rolling five (5) year basis, all such changes and emissions trading that are subject to 326 IAC 2-7-20(b), (c), or (e). 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.~~
- (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.**

3. IDEM has included procedures for the approval of alternate instrument specifications as follows:

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

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

4. IDEM has decided to remove (d) concerning nonroad engines from B.18 Permit Modification. 40 CFR 89, Appendix A specifically indicates that states are not precluded from regulating the use and operation of nonroad engines, such as regulations on hours of usage, daily mass emission limits, or sulfur limits on fuel; nor are permits regulating such operations precluded, once the engine is no longer new.

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

- (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)]
- ~~(d) No permit amendment or modification is required for the addition, operation or removal of a nonroad engine, as defined in 40 CFR 89.2.~~

5. The IDEM Air Compliance phone and fax numbers have been updated.

**Conclusion and Recommendation**

The construction and operation of this proposed modification shall be subject to the conditions of the attached proposed Part 70 Significant Source Modification No. 111-22731-00017 and Significant Permit Modification No. 111-22779-00017. The staff recommend to the Commissioner that this Part 70 Significant Source and Significant Permit Modification be approved.

**Appendix A: Emission Calculations  
CO, VOC and HAPs Emissions from the Landfill**

Company Name: **Newton County Landfill**  
Address: **2266 East 500 South Road, Brook, IN 47922**  
Title V: **T111-17664-00017**  
Significant Source Modification: **111-22731-00017**  
Significant Permit Modification: **111-22779-00017**  
Reviewer: **Donald F. Robin, P.E.**  
Date: **May 24, 2006**

Inputs from Landfill Gas Model (Emissions Before Controls)			
Product	m <sup>3</sup> /yr	mg/yr	tons/year
Methane	4.24E+07	2.83E+04	3.11E+04
CO <sub>2</sub>	4.24E+07	7.77E+04	8.54E+04
CO	9.13E+03	1.38E+01	1.52E+01
NMOC	6.93E+04	2.48E+02	2.73E+02
Fugitive Emissions from Landfill after Controls			tons/yr
CO			3.81
NMOC			68.3
VOC*			26.6

1. Landfill Gas (LFG) Production Rate: **8.49E+07** m<sup>3</sup>/yr (=CH<sub>4</sub>+CO<sub>2</sub> production rate from EPA Landfill Air Emission Model - Appendix B)
2. Collection Efficiency: **75%** (AP-42, Chapter 2.4)
3. Control Efficiency: **98%** (required by NSPS)

CAS Number	Compound	**HAP Concentration (ppmv)	Molecular Weight	Uncontrolled HAPs Emissions (tons/yr)	Fugitive HAPs Emissions (tons/yr)	Captured HAPs after Control Devices (tons/yr)	Total HAP Emissions (tons/yr)
71-55-6	1,1,1-Trichloroethane (methyl chloroform)	0.48	133.41	0.253	0.063	0.004	0.067
79-34-5	1,1,2,2-Tetrachloroethane	1.11	167.85	0.735	0.184	0.011	0.195
75-34-3	1,1-Dichloroethane (ethylidene dichloride)	2.35	98.97	0.918	0.229	0.014	0.243
75-35-4	1,1-Dichloroethene (vinylidene chloride)	0.20	96.94	0.076	0.019	0.001	0.020
107-06-2	1,2-Dichloroethane (ethylene dichloride)	0.41	98.96	0.160	0.040	0.002	0.042
78-87-5	1,2-Dichloropropane (propylene dichloride)	0.18	112.99	0.080	0.020	0.001	0.021
107-13-1	Acrylonitrile	6.33	53.06	1.325	0.331	0.020	0.351
75-15-0	Carbon disulfide	0.58	76.13	0.174	0.044	0.003	0.046
56-23-5	Carbon tetrachloride	0.00	153.84	0.002	0.001	0.000	0.001
463-58-1	Carbonyl sulfide	0.49	60.07	0.116	0.029	0.002	0.031
108-90-7	Chlorobenzene	0.25	112.56	0.111	0.028	0.002	0.029
75-00-3	Chloroethane (ethyl chloride)	1.25	64.52	0.318	0.080	0.005	0.084
67-66-3	Chloroform	0.03	119.39	0.014	0.004	0.000	0.004
75-09-2	Dichloromethane (methylene chloride)	14.30	84.94	4.793	1.198	0.072	1.270
100-41-4	Ethylbenzene	4.61	106.16	1.931	0.483	0.029	0.512
110-54-3	Hexane	6.57	86.18	2.234	0.559	0.034	0.592
78-93-3	Methyl ethyl ketone	7.09	72.11	2.017	0.504	0.030	0.535
108-10-1	Methyl isobutyl ketone	1.87	100.16	0.739	0.185	0.011	0.196
127-18-4	Perchloroethylene (tetrachloroethene)	3.73	165.83	2.441	0.610	0.037	0.647
79-01-6	Trichloroethylene (trichloroethene)	2.82	131.4	1.462	0.366	0.022	0.387
75-01-4	Vinyl chloride	7.34	62.5	1.810	0.453	0.027	0.480
71-43-2	Benzene	1.91	78.11	0.589	0.147	0.009	0.156
74-87-3	Methyl chloride (Chloromethane)	1.21	50.49	0.241	0.060	0.004	0.064
108-88-3	Toluene	39.30	92.13	14.286	3.572	0.214	3.786
1330-20-7	Xylene (isomers and mixture)	12.10	106.16	5.068	1.267	0.076	1.343
	Mercury Compounds	0.000292	200.61	0.000	0.000	0.000	6.125E-05
7647-01-0	***Hydrogen Chloride	42.0	36	-	-	4.474	4.474
<b>Total Emissions</b>				<b>41.9</b>	<b>10.47</b>	<b>5.10</b>	<b>15.6</b>

\* Per AP-42 Table 2.4-2, Footnote C, VOC is 39% of NMOC emissions for non-codisposal facilities (AP-42, 11/98).

\*\* The HAP concentrations are from AP-42, Chapter 2.4 - Municipal Solid Waste Landfills - Tables 2.4-1 and 2.4-2 (AP-42, 11/98).

\*\*\* HCl concentration is from AP-42, Chapter 2.4, Section 2.4.4.2. HCl only occurs in the combustion process of the control device.

**Methodology**

Uncontrolled Emissions of CO and VOC (tons/yr) = CO / VOC emissions at closure (Mg/yr)(from LandGEM 2.01) x 1.1 tons/Mg

Fugitive CO and VOC Emissions from Landfill emissions = Uncontrolled Emissions of CO and VOC (tons/yr) x (1 - Collection Efficiency)

Uncontrolled HAPs Emissions (tons/yr) = LFG Production Rate (m<sup>3</sup>/yr) x 35.31 ft<sup>3</sup>/m<sup>3</sup>x (Concentration (ppmv) /1000,000) x 1 atm /

Gas Constant (0.7302 atm-cf/lb mole-R) / Temp (60F+ 460) x Mole weight of HAPs ( lbs/lbs mole) x (1 ton/2000 lbs)

Fugitive HAP Emissions = Uncontrolled HAPs Emissions (tons/yr) x (1 - Collection Efficiency)

Captured HAPs after control device = Uncontrolled HAPs Emissions (tons/yr) x Collection Efficiency x (1 - Control Efficiency)

HCl Emissions (tons/yr) = LFG Production Rate (m<sup>3</sup>/yr) x 35.31 ft<sup>3</sup>/m<sup>3</sup>x Chlorinated Compound Concentrations (ppmv) /1000,000 x 1 atm / Gas Constant

(0.7302 atm-cf/lb mole-R) / Temp (60F+ 460) x Mole weight of HCl ( lbs/lbs mole) x (1 ton/2000 lbs) x Collection Efficiency

Total HAP Emissions (tons/yr) = Fugitive HAP Emissions (tons/yr) + HAPs after Control Device (tons/yr)

**Appendix A: Emission Calculations  
Combustion Emissions from the Enclosed Combustor**

**Company Name: Newton County Landfill  
Address: 2266 East 500 South Road, Brook, IN 47922  
Permit Modification: 111-22779-00017  
Source Modification: 111-22731-00017  
Reviewer: Donald F. Robin, P.E.  
Date: May 20, 2006**

Fuel Input MMBtu/hr	NMOC ppmv	Flow Rate scfm	Facility Description:	Emissions Unit ID #
81.9	816.3	3,000	Removal of Existing Enclosed Flare (Max. Capacity 3,000 scfm)	N/A
180.0	816.3	6,000	One (1) Enclosed Flare with maximum capacity of 6,000 scfm	3

Pollutant Emission Factors					Inlet Conc. NMOC <sup>c</sup>
PM <sup>a</sup>	PM10 <sup>a</sup>	SO <sub>2</sub> <sup>b</sup>	NO <sub>x</sub> <sup>d</sup>	CO <sup>d</sup>	
16.86	16.86	49.60	0.06	0.20	816.30
(lb/10 <sup>6</sup> dscf methane)	(lb/10 <sup>6</sup> dscf methane)	(ppmv)	(lb/MMBtu)	(lb/MMBtu)	(ppmv)

Potential To Emit (tons/year)							
Emission Unit	PM	PM10	SO <sub>2</sub>	NO <sub>x</sub>	CO	NMOC	VOC
Removed 3,000 SCFM Flare	<b>6.6</b>	<b>6.6</b>	<b>6.6</b>	<b>21.5</b>	<b>71.7</b>	<b>2.9</b>	<b>1.1</b>
#3 - 6,000 SCFM Enclosed Flare	<b>13.3</b>	<b>13.3</b>	<b>13.2</b>	<b>47.3</b>	<b>157.7</b>	<b>5.8</b>	<b>2.3</b>

<sup>a</sup> Emission Factors are from AP-42, Chapter 2.4 - Municipal Solid Waste Landfills, [Table 2.4-5](#). (AP-42, 11/98).

Assume PM emissions equal to PM10 emissions.

<sup>b</sup> The total inlet concentration of Sulfur content compounds in AP-42, Chapter 2.4 - Municipal Solid Waste Landfills - Table 2.4-1 (AP-42, 11/98)

<sup>c</sup> The NMOC flare inlet concentration is provided by the source based on the results of Tier 2 testing done in 1998.

<sup>d</sup> The NO<sub>x</sub> and CO Emission rates are from the guaranteed rate provided by the flare vendor to the source.

**Methodology**

PM / PM10 / NO<sub>x</sub> Emissions (tons/yr) = Flow Rate (scfm landfill gas) / 10<sup>6</sup> x Emission Factor (lb/10<sup>6</sup> dscf) x 50% (Methane % in landfill gas)  
x 60 (min/hr) x 8760 (hr/yr) x .0005 (ton/lb)

SO<sub>2</sub> Emissions (tons/yr) = Flow Rate (scfm) x Emission Factor (ppmv) / 1000,000 x 1 atm / Gas Constant (0.7302 atm-cf/lb mole-R) / Temp (60F+ 460)  
x Mole weight of SO<sub>2</sub> (64 lbs/lbs mole) x 60 min/hr x 8760 hr/yr x 1 ton/2000 lbs

NMOC Emissions (tons/yr) = Flow Rate (scfm) x Emission Factor (ppmv) / 1000,000 x 1 atm / Gas Constant (0.7302 atm-cf/lb mole-R) / Temp (60F+ 460)  
x Mole weight of Hexane ( lbs/lbs mole) x 60 min/hr x 8760 hr/yr x 1 ton/2000 lbs x (1-98% control efficiency)

VOC Emissions (tons/yr) = 39% \* NMOC Emissions (tons/yr) (AP-42, 1998)

# INTRODUCTION

## LandGEM - Landfill Gas Emissions Model, Version 3.02

U.S. Environmental Protection Agency

### Model Design:

Worksheet Name	Function
<u>INTRO</u>	Contains an overview of the model and important notes about using LandGEM
<u>USER INPUTS</u>	Allows users to provide landfill characteristics, determine model parameters, select up to four gases/pollutants (total landfill gas, methane, carbon dioxide, NMOC, and 46 air pollutants), and enter waste acceptance rates
<u>POLLUTANTS</u>	Allows users to edit air pollutant concentrations and molecular weights for existing pollutants and add up to 10 new pollutants
<u>INPUT REVIEW</u>	Allows users to review and print model inputs
<u>METHANE</u>	Calculates methane emission estimates using the first-order decomposition rate equation
<u>RESULTS</u>	Shows tabular emission estimates for up to four gases/pollutants (selected in the USER INPUTS worksheet) in megagrams per year, cubic meters per year, and user's choice of a third unit of measure (average cubic feet per minute, cubic feet per year, or short tons per year)
<u>GRAPHS</u>	Shows graphical emission estimates for up to four gases/pollutants (selected in the USER INPUTS worksheet) in megagrams per year, cubic meters per year, and user's choice of a third unit of measure (selected in the RESULTS worksheet)
<u>INVENTORY</u>	Displays tabular emission estimates for all gases/pollutants for a single year specified by users
<u>REPORT</u>	Allows users to review and print model inputs and outputs in a summary report

### IMPORTANT NOTES!

The following user inputs **MUST** be completed in the USER INPUTS worksheet:

- Landfill open year
- Landfill closure year or Waste design capacity
- Annual waste acceptance rates from open year to current year or closure year

Other Important Notes:

- LandGEM is based on the gas generated from anaerobic decomposition of landfilled waste which has a methane content between 40 and 60 percent.
- When using LandGEM to comply with the CAA, the methane content of the landfill gas must remain fixed at 50% by volume (the model default value).
- Default pollutant concentrations used by LandGEM have already been corrected for air infiltration, as stated in AP-42. If a user-specified value for NMOC concentration is used based on site-specific data, then it must be corrected for air infiltration.
- When comparing results from LandGEM with measurements of extracted gas collected at a site, the landfill owner/operator must adjust for air infiltration prior to any comparisons.
- One megagram is equivalent to one metric ton.

### About LandGEM:

LandGEM is based on a first-order decomposition rate equation for quantifying emissions from the decomposition of landfilled waste in municipal solid waste (MSW) landfills. The software provides a relatively simple approach to estimating landfill gas emissions. Model defaults are based on empirical data from U.S. landfills. Field test data can also be used in place of model defaults when available. Further guidance on EPA test methods, Clean Air Act (CAA) regulations, and other guidance regarding landfill gas emissions and control technology requirements can be found at

<http://www.epa.gov/ttnatw01/landfill/landflpg.html>

LandGEM is considered a screening tool — the better the input data, the better the estimates. Often, there are limitations with the available data regarding waste quantity and composition, variation in design and operating practices over time, and changes occurring over time that impact the emissions potential. Changes to landfill operation, such as operating under wet conditions through leachate recirculation or other liquid additions, will result in generating more gas at a faster rate. Defaults for estimating emissions for this type of operation are being developed to include in LandGEM along with defaults for conventional landfills (no leachate or liquid additions) for developing emission inventories and determining CAA applicability. Refer to the Web site identified above for future updates.

# USER INPUTS

Landfill Name or Identifier:

Clear ALL Non-Parameter Inputs/Selections

## 1: PROVIDE LANDFILL CHARACTERISTICS

Landfill Open Year	2006	
Landfill Closure Year		
Have Model Calculate Closure Year?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
Waste Design Capacity	9,458,270	megagrams

Restore Default Model Parameters

## 2: DETERMINE MODEL PARAMETERS

<b>Methane Generation Rate, k (year<sup>-1</sup>)</b>	
<input type="text" value="CAA Conventional - 0.05"/>	
<b>Potential Methane Generation Capacity, L<sub>o</sub> (m<sup>3</sup>/Mg)</b>	
<input type="text" value="Inventory Conventional - 100"/>	
<b>NMOC Concentration (ppmv as hexane)</b>	
<input type="text" value="User-specified"/>	User-specified value: <input type="text" value="816"/>
<b>Methane Content (% by volume)</b>	
<input type="text" value="CAA - 50% by volume"/>	

## 3: SELECT GASES/POLLUTANTS

<b>Gas / Pollutant #1</b>		Default pollutant parameters are currently being used by model.	<p>Edit Existing or Add New Pollutant Parameters</p> <p>Restore Default Pollutant Parameters</p>
<input type="text" value="Carbon monoxide"/>			
<b>Gas / Pollutant #2</b>			
<input type="text" value="Methane"/>			
<b>Gas / Pollutant #3</b>			
<input type="text" value="Carbon dioxide"/>			
<b>Gas / Pollutant #4</b>			
<input type="text" value="NMOC"/>			

### Description/Comments:

For Landfill Expansion Emissions (PROJECT SPECIFIC EMISSIONS)

4: ENTER WASTE ACCEPTANCE RATES

Input Units:  

Year	Input Units (Mg/year)	Calculated Units (short tons/year)
2006	2,335,118	2,568,630
2007	2,335,118	2,568,630
2008	2,335,118	2,568,630
2009	2,335,118	2,568,630
2010	117,800	129,580
2011		
2012		
2013		
2014		
2015		
2016		
2017		
2018		
2019		
2020		
2021		
2022		
2023		
2024		
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2038		
2039		
2040		
2041		
2042		
2043		
2044		
2045		

4: ENTER WASTE ACCEPTANCE RATES

Input Units:  

Year	Input Units (Mg/year)	Calculated Units (short tons/year)
2046		
2047		
2048		
2049		
2050		
2051		
2052		
2053		
2054		
2055		
2056		
2057		
2058		
2059		
2060		
2061		
2062		
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2076		
2077		
2078		
2079		
2080		
2081		
2082		
2083		
2084		
2085		

**POLLUTANTS**

**Landfill Name or Identifier:** NEWTON COUNTY LANDFILL (Brook, IN)

**Enter New Pollutant Parameters**

**Edit Existing Pollutant Parameters**

Default parameters will be used by model unless alternate parameters are entered.

**Enter User-specified Pollutant Parameters for Existing Pollutants:**

**Gas / Pollutant Default Parameters:**

	Compound	Concentration (ppmv)	Molecular Weight	Notes	Concentration (ppmv)	Molecular Weight
<b>Gases</b>	Total landfill gas		30.03			
	Methane		16.04			
	Carbon dioxide		44.01			
	NMOC	816	86.18			
<b>Pollutants</b>	1,1,1-Trichloroethane (methyl chloroform) - HAP	0.48	133.41	A		
	1,1,2,2-Tetrachloroethane - HAP/VOC	1.1	167.85	A, B		
	1,1-Dichloroethane (ethylidene dichloride) - HAP/VOC	2.4	98.97	A, B		
	1,1-Dichloroethene (vinylidene chloride) - HAP/VOC	0.20	96.94	A, B		
	1,2-Dichloroethane (ethylene dichloride) - HAP/VOC	0.41	98.96	A, B		
	1,2-Dichloropropane (propylene dichloride) - HAP/VOC	0.18	112.99	A, B		
	2-Propanol (isopropyl alcohol) - VOC	50	60.11	B		
	Acetone	7.0	58.08			
	Acrylonitrile - HAP/VOC	6.3	53.06	A, B		
	Benzene - No or Unknown Co-disposal - HAP/VOC	1.9	78.11	A, B		
	Benzene - Co-disposal - HAP/VOC	11	78.11	A, B		
	Bromodichloromethane - VOC	3.1	163.83	B		
	Butane - VOC	5.0	58.12	B		
	Carbon disulfide - HAP/VOC	0.58	76.13	A, B		
	Carbon monoxide	140	28.01			
	Carbon tetrachloride - HAP/VOC	4.0E-03	153.84	A, B		
	Carbonyl sulfide - HAP/VOC	0.49	60.07	A, B		
	Chlorobenzene - HAP/VOC	0.25	112.56	A, B		
	Chlorodifluoromethane	1.3	86.47			
	Chloroethane (ethyl chloride) - HAP/VOC	1.3	64.52	A, B		
	Chloroform - HAP/VOC	0.03	119.39	A, B		
	Chloromethane - VOC	1.2	50.49	B		
	Dichlorobenzene - (HAP for para isomer/VOC)	0.21	147	B, C		
	Dichlorodifluoromethane	16	120.91			
	Dichlorofluoromethane - VOC	2.6	102.92	B		
	Dichloromethane (methylene chloride) - HAP	14	84.94	A		
	Dimethyl sulfide (methyl sulfide) - VOC	7.8	62.13	B		
	Ethane	890	30.07			
	Ethanol - VOC	27	46.08	B		
	Ethyl mercaptan (ethanethiol) - VOC	2.3	62.13	B		
	Ethylbenzene - HAP/VOC	4.6	106.16	A, B		
	Ethylene dibromide - HAP/VOC	1.0E-03	187.88	A, B		
	Fluorotrichloromethane - VOC	0.76	137.38	B		
	Hexane - HAP/VOC	6.6	86.18	A, B		
	Hydrogen sulfide	36	34.08			
	Mercury (total) - HAP	2.9E-04	200.61	A		
Methyl ethyl ketone - HAP/VOC	7.1	72.11	A, B			
Methyl isobutyl ketone - HAP/VOC	1.9	100.16	A, B			
Methyl mercaptan - VOC	2.5	48.11	B			
Pentane - VOC	3.3	72.15	B			
Perchloroethylene (tetrachloroethylene) - HAP	3.7	165.83	A			
Propane - VOC	11	44.09	B			
t-1,2-Dichloroethene - VOC	2.8	96.94	B			
Toluene - No or Unknown Co-disposal - HAP/VOC	39	92.13	A, B			
Toluene - Co-disposal - HAP/VOC	170	92.13	A, B			
Trichloroethylene (trichloroethene) - HAP/VOC	2.8	131.40	A, B			
Vinyl chloride - HAP/VOC	7.3	62.50	A, B			

Xylenes - HAP/VOC	12	106.16	A, B		
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Enter New Compound	Enter Concentration (ppmv)	Enter Molecular Weight

**Return to  
USER INPUTS**

- A. Hazardous air pollutants (HAP) listed in Title III of the 1990 Clean Air Act Amendments.
- B. Considered volatile organic compounds (VOC), as defined by U.S. EPA in 40 CFR 51.100(s).
- C. Source tests did not indicate whether this compound was the para- or ortho- isomer. The para- isomer is a Title III-listed HAP.

Source: Tables 2.4-1 and 2.4-2 of *Compilation of Air Pollutant Emission Factors, AP-42, Volume 1: Stationary Point and Area Sources*, 5th ed., Chapter 2.4 Municipal Solid Waste Landfills. U.S. EPA, Office of Air Quality Planning and Standards. Research Triangle Park, NC. November 1998. <http://www.epa.gov/ttn/chief/ap42/ch02/final/c02s04.pdf>

**INPUT REVIEW**

**Landfill Name or Identifier:** NEWTON COUNTY LANDFILL (Brook, IN)

**LANDFILL CHARACTERISTICS**

Landfill Open Year	<b>2006</b>	
Landfill Closure Year (with 80-year limit)	<b>2010</b>	
<i>Actual Closure Year (without limit)</i>	<b>2010</b>	
Have Model Calculate Closure Year?	<b>Yes</b>	
Waste Design Capacity	<b>9,458,270</b>	<i>megagrams</i>

**MODEL PARAMETERS**

Methane Generation Rate, k	<b>0.050</b>	<i>year<sup>-1</sup></i>
Potential Methane Generation Capacity, L <sub>0</sub>	<b>100</b>	<i>m<sup>3</sup>/Mg</i>
NMOC Concentration	<b>816</b>	<i>ppmv as hexane</i>
Methane Content	<b>50</b>	<i>% by volume</i>

**GASES / POLLUTANTS SELECTED**

- Gas / Pollutant #1: **Carbon monoxide**
- Gas / Pollutant #2: **Methane**
- Gas / Pollutant #3: **Carbon dioxide**
- Gas / Pollutant #4: **NMOC**

**Description/Comments:**

For Landfill Expansion Emissions (PROJECT SPECIFIC EMISSIONS)

## WASTE ACCEPTANCE RATES

<b>Year</b>	<b>(Mg/year)</b>	<b>(short tons/year)</b>
2006	2,335,118	2,568,630
2007	2,335,118	2,568,630
2008	2,335,118	2,568,630
2009	2,335,118	2,568,630
2010	117,798	129,578
2011	0	0
2012	0	0
2013	0	0
2014	0	0
2015	0	0
2016	0	0
2017	0	0
2018	0	0
2019	0	0
2020	0	0
2021	0	0
2022	0	0
2023	0	0
2024	0	0
2025	0	0
2026	0	0
2027	0	0
2028	0	0
2029	0	0
2030	0	0
2031	0	0
2032	0	0
2033	0	0
2034	0	0
2035	0	0
2036	0	0
2037	0	0
2038	0	0
2039	0	0
2040	0	0
2041	0	0
2042	0	0
2043	0	0
2044	0	0
2045	0	0
2046	0	0
2047	0	0
2048	0	0

## WASTE ACCEPTANCE RATES

<b>Year</b>	<b>(Mg/year)</b>	<b>(short tons/year)</b>
2049	0	0
2050	0	0
2051	0	0
2052	0	0
2053	0	0
2054	0	0
2055	0	0
2056	0	0
2057	0	0
2058	0	0
2059	0	0
2060	0	0
2061	0	0
2062	0	0
2063	0	0
2064	0	0
2065	0	0
2066	0	0
2067	0	0
2068	0	0
2069	0	0
2070	0	0
2071	0	0
2072	0	0
2073	0	0
2074	0	0
2075	0	0
2076	0	0
2077	0	0
2078	0	0
2079	0	0
2080	0	0
2081	0	0
2082	0	0
2083	0	0
2084	0	0
2085	0	0

**METHANE**

**Landfill Name or Identifier:** NEWTON COUNTY LANDFILL (Brook, IN)

First-Order Decomposition Rate Equation:

$$Q_{CH_4} = \sum_{i=1}^n \sum_{j=0.1}^1 kL_o \left( \frac{M_i}{10} \right) e^{-kt_{ij}}$$

- Where,
- Q<sub>CH<sub>4</sub></sub> = annual methane generation in the year of the calculation (m<sup>3</sup>/year)
  - i = 1-year time increment
  - n = (year of the calculation) - (initial year of waste acceptance)
  - j = 0.1-year time increment
  - k = methane generation rate (year<sup>-1</sup>)
  - L<sub>o</sub> = potential methane generation capacity (m<sup>3</sup>/Mg)
  - M<sub>i</sub> = mass of waste accepted in the i<sup>th</sup> year (Mg)
  - t<sub>ij</sub> = age of the j<sup>th</sup> section of waste mass M<sub>i</sub> accepted in the i<sup>th</sup> year (decimal years, e.g., 3.2 years)

Model Parameters from User Inputs:

- k = 0.050 year<sup>-1</sup>
- L<sub>o</sub> = 100 m<sup>3</sup>/Mg

**When Model Calculates Closure Year...**

Final Non-Zero Acceptance Entered =	117,800 megagrams in	2010
Waste Design Capacity =	9,458,270 megagrams	
Closure Year (with 80-year limit) =	2010	
Actual Closure Year (without limit) =	2010	
Model Waste Acceptance Limit =	80 years	

Year	User Waste Acceptance Inputs (Mg/year)	User Waste-In Place (Mg)	Waste Acceptance (Mg/year)	Waste-In-Place (Mg)
2006	2,335,118	0	2,335,118	0
2007	2,335,118	2,335,118	2,335,118	2,335,118
2008	2,335,118	4,670,236	2,335,118	4,670,236
2009	2,335,118	7,005,354	2,335,118	7,005,354
2010	117,800	9,340,472	117,798	9,340,472
2011	0	9,458,272	0	9,458,270
2012	0	9,458,272	0	9,458,270
2013	0	9,458,272	0	9,458,270
2014	0	9,458,272	0	9,458,270
2015	0	9,458,272	0	9,458,270
2016	0	9,458,272	0	9,458,270
2017	0	9,458,272	0	9,458,270
2018	0	9,458,272	0	9,458,270
2019	0	9,458,272	0	9,458,270
2020	0	9,458,272	0	9,458,270
2021	0	9,458,272	0	9,458,270
2022	0	9,458,272	0	9,458,270
2023	0	9,458,272	0	9,458,270
2024	0	9,458,272	0	9,458,270
2025	0	9,458,272	0	9,458,270
2026	0	9,458,272	0	9,458,270
2027	0	9,458,272	0	9,458,270
2028	0	9,458,272	0	9,458,270
2029	0	9,458,272	0	9,458,270
2030	0	9,458,272	0	9,458,270
2031	0	9,458,272	0	9,458,270
2032	0	9,458,272	0	9,458,270
2033	0	9,458,272	0	9,458,270
2034	0	9,458,272	0	9,458,270
2035	0	9,458,272	0	9,458,270
2036	0	9,458,272	0	9,458,270
2037	0	9,458,272	0	9,458,270
2038	0	9,458,272	0	9,458,270
2039	0	9,458,272	0	9,458,270
2040	0	9,458,272	0	9,458,270
2041	0	9,458,272	0	9,458,270
2042	0	9,458,272	0	9,458,270
2043	0	9,458,272	0	9,458,270
2044	0	9,458,272	0	9,458,270
2045	0	9,458,272	0	9,458,270
2046	0	9,458,272	0	9,458,270
2047	0	9,458,272	0	9,458,270
2048	0	9,458,272	0	9,458,270
2049	0	9,458,272	0	9,458,270
2050	0	9,458,272	0	9,458,270
2051	0	9,458,272	0	9,458,270
2052	0	9,458,272	0	9,458,270
2053	0	9,458,272	0	9,458,270
2054	0	9,458,272	0	9,458,270
2055	0	9,458,272	0	9,458,270
2056	0	9,458,272	0	9,458,270
2057	0	9,458,272	0	9,458,270
2058	0	9,458,272	0	9,458,270
2059	0	9,458,272	0	9,458,270
2060	0	9,458,272	0	9,458,270
2061	0	9,458,272	0	9,458,270
2062	0	9,458,272	0	9,458,270
2063	0	9,458,272	0	9,458,270
2064	0	9,458,272	0	9,458,270
2065	0	9,458,272	0	9,458,270

<b>Year</b>	<b>User Waste Acceptance Inputs (Mg/year)</b>	<b>User Waste-In Place (Mg)</b>	<b>Waste Acceptance (Mg/year)</b>	<b>Waste-In-Place (Mg)</b>
2066	0	9,458,272	0	9,458,270
2067	0	9,458,272	0	9,458,270
2068	0	9,458,272	0	9,458,270
2069	0	9,458,272	0	9,458,270
2070	0	9,458,272	0	9,458,270
2071	0	9,458,272	0	9,458,270
2072	0	9,458,272	0	9,458,270
2073	0	9,458,272	0	9,458,270
2074	0	9,458,272	0	9,458,270
2075	0	9,458,272	0	9,458,270
2076	0	9,458,272	0	9,458,270
2077	0	9,458,272	0	9,458,270
2078	0	9,458,272	0	9,458,270
2079	0	9,458,272	0	9,458,270
2080	0	9,458,272	0	9,458,270
2081	0	9,458,272	0	9,458,270
2082	0	9,458,272	0	9,458,270
2083	0	9,458,272	0	9,458,270
2084	0	9,458,272	0	9,458,270
2085	0	9,458,272	0	9,458,270

**RESULTS** Landfill Name or Identifier: **NEWTON COUNTY LANDFILL (Brook, IN)**

Closure Year (with 80-year limit) = 2010  
 Methane = 50 % by volume  
 Please choose a third unit of measure to represent all of the emission rates below.  
 User-specified Unit:

Year	Waste Accepted		Waste-In-Place		Carbon monoxide			Methane			Carbon dioxide			NMOC		
	(Mg/year)	(short tons/year)	(Mg)	(short tons)	(Mg/year)	(m <sup>3</sup> /year)	(av ft <sup>3</sup> /min)	(Mg/year)	(m <sup>3</sup> /year)	(av ft <sup>3</sup> /min)	(Mg/year)	(m <sup>3</sup> /year)	(av ft <sup>3</sup> /min)	(Mg/year)	(m <sup>3</sup> /year)	(av ft <sup>3</sup> /min)
2006	2,335,118	2,568,630	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2007	2,335,118	2,568,630	2,335,118	2,568,630	3,724E+00	3.197E+03	2.148E-01	7.617E+03	1.142E+07	7.671E+02	2.090E+04	1.142E+07	7.671E+02	6.681E+01	1.864E+04	1.252E+00
2008	2,335,118	2,568,630	4,670,236	5,137,260	5,137,260	4.288E+03	4.191E-01	1.486E+04	2.228E+07	1.497E+03	4.078E+04	2.228E+07	1.497E+03	1.304E+02	3.637E+04	2.444E+00
2009	2,335,118	2,568,630	7,005,354	7,705,889	1,064E+01	9.130E+03	6.135E-01	2.175E+04	3.261E+07	2.191E+03	5.969E+04	3.261E+07	2.191E+03	1.908E+02	5.324E+04	3.577E+00
2010	117,798	129,578	10,274,519	10,274,519	1.384E+01	1.188E+04	7.983E-01	2.831E+04	4.243E+07	2.851E+03	7.768E+04	4.243E+07	2.851E+03	2.483E+02	6.928E+04	4.655E+00
2011	0	0	9,458,270	10,404,097	1.336E+01	1.146E+04	7.702E-01	2.731E+04	4.094E+07	2.751E+03	7.494E+04	4.094E+07	2.751E+03	2.396E+02	6.684E+04	4.491E+00
2012	0	0	9,458,270	10,404,097	1.270E+01	1.090E+04	7.327E-01	2.598E+04	3.894E+07	2.617E+03	7.129E+04	3.894E+07	2.617E+03	2.279E+02	6.358E+04	4.272E+00
2013	0	0	9,458,270	10,404,097	1.208E+01	1.037E+04	6.969E-01	2.471E+04	3.704E+07	2.489E+03	6.781E+04	3.704E+07	2.489E+03	2.168E+02	6.048E+04	4.064E+00
2014	0	0	9,458,270	10,404,097	1.149E+01	9.867E+03	6.629E-01	2.351E+04	3.524E+07	2.368E+03	6.450E+04	3.524E+07	2.368E+03	2.062E+02	5.753E+04	3.865E+00
2015	0	0	9,458,270	10,404,097	1.093E+01	9.385E+03	6.306E-01	2.236E+04	3.352E+07	2.252E+03	6.136E+04	3.352E+07	2.252E+03	1.962E+02	5.472E+04	3.677E+00
2016	0	0	9,458,270	10,404,097	1.040E+01	8.928E+03	5.999E-01	2.127E+04	3.188E+07	2.142E+03	5.836E+04	3.188E+07	2.142E+03	1.866E+02	5.206E+04	3.498E+00
2017	0	0	9,458,270	10,404,097	9.894E+00	8.492E+03	5.706E-01	2.023E+04	3.033E+07	2.038E+03	5.552E+04	3.033E+07	2.038E+03	1.775E+02	4.952E+04	3.327E+00
2018	0	0	9,458,270	10,404,097	9.411E+00	8.078E+03	5.428E-01	1.925E+04	2.885E+07	1.938E+03	5.281E+04	2.885E+07	1.938E+03	1.688E+02	4.710E+04	3.165E+00
2019	0	0	9,458,270	10,404,097	8.952E+00	7.684E+03	5.163E-01	1.831E+04	2.744E+07	1.844E+03	5.024E+04	2.744E+07	1.844E+03	1.606E+02	4.480E+04	3.010E+00
2020	0	0	9,458,270	10,404,097	8.516E+00	7.309E+03	4.911E-01	1.742E+04	2.611E+07	1.754E+03	4.779E+04	2.611E+07	1.754E+03	1.528E+02	4.262E+04	2.864E+00
2021	0	0	9,458,270	10,404,097	8.100E+00	6.953E+03	4.672E-01	1.657E+04	2.483E+07	1.668E+03	4.545E+04	2.483E+07	1.668E+03	1.453E+02	4.054E+04	2.724E+00
2022	0	0	9,458,270	10,404,097	7.705E+00	6.614E+03	4.444E-01	1.576E+04	2.362E+07	1.587E+03	4.324E+04	2.362E+07	1.587E+03	1.382E+02	3.856E+04	2.591E+00
2023	0	0	9,458,270	10,404,097	7.329E+00	6.291E+03	4.227E-01	1.499E+04	2.247E+07	1.510E+03	4.113E+04	2.247E+07	1.510E+03	1.315E+02	3.668E+04	2.465E+00
2024	0	0	9,458,270	10,404,097	6.972E+00	5.984E+03	4.021E-01	1.426E+04	2.137E+07	1.436E+03	3.912E+04	2.137E+07	1.436E+03	1.251E+02	3.489E+04	2.344E+00
2025	0	0	9,458,270	10,404,097	6.632E+00	5.693E+03	3.825E-01	1.356E+04	2.033E+07	1.366E+03	3.722E+04	2.033E+07	1.366E+03	1.190E+02	3.319E+04	2.230E+00
2026	0	0	9,458,270	10,404,097	6.308E+00	5.415E+03	3.638E-01	1.290E+04	1.934E+07	1.299E+03	3.540E+04	1.934E+07	1.299E+03	1.132E+02	3.157E+04	2.121E+00
2027	0	0	9,458,270	10,404,097	6.001E+00	5.151E+03	3.461E-01	1.227E+04	1.840E+07	1.236E+03	3.367E+04	1.840E+07	1.236E+03	1.077E+02	3.003E+04	2.018E+00
2028	0	0	9,458,270	10,404,097	5.708E+00	4.900E+03	3.292E-01	1.167E+04	1.750E+07	1.176E+03	3.203E+04	1.750E+07	1.176E+03	1.024E+02	2.857E+04	1.920E+00
2029	0	0	9,458,270	10,404,097	5.430E+00	4.661E+03	3.132E-01	1.110E+04	1.665E+07	1.118E+03	3.047E+04	1.665E+07	1.118E+03	9.741E+01	2.718E+04	1.826E+00
2030	0	0	9,458,270	10,404,097	5.165E+00	4.433E+03	2.979E-01	1.056E+04	1.583E+07	1.064E+03	2.898E+04	1.583E+07	1.064E+03	9.266E+01	2.585E+04	1.737E+00
2031	0	0	9,458,270	10,404,097	4.913E+00	4.217E+03	2.834E-01	1.005E+04	1.506E+07	1.012E+03	2.757E+04	1.506E+07	1.012E+03	8.814E+01	2.459E+04	1.652E+00
2032	0	0	9,458,270	10,404,097	4.673E+00	4.011E+03	2.695E-01	9.558E+03	1.433E+07	9.626E+02	2.623E+04	1.433E+07	9.626E+02	8.384E+01	2.339E+04	1.572E+00
2033	0	0	9,458,270	10,404,097	4.446E+00	3.816E+03	2.564E-01	9.092E+03	1.363E+07	9.157E+02	2.495E+04	1.363E+07	9.157E+02	7.975E+01	2.225E+04	1.495E+00
2034	0	0	9,458,270	10,404,097	4.229E+00	3.630E+03	2.439E-01	8.648E+03	1.296E+07	8.710E+02	2.373E+04	1.296E+07	8.710E+02	7.586E+01	2.116E+04	1.422E+00
2035	0	0	9,458,270	10,404,097	4.022E+00	3.453E+03	2.320E-01	8.227E+03	1.233E+07	8.285E+02	2.257E+04	1.233E+07	8.285E+02	7.216E+01	2.013E+04	1.353E+00
2036	0	0	9,458,270	10,404,097	3.826E+00	3.284E+03	2.207E-01	7.825E+03	1.173E+07	7.881E+02	2.147E+04	1.173E+07	7.881E+02	6.864E+01	1.915E+04	1.287E+00
2037	0	0	9,458,270	10,404,097	3.640E+00	3.124E+03	2.099E-01	7.444E+03	1.116E+07	7.497E+02	2.042E+04	1.116E+07	7.497E+02	6.522E+01	1.822E+04	1.224E+00
2038	0	0	9,458,270	10,404,097	3.462E+00	2.972E+03	1.997E-01	7.081E+03	1.061E+07	7.131E+02	1.943E+04	1.061E+07	7.131E+02	6.211E+01	1.733E+04	1.164E+00
2039	0	0	9,458,270	10,404,097	3.293E+00	2.827E+03	1.899E-01	6.735E+03	1.010E+07	6.783E+02	1.848E+04	1.010E+07	6.783E+02	5.908E+01	1.648E+04	1.107E+00
2040	0	0	9,458,270	10,404,097	3.133E+00	2.689E+03	1.807E-01	6.407E+03	9.603E+06	6.453E+02	1.758E+04	9.603E+06	6.453E+02	5.620E+01	1.568E+04	1.053E+00
2041	0	0	9,458,270	10,404,097	2.980E+00	2.558E+03	1.719E-01	6.094E+03	9.135E+06	6.138E+02	1.672E+04	9.135E+06	6.138E+02	5.346E+01	1.491E+04	1.002E+00
2042	0	0	9,458,270	10,404,097	2.835E+00	2.433E+03	1.635E-01	5.797E+03	8.690E+06	5.839E+02	1.591E+04	8.690E+06	5.839E+02	5.085E+01	1.419E+04	9.532E-01
2043	0	0	9,458,270	10,404,097	2.696E+00	2.314E+03	1.555E-01	5.515E+03	8.266E+06	5.554E+02	1.515E+04	8.266E+06	5.554E+02	4.837E+01	1.349E+04	9.067E-01
2044	0	0	9,458,270	10,404,097	2.565E+00	2.202E+03	1.479E-01	5.246E+03	7.863E+06	5.283E+02	1.439E+04	7.863E+06	5.283E+02	4.601E+01	1.284E+04	8.625E-01
2045	0	0	9,458,270	10,404,097	2.440E+00	2.094E+03	1.407E-01	4.990E+03	7.479E+06	5.025E+02	1.369E+04	7.479E+06	5.025E+02	4.377E+01	1.221E+04	8.204E-01
2046	0	0	9,458,270	10,404,097	2.321E+00	1.992E+03	1.338E-01	4.746E+03	7.114E+06	4.780E+02	1.302E+04	7.114E+06	4.780E+02	4.163E+01	1.162E+04	7.804E-01
2047	0	0	9,458,270	10,404,097	2.208E+00	1.895E+03	1.273E-01	4.515E+03	6.767E+06	4.547E+02	1.239E+04	6.767E+06	4.547E+02	3.960E+01	1.105E+04	7.424E-01
2048	0	0	9,458,270	10,404,097	2.100E+00	1.802E+03	1.211E-01	4.295E+03	6.432E+06	4.325E+02	1.178E+04	6.432E+06	4.325E+02	3.767E+01	1.051E+04	7.061E-01
2049	0	0	9,458,270	10,404,097	1.997E+00	1.715E+03	1.152E-01	4.085E+03	6.123E+06	4.114E+02	1.121E+04	6.123E+06	4.114E+02	3.583E+01	9.997E+03	6.717E-01
2050	0	0	9,458,270	10,404,097	1.900E+00	1.631E+03	1.096E-01	3.886E+03	5.825E+06	3.914E+02	1.066E+04	5.825E+06	3.914E+02	3.409E+01	9.510E+03	6.389E-01
2051	0	0	9,458,270	10,404,097	1.807E+00	1.551E+03	1.042E-01	3.696E+03	5.541E+06	3.723E+02	1.014E+04	5.541E+06	3.723E+02	3.242E+01	9.046E+03	6.078E-01
2052	0	0	9,458,270	10,404,097	1.719E+00	1.476E+03	9.916E-02	3.516E+03	5.271E+06	3.541E+02	9.648E+03	5.271E+06	3.541E+02	3.084E+01	8.605E+03	5.781E-01
2053	0	0	9,458,270	10,404,097	1.635E+00	1.404E+03	9.432E-02	3.345E+03	5.013E+06	3.369E+02	9.177E+03	5.013E+06	3.369E+02	2.934E+01	8.185E+03	5.499E-01
2054	0	0	9,458,270	10,404,097	1.556E+00	1.335E+03	8.972E-02	3.182E+03	4.769E+06	3.204E+02	8.730E+03	4.769E+06	3.204E+02	2.791E+01	7.786E+03	5.231E-01
2055	0	0	9,458,270	10,404,097	1.480E+00	1.270E+03	8.534E-02	3.026E+03	4.536E+06	3.048E+02	8.304E+03	4.536E+06	3.048E+02	2.655E+01	7.406E+03	4.976E-01
2056	0	0	9,458,270	10,404,097	1.408E+00	1.208E+03	8.118E-02	2.879E+03	4.315E+06	2.899E+02	7.899E+03	4.315E+06	2.899E+02	2.525E+01	7.045E+03	4.733E-01
2057	0	0	9,458,270	10,404,097	1.339E+00	1.149E+03	7.722E-02	2.738E+03	4.105E+06	2.758E+02	7.514E+03	4.105E+06	2.758E+02	2.402E+01	6.701E+03	4.503E-01
2058	0	0	9,458,270	10,404,097	1.274E+00	1.093E+03	7.346E-02	2.605E+03	3.904E+06	2.623E+02	7.147E+03	3.904E+06	2.623E+02	2.285E+01	6.374E+03	4.283E-01

**RESULTS** Landfill Name or Identifier: NEWTON COUNTY LANDFILL (Brook, IN)

Closure Year (with 80-year limit) = 2010  
 Methane = 50 % by volume  
 Please choose a third unit of measure to represent all of the emission rates below.  
 User-specified Unit: av ft<sup>3</sup>/min

Year	Waste Accepted		Waste-In-Place		Carbon monoxide			Methane			Carbon dioxide			NMOC		
	(Mg/year)	(short tons/year)	(Mg)	(short tons)	(Mg/year)	(m <sup>3</sup> /year)	(av ft <sup>3</sup> /min)	(Mg/year)	(m <sup>3</sup> /year)	(av ft <sup>3</sup> /min)	(Mg/year)	(m <sup>3</sup> /year)	(av ft <sup>3</sup> /min)	(Mg/year)	(m <sup>3</sup> /year)	(av ft <sup>3</sup> /min)
2082	0	0	9,458,270	10,404,097	3,836E-01	3.293E+02	2.212E-02	7,846E+02	1.176E+06	7,902E+01	2.153E+03	1.176E+06	7,902E+01	6,882E+00	1.920E+03	1.290E-01
2083	0	0	9,458,270	10,404,097	3,649E-01	3.132E+02	2.105E-02	7,463E+02	1.119E+06	7,516E+01	2,048E+03	1.119E+06	7,516E+01	6,546E+00	1.826E+03	1.227E-01
2084	0	0	9,458,270	10,404,097	3,471E-01	2.979E+02	2.002E-02	7,099E+02	1.064E+06	7,150E+01	1,948E+03	1.064E+06	7,150E+01	6,227E+00	1.737E+03	1.167E-01
2085	0	0	9,458,270	10,404,097	3,302E-01	2.834E+02	1.904E-02	6,753E+02	1.012E+06	6,801E+01	1,853E+03	1.012E+06	6,801E+01	5,923E+00	1.653E+03	1.110E-01
2086	0	0	9,458,270	10,404,097	3,141E-01	2.696E+02	1.811E-02	6,424E+02	9.628E+05	6,469E+01	1,762E+03	9.628E+05	6,469E+01	5,635E+00	1.572E+03	1.056E-01
2087	0	0	9,458,270	10,404,097	2,988E-01	2,564E+02	1.723E-02	6,110E+02	9.159E+05	6,154E+01	1,677E+03	9.159E+05	6,154E+01	5,360E+00	1.495E+03	1.005E-01
2088	0	0	9,458,270	10,404,097	2,842E-01	2,439E+02	1.639E-02	5,812E+02	8.712E+05	5,854E+01	1,595E+03	8.712E+05	5,854E+01	5,098E+00	1,422E+03	9.557E-02
2089	0	0	9,458,270	10,404,097	2,703E-01	2,320E+02	1.559E-02	5,529E+02	8.287E+05	5,568E+01	1,517E+03	8.287E+05	5,568E+01	4,850E+00	1,353E+03	9.091E-02
2090	0	0	9,458,270	10,404,097	2,571E-01	2,207E+02	1.483E-02	5,259E+02	7.883E+05	5,297E+01	1,443E+03	7.883E+05	5,297E+01	4,613E+00	1,287E+03	8.647E-02
2091	0	0	9,458,270	10,404,097	2,446E-01	2,100E+02	1.411E-02	5,003E+02	7.499E+05	5,038E+01	1,373E+03	7.499E+05	5,038E+01	4,388E+00	1,224E+03	8.225E-02
2092	0	0	9,458,270	10,404,097	2,327E-01	1,997E+02	1.342E-02	4,759E+02	7.133E+05	4,793E+01	1,306E+03	7.133E+05	4,793E+01	4,174E+00	1,165E+03	7.824E-02
2093	0	0	9,458,270	10,404,097	2,213E-01	1,900E+02	1.276E-02	4,527E+02	6.785E+05	4,559E+01	1,242E+03	6.785E+05	4,559E+01	3,971E+00	1,108E+03	7.443E-02
2094	0	0	9,458,270	10,404,097	2,105E-01	1,807E+02	1.214E-02	4,306E+02	6.454E+05	4,336E+01	1,181E+03	6.454E+05	4,336E+01	3,777E+00	1,054E+03	7.080E-02
2095	0	0	9,458,270	10,404,097	2,003E-01	1,719E+02	1.155E-02	4,096E+02	6.139E+05	4,125E+01	1,124E+03	6.139E+05	4,125E+01	3,593E+00	1,002E+03	6.734E-02
2096	0	0	9,458,270	10,404,097	1,905E-01	1,635E+02	1.099E-02	3,896E+02	5.840E+05	3,924E+01	1,069E+03	5.840E+05	3,924E+01	3,418E+00	9.534E+02	6.406E-02
2097	0	0	9,458,270	10,404,097	1,812E-01	1,555E+02	1.045E-02	3,706E+02	5.555E+05	3,732E+01	1,017E+03	5.555E+05	3,732E+01	3,251E+00	9.069E+02	6.094E-02
2098	0	0	9,458,270	10,404,097	1,724E-01	1,480E+02	9.941E-03	3,525E+02	5.284E+05	3,550E+01	9.673E+02	5.284E+05	3,550E+01	3,092E+00	8.627E+02	5.796E-02
2099	0	0	9,458,270	10,404,097	1,640E-01	1,407E+02	9.456E-03	3,353E+02	5.026E+05	3,377E+01	9,201E+02	5.026E+05	3,377E+01	2,941E+00	8,206E+02	5,514E-02
2100	0	0	9,458,270	10,404,097	1,560E-01	1,339E+02	8.995E-03	3,190E+02	4.781E+05	3,213E+01	8,752E+02	4.781E+05	3,213E+01	2,798E+00	7,806E+02	5,245E-02
2101	0	0	9,458,270	10,404,097	1,484E-01	1,273E+02	8.556E-03	3,034E+02	4.548E+05	3,056E+01	8,325E+02	4.548E+05	3,056E+01	2,662E+00	7,425E+02	4,989E-02
2102	0	0	9,458,270	10,404,097	1,411E-01	1,211E+02	8.139E-03	2,886E+02	4.326E+05	2,907E+01	7,919E+02	4.326E+05	2,907E+01	2,532E+00	7,063E+02	4,746E-02
2103	0	0	9,458,270	10,404,097	1,342E-01	1,152E+02	7.742E-03	2,746E+02	4.115E+05	2,765E+01	7,533E+02	4.115E+05	2,765E+01	2,408E+00	6,719E+02	4,514E-02
2104	0	0	9,458,270	10,404,097	1,277E-01	1,096E+02	7.365E-03	2,612E+02	3.915E+05	2,630E+01	7,166E+02	3.915E+05	2,630E+01	2,291E+00	6,391E+02	4,294E-02
2105	0	0	9,458,270	10,404,097	1,215E-01	1,043E+02	7.005E-03	2,484E+02	3.724E+05	2,502E+01	6,816E+02	3.724E+05	2,502E+01	2,179E+00	6,079E+02	4,085E-02
2106	0	0	9,458,270	10,404,097	1,155E-01	9.918E+01	6.664E-03	2,363E+02	3.542E+05	2,380E+01	6,484E+02	3.542E+05	2,380E+01	2,073E+00	5,783E+02	3,885E-02
2107	0	0	9,458,270	10,404,097	1,099E-01	9.434E+01	6.339E-03	2,248E+02	3.369E+05	2,264E+01	6,168E+02	3.369E+05	2,264E+01	1,972E+00	5,501E+02	3,696E-02
2108	0	0	9,458,270	10,404,097	1,045E-01	8.974E+01	6.030E-03	2,138E+02	3.205E+05	2,153E+01	5,867E+02	3.205E+05	2,153E+01	1,876E+00	5,232E+02	3,516E-02
2109	0	0	9,458,270	10,404,097	9.945E-02	8.536E+01	5.736E-03	2,034E+02	3.049E+05	2,048E+01	5,581E+02	3.049E+05	2,048E+01	1,784E+00	4,977E+02	3,344E-02
2110	0	0	9,458,270	10,404,097	9.460E-02	8.120E+01	5.456E-03	1,935E+02	2.900E+05	1,949E+01	5,308E+02	2.900E+05	1,949E+01	1,697E+00	4,735E+02	3,181E-02
2111	0	0	9,458,270	10,404,097	8.999E-02	7.724E+01	5.190E-03	1,840E+02	2.759E+05	1,853E+01	5,050E+02	2.759E+05	1,853E+01	1,614E+00	4,504E+02	3,026E-02
2112	0	0	9,458,270	10,404,097	8.560E-02	7.347E+01	4.937E-03	1,751E+02	2.624E+05	1,763E+01	4,803E+02	2.624E+05	1,763E+01	1,536E+00	4,284E+02	2,878E-02
2113	0	0	9,458,270	10,404,097	8.142E-02	6.989E+01	4.696E-03	1,665E+02	2.496E+05	1,677E+01	4,596E+02	2.496E+05	1,677E+01	1,461E+00	4,075E+02	2,738E-02
2114	0	0	9,458,270	10,404,097	7.745E-02	6.648E+01	4.467E-03	1,584E+02	2.374E+05	1,595E+01	4,346E+02	2.374E+05	1,595E+01	1,389E+00	3,876E+02	2,604E-02
2115	0	0	9,458,270	10,404,097	7.367E-02	6.324E+01	4.249E-03	1,507E+02	2.259E+05	1,518E+01	4,134E+02	2.259E+05	1,518E+01	1,322E+00	3,687E+02	2,477E-02
2116	0	0	9,458,270	10,404,097	7.008E-02	6.015E+01	4.042E-03	1,433E+02	2.148E+05	1,443E+01	3,933E+02	2.148E+05	1,443E+01	1,257E+00	3,507E+02	2,357E-02
2117	0	0	9,458,270	10,404,097	6.666E-02	5.722E+01	3.845E-03	1,363E+02	2.044E+05	1,373E+01	3,741E+02	2.044E+05	1,373E+01	1,196E+00	3,336E+02	2,242E-02
2118	0	0	9,458,270	10,404,097	6.341E-02	5.443E+01	3.657E-03	1,297E+02	1.944E+05	1,306E+01	3,558E+02	1.944E+05	1,306E+01	1,138E+00	3,174E+02	2,132E-02
2119	0	0	9,458,270	10,404,097	6.032E-02	5.178E+01	3.479E-03	1,234E+02	1.849E+05	1,242E+01	3,385E+02	1.849E+05	1,242E+01	1,082E+00	3,019E+02	2,028E-02
2120	0	0	9,458,270	10,404,097	5.738E-02	4.925E+01	3.309E-03	1,173E+02	1.759E+05	1,182E+01	3,220E+02	1.759E+05	1,182E+01	1,029E+00	2,872E+02	1,929E-02
2121	0	0	9,458,270	10,404,097	5.458E-02	4.685E+01	3.148E-03	1,116E+02	1.673E+05	1,124E+01	3,063E+02	1.673E+05	1,124E+01	9,791E-01	2,732E+02	1,835E-02
2122	0	0	9,458,270	10,404,097	5.192E-02	4.456E+01	2.994E-03	1,062E+02	1.592E+05	1,069E+01	2,913E+02	1.592E+05	1,069E+01	9,314E-01	2,598E+02	1,746E-02
2123	0	0	9,458,270	10,404,097	4.939E-02	4.239E+01	2.848E-03	1,010E+02	1.514E+05	1,017E+01	2,771E+02	1.514E+05	1,017E+01	8,860E-01	2,472E+02	1,661E-02
2124	0	0	9,458,270	10,404,097	4.698E-02	4.032E+01	2.709E-03	9,608E+01	1,440E+05	9,676E+00	2,636E+02	1,440E+05	9,676E+00	8,427E-01	2,351E+02	1,580E-02
2125	0	0	9,458,270	10,404,097	4.469E-02	3.836E+01	2.577E-03	9,139E+01	1,370E+05	9,204E+00	2,508E+02	1,370E+05	9,204E+00	8,016E-01	2,236E+02	1,503E-02
2126	0	0	9,458,270	10,404,097	4.251E-02	3.649E+01	2.451E-03	8,693E+01	1,303E+05	8,755E+00	2,385E+02	1,303E+05	8,755E+00	7,625E-01	2,127E+02	1,429E-02
2127	0	0	9,458,270	10,404,097	4.043E-02	3.471E+01	2.332E-03	8,269E+01	1,240E+05	8,328E+00	2,269E+02	1,240E+05	8,328E+00	7,254E-01	2,024E+02	1,360E-02
2128	0	0	9,458,270	10,404,097	3.846E-02	3.301E+01	2.218E-03	7,866E+01	1,179E+05	7,922E+00	2,158E+02	1,179E+05	7,922E+00	6,900E-01	1,925E+02	1,293E-02
2129	0	0	9,458,270	10,404,097	3.659E-02	3.140E+01	2.110E-03	7,482E+01	1,122E+05	7,536E+00	2,053E+02	1,122E+05	7,536E+00	6,563E-01	1,831E+02	1,230E-02
2130	0	0	9,458,270	10,404,097	3.480E-02	2.987E+01	2.007E-03	7,117E+01	1,067E+05	7,168E+00	1,953E+02	1,067E+05	7,168E+00	6,243E-01	1,742E+02	1,170E-02
2131	0	0	9,458,270	10,404,097	3.310E-02	2.841E+01	1.909E-03	6,770E+01	1,015E+05	6,819E+00	1,858E+02	1,015E+05	6,819E+00	5,939E-01	1,657E+02	1,113E-02
2132	0	0	9,458,270	10,404,097	3.149E-02	2.703E+01	1.816E-03	6,440E+01	9.653E+04	6,486E+00	1,767E+02	9.653E+04	6,486E+00	5,649E-01	1,576E+02	1,059E-02
2133	0	0	9,458,270	10,404,097	2.995E-02	2.571E+01	1.728E-03	6,126E+01	9.182E+04	6,170E+00	1,681E+02	9.182E+04	6,170E+00	5,374E-01	1,499E+02	1,007E-02
2134	0	0	9,458,270	10,404,097	2.849E-02	2.446E+01	1.643E-03	5,827E+01	8.735E+04	5,869E+00	1,599E+02	8.735E+04	5,869E+00			

# GRAPHS

Landfill Name or Identifier: NEWTON COUNTY LANDFILL (Brook, IN)

