PART 70 OPERATING PERMIT

OFFICE OF AIR MANAGEMENT

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.

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 and 326 IAC 2-1-3.2 as required by 42 U.S.C. 7401, et. seq. (Clean Air Act as amended by the 1990 Clean Air Act Amendments), 40 CFR Part 70.6, IC 13-15 and IC 13-17.

Operation Permit No.: T111-9725-00017	
Issued by: Janet G. McCabe, Assistant Commissioner Office of Air Management	Issuance Date:

SECTION A SOURCE SUMMARY

This permit is based on information requested by the Indiana Department of Environmental Management (IDEM), Office of Air Management (OAM). 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)]

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

Responsible Official:	Steven C. Smith
Source Address:	2266 East 500 South Road, Brook, Indiana 47922
Mailing Address:	2266 East 500 South Road, Brook, Indiana 47922
SIC Code:	4953
County Location:	Newton County
County Status:	Attainment for all criteria pollutants
Source Status:	Part 70 Permit Program Minor Source, under PSD Major Source, Section 112 of the Clean Air Act

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

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

(a) One (1) municipal solid waste landfill with a design capacity of 7.171134 million megagrams (Mg).

(b) Four (4) passive open flares with a maximum capacity of 200 cubic feet per minute (cfm) each.

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

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

(a) One (1) 55 gallon parts washing machine with an annual throughput of 350 gallons and a monthly throughput of 28 gallons.

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

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

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

(b) It is a source in a source category designated by the United States Environmental Protection Agency (U.S. EPA) under 40 CFR 70.3 (Part 70 - Applicability).

SECTION B GENERAL CONDITIONS

B.1 Permit No Defense [326 IAC 2-1-10] [IC 13]

(a) Indiana statutes from IC 13 and rules from 326 IAC, quoted 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.

(b) This prohibition shall not apply to alleged violations of applicable requirements for which the Commissioner has granted a permit shield in accordance with 326 IAC 2-1-3.2 or 326 IAC 2-7-15, as set out in this permit in the Section B condition entitled “Permit Shield.”

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

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

B.3 Permit Term [326 IAC 2-7-5(2)]

This permit is issued for a fixed term of five (5) years from the effective date, as determined in accordance with IC 4-21.5-3-5(f) and IC 13-15-5-3.

B.4 Enforceability [326 IAC 2-7-7(a)]

(a) All terms and conditions in this permit, including any provisions designed to limit the source's potential to emit, are enforceable by IDEM.

(b) Unless otherwise stated, terms and conditions of this permit, including any provisions to limit the source’s potential to emit, are enforceable by the United States Environmental Protection Agency (U.S. EPA) and citizens under the Clean Air Act.

B.5 Termination of Right to Operate [326 IAC 2-7-10] [326 IAC 2-7-4(a)]

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

B.6 Severability [326 IAC 2-7-5(5)]

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

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

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

B.8 Duty to Supplement and Provide Information [326 IAC 2-7-4(b)] [326 IAC 2-7-5(6)(E)]

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

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

(b) The Permittee shall furnish to IDEM, OAM, within a reasonable time, any information that IDEM, OAM, 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.

(c) Upon request, the Permittee shall also furnish to IDEM, OAM, copies of records required to be kept by this permit. If the Permittee wishes to assert a claim of confidentiality over any of the furnished records, the Permittee must furnish such records to IDEM, OAM, along with a claim of confidentiality under 326 IAC 17. If requested by IDEM, OAM, or the U.S. EPA, to furnish copies of requested records directly to U. S. EPA, and if the Permittee is making a claim of confidentiality regarding the furnished records, then the Permittee must furnish such confidential records directly to the U.S. EPA along with a claim of confidentiality under 40 CFR 2, Subpart B.

B.9 Compliance with Permit Conditions [326 IAC 2-7-5(6)(A)] [326 IAC 2-7-5(6)(B)]

(a) The Permittee must comply with all conditions of this permit. Noncompliance with any provisions of this permit constitutes a violation of the Clean Air Act and is grounds for:

(1) Enforcement action;

(2) Permit termination, revocation and reissuance, or modification; or

(3) Denial of a permit renewal application.

(b) 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.

B.10 Certification [326 IAC 2-7-4(f)] [326 IAC 2-7-6(1)]

(a) Any application form, report, or compliance certification submitted under this permit shall contain certification by a responsible official of truth, accuracy, and completeness. This certification, and any other certification required under this permit, 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, on the attached Certification Form, with each submittal.

(c) A responsible official is defined at 326 IAC 2-7-1(34).

B.11 Annual Compliance Certification [326 IAC 2-7-6(5)]

(a) The Permittee shall annually submit a compliance certification report which addresses the status of the source's compliance with the terms and conditions contained in this permit, including emission limitations, standards, or work practices. The certification 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 Data Section, Office of Air Management
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

and

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

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

(c) The annual compliance certification report shall include the following:

(1) The identification of each term or condition of this permit that is the basis of the certification;

(2) The compliance status;

(3) Whether compliance was based on continuous or intermittent data;

(4) The methods used for determining compliance of the source, currently and over the reporting period consistent with 326 IAC 2-7-5(3);

(5) Any insignificant activity that has been added without a permit revision; and

(6) Such other facts, as specified in Sections D of this permit, as IDEM, OAM, 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.12 Preventive Maintenance Plan [326 IAC 2-7-5(1),(3) and (13)] [326 IAC 2-7-6(1) and (6)] [326 IAC 1-6-3]

(a) If required by specific condition(s) in Section D of this permit, the Permittee shall prepare and maintain Preventive Maintenance Plans (PMP) 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;

(3) Identification and quantification of the replacement parts that will be maintained in inventory for quick replacement.

If due to circumstances beyond its control, the PMP cannot be prepared and maintained within the above time frame, the Permittee may extend the date an additional ninety (90) days provided the Permittee notifies:

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

(b) The Permittee shall implement the Preventive Maintenance Plans as necessary to ensure that lack of proper maintenance does not cause or contribute to a violation of any limitation on emissions or potential to emit.

(c) PMP's shall be submitted to IDEM, OAM, upon request and shall be subject to review and approval by IDEM, OAM.

B.13 Emergency Provisions [326 IAC 2-7-16]

(a) An emergency, as defined in 326 IAC 2-7-1(12), is not an affirmative defense for an action brought for noncompliance with a federal or state health-based emission limitation, except as provided in 326 IAC 2-7-16.

(b) An emergency, as defined in 326 IAC 2-7-1(12), constitutes an affirmative defense to an action brought for noncompliance with a health-based or 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, OAM, 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 Management, Compliance Section), or
Telephone Number: 317-233-5674 (ask for Compliance Section)
Facsimile Number: 317-233-5967

(5) For each emergency lasting one (1) hour or more, the Permittee submitted notice, either in writing or facsimile, of the emergency to:

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

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

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

(A) A description of the emergency;

(B) Any steps taken to mitigate the emissions; and

(C) Corrective actions taken.

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

(6) The Permittee immediately took all reasonable steps to correct the emergency.

(c) In any enforcement proceeding, the Permittee seeking to establish the occurrence of an emergency has the burden of proof.

(d) This emergency provision supersedes 326 IAC 1-6 (Malfunctions) for sources subject to this rule after the effective date of this rule. This permit condition is in addition to any emergency or upset provision contained in any applicable requirement.

(e) IDEM, OAM, 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, OAM, by telephone or facsimile of an emergency lasting more than one (1) hour in compliance with (b)(4) and (5) of this condition shall constitute a violation of 326 IAC 2-7 and any other applicable rules.

(g) Operations may continue during an emergency only if the following conditions are met:

(1) 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.

(2) If an emergency situation causes a deviation from a health-based limit, the Permittee may not continue to operate the affected emissions facilities unless:

(A) The Permittee immediately takes all reasonable steps to correct the emergency situation and to minimize emissions; and

(B) Continued operation of the facilities is 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.

Any operation shall continue no longer than the minimum time required to prevent the situations identified in (g)(2)(B) of this condition.

B.14 Permit Shield [326 IAC 2-7-15]

(a) This condition provides a permit shield as addressed in 326 IAC 2-7-15.

(b) This permit shall be used as the primary document for determining compliance with applicable requirements established by previously issued permits. 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:

(1) The applicable requirements are included and specifically identified in this permit; or

(2) The permit contains an explicit determination or concise summary of a determination that other specifically identified requirements are not applicable.

(c) 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, including any term or condition from a previously issued construction or operation permit, IDEM, OAM, 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.

(d) 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.

(e) 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.

(f) 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).

(g) This permit shield is not applicable to modifications eligible for group processing until after IDEM, OAM, has issued the modifications. [326 IAC 2-7-12(c)(7)]

(h) This permit shield is not applicable to minor Part 70 permit modifications until after IDEM, OAM, has issued the modification. [326 IAC 2-7-12(b)(8)]

B.15 Multiple Exceedances [326 IAC 2-7-5(1)(E)]

Any exceedance of a permit limitation or condition contained in this permit, which occurs contemporaneously with an exceedance of an associated surrogate or operating parameter established to detect or assure compliance with that limit or condition, both arising out of the same act or occurrence, shall constitute a single potential violation of this permit.

B.16 Deviations from Permit Requirements and Conditions [326 IAC 2-7-5(3)(C)(ii)]

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

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

within ten (10) calendar days from the date of the discovery of the deviation.

(b) A deviation is an exceedance of a permit limitation or a failure to comply with a requirement of the permit or a rule. It does not include:

(1) An excursion from compliance monitoring parameters as identified in Section D of this permit unless tied to an applicable rule or limit; or

(2) An emergency as defined in 326 IAC 2-7-1(12); or

(3) Failure to implement elements of the Preventive Maintenance Plan unless lack of maintenance has caused or contributed to a deviation.

(4) Failure to make or record information required by the compliance monitoring provisions of Section D unless such failure exceeds 5% of the required data in any calendar quarter.

A Permittee's failure to take the appropriate response step when an excursion of a compliance monitoring parameter has occurred is a deviation.

(c) Written notification shall be submitted on the attached Emergency/Deviation Occurrence Reporting Form or its substantial equivalent. The notification does not need to be certified by the "responsible official" as defined by 326 IAC 2-7-1(34).

(d) Proper notice submittal under 326 IAC 2-7-16 satisfies the requirement of this subsection.

B.17 Permit Modification, Reopening, Revocation and Reissuance, or Termination [326 IAC 2-7-5(6)(C)] [326 IAC 2-7-8(a)] [326 IAC 2-7-9]

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

(b) This permit shall be reopened and revised under any of the circumstances listed in IC 13-15-7-2 or if IDEM, OAM, 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, OAM 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, OAM, at least thirty (30) days in advance of the date this permit is to be reopened, except that IDEM, OAM may provide a shorter time period in the case of an emergency. [326 IAC 2-7-9(c)]

B.18 Permit Renewal [326 IAC 2-7-4]

(a) The application for renewal shall be submitted using the application form or forms prescribed by IDEM, OAM, 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).

Request for renewal shall be submitted to:

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

(b) Timely Submittal of Permit Renewal [326 IAC 2-7-4(a)(1)(D)]

(1) A timely renewal application is one that is:

(A) Submitted at least nine (9) months prior to the date of the expiration of this permit; and

(B) If the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAM, on or before the date it is due. [326 IAC 2-5-3]

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

(c) Right to Operate After Application for Renewal [326 IAC 2-7-3]
If the Permittee submits a timely and complete application for renewal of this permit, the source's failure to have a permit is not a violation of 326 IAC 2-7 until IDEM, OAM, 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, OAM, any additional information identified as being needed to process the application.

(d) United States Environmental Protection Agency Authority [326 IAC 2-7-8(e)]
If IDEM, OAM, fails to act in a timely way on a Part 70 permit renewal, the U.S. EPA may invoke its authority under Section 505(e) of the Clean Air Act to terminate or revoke and reissue a Part 70 permit.

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

(a) The Permittee must comply with 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 Management
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

Any such application should be certified by the "responsible official" as defined by 326 IAC 2-7-1(34) only if a certification is required by the terms of the applicable rule

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

(a) No Part 70 permit revision shall be required under any approved economic incentives, marketable Part 70 permits, emissions trading, and other similar programs or processes for changes that are provided for in a Part 70 permit.

(b) Notwithstanding 326 IAC 2-7-12(b)(1)(D)(i) and 326 IAC 2-7-12(c)(1), minor Part 70 permit modification procedures may be used for Part 70 modifications involving the use of economic incentives, marketable Part 70 permits, emissions trading, and other similar approaches to the extent that such minor Part 70 permit modification procedures are explicitly provided for in the applicable State Implementation Plan (SIP) or in applicable requirements promulgated or approved by the U.S. EPA.

B.21 Changes Under Section 502(b)(10) of the Clean Air Act [326 IAC 2-7-20(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) and the following additional conditions:

(a) For each such change, the required written notification shall include a brief description of the change within the source, the date on which the change will occur, any change in emissions, and any permit term or condition that is no longer applicable as a result of the change.

(b) The permit shield, described in 326 IAC 2-7-15, shall not apply to any change made under 326 IAC 2-7-20(b).

B.22 Operational Flexibility [326 IAC 2-7-20]

(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 approval required by 326 IAC 2-1 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 Management
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

and

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

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

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

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

(b) 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 by the Permittee does not require the certification by the “responsible official” as defined by 326 IAC 2-7-1(34).

(c) Emission Trades [326 IAC 2-7-20(c)]
The Permittee may trade increases and decreases in emissions in the source, where the applicable SIP provides for such emission trades without requiring a permit revision, subject to the constraints of Section (a) of this condition and those in 326 IAC 2-7-20(c).

(d) Alternative Operating Scenarios [326 IAC 2-7-20(d)]
The Permittee may make changes at the source within the range of alternative operating scenarios that are described in the terms and conditions of this permit in accordance with 326 IAC 2-7-5(9). No prior notification of IDEM, OAM, 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.23 Construction Permit Requirement [326 IAC 2]

Except as allowed by Indiana P.L. 130-1996 Section 12, as amended by P.L. 244-1997, modification, construction, or reconstruction shall be approved as required by and in accordance with 326 IAC 2.

B.24 Inspection and Entry [326 IAC 2-7-6(2)]

Upon presentation of proper identification cards, credentials, and other documents as may be required by law, the Permittee shall allow IDEM, OAM, U.S. EPA, or an authorized representative to perform the following:

(a) Enter upon the Permittee's premises where a Part 70 source is located, or emissions related activity is conducted, or where records must be kept under the conditions of this permit;

(b) Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;

(c) Inspect, at reasonable times, any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit;

(d) Sample or monitor, at reasonable times, substances or parameters for the purpose of assuring compliance with this permit or applicable requirements; and

(e) Utilize any photographic, recording, testing, monitoring, or other equipment for the purpose of assuring compliance with this permit or applicable requirements. [326 IAC 2-7-6(6)]

(1) The Permittee may assert a claim that, in the opinion of the Permittee, information removed or about to be removed from the source by IDEM, OAM, or an authorized representative, contains information that is confidential under IC 5-14-3-4(a). The claim shall be made in writing before or at the time the information is removed from the source. In the event that a claim of confidentiality is so asserted, neither IDEM, OAM, nor an authorized representative, may disclose the information unless and until IDEM, OAM, makes a determination under 326 IAC 17-1-7 through 326 IAC 17-1-9 that the information is not entitled to confidential treatment and that determination becomes final. [IC 5-14-3-4; IC 13-14-11-3; 326 IAC 17-1-7 through 326 IAC 17-1-9]

(2) The Permittee and IDEM, OAM, acknowledge that the federal law applies to claims of confidentiality made by the Permittee with regard to information removed or about to be removed from the source by U.S. EPA. [40 CFR Part 2, Subpart B]

B.25 Transfer of Ownership or Operation [326 IAC 2-1-6] [326 IAC 2-7-11]

Pursuant to 326 IAC 2-1-6 and 326 IAC 2-7-11:

(a) In the event that ownership of this source is changed, the Permittee shall notify IDEM, OAM, Permits Branch, within thirty (30) days of the change. Notification shall include a written agreement containing a specific date for transfer of permit responsibility, coverage, and liability between the Permittee and the new owner.

(b) The written notification shall be sufficient to transfer the permit to the new owner by an administrative amendment pursuant to 326 IAC 2-7-11. 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).

(c) IDEM, OAM, shall reserve the right to issue a new permit.

B.26 Annual Fee Payment [326 IAC 2-7-19] [326 IAC 2-7-5(7)]

(a) The Permittee shall pay annual fees to IDEM, OAM, within thirty (30) calendar days of receipt of a billing. If the Permittee does not receive a bill from IDEM, OAM the applicable fee is due April 1 of each year.

(b) 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 317-233-0425 (ask for OAM, Technical Support and Modeling Section), to determine the appropriate permit fee.

SECTION C SOURCE OPERATION CONDITIONS

Entire Source

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

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

Pursuant to 326 IAC 6-3-2(c), the allowable particulate matter emissions rate from any process not already regulated by 326 IAC 6-1 or any New Source Performance Standard, and which has a maximum process weight rate less than 100 pounds per hour shall not exceed 0.551 pounds per hour.

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 Exemptions), opacity shall meet the following, unless otherwise stated in this permit:

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

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

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

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

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

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

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

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

C.6 Operation of Equipment [326 IAC 2-7-6(6)]

All air pollution control equipment listed in this permit and used to comply with an applicable requirement shall be operated at all times that the emission unit vented to the control equipment is in operation.

C.7 Asbestos Abatement Projects [326 IAC 14-10] [326 IAC 18] [40 CFR 61.140]

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

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 emission control procedures in 326 IAC 14-10-4 and 40 CFR 61.145(c). Per 326 IAC 14-10-4 emission control requirements are mandatory for any removal or disturbance of RACM greater than three (3) linear feet on pipes or three (3) square feet on any other facility components or a total of at least 0.75 cubic feet on all facility components.

(f) Indiana Accredited Asbestos Inspector
The Permittee shall comply with 326 IAC 14-10-1(a) that requires the owner or operator, prior to a renovation/demolition, to use an Indiana Accredited Asbestos Inspector to thoroughly inspect the affected portion of the facility for the presence of asbestos. The requirement that the inspector be accredited is federally enforceable.

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

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

(a) All testing shall be performed according to the provisions of 326 IAC 3-6 (Source Sampling Procedures), except as provided elsewhere in this permit, utilizing methods approved by IDEM, OAM.

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

no later than thirty-five (35) days prior to the intended test date. The Permittee shall submit a notice of the actual test date to the above address so that it is received at least two weeks prior to the test date.

(b) All test reports must be received by IDEM, OAM within forty-five (45) days after the completion of the testing. An extension may be granted by the Commissioner, if the source submits to IDEM, OAM, a reasonable written explanation within five (5) days prior to the end of the initial forty-five (45) day period.

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

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

C.9 Compliance Schedule [326 IAC 2-7-6(3)]

The Permittee:

(a) Has certified that all facilities at this source are in compliance with all applicable requirements; and

(b) Has submitted a statement that the Permittee will continue to comply with such requirements; and

(c) Will comply with such applicable requirements that become effective during the term of this permit.

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

Compliance with applicable requirements shall be documented as required by this permit. The Permittee shall be responsible for installing any necessary equipment and initiating any required monitoring related to that equipment, no more than ninety (90) days after receipt of this permit. If due to circumstances beyond its control, this schedule cannot be met, the Permittee may extend compliance schedule an additional ninety (90) days provided the Permittee notifies:

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

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

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

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

(a) In the event that a breakdown of the monitoring equipment occurs, a record shall be made of the times and reasons of the breakdown and efforts made to correct the problem. To the extent practicable, supplemental or intermittent monitoring of the parameter should be implemented at intervals no less frequent than required in Section D of this permit until such time as the monitoring equipment is back in operation. In the case of continuous monitoring, supplemental or intermittent monitoring of the parameter should be implemented at intervals no less than one (1) hour until such time as the continuous monitor is back in operation.

(b) The Permittee shall install, calibrate, quality assure, maintain, and operate all necessary monitors and related equipment. In addition, prompt corrective action shall be initiated whenever indicated.

C.12 Monitoring Methods [326 IAC 3]

Any monitoring or testing performed to meet the applicable requirements of this permit shall be performed according to the provisions of 326 IAC 3, 40 CFR 60, Appendix A, or other approved methods as specified in this permit.

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

C.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 shall prepare written emergency reduction plans (ERPs) consistent with safe operating procedures.

(b) These ERPs shall be submitted for approval to:

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

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

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

(c) If the ERP is disapproved by IDEM, OAM, the Permittee shall have an additional thirty (30) days to resolve the differences and submit an approvable ERP.

(d) These ERPs shall state those actions that will be taken, when each episode level is declared, to reduce or eliminate emissions of the appropriate air pollutants.

(e) Said ERPs shall also identify the sources of air pollutants, the approximate amount of reduction of the pollutants, and a brief description of the manner in which the reduction will be achieved.

(f) Upon direct notification by IDEM, OAM, 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 68.215]

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

(a) Submit:

(1) A compliance schedule for meeting the requirements of 40 CFR 68 by the date provided in 40 CFR 68.10(a); or

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

(3) A verification to IDEM, OAM, that a RMP or a revised plan was prepared and submitted as required by 40 CFR 68.

(b) Provide annual certification to IDEM, OAM, that the Risk Management Plan is being properly implemented.

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

C.15 Compliance Monitoring Plan - Failure to Take Response Steps [326 IAC 2-7-5][326 IAC 2-7-6] [326 IAC 1-6]

(a) The Permittee is required to implement a compliance monitoring plan to ensure that reasonable information is available to evaluate its continuous compliance with applicable requirements. This compliance monitoring plan is comprised of:

(1) This condition;

(2) The Compliance Determination Requirements in Section D of this permit;

(3) The Compliance Monitoring Requirements in Section D of this permit;

(4) The Record Keeping and Reporting Requirements in Section C (Monitoring Data Availability, General Record Keeping Requirements, and General Reporting Requirements) and in Section D of this permit; and

(5) A Compliance Response Plan (CRP) for each compliance monitoring condition of this permit. CRP's shall be submitted to IDEM, OAM upon request and shall be subject to review and approval by IDEM, OAM. The CRP shall be prepared within ninety (90) days after issuance of this permit by the Permittee and maintained on site, and is comprised of :

(A) Response steps that will be implemented in the event that compliance related information indicates that a response step is needed pursuant to the requirements of Section D of this permit; and

(B) A time schedule for taking such response steps including a schedule for devising additional response steps for situations that may not have been predicted.

(b) For each compliance monitoring condition of this permit, appropriate response steps shall be taken when indicated by the provisions of that compliance monitoring condition. Failure to perform the actions detailed in the compliance monitoring conditions or failure to take the response steps within the time prescribed in the Compliance Response Plan, shall constitute a violation of the permit unless taking the response steps set forth in the Compliance Response Plan would be unreasonable.

(c) After investigating the reason for the excursion, the Permittee is excused from taking further response steps for any of the following reasons:

(1) The monitoring equipment malfunctioned, giving a false reading. This shall be an excuse from taking further response steps providing that prompt action was taken to correct the monitoring equipment.

(2) The Permittee has determined that the compliance monitoring parameters established in the permit conditions are technically inappropriate, has previously submitted a request for an administrative amendment to the permit, and such request has not been denied or;

(3) An automatic measurement was taken when the process was not operating; or

(4) The process has already returned to operating within “normal” parameters and no response steps are required.

(d) Records shall be kept of all instances in which the compliance related information was not met and of all response steps taken. In the event of an emergency, the provisions of 326 IAC 2-7-16 (Emergency Provisions) requiring prompt corrective action to mitigate emissions shall prevail.

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 corrective actions. The Permittee shall submit a description of these corrective actions to IDEM, OAM, within thirty (30) days of receipt of the test results. The Permittee shall take appropriate action to minimize emissions from the affected facility while the corrective actions are being implemented. IDEM, OAM shall notify the Permittee within thirty (30) days, if the corrective actions taken are deficient. The Permittee shall submit a description of additional corrective actions taken to IDEM, OAM within thirty (30) days of receipt of the notice of deficiency. IDEM, OAM reserves the authority to use enforcement activities to resolve noncompliant stack tests.

(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, OAM that retesting in one-hundred and twenty (120) days is not practicable, IDEM, OAM may extend the retesting deadline. Failure of the second test to demonstrate compliance with the appropriate permit conditions may be grounds for immediate revocation of the permit to operate the affected facility.

The documents submitted pursuant to this condition do not 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 2-7-5(3)(C)(iii)][326 IAC 2-7-5(7)][326 IAC 2-7-19(c)][326 IAC 2-6] [326 IAC 2-7-19 (e)]

(a) The Permittee shall submit an annual emission statement certified pursuant to the requirements of 326 IAC 2-6, that must be received by July 1 of each year and must comply with the minimum requirements specified in 326 IAC 2-6-4. The annual emission statement shall meet the following requirements and be used for the purpose of a Part 70 fee assessment:

(1) Indicate actual emissions of criteria pollutants from the source;

(2) Indicate actual emissions of other regulated pollutants from the source.

(b) The annual emission statement covers the twelve (12) consecutive month time period starting January 1 and ending December 31. The annual emission statement must be submitted to:

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

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

C.18 Monitoring Data Availability [326 IAC 2-7-6(1)] [326 IAC 2-7-5(3)]

(a) With the exception of performance tests conducted in accordance with Section C-Performance Testing, all observations, sampling, maintenance procedures, and record keeping, required as a condition of this permit shall be performed at all times the equipment is operating at normal representative conditions.

(b) As an alternative to the observations, sampling, maintenance procedures, and record keeping of subsection (a) above, when the equipment listed in Section D of this permit is not operating, the Permittee shall either record the fact that the equipment is shut down or perform the observations, sampling, maintenance procedures, and record keeping that would otherwise be required by this permit.

(c) If the equipment is operating but abnormal conditions prevail, additional observations and sampling should be taken with a record made of the nature of the abnormality.

(d) If for reasons beyond its control, the operator fails to make required observations, sampling, maintenance procedures, or record keeping, reasons for this must be recorded.

(e) At its discretion, IDEM may excuse such failure providing adequate justification is documented and such failures do not exceed five percent (5%) of the operating time in any quarter.

(f) Temporary, unscheduled unavailability of staff qualified to perform the required observations, sampling, maintenance procedures, or record keeping shall be considered a valid reason for failure to perform the requirements stated in (a) above.

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

(a) Records of all required monitoring data and support information shall be retained for a period of at least five (5) years from the date of monitoring sample, measurement, report, or application. These records shall be kept at the source location for a minimum of three (3) years and available upon the request of an IDEM, OAM, representative. 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 written request for records to the Permittee, the Permittee shall furnish the records to the Commissioner within a reasonable time.

(b) Records of required monitoring information shall include, where applicable:

(1) The date, place, and time of sampling or measurements;

(2) The dates analyses were performed;

(3) The company or entity performing the analyses;

(4) The analytic techniques or methods used;

(5) The results of such analyses; and

(6) The operating conditions existing at the time of sampling or measurement.

(c) Support information shall include, where applicable:

(1) Copies of all reports required by this permit;

(2) All original strip chart recordings for continuous monitoring instrumentation;

(3) All calibration and maintenance records;

(4) Records of preventive maintenance shall be sufficient to demonstrate that improper maintenance did not cause or contribute to a violation of any limitation on emissions or potential to emit. To be relied upon subsequent to any such violation, these records may include, but are not limited to: work orders, parts inventories, and operator's standard operating procedures. Records of response steps taken shall indicate whether the response steps were performed in accordance with the Compliance Response Plan required by Section C - Compliance Monitoring Plan - Failure to take Response Steps, of this permit, and whether a deviation from a permit condition was reported. All records shall briefly describe what maintenance and response steps were taken and indicate who performed the tasks.

(d) All record keeping requirements not already legally required shall be implemented within ninety (90) days of permit issuance.

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

(a) To affirm that the source has met all the compliance monitoring requirements stated in this permit the source shall submit a Semi-Annual Compliance Monitoring Report. Any deviation from the requirements and the date(s) of each deviation must be reported.

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

(c) Unless otherwise specified in this permit, any notice, report, or other submission required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAM, on or before the date it is due.

(d) Unless otherwise specified in this permit, any semi-annual report shall be submitted within thirty (30) days of the end of the reporting period.

(e) All instances of deviations as described in Section B- Deviations from Permit Requirements Conditions must be clearly identified in such reports.

(f) Any corrective actions or response steps taken as a result of each deviation must be clearly identified in such reports.

(g) The first report shall cover the period commencing on the date of issuance of this permit and ending on the last day of the reporting period.

The documents submitted pursuant to this condition do not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

Stratospheric Ozone Protection

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

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

(a) Persons opening appliances for maintenance, service, repair, or disposal must comply with the required practices pursuant to 40 CFR 82.156.

(b) Equipment used during the maintenance, service, repair, or disposal of appliances must comply with the standards for recycling and recovery equipment pursuant to 40 CFR 82.158.

(c) Persons performing maintenance, service, repair, or disposal of appliances must be certified by an approved technician certification program pursuant to 40 CFR 82.161.

SECTION D.1 FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)] A municipal solid waste landfill with a design capacity of 7.171134 million megagrams and (4) four passive open flares rated with a maximum capacity of 200cfm each to control landfill gas.

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

D.1.1 General Provisions Relating to NSPS [326 IAC 12-1][40 CFR Part 60, Subpart A]

The provisions of 40 CFR Part 60, Subpart A - General Provisions, which are incorporated by reference in 326 IAC 12-1, apply to the facility described in this section except when otherwise specified in 40 CFR Part 60, Subpart WWW.

D.1.2 Municipal Solid Waste Landfill NSPS [326 IAC 12] [40CFR 60.752, Subpart WWW]

The municipal solid waste landfill has a design capacity greater than 2.5 million megagrams (Mg) and shall either comply with 40CFR 60.752 (b)(2) or calculate the non methane organic compound (NMOC) emission rate for the landfill using the procedures specified in 40CFR 60.754.

D.1.3 Operational Standards for Collection and Control Systems [40CFR 60.753]

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

(1) 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 2 years or more if closed or at final grade.

(2) Operate the collection system with negative pressure at each wellhead except under the following conditions:

(a) 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 40CFR 60.757(f)(1).

(b) Use of a geomembrane or synthetic cover. The Permittee shall develop acceptable pressure limits in the design plan.

(c) 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 Management (OAM).

(3) Operate each interior wellhead in the collection system with a landfill gas temperature less than 55EC and with either a nitrogen level less than 20 percent or an oxygen level less than 5 percent. The Permittee may establish a higher operating temperature, nitrogen, or oxygen value at a particular well. 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.

(a) The nitrogen level shall be determined using Method 3C, unless an alternative method is established as allowed by 40CFR 60.752 (b)(2)(i).

(b) Unless an alternative test method is established as allowed by 40CFR 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.

(4) 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.

(5) Operate the system such that all collected gases are vented to a control system designed and operated in compliance with 40CFR 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.

(6) Operate the control system at all times when the collected gas is routed to the system.

(7) If monitoring demonstrates that the operational requirements in 40CFR 60.753(b), (c), or (d) are not met, corrective action shall be taken as specified in 40CFR 60.755(a)(3) through (5) or 40CFR 60.755(c). If corrective actions are taken as specified in 40CFR 60.755, the monitored exceedance is not a violation of the operational requirements in 40CFR 60.753.

Compliance Determination Requirements

D.1.4 Testing Requirements [326 IAC 2-7-6(1),(6)] [40CFR 60.754]

(1) Pursuant to 40CFR 60.754(b):

After installation of a collection and control system in compliance with 40CFR 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:

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

M_{NMOC} = mass emission rate of NMOC, megagrams per year
Q_{LFG} = flow rate of landfill gas, cubic meters per minute
C_{NMOC} = NMOC concentration, parts per million by volume as hexane

(a) The flow rate of landfill gas, Q_{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 40CFR 60.

(b) The average NMOC concentration, C_{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 40CFR 60. If using Method 18 of appendix A of 40CFR 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 40CFR 60 by six to convert from C_{NMOC} as carbon to C_{NMOC} as hexane.

(c) 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 Mangement.

(2) 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 Management (OAM) 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:

Control Efficiency = $(NMOC_{in} - NMOC_{out}) / (NMOC_{in})$
where,
$NMOC_{in}$ = mass of NMOC entering the control device
$NMOC_{out}$ = mass of NMOC exiting control device

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

D.1.5 Monitoring [40CFR 60.756]

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

(1) The Permittee seeking to comply with 40CFR 60.752(b)(2)(ii)(A) for an active gas collection shall install a sampling port and a thermometer, other temperature measuring device, or an access port for temperature measurements at each wellhead and:

(a) Measure the gauge pressure in the gas collection header on a monthly basis as provided in 40CFR 60.755(a)(3);

(b) Monitor nitrogen or oxygen concentration in the landfill gas on a monthly basis as provided in 40CFR 60.755(a)(5); and

(c) Monitor temperature of the landfill gas on a monthly basis as provided in 40CFR 60.755(a)(5).

(2) The Permittee seeking to comply with 40CFR 60.752(b)(2)(iii) using an enclosed combustor shall calibrate, maintain, and operate according to the manufacturer's specifications, the following equipment:

(a) A temperature monitoring device equipped with a continuous recorder and having a minimum accuracy of ±1 percent of the temperature being measured expressed in degrees Celsius of ±0.5 EC, whichever is greater. A temperature monitoring device is not required for boilers or process heaters with design heat input capacity greater than 44 megawatts.

(b) 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.

(3) The Permittee seeking to comply with 40CFR 60.752(b)(2)(iii) using an open flare shall install, calibrate, maintain, and operate according to the manufacturer's specifications the following equipment:

(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

(b) A device that records flow to or bypass of the flare.

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 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 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.

(4) The Permittee seeking to comply with 40CFR 60.752(b)(2)(iii) using a device other than an open flare or an enclosed combustor shall provide information satisfactory to the Office of Air Management (OAM) as provided in 40CFR 60.752(b)(2)(i)(B) describing the operation of the control device, the operating parameters that would indicate proper performance, and appropriate monitoring procedures. The Office of Air Management (OAM) shall review the information and either approve it, or request that additional information be submitted. The Office of Air Management (OAM) may specify additional monitoring procedures.

(5) The Permittee seeking to install a collection system that does not meet the specifications in 40CFR 60.759 or seeking to monitor alternative parameters to those required by 40CFR 60.753 through 40CFR 60.756 shall provide information satisfactory to the Office of Air Management (OAM) as provided in 40CFR 60.752(b)(2)(i)(B) and (C) describing the design and operation of the collection system, the operating parameters that would indicate proper performance, and appropriate monitoring procedures. The Office of Air Management (OAM) may specify additional appropriate monitoring procedures.

(6) The Permittee seeking to demonstrate compliance with 40CFR 60.755(c), shall monitor surface concentrations of methane according to the instrument specifications and procedures provided in 40CFR 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.1.6 Compliance Provisions [40CFR 60.755]

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

(a) 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 L_o 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 Management (OAM). If k has been determine as specified in 40CFR 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:

$Q_m = 2L_o R (e^{-kc} - e^{-kt})$
where,
Q_m = maximum expected gas generation flow rate, cubic meters per year
L_o = methane generation potential, cubic meters per megagram solid waste
R = average annual acceptance rate, megagrams per year
k = methane generation rate constant, $year^{-1}$
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 $e^{-kc} = 1$)

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

$$Q_M = \sum_{i=1}^{n} 2 k L_O M_i (e^{-kt_i})$$

where,
Q_M = maximum expected gas generation flow rate, cubic meters per year
k = methane generation rate constant, $year^{-1}$
L_o = methane generation potential, cubic meters per megagram solid waste
M_i = mass of solid waste in the ith section, megagrams
t_i = 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 40CFR 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 40CFR 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.

(b) For the purposes of determining sufficient density of gas collector for compliance with 40CFR 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 Management (OAM), capable of controlling and extracting gas from all portions of the landfill sufficient to meet all operational and performance standards.

(c) For the purpose of demonstrating whether the gas collection system flow rate is sufficient to determine compliance with 40CFR 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 40CFR 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.

(d) The Permittee is not required to expand the system as required in 40CFR 60.755(a)(3) during the first 180 days after gas collection system start-up.

(e) 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 40CFR 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.

(f) If the Permittee seeks to demonstrate compliance with 40CFR 60.752(b)(2)(ii)(A)(4) through the use of a collection system not conforming to the specifications provided in 40CFR 60.759 shall provide information satisfactory to the Office of Air Management (OAM) as specified in 40CFR 60.752 (b)(2)(i)(C) demonstrating that off-site migration is being controlled.

(2) For purposes of compliance with 40CFR 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 40CFR 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.

(3) The following procedures shall be used for compliance with the surface methane operational standard as provided in 40CFR 60.753 (d):

(a) 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 40CFR 60.755(d).

(b) 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.

(c) Surface emission monitoring shall be performed in accordance with section 4.3.1 of Method 21 of appendix A of 40CFR60, 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.

(d) 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 40CFR 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 40CFR 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 40CFR 60.755(c)(4)(v) of this section shall be taken, and no further monitoring of that location is required until the action specified in 40CFR 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 40CFR 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 remonitoring shows an exceedance, the actions specified in 40CFR 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 Management (OAM) for approval.

(e) The Permittee shall implement a program to monitor for cover integrity and implement cover repairs as necessary on a monthly basis.

(4) The Permittee seeking to comply with the provisions of 40CFR 60.755(c) shall comply with the following instrumentation specifications and procedures for surface emission monitoring devices:

(a) The portable analyzer shall meet the instrument specifications provided in section 3 of Method 21 of appendix A of 40CFR 60, except the “methane” shall replace all references to volatile organic compound (VOC).

(b) The calibration gas shall be methane, diluted to a nominal concentration of 500 parts per million in air.

(c) To meet the performance evaluation requirements in section 3.1.3 of Method 21 of appendix A of 40CFR 60, the instrument evaluation procedures of section 4.4 of Method 21 of appendix A of 40CFR 60 shall be used.

(d) The calibration procedures provided in section 4.2 of Method 21 of appendix A of 40CFR 60 shall be followed immediately before commencing a surface monitoring survey.

(5) The provisions of 40CFR 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.

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

D.1.7 Non Methane Organic Compound (NMOC) Rate Calculation [40CFR 60.754]

Pursuant to 40CFR 60.754 the Permittee shall:

(1) Calculate the non methane organic compound (NMOC) emission rate using either the equation provided in 40 CFR 60.754(a)(1)(i) or the equation provided in 40 CFR 60.754(a)(1)(ii). Both equations may be used if the actual year-to-year solid waste acceptance rate is known, as specified in 40 CFR 60.754(a)(1)(i), for part of the life of the landfill and the actual year-to-year solid waste acceptance rate is unknown, as specified in 40 CFR 60.754(a)(1)(ii), for part of the life of the landfill. The values to be used in both equations are 0.05 per year for k, 170 cubic meters per megagram for L_o, and 4,000 parts per million by volume as hexane for the C_{NMOC}. For landfills located in geographical areas with a thirty year annual average precipitation of less than 25 inches, as measured at the nearest representative official meteorological site, the k value to be used is 0.02 per year.

The following equation shall be used if the actual year-to-year solid waste acceptance rate is known:

$$M_{NMOC} = \sum_{i=1}^{n} 2\ k\ L_O M_i\ (e^{-kt}i)\ (C_{NM}OC)\ \ (3.6x10^{-}9)$$

where,

M_{NMOC}= Total NMOC emission rate from the landfill, megagrams per year
k = methane generation rate constant, year^{-1}
L_o= methane generation potential, cubic meters per megagram solid waste
M_i= mass of solid waste in the ith section, megagrams
t_i= age of the ith section, years
C_{NMOC}= concentration of NMOC, parts per million by volume as hexane
3.6 x 10^{-9}= conversion factor

The mass of the nondegradable solid waste may be subtracted from the total mass of solid waste in a particular section of the landfill when calculating the value for M_i if documentation of the nature and amount of such wastes is maintained.

The following equation shall be used if the actual year-to-year solid waste acceptance rate is unknown:

$$M_{NMOC} = 2\ L_o\ R\ (e^{-kc} - e^{-kt})(C_{NMOC})(3.6 \times 10^{-9})$$

where,

M_{NMOC} = mass emission rate of NMOC, megagrams per year
L_o = methane generation potential, cubic meters per megagram solid waste
R = average annual acceptance rate, megagrams per year
k = methane generation rate constant, year $^{-1}$
t = age of landfill, years
C_{NMOC} = concentration of NMOC, parts per million by volume as hexane
c = time since closure, years. For active landfill c = 0 and e^{-kc} = 1
3.6 x 10^{-9} = conversion factor

The mass of the nondegradable solid waste may be subtracted from the total mass of solid waste in a particular section of the landfill when calculating the value for M_i if documentation of the nature and amount of such wastes is maintained.

(2) Tier 1. The Permittee shall compare the calculated NMOC mass emission rate to the standard of 50 megagrams per year.

If the NMOC emission rate calculated in 40CFR 60.754(a)(1) is less than 50 megagrams per year, then the landfill owner shall submit an emission rate report as provided in 40CFR 60.757(b)(1), and shall recalculate the NMOC mass emission rate annually as required under 40CFR 60.752(b)(1). If the calculated NMOC emission rate is equal to or greater than 50 megagrams per year, then the Permittee shall either comply with 40CFR 60.752(b)(2), or determine a site-specific NMOC concentration and recalculate the NMOC emission rate using the procedures provided in 40CFR 60.754(a)(3).

Tier 2. The Permittee shall determine the NMOC concentration using the following sampling procedure. The Permittee shall install at least two sample probes per hectare of landfill surface that has retained waste for at least 2 years. If the landfill is larger that 25 hectares in area, only 50 samples are required. The sample probes should be located to avoid known areas of nondegradable solid waste. The Permittee shall collect and analyze one sample of landfill gas from each probe to determine the NMOC concentration using Method 25C of appendix A of 40 CFR 60 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). If composite sampling is used, equal volumes shall be taken from each sample probe. If more than the required number of samples are taken, all samples shall be used in analysis. The Permittee shall divide the NMOC concentration from Method 25C of appendix A by six to convert from C_{NMOC} as carbon to C_{NMOC} as hexane.

The Permittee shall recalculate the NMOC mass emission rate using the equations provided in 40CFR 60.754(a)(1)(i) and (a)(1)(ii) and using the average NMOC concentration from the collected samples instead of the default value in the equation provided in 40CFR 60.754(a)(1).

If the resulting mass emission rate calculated using the site-specific NMOC concentration is equal to or greater that 50 megagrams per year, then the Permittee shall either comply with 40CFR 60.752(b)(2), or determine the site-specific methane generation rate constant and recalculate the NMOC emission rate using the site-specific methane generation rate using the procedure specified in 40CFR 60.754(a)(4).

If the resulting NMOC mass emission rate is less than 50 megagrams per year, the Permittee shall submit a periodic estimate of the emission rate report as provided in 40CFR 60.757(b)(1) and retest the site-specific NMOC concentration every five (5) years using the methods in 40CFR 60.754(a)(3).

Tier 3. The site-specific methane generation rate constant shall be determined using the procedures provided in Method 2E of appendix A of 40 CFR 60. The Permittee shall estimate the NMOC mass emission rate using equations in 40 CFR 60.754(a)(1)(i) or (a)(1)(ii) and using a site-specific methane generation rate constant k, and the site-specific NMOC concentration as determined in 40 CFR 60.754(a)(3) instead of the default values provided in 40 CFR 60.754(a)(1). The Permittee shall compare the resulting NMOC mass emission rate to the standard of 50 megagrams per year.

If the NMOC mass emission rate as calculated using the site-specific methane generation rate and concentration of NMOC is equal to or greater than 50 megagrams per year, the Permittee shall comply with 40CFR 60.752(b)(2).

If the NMOC mass emission rate is less than 50 megagrams per year, then the Permittee shall submit a periodic emission rate report as provided in 40CFR 60.757(b)(1) and shall recalculate the NMOC mass emission rate annually, as provided in 40CFR 60.757(b)(1) using the equations in 40CFR 60.754(a)(1) and using the site-specific methane generation rate constant and NMOC concentration obtained in 40CFR 60.754(a)(3). The calculation of the methane generation rate constant is performed only once, and the value obtained from this test shall be used in all subsequent annual NMOC emission rate calculations.

The Permittee may use other methods to determine the NMOC concentration or a site-specific k as an alternative to the methods required in 40CFR 60.754(a)(3) and (a)(4) if the method has been approved by the Administrator.

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

The Permittee's initial NMOC report was submitted on August 11, 1997.

D.1.8 Reporting Requirements [40CFR 60.757]

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

(1) Submit an initial design capacity report to the Office of Air Management (OAM) no later than 90 days after October 8, 1997. An amended design capacity report shall be submitted to the Office of Air Management (OAM) providing notification of any increase in the design capacity of the landfill. The Permittee's initial design capacity report was submitted on June 13, 1996.

(2) Submit a non methane organic compound (NMOC) emission rate report to the Office of Air Management initially and annually thereafter, except as provided for in 40CFR 60.757(b)(1)(ii) or (b) (3). The Office of Air Management (OAM) may request such additional information as may be necessary to verify the reported NMOC emission rate. The report should contain an annual or 5-year estimate of the non methane organic compound (NMOC) emission rate using the formula and procedures provided in 40CFR 60.754 (a) or (b), as applicable. The initial NMOC emission rate report may be combined with the initial design capacity report required in 40CFR 60.757(a) and shall be submitted no later than indicated in paragraphs 40 CFR 60.757(b)(1)(i)(A) and (B). June 10, 1996, for landfills that commenced construction, modification, or reconstruction on or after May 30, 1991, but before March 12, 1996, or ninety days after the date of commenced construction, modification, or reconstruction for landfills that commence construction, modification, or reconstruction on or after March 12, 1996. Subsequent NMOC emission rate reports shall be submitted annually thereafter, except as provided in 40CFR 60.757(b)(1)(ii) and (b)(3). If the estimated NMOC emission rate as reported in the annual report to the Office of Air Management (OAM) is less than 50 megagrams per year in each of the next five (5) consecutive years, the Permittee may elect to submit an estimate of the NMOC emission rate for the next five (5) year period in lieu of the annual report. This estimate shall include the current amount of solid waste-in-place and the estimated waste acceptance rate for each year of the five (5) years for which an NMOC emission rate is estimated. All data and calculations upon which this estimate is based shall be provided to the Office of Air Management (OAM). This estimate shall be revised at least once every five (5) years. If the actual waste acceptance rate exceeds the estimated waste acceptance rate in any year reported in the five (5) year estimate, a revised five (5) year estimate shall be submitted to the Office of Air Management. The revised estimate shall cover the five (5) year period beginning with the year in which the actual waste acceptance rate exceeded the estimated waste acceptance rate. The NMOC emission rate report shall include all the data, calculations, sample reports, and measurements used to estimate the annual or five (5) year emission rate. The Permittee is exempted from the requirements of 40CFR 60.757(b)(1) and (2) after the installation of a collection and control system in compliance with 40CFR 60.752 (b)(2), during such time as the system is in operation and in compliance with 40CFR 60.753 and 60.755.

(3) Submit a collection and control system design plan to the Office of Air Management (OAM) within one (1) year of the first non methane organic compound (NMOC) emission rate report, required under 40CFR 60.757(b), in which NMOC emission rate exceeds 50 megagrams (Mg) per year; except if the Permittee elects to recalculate the NMOC emission rate after Tier 2 sampling and analysis as provided in 40CFR 60.754(a)(3) and the resulting rate is less than 50 megagrams per year, annual periodic reporting shall be resumed, using the Tier 2 determined site-specific NMOC concentration, until the calculated emission rate is equal to or greater than 50 megagrams per year or the landfill is closed. The revised NMOC emission rate report, with the recalculated emission rate based on NMOC sampling and analysis, shall be submitted within 180 days of the first calculated exceedance of 50 megagrams per year. If the Permittee elects to recalculate the NMOC emission rate after determining a site-specific methane generation rate constant (k), as provided in Tier 3 in 40CFR 60.754(a)(4), and the resulting NMOC emission rate is less than 50 megagrams per year, annual periodic reporting shall be resumed. The resulting site-specific methane generation rate constant (k) shall be used in the emission rate calculation until such time as the emissions rate calculation results in an exceedance. The revised NMOC emission rate report based on the provisions of 40CFR 60.754(a)(4) and the resulting site-specific methane generation rate constant (k) shall be submitted to the Office of Air Management (OAM) within one (1) year of the first calculated emission rate exceeding 50 megagrams per year. The Permittee's design plan was submitted on March 12, 1998.

(4) Submit a closure report to the Office of Air Management (OAM) within thirty days of waste acceptance cessation. The Office of Air Management (OAM) may request additional information as may be necessary to verify that permanent closure has taken place in accordance with the requirements of 40CFR 258.60. If a closure report has been submitted to the Office of Air Management (OAM), no additional wastes may be placed into the landfill without filing a notification of modification as described under 40CFR 60.7(a)(4).

(5) Submit an equipment removal report to the Office of Air Management (OAM) 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 40CFR 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 Management (OAM) may request such additional information as may be necessary to verify that all of the conditions for removal in 40CFR 60.752(b)(2)(v) have been met.

(6) Annual reports of the following recorded information. The initial annual report shall be submitted within 180 days of installation and start-up of the collection and control system, and shall include the initial performance test report required under 40CFR 60.8. For enclosed combustion devices and flares, reportable exceedances are defined under 40 CFR 60.758(c) .

(a) Value and length of time for exceedance of applicable parameters monitored under 40CFR 60.756(a), (b), (c), and (d).

(b) 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 40CFR 60.756.

(c) 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.

(d) All periods when the collection system was not operating in excess of five (5) days.

(e) Location of each exceedance of the 500 parts per million methane concentration as provided in 40CFR 60.753(d) and the concentration recorded at each location for which an exceedance was recorded in the previous month.

(f) Date of installation and the location of each well or collection system expansion added pursuant to 40CFR 60.755(a)(3), (b), and (c)(4).

(7) The Permittee seeking to comply with 40CFR 40.752(b)(2)(iii) shall include the following information with the initial performance test report required under 40CFR 60.8:

(a) 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.

(b) 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.

(c) 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.

(d) 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.

(e) 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

(f) The provision for the control of off-site migration.

(8) A summary of the above information shall be submitted to the address listed in Section C - General Reporting Requirements, of this permit.

D.1.9 Record Keeping Requirements [326 IAC 12] [40CFR 60.758]

Pursuant to 40CFR 60.758:

(1) 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 5 years up-to-date, readily accessible, 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.

(2) 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 of the data listed in (a) through (d) 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.

(a) Where the Permittee subject to the provisions of 40CFR 60.758 seeks to demonstrate compliance with 40CFR 60.752(b)(2)(ii):

The maximum expected gas generation flow rate as calculated in 40CFR 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 Management (OAM).

The density of wells, horizontal collectors, surface collectors, or other gas extraction devices determined using the procedures specified in 40CFR 60.759(a)(1).

(b) Where the Permittee subject to the provisions of 40CFR 60.758 seeks to demonstrate compliance with 40CFR 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 greater than 44 megawatts:

The average combustion temperature measured at least every fifteen (15) minutes and averaged over the same time period of the performance test.

The percent reduction of NMOC determined as specified in 40CFR 60.752(b)(2)(iii)(B) achieved by the control device.

(c) Where the Permittee subject to the provisions of 40CFR 60.758 seeks to demonstrate compliance with 40CFR 60.752(b)(2)(iii)(B)(1) through use of a boiler or process heater of any size: a description of the location at which the collected gas vent stream is introduced into the boiler or process heater over the same time period of the performance testing.

(d) Where the Permittee subject to the provisions of 40CFR 60.758 seeks to demonstrate compliance with 40CFR 60.752(b)(2)(iii)(A) through use of an open flare, 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 40CFR 60.18; 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.

(3) Except as provided in 40 CFR 60.752(b)(2)(i)(B), the Permittee of a controlled landfill subject to the provisions of the subpart shall keep for 5 years up-to-date, readily accessible continuous records of the equipment operating parameters specified to be monitored in 40CFR 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.

(a) The following constitute exceedances that shall be recorded and reported under 40CFR 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 28EC below the average combustion temperature during the most recent performance test at which compliance with 40CFR 60.752(b)(2)(iii) was determined.

For boilers or process heaters, whenever there is a change in the location at which the vent stream is introduced into the flame zone as required under 40CFR 60.758(b)(3)(i) of this section

(b) The Permittee subject to 40CFR 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 40CFR 60.756.

(c) The Permittee subject to the provisions of 40CFR 60.758 who uses a boiler or process heater with a design heat input capacity of 44 megawatts or greater to comply with 40CFR 60.752(b)(2)(iii) shall keep an up-to-date, readily accessible record of all periods of operation of the boiler or process heater. (Examples of such records could include records of steam use, fuel use, or monitoring data collected pursuant to other State, local, Tribal or Federal regulatory requirements.)

(d) The Permittee seeking to comply with the provisions of 40CFR 60.758 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 40CFR 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.

(4) 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.

(a) The Permittee subject to the provisions of 40CFR 60.758 shall keep up-to-date, readily accessible records of the installation date and location of all newly installed collectors as specified in 40CFR 60.755 (b).

(b) The Permittee subject to the provisions of 40CFR 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 40CFR 60.759 (a)(3)(i) as well as any non-productive areas excluded from collection as provided in 40CFR 60.759 (a)(3)(ii).

(5) 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 5 years up-to-date, readily accessible records of all collection and control system exceedances of the operational standards in 40CFR 60.753, the reading in the subsequent month whether or not the second reading is an exceedance, and the location of each exceedance.

(6) Landfill owners or operators who convert 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”, 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.

SECTION D.2 FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)] Insignificant Activity
One (1) 55 gallon parts washing machine with an annual throughput of 350 gallons and a monthly throughput of 28 gallons, installed after 1991.

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:

(1) equip the cleaner with a cover;
(2) equip the cleaner with a facility for draining cleaned parts;
(3) close the degreaser cover whenever parts are not being handled in the cleaner;
(4) drain cleaned parts for at least fifteen (15) seconds or until dripping ceases;
(5) provide a permanent, conspicuous label summarizing the operation requirements;
(6) store waste solvent only in covered containers and not dispose of waste solvent or transfer it to another party, in such a matter 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^{O}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.

Compliance Determination Requirements

D.2.3 Testing Requirements [326 IAC 2-7-6(1),(6)]

The Permittee is not required to test this facility by this permit. However, IDEM may require compliance testing at any specific time when necessary to determine if the facility is in compliance. If testing is required by IDEM, compliance with Condition D.2.1 and D.2.2 shall be determined by a performance test conducted in accordance with Section C - Performance Testing.

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

PART 70 OPERATING PERMIT
CERTIFICATION

Source Name: Newton County Landfill
Source Address: 2266 East 500 South Road, Brook, Indiana 47922
Mailing Address: 2266 East 500 South Road, Brook, Indiana 47922
Part 70 Permit No.: T111-9725-00017

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:

9 Annual Compliance Certification Letter

9 Test Result (specify) _____

9 Report (specify) _____

9 Notification (specify) _____

9 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:

Date:

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR MANAGEMENT
COMPLIANCE DATA SECTION
P.O. Box 6015
100 North Senate Avenue
Indianapolis, Indiana 46206-6015
Phone: 317-233-5674
Fax: 317-233-5967

PART 70 OPERATING PERMIT
EMERGENCY/DEVIATION OCCURRENCE REPORT

Source Name: Newton County Landfill
Source Address: 2266 East 500 South Road, Brook, Indiana 47922
Mailing Address: 2266 East 500 South Road, Brook, Indiana 47922
Part 70 Permit No.: T111-9725-00017

This form consists of 2 pages **Page 1 of 2**

Check either No. 1 or No.2
9 1. This is an emergency as defined in 326 IAC 2-7-1(12) C The Permittee must notify the Office of Air Management (OAM), within four (**4**) business hours (1-800-451-6027 or 317-233-5674, ask for Compliance Section); and C The Permittee must submit notice in writing or by facsimile within two (**2**) days (Facsimile Number: 317-233-5967), and follow the other requirements of 326 IAC 2-7-16
9 2. This is a deviation, reportable per 326 IAC 2-7-5(3)(c) C The Permittee must submit notice in writing within ten (**10**) calendar days

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/Deviation:
Describe the cause of the Emergency/Deviation:

If any of the following are not applicable, mark N/A **Page 2 of 2**

Date/Time Emergency/Deviation started:
Date/Time Emergency/Deviation was corrected:
Was the facility being properly operated at the time of the emergency/deviation? Y N Describe:
Type of Pollutants Emitted: TSP, PM-10, SO_2, VOC, NO_X, CO, Pb, other:
Estimated amount of pollutant(s) emitted during emergency/deviation:
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: _____

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

PART 70 OPERATING PERMIT
SEMI-ANNUAL COMPLIANCE MONITORING REPORT

Source Name: Newton County Landfill
Source Address: 2266 East 500 South Road, Brook, Indiana 47922
Mailing Address: 2266 East 500 South Road, Brook, Indiana 47922
Part 70 Permit No.: T111-9725-00017

Months: _____ **to** _____ **Year:** _____

This report is an affirmation that the source has met all the compliance monitoring requirements stated in this permit. This report shall be submitted semi-annually. Any deviation from the compliance monitoring requirements and the date(s) of each deviation must be reported. Additional pages may be attached if necessary. This form can be supplemented by attaching the Emergency/Deviation Occurrence Report. If no deviations occurred, please specify in the box marked "No deviations occurred this reporting period".

9 NO DEVIATIONS OCCURRED THIS REPORTING PERIOD

9 THE FOLLOWING DEVIATIONS OCCURRED THIS REPORTING PERIOD.

Compliance Monitoring Requirement (e.g. Permit Condition D.1.3)	**Number of Deviations**	**Date of each Deviation**

Form Completed By: _____
Title/Position: _____
Date: _____
Phone: _____

Attach a signed certification to complete this report.

Indiana Department of Environmental Management
Office of Air Management

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

Source Background and Description

Source Name: **Newton County Landfill**
Source Location: **2266 East 500 South Road, Brook, Indiana 47922**
County: **Newton**
SIC Code: **4953**
Operation Permit No.: **T111-9725-00017**
Permit Reviewer: **Autumn M. Marker**

The Office of Air Management (OAM) has reviewed a Part 70 permit application from Newton County Landfill relating to the operation of a municipal solid waste landfill.

Unpermitted Emission Units and Pollution Control Equipment

The source consists of the following unpermitted facilities/units:

(a) One (1) municipal solid waste landfill with a design capacity of 7.171134 million megagrams (Mg).

(b) Four (4) passive open flares with a maximum capacity of 200 cubic feet per minute (cfm) each.

This source has been operating and was not required to have any approvals from the OAM. There are no new facilities to be reviewed under the ENSR process.

Insignificant Activities

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

(a) Natural gas-fired combustion sources with heat input equal to or less than ten million (10,000,000) Btu per hour.

(1) Two (2) natural gas-fired furnaces each with an input of 0.1MMBtu/hr.

(b) Propane or liquified petroleum gas, or butane-fired combustion sources with heat input equal to or less than six million (6,000,000) Btu per hour.

(1) Two (2) liquified petroleum-fired furnaces each with an input of 0.06MMBtu/hr.

(c) A gasoline fuel transfer and dispensing operation handling less than or equal to 1,300 gallons per day, such as filling of tanks, locomotives, automobiles, having a storage capacity less than or equal to 10,500 gallons.

(c) A petroleum fuel, other than gasoline, dispensing facility, having a storage capacity of less than or equal to 10,500 gallons, and dispensing less than or equal to 230,000 gallons per month.

(1) One (1) above ground diesel storage tank with an 8,000 gallon capacity and an annual throughput of 60,160 gallons.

(2) One (1) above ground diesel storage tank with a 4,000 gallon capacity and an annual throughput of 330,080 gallons.

(d) Other activities or categories not previously identified:
Insignificant Thresholds: Activities with emissions equal to or less than thresholds require listing only.

Lead (Pb) = 0.6ton/yr or 3.29lbs/day
Sulfur Dioxide (SO_2) = 5lbs/hr or 25lbs/day
Nitrogen Oxides (NO_x) = 5lbs/hr or 25 lbs/day
Carbon Monoxide (CO) = 25lbs/day
Particulate Matter (PM) = 5lbs/hr or 25lbs/day
Volatile Organic Compounds (VOC) = 3lbs/hr or 15lbs/day

(1) One (1) 55 gallon parts washing machine with an annual throughput of 350 gallons and a monthly throughput of 28 gallons.

Enforcement Issue

There are no enforcement actions pending.

Recommendation

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

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

An administratively incomplete Part 70 permit application for the purposes of this review was received on April 28, 1998. Additional information received on July 10, 1998, makes the Part 70 permit application administratively complete.

A notice of completeness letter was mailed to the source on August 3, 1998.

Emission Calculations

See Appendix A, pages12-14, of this document for detailed emissions calculations.

Potential Emissions

Pursuant to 326 IAC 1-2-55, Potential Emissions are defined as “emissions of any one (1) pollutant which would be emitted from a facility, if that facility were operated without the use of pollution control equipment unless such control equipment is necessary for the facility to produce its normal product or is integral to the normal operation of the facility.”

Pollutant	Potential Emissions (tons/year)
PM	less than 100
PM-10	less than 100
SO_2	less than 100
VOC	over 100 less than 250
CO	less than 100
NO_x	less than 100

Note: For the purpose of determining Title V applicability for particulates, PM-10, not PM, is the regulated pollutant in consideration.

HAP's	Potential Emissions (tons/year)
Toluene	greater than 10
Total HAPs	greater than 25
TOTAL	***greater than 25***

(a) The potential emissions (as defined in 326 IAC 1-2-55) of any single HAP is equal to or greater than ten (10) tons per year or the potential emissions (as defined in 326 IAC 1-2-55) of a combination HAPs is greater than or equal to twenty-five (25) tons per year. Therefore, the source is subject to the provisions of 326 IAC 2-7.

(b) Pursuant to New Source Performance Standard, 40 CFR 60, Subpart WWW, the source is subject to the provisions of 326 IAC 2-7.

Actual Emissions

No previous emission data has been received from the source.

County Attainment Status

The source is located in Newton County.

Pollutant	Status
PM-10	attainment
SO_2	attainment
NO_2	attainment
Ozone	attainment
CO	attainment
Lead	attainment

(a) Volatile organic compounds (VOC) and oxides of nitrogen (Nox) are precursors for the formation of ozone. Therefore, VOC and NO_X emissions are considered when evaluating the rule applicability relating to the ozone standards. Newton County has been designated as attainment or unclassifiable for ozone.

Federal Rule Applicability

The municipal solid waste landfill is subject to the New Source Performance Standard, 326 IAC 12, (40 CFR 60.750, Subpart WWW) because the municipal solid waste landfill commenced construction, reconstruction or modification or began accepting waste on or after May 30, 1991.

(1) Pursuant to 40CFR 60.752, a municipal solid waste landfill with a design capacity greater than 2.5 million megagrams (Mg) shall either comply with 40CFR 60.752 (b)(2) or calculate the non methane organic compound emission (NMOC) rate for the landfill using the procedures specified in 40CFR 60.754. (The Permittee's initial design capacity report was submitted on June 13, 1996. The Permittee's initial NMOC report was submitted on August 11, 1997. The Permittee's design plan was submitted on June 13, 1996.)

If the Permittee has calculated non methane organic compound (NMOC) emissions less than 50 megagrams (Mg) per year, the Permittee shall:

(a) Submit an annual NMOC report to the Office of Air Management (OAM);

and

(b) Recalculate the non methane organic compound (NMOC) emission rate annually using the procedures specified in 40CFR 60.754(a)(1) until such time as the calculated non methane organic compound (NMOC) emission rate is equal to or greater than 50 megagrams (Mg) per year or the landfill is closed.

If the Permittee has calculated non methane organic compound (NMOC) emissions of greater than 50 megagrams per year, the Permittee shall:

(a) Submit a collection and control system design plan prepared by a professional engineer that meets the requirements of 40CFR 60.752 (b)(2)(ii) to the Office of Air Management (OAM) within one year after calculated non methane organic compound (NMOC) emissions of greater than 50 megagrams (Mg) per year. The design plan shall include any alternatives to the operational standards, test methods, procedures, compliance measures, monitoring, record keeping or reporting provisions of 40CFR 60.753 through 40CFR 60.758 that are proposed by the Permittee. The design plan shall either conform with specifications for active collection systems in 40 CFR 60.759 or include a demonstration to the Office of Air Management's (OAM) satisfaction of the sufficiency of the alternative provisions to 40 CFR 60.759. The Office of Solid and Hazardous Waste Management (OSHWM) shall review the design plan and can either approve, disapprove, or request additional information be submitted by the Permittee.

(b) Install a collection and control system within eighteen months of the submittal of the design plan that effectively captures the gas generated within the landfill.

An active collection system shall:

(i) Be designed to handle the maximum expected gas flow rate from the entire area of the landfill that warrants control over the intended use period of the gas control or treatment system equipment.

(ii) Collect gas from each area, cell, or group of cells in the landfill in which the initial solid waste has been placed for a period of five years or more if active or two years or more if closed or at final grade.

(iii) Collect gas at a sufficient extraction rate.

(iv) Be designed to minimize off-site migration of subsurface gas.

A passive collection system shall:

(i) Comply with the provisions specified in paragraphs A, B, and D above.

(ii) Be installed with liners on the bottom and all sides in all areas in which gas is to be collected. The liners shall be installed as required under §258.40 of the title.

(c) Route all collected gas to an open flare collection system that is designed and operated in accordance with 40CFR 60.18.

(d) Operate the collection and control device installed to comply with this subpart in accordance with the provisions of 40CFR 60.753, 60.755, and 60.756.

(e) Cap or remove the collection and control system provided that the following conditions are met:

(i) The landfill shall be no longer accepting solid waste and be permanently closed under the requirements of §258.60 of this title. A closure report shall be submitted to the Office of Solid and Hazardous Waste Management (OSHWM) as provided in 40CFR 60.757 (d);

(ii) The collection and control system shall have been in operation a minimum of fifteen years;

and

(iii) The calculated non methane organic compound (NMOC) gas produced by the landfill shall be less than 50 megagrams (Mg) per year on three consecutive test dates. The test dates shall be no less than 90 days apart, and no more than 180 days apart.

(2) Pursuant to 40CFR 60.754 the Permittee shall calculate the non methane organic compound (NMOC) rate using either of the equations listed below. The values to be used in both equations are 0.05 per year for k, 170 cubic meters per megagram for L_o, and 4,000 parts per million by volume as hexane for the C_{NMOC}.

The following equation when the actual year-to-year solid waste acceptance rate is known.

$$M_{NMOC} = \sum_{i=1}^{n} 2\ k\ L_O M_i\ (e^{-kt_i})\ (C_{NM}OC)\ \ (3.6x10^{-9})$$

where,

M_{NMOC}= Total NMOC emission rate from the landfill, megagrams per year
k = methane generation rate constant, $year^{-1}$
L_o= methane generation potential, cubic meters per megagram solid waste
M_i= mass of solid waste in the ith section, megagrams
t_i= age of the ith section, years
C_{NMOC}= concentration of NMOC, parts per million by volume as hexane
3.6×10^{-9}= conversion factor

The mass of the nondegradable solid waste may be subtracted from the total mass of solid waste in a particular section of the landfill when calculating the value for M_i if the documentation provisions of 40CFR 60.758(d)(2) are followed.

The following equation shall be used if the actual year-to-year solid waste acceptance rate is unknown:

$$M_{NMOC} = 2\ L_o\ R\ (e^{-kc} - e^{-kt})(C_{NMOC})(3.6 \times 10^{-9})$$

where,

M_{NMOC} = mass emission rate of NMOC, megagrams per year
L_o = methane generation potential, cubic meters per megagram solid waste
R = average annual acceptance rate, megagrams per year
k = methane generation rate constant, year $^{-1}$
t = age of landfill, years
C_{NMOC} = concentration of NMOC< parts per million by volume as hexane
c = time since closure, years. For active landfill c = 0 and e^{-kc} = 1
3.6×10^{-9} = conversion factor

The mass of the nondegradable solid waste may be subtracted from the total mass of solid waste in a particular section of the landfill when calculating the value for M_i if the documentation provisions of 40CFR 60.758(d)(2) are followed.

If the calculated non methane organic compound (NMOC) emission rate is equal to or greater than 50 megagrams per year, then the Permittee shall either comply with the provisions of 40CFR 60.752 (b)(2) or determine a site-specific non methane organic compound (NMOC) emission rate using the procedures described in 40CFR 60.754 (a)(3).

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

(1) 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 2 years or more if closed or at final grade.

(2) Operate the collection system with negative pressure at each wellhead except under the following conditions:

(a) 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 40CFR 60.757(f)(1).

(b) Use of a geomembrane or synthetic cover. The Permittee shall develop acceptable pressure limits in the design plan.

(c) 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 Management (OAM).

(3) Operate each interior wellhead in the collection system with a landfill gas temperature less than 55EC and with either a nitrogen level less than 20 percent or an oxygen level less than 5 percent. The Permittee may establish a higher operating temperature, nitrogen, or oxygen value at a particular well. 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.

(a) The nitrogen level shall be determined using Method 3C, unless an alternative method is established as allowed by 40CFR 60.752 (b)(2)(i).

(b) Unless an alternative test method is established as allowed by 40CFR 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.

(4) 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 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.

(5) Operate the system such that all collected gases are vented to a control system designed and operated in compliance with 40CFR 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.

(6) Operate the control system at all times when the collected gas is routed to the system.

(7) If monitoring demonstrates that the operational requirement in 40CFR 60.753(b), (c), or (d) are not met, corrective action shall be taken as specified in 40CFR 60.752(a)(3) through (5) or 40CFR 60.755(c). If corrective actions are taken as specified in 40CFR 60.755, the monitored exceedance is not a violation of the operational requirements in 40CFR 60.753.

The two (2) above ground diesel storage tanks are not subject to the New Source Performance Standard, 326IAC 12, (40CFR60, Subpart Kb) because both of the storage tanks have a capacity less than 40 cubic meters (m^3).

The parts washing machine is not subject to the requirements of the National Emission Standards for Hazardous Air Pollutants (NESHAPs), Subpart T, because the solvent used does not contain any of the following halogenated solvents in concentrations greater than five percent by weight: methylene chloride, 1,1,1-trichloroethane, trichloroethylene, perchloroethylene, carbon tetrachloride, or chloroform.

There are no National Emission Standards for Hazardous Air Pollutants (NESHAPs), 40CFR 63, applicable to this source.

State Rule Applicability - Entire Source

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

This source does not have potential emissions of 250 tons per year or more of any air pollutant subject to regulation under the Clean Air Act and it is not one of the twenty-eight (28) listed sources, therefore, pursuant to 326 IAC 2-2 this source is a minor source.

326 IAC 2-6 (Emission Reporting)

This source is subject to 326 IAC 2-6 (Emission Reporting), because it has the potential to emit more than one hundred (100) tons per year of volatile organic compounds. Pursuant to this rule, the owner/operator of the source must annually submit an emission statement for the source.

The annual statement must be received by July 1 of each year and contain the minimum requirement as specified in 326 IAC 2-6-4. The submittal should cover the period defined in 326 IAC 2-6-2(8)(Emission Statement Operating Year).

326 IAC 5-1 (Visible Emissions Limitations)

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

(a) Visible emissions shall not exceed an average of forty percent (40%) opacity in twenty-four (24) consecutive readings as determined by 326 IAC 5-1-4,

(b) Visible emissions shall not exceed sixty percent (60%) opacity for more than a cumulative total of fifteen (15) minutes (sixty (60) readings) in a six (6) hour period.

326IAC 8-8.1 (Municipal Solid Waste Landfills Not Located in Clark, Floyd, Lake, and Porter Counties)

The source did not commence construction prior to May 30, 1991, and is not considered an existing municipal solid waste landfill, therefore, the source is not subject to 326IAC 8-8.1.

State Rule Applicability - Individual Facilities

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

The above ground storage tanks are not subject to 326IAC 8-9 because they are not located in Clark, Floyd, Lake, or Porter County.

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:

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

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) kilo Pascals (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) kilo Pascals (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) kilo Pascals (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^{O}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.

Compliance Requirements

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

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

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

The Permittee complying with 40CFR 60.752 (b)(2)(i)(B) has applicable compliance monitoring conditions with regard to an active collection system as specified below:

(1) The Permittee shall install a sampling port and a thermometer or other temperature measuring device at each wellhead; measure the gauge pressure in the gas collection header on a monthly basis; monitor nitrogen or oxygen concentration in the landfill gas on a monthly basis; and monitor temperature of the landfill gas on a monthly basis.

The municipal solid waste landfill has applicable compliance monitoring conditions with regard to the four (4) passive open flares as specified below:

(1) The Permittee shall install, calibrate, maintain, and operate according to the manufacturer's specifications 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 and a device that records flow to or bypass of the flare. 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 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 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.

The Permittee shall comply with any applicable monitoring conditions pursuant to 40CFR 60.756.

These monitoring conditions are necessary because the flares at the municipal solid waste landfill and an active collection system must operate properly to ensure compliance with 40CFR 60, Subpart WWW (Standards of Performance for Municipal Solid Waste Landfills).

Air Toxic Emissions

Indiana presently requests applicants to provide information on emissions of the 187 hazardous air pollutants (HAPs) set out in the Clean Air Act Amendments of 1990. These pollutants are either carcinogenic or otherwise considered toxic and are commonly used by industries. They are listed as air toxics on the Office of Air Management (OAM) Part 70 Application Form GSD-08.

(a) This source will emit levels of air toxics greater than those that constitute major source applicability according to Section 112 of the 1990 Clean Air Act Amendments.

(b) See attached calculations for detailed air toxic calculations. See page 13 of Appendix A.

Conclusion

The operation of this municipal solid waste landfill shall be subject to the conditions of the attached proposed **Part 70 Permit No. T111-9725-00017.**

Appendix A

Non Methane Organic Compound (NMOC) Emission Rate for the Landfill

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Model Parameters

==========

Lo : 170.00 m^3 / Mg*
k : 0.0500 1/yr*
NMOC : 816.30 ppmv**
Methane : 50.0000 % volume
Carbon Dioxide : 50.0000 % volume

==========

Landfill Parameters

==========

Landfill type : No Co-Disposal
Year Opened : 1995 Current Year : 1998 Closure Year: 2004
Capacity : 7171100 Mg
Average Acceptance Rate Required from
Current Year to Closure Year : 933022.00 Mg/year

==========

Model Results

==========

Year	Refuse In Place (Mg)	NMOC Emission Rate (Mg/yr)	(Cubic m/yr)
1996	2.186E+04	1.087E+00	3.034E+02
1997	5.250E+05	2.606E+01	7.271E+03
1998	1.573E+06	7.692E+01	2.146E+04
1999	2.506E+06	1.196E+02	3.336E+04
2000	3.439E+06	1.602E+02	4.468E+04
2001	4.372E+06	1.988E+02	5.545E+04
2002	5.305E+06	2.355E+02	6.569E+04
2003	6.238E+06	2.704E+02	7.544E+04
2004	7.171E+06	3.036E+02	8.470E+04
2005	7.171E+06	2.888E+02	8.057E+04
2006	7.171E+06	2.747E+02	7.664E+04
2007	7.171E+06	2.613E+02	7.291E+04
2008	7.171E+06	2.486E+02	6.935E+04
2009	7.171E+06	2.365E+02	6.597E+04
2010	7.171E+06	2.249E+02	6.275E+04
2011	7.171E+06	2.140E+02	5.969E+04
2012	7.171E+06	2.035E+02	5.678E+04
2013	7.171E+06	1.936E+02	5.401E+04
2014	7.171E+06	1.842E+02	5.138E+04
2015	7.171E+06	1.752E+02	4.887E+04
2016	7.171E+06	1.666E+02	4.649E+04

Values calculated using the Landfill Gas Emissions Model, version 2.0
*Default values for L_o and k taken from NSPS 40CFR 60.750, Subpart WWW
**NMOC concentration submitted by the Permittee as a result of a Tier 2 analysis

Potential HAP Emissions from the Landfill

==========

Model Parameters

==========

Lo : 170.00 m^3 / Mg*
k : 0.0500 1/yr*
NMOC : 816.30 ppmv**
Methane : 50.0000 % volume
Carbon Dioxide : 50.0000 % volume

==========

Landfill Parameters

==========

Landfill type : No Co-Disposal
Year Opened : 1995 Current Year : 1998 Closure Year: 2003
Capacity : 7171134 Mg
Average Acceptance Rate Required from
Current Year to Closure Year : 1045226.80 Mg/year

HAPs Emitted	Mg/yr
1,1,1 - Trichloroethane	0.0276
1,1,2,2 - Tetrachloroethane	0.8041
1,1,2 - Trichloroethane	0.05758
1,1 - Dichloroethane	1.000
1,1 - Dichloroethene	0.08368
1,2 - Dichloroethane	0.1751
1,2 - Dichloropropane	0.08778
Acrylonitrile	1.450
Benzene	0.6440
Carbon Disulfide	0.1906
Carbon Tetrachloride	0.002656
Carbonyl Sulfide	0.1270
Chlorobenzene	0.1215
Chloroethane	0.3481
Chloroform	0.01237
Dichlorobenzene	0.1332
Dichloromethane	5.242
Ethylbenzene	2.112
Ethylene Dibromide	0.0008109
Hexane	2.444
Hydrogen Sulfide	5.222
Mercury	0.0002191
Methyl Ethyl Ketone	2.207
Methyl Isobutyl Ketone	0.8084
Perchloroethylene	2.670
Toluene	15.63
Trichloroethene	1.599
Xylene	5.545
Vinyl Chloride	1.980
TOTAL	50.726

50.726 Mg/yr * 1.1 = 55.799 ton/yr

Values obtained using the Landfill Gas Emissions Model, version 2.0
*Default values for L_o and k taken from NSPS 40CFR 60.750, Subpart WWW
**NMOC concentration submitted by the Permittee as a result of a Tier 2 analysis

Flare Emissions

LFG Heating Value: 1049 Btu/scf (based on the heating value of the methane content of landfill gas)

Maximum Flare Capacity: 200scfm (4 flares total)

Heat Input Capacity:

$$\frac{200cf}{m} * \frac{60\ m}{1hr} * \frac{1049Btu}{cf} * \frac{MM}{10^6} = 12.59MMBtu/hr$$

Emission Factors:

NO_x = 0.068lb/MMBtu

CO = 0.37lb/MMBtu

Potential Emissions in Tons Per Year:

$$NO_x = \frac{0.068lb}{MMBtu} * \frac{12.59MMBtu}{hr} * \frac{8760hr}{yr} * \frac{ton}{2000lbs} = 3.75ton/yr * 4\ flares = 15.0ton/yr$$

$$CO = \frac{0.37lb}{MMBtu} * \frac{12.59MMBtu}{hr} * \frac{8760hr}{yr} * \frac{ton}{2000lbs} = 20.40ton/yr * 4\ flares = 81.61ton/yr$$

NO_x and CO emission factors taken from AP-42, 13.5-1 (Emission Factors for Flare Operations), 1/95.

Indiana Department of Environmental Management
Office of Air Management

Addendum to the
Technical Support Document for a Part 70 Operating Permit

Source Name:	Newton County Landfill
Source Location:	2266 East 500 South Road, Brook, Indiana 47922
County:	Newton
SIC Code:	4953
Operation Permit No.:	T111-9725-00017
Permit Reviewer:	Autumn M. Marker

On October 28, 1998, the Office of Air Management (OAM) had a notice published in the Newton County Enterprise, Kentland, Indiana, stating that Newton County Landfill had applied for a Part 70 Operating Permit to operate municipal solid waste landfill. The notice also stated that OAM 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 or not this permit should be issued as proposed.

On November 13, 1998, the Environmental Protection Agency (EPA) submitted comments on the Part 70 permit. The summary of the comments is as follows. (Deleted language appears as ~~strikeouts~~ and the new language is **bolded**.)

Comment 1:

Condition D.1.4(3) says, "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 Management." This authority has not been delegated to the states. Therefore, this cannot be approved by OAM.

Response to Comment 1:

As stated in the most recent version of the NSPS (dated June 16, 1998), Subpart WWW, 40 CFR 60.750(b), the only authority retained by the Administrator and not transferred to the State is 60.754(a)(5). Therefore, the language in D.1.4(1)(c) [originally numbered D.1.4(3)] will not be changed at this time. The last paragraph of D.1.7(2) has been changed to reflect the authority retained in 60.754(a)(5). The last sentence has also been changed to reflect the most recent changes to the NSPS, Subpart WWW.

D.1.7 Non Methane Organic Compound (NMOC) Rate Calculation [40CFR 60.754]

(2) The Permittee may use other methods to determine the NMOC concentration or a site-specific k as an alternative to the methods required in 40CFR 60.754(a)(3) and (a)(4) if the method has been approved by the ~~Office of Air Management (OAM)~~ **Administrator** ~~as provided in 40 CFR 60.752(b)(2)(i)(B)~~.

Comment 2:

The permit only contains the first part of the paragraph from 40CFR 60.754(b)(2). Is there a reason why the rest of the paragraph was not included?

Response to Comment 2:

The omission of the end of paragraph 40CFR 60.754(b)(2) was done in error. The rest of the paragraph has been added to condition D.1.4 to reflect that which is stated in the NSPS.

(b) The average NMOC concentration, C_{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 40CFR 60. **If using Method 18 of appendix A of 40CFR 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 40CFR 60 by six to convert from C_{NMOC} as carbon to C_{NMOC} as hexane.**

On December 17, 1998, the Environmental Protection Agency (EPA) submitted comments on the Part 70 permit. The summary of the comments is as follows. (Deleted language appears as ~~strikeouts~~ and the new language is **bolded**.)

Comment 3:

There is no time frame stated for the corrective action to occur in D.1.6(1)(e). Referring to the CFR, would you agree that the following should be added "within 120 days of the initial exceedance" after "correct the exceedance" (the third to the last line of D.1.6(1)(e)?

Response to Comment 3:

This language has been added to the permit. In addition, the last line shows changes to the most updated version of the NSPS, Subpart WWW.

D.1.6 Compliance Provisions [40CFR 60.755]

(1) (e) 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 40CFR 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.**

Comment 4:

"Equals or" should replace "equals of" on the first line of the last paragraph of D.1.6(3)(d).

Response to Comment 4:

This change has been made.

D.1.6 Compliance Provisions [40CFR 60.755]

(3) (d) For any location where monitored methane concentration ~~equals of~~ **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 days 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 Management (OAM) for approval.

Comment 5:

In the definition of CNMOC of the second equation of D.1.7(1), the "<" should be replaced with a ",".

Response to Comment 5:

This change has been made.

D.1.7 Non Methane Organic Compound (NMOC) Rate Calculation [40CFR 60.754]

(1) where,

M_{NMOC} = mass emission rate of NMOC, megagrams per year
L_o = methane generation potential, cubic meters per megagram solid waste
R = average annual acceptance rate, megagrams per year
k = methane generation rate constant, year $^{-1}$
t = age of landfill, years
C_{NMOC} = concentration of NMOC~~<~~ **,** parts per million by volume as hexane
c = time since closure, years. For active landfill c = 0 and e^{-kc} = 1
3.6×10^{-9} = conversion factor

Comment 6:

The last paragraph of D.1.7(1) seems to be redundant in that it is again stated under D.1.7(2).

Response to Comment 6:

The last paragraph of D.1.7(1) has been removed to correct this error.

D.1.7 Non Methane Organic Compound (NMOC) Rate Calculation [40CFR 60.754]

(1) ~~If the calculated non-methane organic compound (NMOC) emission rate is equal to or greater than 50 megagrams per year, then the Permittee shall either comply with the provisions of 40CFR 60.752 (b)(2) or determine a site-specific non-methane organic compound (NMOC) emission rate using the procedures described in 40CFR 60.754 (a)(3).~~

Comment 7:

Why is Tier 2 and Tier 3 (40 CFR 60.754(a)(3) and (4)) not included in D.1.7(2)?

Response to Comment 7:

The actual Tier 2 and Tier 3 descriptions were originally excluded from the permit to make the permit marginally less confusing. These two descriptions have been added to the permit to insure that the permit clearly reflects that which is stated in the NSPS.

D.1.7 Non Methane Organic Compound (NMOC) Rate Calculation [40CFR 60.754]

(2) **Tier 1.** The Permittee shall compare the calculated NMOC mass emission rate to the standard of 50 megagrams per year.

If the NMOC emission rate calculated in 40CFR 60.754(a)(1) is less than 50 megagrams per year, then the landfill owner shall submit an emission rate report as provided in 40CFR 60.757(b)(1), and shall recalculate the NMOC mass emission rate annually as required under 40CFR 60.752(b)(1). If the calculated NMOC emission rate is equal to or greater than 50 megagrams per year, then the Permittee shall either comply with 40CFR 60.752(b)(2), or determine a site-specific NMOC concentration and recalculate the NMOC emission rate using the procedures provided in 40CFR 60.754(a)(3).

Tier 2. The Permittee shall determine the NMOC concentration using the following sampling procedure. The Permittee shall install at least two sample probes per hectare of landfill surface that has retained waste for at least 2 years. If the landfill is larger that 25 hectares in area, only 50 samples are required. The sample probes should be located to avoid known areas of nondegradable solid waste. The Permittee shall collect and analyze one sample of landfill gas from each probe to determine the NMOC concentration using Method 25C of appendix A of 40 CFR 60 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). If composite sampling is used, equal volumes shall be taken from each sample probe. If more than the required number of samples are taken, all samples shall be used in analysis. The Permittee shall divide the NMOC concentration from Method 25C of appendix A by six to convert from C_{NMOC} as carbon to C_{NMOC} as hexane.

The Permittee shall recalculate the NMOC mass emission rate using the equations provided in 40CFR 60.754(a)(1)(i) and (a)(1)(ii) and using the average NMOC concentration from the collected samples instead of the default value in the equation provided in 40CFR 60.754(a)(1).

If the resulting mass emission rate calculated using the site-specific NMOC concentration is equal to or greater that 50 megagrams per year, then the Permittee shall either comply with 40CFR 60.752(b)(2), or determine the site-specific methane generation rate constant and recalculate the NMOC emission rate using the site-specific methane generation rate using the procedure specified in 40CFR 60.754(a)(4).

If the resulting NMOC mass emission rate is less than 50 megagrams per year, the Permittee shall submit a periodic estimate of the emission rate report as provided in 40CFR 60.757(b)(1) and retest the site-specific NMOC concentration every five (5) years using the methods in 40CFR 60.754(a)(3).

Tier 3. The site-specific methane generation rate constant shall be determined using the procedures provided in Method 2E of appendix A of 40 CFR 60. The Permittee shall estimate the NMOC mass emission rate using equations in 40 CFR 60.754(a)(1)(i) or (a)(1)(ii) and using a site-specific methane generation rate constant k, and the site-specific NMOC concentration as determined in 40 CFR 60.754(a)(3) instead of the default values provided in 40 CFR 60.754(a)(1). The Permittee shall compare the resulting NMOC mass emission rate to the standard of 50 megagrams per year.

If the NMOC mass emission rate as calculated using the site-specific methane generation rate and concentration of NMOC is equal to or greater than 50 megagrams per year, the Permittee shall comply with 40CFR 60.752(b)(2).

If the NMOC mass emission rate is less than 50 megagrams per year, then the Permittee shall submit a periodic emission rate report as provided in 40CFR 60.757(b)(1) and shall recalculate the NMOC mass emission rate annually, as provided in 40CFR 60.757(b)(1) using the equations in 40CFR 60.754(a)(1) and using the site-specific methane generation rate constant and NMOC concentration obtained in 40CFR 60.754(a)(3). The calculation of the methane generation rate constant is performed only once, and the value obtained from this test shall be used in all subsequent annual NMOC emission rate calculations.

The Permittee may use other methods to determine the NMOC concentration or a site-specific k as an alternative to the methods required in 40CFR 60.754(a)(3) and (a)(4) if the method has been approved by the ~~Office of Air Management (OAM)~~ **Administrator** ~~as provided in 40 CFR 60.752(b)(2)(i)(B).~~

Comment 8:

The last CFR referenced in D.1.8(6) is incorrect. 40 CFR 60.756(a), (b), (c), and (d) should be replaced with 40 CFR 60.758(c).

Response to Comment 8:

This change has been made in the permit.

D.1.8 Reporting Requirements [40CFR 60.757]

(6) Annual reports of the following recorded information. The initial annual report shall be submitted within 180 days of installation and start-up of the collection and control system, and shall include the initial performance test report required under 40CFR 60.8. For enclosed combustion devices and flares, reportable exceedances are defined under ~~40CFR 60.756(a), (b), (c), and (d)~~ **40 CFR 60.758(c)**.

Upon further review, the OAM has decided to make the following revisions to the permit (bolded language has been added, the language with a line through it has been deleted). The Table Of Contents has been modified to reflect these changes.

Condition D.1.7(4) has been moved to section D.1.4(2) to more clearly and correctly identify the testing requirements of the permit.

The title of section D.1.7 has been changed to reflect and clarify the content of the condition.

D.1.7 ~~Test Methods~~ **Non Methane Organic Compound (NMOC) Rate Calculation** [40CFR 60.754]

~~(4) 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 Management (OAM) 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:~~

~~Control Efficiency = $(NMOC_{in} - NMOC_{out})/(NMOC_{in})$~~
~~where,~~
~~$NMOC_{in}$ = mass of NMOC entering the control device~~
~~$NMOC_{out}$ = mass of NMOC exiting control device~~

D.1.4 Testing Requirements [326 IAC 2-7-6(1),(6)] [40CFR 60.754]

(2) 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 Management (OAM) 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:

Control Efficiency = $(NMOC_{in} - NMOC_{out})/(NMOC_{in})$
where,
$NMOC_{in}$ = mass of NMOC entering the control device
$NMOC_{out}$ = mass of NMOC exiting control device

Condition C.2 has been changed to reflect the current rule language. The condition has been changed to:

C.2 Opacity [326 IAC 5-1]

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

(a) ~~Visible emissions~~ **Opacity** shall not exceed an average of forty percent (40%)~~ opacity~~ in ~~twenty-four (24) consecutive readings,~~ **any one (1) six (6) minute averaging period** as determined in 326 IAC 5-1-4.

(b) ~~Visible emissions~~ **Opacity** shall not exceed sixty percent (60%) ~~opacity~~ 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.

Condition B.27 Credible Evidence:

The IDEM now believes that this condition is not necessary and has removed it from the permit. The issues regarding credible evidence can be adequately addressed during a showing of compliance or noncompliance. Indiana's statutes, and the rules adopted under their authority, govern the admissibility of evidence in any proceeding. Indiana law contains no provisions that limit the use of any credible evidence and an explicit statement is not required in the permit.

~~B.27 Credible Evidence [326 IAC 2-7-5(3)][62 Federal Register 8313][326 IAC 2-7-6]~~

~~Not withstanding the conditions of this permit that state specific methods that may be used to assess compliance or noncompliance with applicable requirements, other credible evidence may be used to demonstrate compliance or non-compliance.~~

The most current version of 40 CFR 60, Subpart WWW, was not used in the draft permit. Following are changes that were made and incorporated into the latest version (June 16, 1998). These updates have been added to the permit. Only the changed language has been included all other language will remain the same as in the draft permit.

D.1.3 Operational Standards for Collection and Control Systems [40CFR 60.753]

(4) 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.

(7) If monitoring demonstrates that the operational requirement**s** in 40CFR 60.753(b), (c), or (d) are not met, corrective action shall be taken as specified in 40CFR 60.75~~2~~**5**(a)(3) through (5) or 40CFR 60.755(c). If corrective actions are taken as specified in 40CFR 60.755, the monitored exceedance is not a violation of the operational requirements in 40CFR 60.753.

D.1.4 Testing Requirements [326 IAC 2-7-6(1),(6)] [40CFR 60.754]

(1) (c) 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 Management ~~as provided in 40CFR 60.752(b)(2)(i)(B).~~

(2) 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 Management (OAM) 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:**

Control Efficiency = ($NMOC_{in}$ - $NMOC_{out}$)/ ($NMOC_{in}$)
where,
$NMOC_{in}$ = mass of NMOC entering the control device
$NMOC_{out}$ = mass of NMOC exiting control device

D.1.5 Monitoring [40CFR 60.756]

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

(1) The Permittee seeking to comply with 40CFR 60.752(b)(2)(ii)(A) for an active gas collection shall install a sampling port and a thermometer, ~~or~~ other temperature measuring device**, or an access port for temperature measurements** at each wellhead and:

(2) The Permittee seeking to comply with 40CFR 60.752(b)(2)(iii) using an enclosed combustor shall calibrate, maintain, and operate according to the manufacturer's specifications, the following equipment:

(a) A temperature monitoring device equipped with a continuous recorder and having a~~n~~ **minimum** accuracy of ±1 percent of the temperature being measured expressed in degrees Celsius of ±0.5 EC, whichever is greater. A temperature monitoring device is not required for boilers or process heaters with design heat input capacity greater than 44 megawatts.

(b) ~~A gas flow rate measuring device that provides a measurement of gas flow~~ **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.

D.1.6 Compliance Provisions [40CFR 60.755]

(1) (c) For the purpose of demonstrating whether the gas collection system flow rate is sufficient to determine compliance with 40CFR 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 40CFR 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.**

(d) The Permittee is not required to ~~install additional wells~~ **expand the system** as required in 40CFR 60.755(a)(3) during the first 180 days after gas collection system start-up.

(e) 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 40CFR 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.**

(2) For purposes of compliance with 40CFR 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 40CFR 60.752(b)(2)(i). Each well shall be installed ~~within 60 days of the date in which~~ **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.

(3) The following procedures shall be used for compliance with the surface methane operational standard as provided in 40CFR 60.753 (d):

(a) 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 serpentine pattern spaced 30 meters apart~~ **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 40CFR 60.755(d).

D.1.7 Non Methane Organic Compound (NMOC) Rate Calculation [40CFR 60.754]

Pursuant to 40CFR 60.754 the Permittee shall:

(1) Calculate the non methane organic compound (NMOC) rate using either ~~of~~ the equation~~s~~ **provided in 40 CFR 60.754(a)(1)(i) or the equation provided in 40CFR 60.754(a)(1)(ii).** ~~listed below.~~ **Both equations may be used if the actual year-to-year solid waste acceptance rate is known, as specified in 40 CFR 60.754(a)(1)(i), for part of the life of the landfill and the actual year-to-year solid waste acceptance rate is unknown, as specified in paragraph 40 CFR 60.754(a)(1)(ii), for part of the life of the landfill.** The values to be used in both equations are 0.05 per year for k, 170 cubic meters per megagram for L_o, and 4,000 parts per million by volume as hexane for the C_{NMOC}. **For landfills located in geographical areas with a thirty year annual average precipitation of less than 25 inches, as measured at the nearest representative official meteorologic site, the k value to be used is 0.02 per year.**

The following equation shall be used if the actual year-to-year solid waste acceptance rate is known:

$$M_{NMOC} = \sum_{i=1}^{n} 2\ k\ L_O M_i\ (e^{-kt_i})\ (C_{NMOC})\ (3.6 \times 10^{-9})$$

where,

M_{NMOC}= Total NMOC emission rate from the landfill, megagrams per year
k = methane generation rate constant, year^{-1}
L_o= methane generation potential, cubic meters per megagram solid waste
M_i= mass of solid waste in the ith section, megagrams
t_i= age of the ith section, years
C_{NMOC}= concentration of NMOC, parts per million by volume as hexane
3.6×10^{-9}= conversion factor

The mass of the nondegradable solid waste may be subtracted from the total mass of solid waste in a particular section of the landfill when calculating the value for M_i ~~if the documentation provisions of 40CFR 60.758 are followed~~ **if documentation of the nature and amount of such wastes is maintained**.

The following equation shall be used if the actual year-to-year solid waste acceptance rate is unknown:

$$M_{NMOC} = 2\ L_o\ R\ (e^{-kc} - e^{-kt})(C_{NMOC})(3.6 \times 10^{-9})$$

where,

M_{NMOC} = mass emission rate of NMOC, megagrams per year
L_o = methane generation potential, cubic meters per megagram solid waste
R = average annual acceptance rate, megagrams per year
k = methane generation rate constant, year $^{-1}$
t = age of landfill, years
C_{NMOC} = concentration of NMOC~~<~~**,** parts per million by volume as hexane
c = time since closure, years. For active landfill c = 0 and e^{-kc} = 1
3.6×10^{-9} = conversion factor

The mass of the nondegradable solid waste may be subtracted from the total mass of solid waste in a particular section of the landfill when calculating the value for M_i ~~if the documentation provisions of 40CFR 60.758(d)(2) are followed~~ **if documentation of the nature and amount of such wastes is maintained**.

~~If the calculated non-methane organic compound (NMOC) emission rate is equal to or greater than 50 megagrams per year, then the Permittee shall either comply with the provisions of 40CFR 60.752 (b)(2) or determine a site-specific non-methane organic compound (NMOC) emission rate using the procedures described in 40CFR 60.754 (~~a)(3).

(2) **Tier 1.** The Permittee shall compare the calculated NMOC mass emission rate to the standard of 50 megagrams per year.

If the NMOC emission rate calculated in 40CFR 60.754(a)(1) is less than 50 megagrams per year, then the landfill owner shall submit an emission rate report as provided in 40CFR 60.757(b)(1), and shall recalculate the NMOC mass emission rate annually as required under 40CFR 60.752(b)(1). If the calculated NMOC emission rate is equal to or greater than 50 megagrams per year, then the Permittee shall either comply with 40CFR 60.752(b)(2), or determine a site-specific NMOC concentration and recalculate the NMOC emission rate using the procedures provided in 40CFR 60.754(a)(3).

Tier 2. The Permittee shall determine the NMOC concentration using the following sampling procedure. The Permittee shall install at least two sample probes per hectare of landfill surface that has retained waste for at least 2 years. If the landfill is larger that 25 hectares in area, only 50 samples are required. The sample probes should be located to avoid known areas of nondegradable solid waste. The Permittee shall collect and analyze one sample of landfill gas from each probe to determine the NMOC concentration using Method 25C of appendix A of 40 CFR 60 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). If composite sampling is used, equal volumes shall be taken from each sample probe. If more than the required number of samples are taken, all samples shall be used in analysis. The Permittee shall divide the NMOC concentration from Method 25C of appendix A by six to convert from C_{NMOC} as carbon to C_{NMOC} as hexane.

The Permittee shall recalculate the NMOC mass emission rate using the equations provided in 40CFR 60.754(a)(1)(i) and (a)(1)(ii) and using the average NMOC concentration from the collected samples instead of the default value in the equation provided in 40CFR 60.754(a)(1).

If the resulting mass emission rate calculated using the site-specific NMOC concentration is equal to or greater that 50 megagrams per year, then the Permittee shall either comply with 40CFR 60.752(b)(2), or determine the site-specific methane generation rate constant and recalculate the NMOC emission rate using the site-specific methane generation rate using the procedure specified in 40CFR 60.754(a)(4).

If the resulting NMOC mass emission rate is less than 50 megagrams per year, the Permittee shall submit a periodic estimate of the emission rate report as provided in 40CFR 60.757(b)(1) and retest the site-specific NMOC concentration every five (5) years using the methods in 40CFR 60.754(a)(3).

Tier 3. The site-specific methane generation rate constant shall be determined using the procedures provided in Method 2E of appendix A of 40 CFR 60. The Permittee shall estimate the NMOC mass emission rate using equations in 40 CFR 60.754(a)(1)(i) or (a)(1)(ii) and using a site-specific methane generation rate constant k, and the site-specific NMOC concentration as determined in 40 CFR 60.754(a)(3) instead of the default values provided in 40 CFR 60.754(a)(1). The Permittee shall compare the resulting NMOC mass emission rate to the standard of 50 megagrams per year.

If the NMOC mass emission rate as calculated using the site-specific methane generation rate and concentration of NMOC is equal to or greater than 50 megagrams per year, the Permittee shall comply with 40CFR 60.752(b)(2).

If the NMOC mass emission rate is less than 50 megagrams per year, then the Permittee shall submit a periodic emission rate report as provided in 40CFR 60.757(b)(1) and shall recalculate the NMOC mass emission rate annually, as provided in 40CFR 60.757(b)(1) using the equations in 40CFR 60.754(a)(1) and using the site-specific methane generation rate constant and NMOC concentration obtained in 40CFR 60.754(a)(3). The calculation of the methane generation rate constant is performed only once, and the value obtained ~~is~~ **from this test shall be** used in all subsequent annual NMOC emission rate calculations.

The Permittee may use other methods to determine the NMOC concentration or a site-specific k as an alternative to the methods required in 40CFR 60.754(a)(3) and (a)(4) if the method has been approved by the ~~Office of Air Management (OAM)~~ **Administrator** ~~as provided in 40CFR 60.752 (b)(2)(i)(B)~~.

(3) **When calculating emissions for PSD purposes,** the ~~Permittee~~ **owner or operator of each municipal solid waste landfill** subject to 40CFR 60.754 shall estimate the NMOC emission rate for comparison to the PSD major source and significance levels in 40CFR 51.166 or 40CFR 52.21 using AP-42 or other approved measurement procedures. If a collection system, which complies with the provisions of 40CFR 60.752(b)(2) is already installed, the Permittee shall estimate the NMOC emission rate using the procedures provided in 40CFR 60.754(b).

D.1.8 Reporting Requirements [40CFR 60.757]

(2) Submit a non methane organic compound (NMOC) emission rate report to the Office of Air Management initially and annually thereafter, except as provided for in 40CFR 60.757(b)(1)(ii) or (b) (3). The Office of Air Management (OAM) may request such additional information as may be necessary to verify the reported NMOC emission rate. The report should contain an annual or 5-year estimate of the non methane organic compound (NMOC) emission rate using the formula and procedures provided in 40CFR 60.754 (a) or (b), as applicable. The initial NMOC emission rate report ~~shall be submitted within 90 days of the date waste acceptance commences and~~ may be combined with the initial design capacity report required in 40CFR 60.757(a) **and shall be submitted no later than indicated in paragraphs 40 CFR 60.757(b)(1)(i)(A) and (B). June 10, 1996, for landfills that commenced construction, modification, or reconstruction on or after May 30, 1991, but before March 12, 1996, or ninety days after the date of commenced construction, modification, or reconstruction for landfills that commence construction, modification, or reconstruction on or after March 12, 1996.** Subsequent NMOC emission rate reports shall be submitted annually thereafter, except as provided in 40CFR 60.757(b)(1)(ii) and (b)(3). If the estimated NMOC emission rate as reported in the annual report to the Office of Air Management (OAM) is less than 50 megagrams per year in each of the next five (5) consecutive years, the Permittee may elect to submit an estimate of the NMOC emission rate for the next five (5) year period in lieu of the annual report. This estimate shall include the current amount of solid waste-in-place and the estimated waste acceptance rate for each year of the five (5) years for which an NMOC emission rate is estimated. All data and calculations upon which this estimate is based shall be provided to the Office of Air Management (OAM). This estimate shall be revised at least once every five (5) years. If the actual waste acceptance rate exceeds the estimated waste acceptance rate in any year reported in the five (5) year estimate, a revised five (5) year estimate shall be submitted to the Office of Air Management. The revised estimate shall cover the five (5) year period beginning with the year in which the actual waste acceptance rate exceeded the estimated waste acceptance rate. The NMOC emission rate report shall include all

the data, calculations, sample reports, and measurements used to estimate the annual or five (5) year emission rate. The Permittee is exempted from the requirements of 40CFR 60.757(b)(1) and (2) after the installation of a collection and control system in compliance with 40CFR 60.752 (b)(2), during such time as the system is in operation and in compliance with 40CFR 60.753 and 60.755.

(7) The Permittee seeking to comply with 40CFR 60.752(b)(2)(i**ii**) shall include the following information with the initial performance test report required under 40CFR 60.8:

D.1.9 Record Keeping Requirements [326 IAC 12] [40CFR 60.758]

Pursuant to 40CFR 60.758 ~~the Permittee shall keep for at least five years up-to-date, readily accessible, continuous on-site records of the following:~~

(1) **Except as provided in 40 CFR 60.752(b)(2)(i)(B), the Permittee subject to 40CFR 60.752(b) shall keep for at least 5 years up-to-date, readily accessible, on-site records of** ~~maximum design capacity~~ **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.

(2) **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 **of the data listed in** (a) through (d) ~~listed~~ 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.

(3) **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 5 years up-to-date, readily accessible continuous records of the** equipment operating parameters specified to be monitored in 40CFR 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.

(4) **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** ~~a~~ plot map showing each existing and planned collector in the system and providing a unique identification location label for each collector.

(5) **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 5 years up-to-date, readily accessible records of** all collection and control system exceedances of the operational standards in 40CFR 60.753, the reading in the subsequent month whether or not the second reading is an exceedance, and the location of each exceedance.

(6) Landfill owners or operators who convert 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", 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.

On February 25, 1999, EMCON on behalf of Newton County Landfill submitted the following comment:

Comment 9:

D.1.8(3) The last sentence states that " The Permittee's design plan was submitted on June 13, 1996." The design plan was actually submitted on March 12, 1998. Since the facility's NMOC emissions did not exceed 50 Mg/yr until 1998, the facility is on a delayed schedule for NSPS compliance. Under this delayed schedule, the gas system is required to be operational by December 10, 2000.

Response to Comment 9:

This information in the permit has been changed to reflect the correct submission date of the Permittee's design plan.

D.1.8 Reporting Requirements [40CFR 60.757]

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

(3) Submit a collection and control system design plan to the Office of Air Management (OAM) within one (1) year of the first non methane organic compound (NMOC) emission rate report, required under 40CFR 60.757(b), in which NMOC emission rate exceeds 50 megagrams (Mg) per year; except if the Permittee elects to recalculate the NMOC emission rate after Tier 2 sampling and analysis as provided in 40CFR 60.754(a)(3) and the resulting rate is less than 50 megagrams per year, annual periodic reporting shall be resumed, using the Tier 2 determined site-specific NMOC concentration, until the calculated emission rate is equal to or greater than 50 megagrams per year or the landfill is closed. The revised NMOC emission rate report, with the recalculated emission rate based on NMOC sampling and analysis, shall be submitted within 180 days of the first calculated exceedance of 50 megagrams per year. If the Permittee elects to recalculate the NMOC emission rate after determining a site-specific methane generation rate constant (k), as provided in Tier 3 in 40CFR 60.754(a)(4), and the resulting NMOC emission rate is less than 50 megagrams per year, annual periodic reporting shall be resumed. The resulting site-specific methane generation rate constant (k) shall be used in the emission rate calculation until such time as the emissions rate calculation results in an exceedance. The revised NMOC emission rate report based on the provisions of 40CFR 60.754(a)(4) and the resulting site-specific methane generation rate constant (k) shall be submitted to the Office of Air Management (OAM) within one (1) year of the first calculated emission rate exceeding 50 megagrams per year. The Permittee's design plan was submitted on ~~June 13, 1996~~ **March 12, 1998**.