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

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100 North Senate Avenue
Indianapolis, Indiana 46204
MC 61-53 IGCN 1003
(317) 232-8603
(800) 451-6027
www.IN.gov/idem

TO: Interested Parties / Applicant

DATE: November 26, 2007

RE: Republic Services of Indiana/ 055-18340-00036

FROM: Nisha Sizemore
Chief, Permits Branch
Office of Air Quality

Notice of Decision: Approval – Effective Immediately

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

If you wish to challenge this decision, IC 4-21.5-3-7 and IC 13-15-6-1(b) or IC 13-15-6-1(a) require that you file a petition for administrative review. This petition may include a request for stay of effectiveness and must be submitted to the Office of Environmental Adjudication, 100 North Senate Avenue, Government Center North, Room 1049, Indianapolis, IN 46204.

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

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

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

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

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

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

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

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

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

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

Enclosures
FNTVOP.dot 03/23/06

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(800) 451-6027
www.IN.gov/idem

PART 70 OPERATING PERMIT
OFFICE OF AIR QUALITY

Republic Services of Indiana, LP - Worthington Sanitary Landfill
County Road 500
Worthington Indiana 46176

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

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

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

Operation Permit No.: T055-18340-00036	
Issued by: Nisha Sizemore, Chief Permits Branch Office of Air Quality	 Issuance Date: November 26, 2007 Expiration Date: November 26, 2012

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SECTION A SOURCE SUMMARY

This permit is based on information requested by the Indiana Department of Environmental Management (IDEM), Office of Air Quality (OAQ). The information describing the source contained in conditions A.1, A.2 through A.4 is descriptive information and does not constitute enforceable conditions. However, the Permittee should be aware that a physical change or a change in the method of operation that may render this descriptive information obsolete or inaccurate may trigger requirements for the Permittee to obtain additional permits or seek modification of this permit pursuant to 326 IAC 2, or change other applicable requirements presented in the permit application.

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

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

Source Address:	County Road 500 Worthington Indiana 46176
Mailing Address:	5621 East Cottom Road, Pimento, IN 47866
General Source Phone Number:	812-298-2131
SIC Code:	4953
County Location:	Greene
Source Location Status:	Nonattainment for 8 hour Ozone Attainment for all other criteria pollutants
Source Status:	Part 70 Permit Program Minor Source, under PSD; Minor Source, Section 112 of the Clean Air Act Not 1 of 28 Sources

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 sanitary landfill generating landfill gas, with a maximum design capacity of 6,337,349 megagrams (Mg), constructed in 1980 and expanded in 2002; and

(b) Solid waste dumping operations, constructed in 1981;

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 does not currently have any specifically regulated insignificant activities, as defined in 326 IAC 2-7-1(21).

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

SECTION B GENERAL CONDITIONS

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

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

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

(a) This permit, T055-18340-00036, is issued for a fixed term of five (5) years from the issuance date of this permit, as determined in accordance with IC 4-21.5-3-5(f) and IC 13-15-5-3. Subsequent revisions, modifications, or amendments of this permit do not affect the expiration date of this permit.

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

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

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

(a) the condition is modified in a subsequent permit action pursuant to Title I of the Clean Air Act; or

(b) the emission unit to which the condition pertains permanently ceases operation.

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

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

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

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

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

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

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

(a) The Permittee shall furnish to IDEM, OAQ , within a reasonable time, any information that IDEM, OAQ may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit, or to determine compliance with this permit. The submittal by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34). Upon request, the Permittee shall also furnish to IDEM, OAQ copies of records required to be kept by this permit.

(b) For information furnished by the Permittee to IDEM, OAQ, the Permittee may include a claim of confidentiality in accordance with 326 IAC 17.1. When furnishing copies of requested records directly to U. S. EPA, the Permittee may assert a claim of confidentiality in accordance with 40 CFR 2, Subpart B.

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

(a) Where specifically designated by this permit or required by an applicable requirement, any application form, report, or compliance certification submitted shall contain certification by the "responsible official" of truth, accuracy, and completeness. This certification shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.

(b) One (1) certification shall be included, using the attached Certification Form, with each submittal requiring certification. One (1) certification may cover multiple forms in one (1) submittal.

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

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

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

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

and

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

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

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

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

(2) The compliance status;

(3) Whether compliance was continuous or intermittent;

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

(5) Such other facts, as specified in Sections D of this permit, as IDEM, OAQ may require to determine the compliance status of the source.

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

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

(a) The Permittee shall maintain and implement Preventive Maintenance Plans (PMPs) for the source as described in 326 IAC 1-6-3. At a minimum, the PMPs shall include:

(1) Identification of the individual(s) responsible for inspecting, maintaining, and repairing emission control devices;

(2) A description of the items or conditions that will be inspected and the inspection schedule for said items or conditions; and

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

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

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

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

(b) A copy of the PMPs shall be submitted to IDEM, OAQ upon request and within a reasonable time, and shall be subject to review and approval by IDEM, OAQ. IDEM, OAQ may require the Permittee to revise its PMPs whenever lack of proper maintenance causes or is the primary contributor to an exceedance of any limitation on emissions or potential to emit. The PMPs do not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

(c) To the extent the Permittee is required by 40 CFR Part 60/63 to have an Operation Maintenance, and Monitoring (OMM) Plan for a unit, such Plan is deemed to satisfy the PMP requirements of 326 IAC 1-6-3 for that unit.

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

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

(b) An emergency, as defined in 326 IAC 2-7-1(12), constitutes an affirmative defense to an action brought for noncompliance with a technology-based emission limitation if the affirmative defense of an emergency is demonstrated through properly signed, contemporaneous operating logs or other relevant evidence that describe the following:

(1) An emergency occurred and the Permittee can, to the extent possible, identify the causes of the emergency;

(2) The permitted facility was at the time being properly operated;

(3) During the period of an emergency, the Permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards or other requirements in this permit;

(4) For each emergency lasting one (1) hour or more, the Permittee notified IDEM, OAQ, within four (4) daytime business hours after the beginning of the emergency, or after the emergency was discovered or reasonably should have been discovered;

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

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

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

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

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

(A) A description of the emergency;

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

(C) Corrective actions taken.

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

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

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

(d) This emergency provision supersedes 326 IAC 1-6 (Malfunctions). This permit condition is in addition to any emergency or upset provision contained in any applicable requirement.

(e) The Permittee seeking to establish the occurrence of an emergency shall make records available upon request to ensure that failure to implement a PMP did not cause or contribute to an exceedance of any limitations on emissions. However, IDEM, OAQ may require that the Preventive Maintenance Plans required under 326 IAC 2-7-4(c)(9) be revised in response to an emergency.

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

(g) If the emergency situation causes a deviation from a technology-based limit, the Permittee may continue to operate the affected emitting facilities during the emergency provided the Permittee immediately takes all reasonable steps to correct the emergency and minimize emissions.

(h) The Permittee shall include all emergencies in the Quarterly Deviation and Compliance Monitoring Report.

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

(a) Pursuant to 326 IAC 2-7-15, the Permittee has been granted a permit shield. The permit shield provides that compliance with the conditions of this permit shall be deemed compliance with any applicable requirements as of the date of permit issuance, provided that either the applicable requirements are included and specifically identified in this permit or the permit contains an explicit determination or concise summary of a determination that other specifically identified requirements are not applicable. The Indiana statutes from IC 13 and rules from 326 IAC, referenced in conditions in this permit, are those applicable at the time the permit was issued. The issuance or possession of this permit shall not alone constitute a defense against an alleged violation of any law, regulation or standard, except for the requirement to obtain a Part 70 permit under 326 IAC 2-7 or for applicable requirements for which a permit shield has been granted.

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

(b) If, after issuance of this permit, it is determined that the permit is in nonconformance with an applicable requirement that applied to the source on the date of permit issuance, IDEM, OAQ, shall immediately take steps to reopen and revise this permit and issue a compliance order to the Permittee to ensure expeditious compliance with the applicable requirement until the permit is reissued. The permit shield shall continue in effect so long as the Permittee is in compliance with the compliance order.

(c) No permit shield shall apply to any permit term or condition that is determined after issuance of this permit to have been based on erroneous information supplied in the permit application. Erroneous information means information that the Permittee knew to be false, or in the exercise of reasonable care should have been known to be false, at the time the information was submitted.

(d) Nothing in 326 IAC 2-7-15 or in this permit shall alter or affect the following:

(1) The provisions of Section 303 of the Clean Air Act (emergency orders), including the authority of the U.S. EPA under Section 303 of the Clean Air Act;

(2) The liability of the Permittee for any violation of applicable requirements prior to or at the time of this permit's issuance;

(3) The applicable requirements of the acid rain program, consistent with Section 408(a) of the Clean Air Act; and

(4) The ability of U.S. EPA to obtain information from the Permittee under Section 114 of the Clean Air Act.

(e) This permit shield is not applicable to any change made under 326 IAC 2-7-20(b)(2) (Sections 502(b)(10) of the Clean Air Act changes) and 326 IAC 2-7-20(c)(2) (trading based on State Implementation Plan (SIP) provisions).

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

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

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

(a) All terms and conditions of permits established prior to T055-18340-00036 and issued pursuant to permitting programs approved into the state implementation plan have been either:

(1) incorporated as originally stated,

(2) revised under 326 IAC 2-7-10.5, or

(3) deleted under 326 IAC 2-7-10.5.

(b) Provided that all terms and conditions are accurately reflected in this permit, all previous registrations and permits are superseded by this Part 70 operating permit.

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

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

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

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

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

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

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

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

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

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

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

(1) That this permit contains a material mistake.

(2) That inaccurate statements were made in establishing the emissions standards or other terms or conditions.

(3) That this permit must be revised or revoked to assure compliance with an applicable requirement. [326 IAC 2-7-9(a)(3)]

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

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

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

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

Request for renewal shall be submitted to:

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

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

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

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

(c) If the Permittee submits a timely and complete application for renewal of this permit, the source's failure to have a permit is not a violation of 326 IAC 2-7 until IDEM, OAQ takes final action on the renewal application, except that this protection shall cease to apply if, subsequent to the completeness determination, the Permittee fails to submit by the deadline specified in writing by IDEM, OAQ any additional information identified as being needed to process the application.

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

(a) Permit amendments and modification are governed by the requirements of 326 IAC 2-7-11 or 326 IAC 2-7-12 whenever the Permittee seeks to amend or modify this permit.

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

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

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

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

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

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

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

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

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

(1) The changes are not modifications under any provision of Title I of the Clean Air Act;

(2) Any preconstruction approval required by 326 IAC 2-7-10.5 has been obtained;

(3) The changes do not result in emissions which exceed the limitations provided in this permit (whether expressed herein as a rate of emissions or in terms of total emissions);

(4) The Permittee notifies the:

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

and

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

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

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

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

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

(1) A brief description of the change within the source;

(2) The date on which the change will occur;

(3) Any change in emissions; and

(4) Any permit term or condition that is no longer applicable as a result of the change.

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

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

(d) Alternative Operating Scenarios [326 IAC 2-7-20(d)]
The Permittee may make changes at the source within the range of alternative operating scenarios that are described in the terms and conditions of this permit in accordance with 326 IAC 2-7-5(9). No prior notification of IDEM, OAQ, or U.S. EPA is required.

(e) Backup fuel switches specifically addressed in, and limited under, Section D of this permit shall not be considered alternative operating scenarios. Therefore, the notification requirements of part (a) of this condition do not apply.

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

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

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

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

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

(b) As authorized by the Clean Air Act, IC 13-14-2-2, IC 13-17-3-2, and IC 13-30-3-1, have access to and copy any records that must be kept under the conditions of this permit;

(c) As authorized by the Clean Air Act, IC 13-14-2-2, IC 13-17-3-2, and IC 13-30-3-1, inspect any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit;

(d) As authorized by the Clean Air Act, IC 13-14-2-2, IC 13-17-3-2, and IC 13-30-3-1, sample or monitor substances or parameters for the purpose of assuring compliance with this permit or applicable requirements; and

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

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

(a) The Permittee must comply with the requirements of 326 IAC 2-7-11 whenever the Permittee seeks to change the ownership or operational control of the source and no other change in the permit is necessary.

(b) Any application requesting a change in the ownership or operational control of the source shall contain a written agreement containing a specific date for transfer of permit responsibility, coverage and liability between the current and new Permittee. The application shall be submitted to:

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

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

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

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

(a) The Permittee shall pay annual fees to IDEM, OAQ, within thirty (30) calendar days of receipt of a billing. Pursuant to 326 IAC 2-7-19(b), if the Permittee does not receive a bill from IDEM, OAQ, the applicable fee is due April 1 of each year.

(b) Except as provided in 326 IAC 2-7-19(e), failure to pay may result in administrative enforcement action or revocation of this permit.

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

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

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

SECTION C SOURCE OPERATION CONDITIONS

Entire Source

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

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

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

C.2 Opacity [326 IAC 5-1]

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

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

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

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

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

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

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

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

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

C.6 Asbestos Abatement Projects [326 IAC 14-10] [326 IAC 18] [40 CFR 61, Subpart M]

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

(b) The Permittee shall ensure that a written notification is sent on a form provided by the Commissioner at least ten (10) working days before asbestos stripping or removal work or before demolition begins, per 326 IAC 14-10-3, and shall update such notice as necessary, including, but not limited to the following:

(1) When the amount of affected asbestos containing material increases or decreases by at least twenty percent (20%); or

(2) If there is a change in the following:

(A) Asbestos removal or demolition start date;

(B) Removal or demolition contractor; or

(C) Waste disposal site.

(c) The Permittee shall ensure that the notice is postmarked or delivered according to the guidelines set forth in 326 IAC 14-10-3(2).

(d) The notice to be submitted shall include the information enumerated in 326 IAC 14-10-3(3).

All required notifications shall be submitted to:

Indiana Department of Environmental Management
Asbestos Section, Office of Air Quality
100 North Senate Avenue
MC 61-52 IGCN 1003
Indianapolis, Indiana 46204-2251

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

(e) Procedures for Asbestos Emission Control
The Permittee shall comply with the applicable emission control procedures in 326 IAC 14-10-4 and 40 CFR 61.145(c). Per 326 IAC 14-10-1, emission control requirements are applicable for any removal or disturbance of RACM greater than three (3) linear feet on pipes or three (3) square feet on any other facility components or a total of at least 0.75 cubic feet on all facility components.

(f) Demolition and Renovation
The Permittee shall thoroughly inspect the affected facility or part of the facility where the demolition or renovation will occur for the presence of asbestos pursuant to 40 CFR 61.145(a).

(g) Indiana Accredited Asbestos Inspector
The Permittee shall comply with 326 IAC 14-10-1(a) that requires the owner or operator, prior to a renovation/demolition, to use an Indiana Accredited Asbestos Inspector to thoroughly inspect the affected portion of the facility for the presence of asbestos. The requirement to use an Indiana Accredited Asbestos inspector is not federally enforceable.

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

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

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

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

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

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

(b) The Permittee shall notify IDEM, OAQ of the actual test date at least fourteen (14) days prior to the actual test date. The notification submitted by the Permittee does not require certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

(c) Pursuant to 326 IAC 3-6-4(b), all test reports must be received by IDEM, OAQ not later than forty-five (45) days after the completion of the testing. An extension may be granted by IDEM, OAQ, if the Permittee submits to IDEM, OAQ, a reasonable written explanation not later than five (5) days prior to the end of the initial forty-five (45) day period.

Compliance Requirements [326 IAC 2-1.1-11]

C.8 Compliance Requirements [326 IAC 2-1.1-11]

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

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

C.9 Compliance Monitoring [326 IAC 2-7-5(3)][326 IAC 2-7-6(1)]

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

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

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

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

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

C.10 Monitoring Methods [326 IAC 3] [40 CFR 60] [40 CFR 63]

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

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

(a) When required by any condition of this permit, an analog instrument used to measure a parameter related to the operation of an air pollution control device shall have a scale such that the expected maximum reading for the normal range shall be no less than twenty percent (20%) of full scale

(b) The Permittee may request that the IDEM, OAQ approve the use of an instrument that does not meet the above specifications provided the Permittee can demonstrate that an alternative pressure gauge or other instrument specification will adequately ensure compliance with permit conditions requiring the measurement the parameters.

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

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

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

C.13 Response to Excursions or Exceedances [326 IAC 2-7-5] [326 IAC 2-7-6]

(a) Upon detecting an excursion or exceedance, the Permittee shall restore operation of the emissions unit (including any control device and associated capture system) to its normal or usual manner of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions.

(b) The response shall include minimizing the period of any startup, shutdown or malfunction and taking any necessary corrective actions to restore normal operation and prevent the likely recurrence of the cause of an excursion or exceedance (other than those caused by excused startup or shutdown conditions). Corrective actions may include, but are not limited to, the following:

(1) initial inspection and evaluation

(2) recording that operations returned to normal without operator action (such as through response by a computerized distribution control system); or

(3) any necessary follow-up actions to return operation to within the indicator range, designated condition, or below the applicable emission limitation or standard, as applicable.

(c) A determination of whether the Permittee has used acceptable procedures in response to an excursion or exceedance will be based on information available, which may include, but is not limited to, the following:

(1) monitoring results;

(2) review of operation and maintenance procedures and records;

(3) inspection of the control device, associated capture system, and the process.

(d) Failure to take reasonable response steps shall be considered a deviation from the permit.

(e) The Permittee shall maintain the following records:

(1) monitoring data;

(2) monitor performance data, if applicable; and

(3) corrective actions taken.

C.14 Actions Related to Noncompliance Demonstrated by a Stack Test [326 IAC 2-7-5] [326 IAC 2-7-6]

(a) When the results of a stack test performed in conformance with Section C - Performance Testing, of this permit exceed the level specified in any condition of this permit, the Permittee shall take appropriate response actions. The Permittee shall submit a description of these response actions to IDEM, OAQ, within thirty (30) days of receipt of the test results. The Permittee shall take appropriate action to minimize excess emissions from the affected facility while the response actions are being implemented.

(b) A retest to demonstrate compliance shall be performed within one hundred twenty (120) days of receipt of the original test results. Should the Permittee demonstrate to IDEM, OAQ that retesting in one-hundred and twenty (120) days is not practicable, IDEM, OAQ may extend the retesting deadline.

(c) IDEM, OAQ reserves the authority to take any actions allowed under law in response to noncompliant stack tests.

The response action documents submitted pursuant to this condition do require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

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

C.15 Emission Statement [326 IAC 2-7-5(3)(C)(iii)][326 IAC 2-7-5(7)][326 IAC 2-7-19(c)][326 IAC 2-6]

(a) In accordance with the compliance schedule specified in 326 IAC 2-6-3(b)(1), starting in 2006 and every three (3) years thereafter, the Permittee shall submit by July 1 an emission statement covering the previous calendar year. The emission statement shall contain, at a minimum, the information specified in 326 IAC 2-6-4(c) and shall meet the following requirements:

(1) Indicate estimated actual emissions of all pollutants listed in 326 IAC 2-6-4(a);

(2) Indicate estimated actual emissions of regulated pollutants as defined by 326 IAC 2-7-1 (32) ("Regulated pollutant, which is used only for purposes of Section 19 of this rule") from the source, for purpose of fee assessment.

The statement must be submitted to:

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

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

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

C.16 General Record Keeping Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-6]

(a) Records of all required monitoring data, reports and support information required by this permit shall be retained for a period of at least five (5) years from the date of monitoring sample, measurement, report, or application. These records shall be physically present or electronically accessible at the source location for a minimum of three (3) years. The records may be stored elsewhere for the remaining two (2) years as long as they are available upon request. If the Commissioner makes a request for records to the Permittee, the Permittee shall furnish the records to the Commissioner within a reasonable time.

(b) Unless otherwise specified in this permit, all record keeping requirements not already legally required shall be implemented within ninety (90) days of permit issuance to when operation begins.

C.17 General Reporting Requirements [326 IAC 2-7-5(3)(C)] [326 IAC 2-1.1-11]

(a) The Permittee shall submit the attached Quarterly Deviation and Compliance Monitoring Report or its equivalent. Any deviation from permit requirements, the date(s) of each deviation, the cause of the deviation, and the response steps taken must be reported. This report shall be submitted within thirty (30) days of the end of the reporting period. The Quarterly Deviation and Compliance Monitoring Report shall include the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

(b) The report required in (a) of this condition and reports required by conditions in Section D of this permit shall be submitted to:

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

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

(d) Unless otherwise specified in this permit, all reports required in Section D of this permit shall be submitted within thirty (30) days of the end of the reporting period. All reports do require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

(e) The first report shall cover the period commencing on the date of issuance of this permit and ending on the last day of the reporting period. Reporting periods are based on calendar years, unless otherwise specified in this permit. For the purpose of this permit “calendar year” means the twelve (12) month period from January 1 to December 31 inclusive.

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

Stratospheric Ozone Protection

C.18 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) One (1) municipal solid waste sanitary landfill generating landfill gas, with a maximum design capacity of 6,337,349 megagrams (Mg), constructed in 1980 and expanded in 2002.

(b) Solid waste dumping operations, constructed in 1981.

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

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

D.1.1 Particulate [326 IAC 6-3-2]

The particulate from the solid waste dumping operations shall not exceed 52.62 pounds per hour when operating at a process weight rate of 114.15 tons per hour. The pounds per hour limitation was calculated using the following equation:

Interpolation and extrapolation of the data for the process weight rate in excess of 60,000 pounds per hour shall be accomplished by use of the equation:

$E = 55.0\ P^{0.11} - 40$ where E = rate of emission in pounds per hour; and P = process weight rate in tons per hour

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

D.1.2 Reporting Requirements

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

D.1.3 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.1.4 Municipal Solid Waste Landfill NSPS Requirements [326 IAC 12] [40CFR 60.752, Subpart WWW]

Pursuant to CFR Part 60, Subpart WWW, the Permittee shall comply with the provisions of 40 CFR Part 60.752, as specified as follows:

§ 60.750 Applicability, designation of affected facility, and delegation of authority.

(a) The provisions of this subpart apply to each municipal solid waste landfill that commenced construction, reconstruction or modification on or after May 30, 1991. Physical or operational changes made to an existing MSW landfill solely to comply with Subpart Cc of this part are not considered construction, reconstruction, or modification for the purposes of this section.

(b) The following authorities shall be retained by the Administrator and not transferred to the State: § 60.754(a)(5).

(c) Activities required by or conducted pursuant to a CERCLA, RCRA, or State remedial action are not considered construction, reconstruction, or modification for purposes of this subpart.

§ 60.751 Definitions.

As used in this subpart, all terms not defined herein shall have the meaning given them in the Act or in subpart A of this part.

Active collection system means a gas collection system that uses gas mover equipment.

Active landfill means a landfill in which solid waste is being placed or a landfill that is planned to accept waste in the future.

Closed landfill means a landfill in which solid waste is no longer being placed, and in which no additional solid wastes will be placed without first filing a notification of modification as prescribed under § 60.7(a)(4). Once a notification of modification has been filed, and additional solid waste is placed in the landfill, the landfill is no longer closed. A landfill is considered closed after meeting the criteria of § 258.60 of this title.

Closure means that point in time when a landfill becomes a closed landfill.

Commercial solid waste means all types of solid waste generated by stores, offices, restaurants, warehouses, and other nonmanufacturing activities, excluding residential and industrial wastes.

Controlled landfill means any landfill at which collection and control systems are required under this subpart as a result of the nonmethane organic compounds emission rate. The landfill is considered controlled at the time a collection and control system design plan is submitted in compliance with § 60.752(b)(2)(i).

Design capacity means the maximum amount of solid waste a landfill can accept, as indicated in terms of volume or mass in the most recent permit issued by the State, local, or Tribal agency responsible for regulating the landfill, plus any in-place waste not accounted for in the most recent permit. If the owner or operator chooses to convert the design capacity from volume to mass or from mass to volume to demonstrate its design capacity is less than 2.5 million megagrams or 2.5 million cubic meters, the calculation must include a site specific density, which must be recalculated annually.

Disposal facility means all contiguous land and structures, other appurtenances, and improvements on the land used for the disposal of solid waste.
Emission rate cutoff means the threshold annual emission rate to which a landfill compares its estimated emission rate to determine if control under the regulation is required.

Enclosed combustor means an enclosed firebox which maintains a relatively constant limited peak temperature generally using a limited supply of combustion air. An enclosed flare is considered an enclosed combustor.

Flare means an open combustor without enclosure or shroud.

Gas mover equipment means the equipment (i.e., fan, blower, compressor) used to transport landfill gas through the header system.

Household waste means any solid waste (including garbage, trash, and sanitary waste in septic tanks) derived from households (including, but not limited to, single and multiple residences, hotels and motels, bunkhouses, ranger stations, crew quarters, campgrounds, picnic grounds, and day-use recreation areas).

Industrial solid waste means solid waste generated by manufacturing or industrial processes that is not a hazardous waste regulated under Subtitle C of the Resource Conservation and Recovery Act, parts 264 and 265 of this title. Such waste may include, but is not limited to, waste resulting from the following manufacturing processes: electric power generation; fertilizer/agricultural chemicals; food and related products/by-products; inorganic chemicals; iron and steel manufacturing; leather and leather products; nonferrous metals manufacturing/foundries; organic chemicals; plastics and resin manufacturing; pulp and

paper industry; rubber and miscellaneous plastic products; stone, glass, clay, and concrete products; textile manufacturing; transportation equipment; and water treatment. This term does not include mining waste or oil and gas waste.

Interior well means any well or similar collection component located inside the perimeter of the landfill waste. A perimeter well located outside the landfilled waste is not an interior well.
Landfill means an area of land or an excavation in which wastes are placed for permanent disposal, and that is not a land application unit, surface impoundment, injection well, or waste pile as those terms are defined under § 257.2 of this title.

Lateral expansion means a horizontal expansion of the waste boundaries of an existing MSW landfill. A lateral expansion is not a modification unless it results in an increase in the design capacity of the landfill.

Modification means an increase in the permitted volume design capacity of the landfill by either horizontal or vertical expansion based on its permitted design capacity as of May 30, 1991. Modification does not occur until the owner or operator commences construction or the horizontal or vertical expansion.

Municipal solid waste landfill or MSW landfill means an entire disposal facility in a contiguous geographical space where household waste is placed in or on land. An MSW landfill may also receive other types of RCRA Subtitle D wastes (§ 257.2 of this title) such as commercial solid waste, nonhazardous sludge, conditionally exempt small quantity generator waste, and industrial solid waste. Portions of an MSW landfill may be separated by access roads. An MSW landfill may be publicly or privately owned. An MSW landfill may be a new MSW landfill, an existing MSW landfill, or a lateral expansion.

Municipal solid waste landfill emissions or MSW landfill emissions means gas generated by the decomposition of organic waste deposited in an MSW landfill or derived from the evolution of organic compounds in the waste.

NMOC means nonmethane organic compounds, as measured according to the provisions of § 60.754.

Nondegradable waste means any waste that does not decompose through chemical breakdown or microbiological activity. Examples are, but are not limited to, concrete, municipal waste combustor ash, and metals.

Passive collection system means a gas collection system that solely uses positive pressure within the landfill to move the gas rather than using gas mover equipment.

Sludge means any solid, semisolid, or liquid waste generated from a municipal, commercial, or industrial wastewater treatment plant, water supply treatment plant, or air pollution control facility, exclusive of the treated effluent from a wastewater treatment plant.

Solid waste means any garbage, sludge from a wastewater treatment plant, water supply treatment plant, or air pollution control facility and other discarded material, including solid, liquid, semisolid, or contained gaseous material resulting from industrial, commercial, mining, and agricultural operations, and from community activities, but does not include solid or dissolved material in domestic sewage, or solid or dissolved materials in irrigation return flows or industrial discharges that are point sources subject to permits under 33 U.S.C. 1342, or source, special nuclear, or by-product material as defined by the Atomic Energy Act of 1954, as amended (42 U.S.C 2011 et seq.).

Sufficient density means any number, spacing, and combination of collection system components, including vertical wells, horizontal collectors, and surface collectors, necessary to maintain emission and migration control as determined by measures of performance set forth in this part.

Sufficient extraction rate means a rate sufficient to maintain a negative pressure at all wellheads in the collection system without causing air infiltration, including any wellheads connected to the system as a result of expansion or excess surface emissions, for the life of the blower.

§ 60.752 Standards for air emissions from municipal solid waste landfills.

(b) Each owner or operator of an MSW landfill having a design capacity equal to or greater than 2.5 million megagrams and 2.5 million cubic meters, shall either comply with paragraph (b)(2) of this section or calculate an NMOC emission rate for the landfill using the procedures specified in § 60.754. The NMOC emission rate shall be recalculated annually, except as provided in § 60.757(b)(1)(ii) of this subpart. The owner or operator of an MSW landfill subject to this subpart with a design capacity greater than or equal to 2.5 million megagrams and 2.5 million cubic meters is subject to part 70 or 71 permitting requirements.

(1) If the calculated NMOC emission rate is less than 50 megagrams per year, the owner or operator shall:

(i) Submit an annual emission report to the Administrator, except as provided for in § 60.757(b)(1)(ii); and

(ii) Recalculate the NMOC emission rate annually using the procedures specified in § 60.754(a)(1) until such time as the calculated NMOC emission rate is equal to or greater than 50 megagrams per year, or the landfill is closed.

(A) If the NMOC emission rate, upon recalculation required in paragraph (b)(1)(ii) of this section, is equal to or greater than 50 megagrams per year, the owner or operator shall install a collection and control system in compliance with paragraph (b)(2) of this section.

(B) If the landfill is permanently closed, a closure notification shall be submitted to the Administrator as provided for in § 60.757(d).

(d) When a MSW landfill subject to this subpart is closed, the owner or operator is no longer subject to the requirement to maintain an operating permit under part 70 or 71 of this chapter for the landfill if the landfill is not otherwise subject to the requirements of either part 70 or 71 and if either of the following conditions are met:

(1) The landfill was never subject to the requirement for a control system under paragraph (b)(2) of this section; or

(2) The owner or operator meets the conditions for control system removal specified in paragraph (b)(2)(v) of this section.

§ 60.754 Test methods and procedures.

(a)(1) The landfill owner or operator shall calculate the NMOC emission rate using either the equation provided in paragraph (a)(1)(i) of this section or the equation provided in paragraph (a)(1)(ii) of this section. Both equations may be used if the actual year-to-year solid waste acceptance rate is known, as specified in paragraph (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 (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.

(i) The following equation shall be used if the actual year-to-year solid waste acceptance rate is known.

$$M_{NMOC} = \sum_{i=1}^{n} 2kL_oM_i\left(e^{-kt}i\right)\left(C_{NMOC}\right)\left(3.6X10^{-9}\right)$$

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

Mi = 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 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.

(ii) The following equation shall be used if the actual year-to- year solid waste acceptance rate is unknown.

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

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 = O and e^{-kc}=1
3.6×10^{-9} = conversion factor
The mass of nondegradable solid waste may be subtracted from the total mass of solid waste in a particular section of the landfill when calculating a value for R, if documentation of the nature and amount of such wastes is maintained.

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

(i) If the NMOC emission rate calculated in paragraph (a)(1) of this section is less than 50 megagrams per year, then the landfill owner shall submit an emission rate report as provided in § 60.757(b)(1), and shall recalculate the NMOC mass emission rate annually as required under § 60.752(b)(1).

(3) Tier 2. The landfill owner or operator shall determine the NMOC concentration using the following sampling procedure. The landfill owner or operator 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 than 25 hectares in area, only 50 samples are required. The sample probes should be located to avoid known areas of nondegradable solid waste. The owner or operator shall collect and analyze one sample of landfill gas from each probe to determine the NMOC concentration using Method 25 or 25C of Appendix A of this part. Method 18 of Appendix A of this part may be used to analyze the samples collected by the Method 25 or 25C sampling procedure. Taking composite samples from different probes into a single cylinder is allowed; however, equal sample volumes must be taken from each probe. For each composite, the sampling rate, collection times, beginning and ending cylinder vacuums, or alternative volume measurements must be recorded to verify that composite volumes are equal. Composite sample volumes should not be less than one liter unless evidence can be provided to substantiate the accuracy of smaller volumes. Terminate compositing before the cylinder approaches ambient pressure where measurement accuracy diminishes. If using Method 18, the owner or operator must identify all compounds in the sample and, as a minimum, test for those compounds published in the most recent Compilation of Air Pollutant Emission Factors (AP-42), minus carbon monoxide, hydrogen sulfide, and mercury. As a minimum, the instrument must be calibrated for each of the compounds on the list. Convert the concentration of each Method 18 compound to CNMOC as hexane by multiplying by the ratio of its carbon atoms divided by six. If more than the required number of samples are taken, all samples must be used in the analysis. The landfill owner or operator must divide the NMOC concentration from Method 25 or 25C of Appendix A of this part by six to convert from CNMOC as carbon to CNMOC as hexane. If the landfill has an active or passive gas removal system in place, Method 25 or 25C samples may be collected from these systems instead of surface probes provided the removal system can be shown to provide sampling as representative as the two

sampling probe per hectare requirement. For active collection systems, samples may be collected from the common header pipe before the gas moving or condensate removal equipment. For these systems, a minimum of three samples must be collected from the header pipe.

(i) The landfill owner or operator shall recalculate the NMOC mass emission rate using the equations provided in paragraph (a)(1)(i) or (a)(1)(ii) of this section and using the average NMOC concentration from the collected samples instead of the default value in the equation provided in paragraph (a)(1) of this section.

(iii) If the resulting NMOC mass emission rate is less than 50 megagrams per year, the owner or operator shall submit a periodic estimate of the emission rate report as provided in § 60.757(b)(1) and retest the site-specific NMOC concentration every 5 years using the methods specified in this section.

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

(ii) If the NMOC mass emission rate is less than 50 megagrams per year, then the owner or operator shall submit a periodic emission rate report as provided in § 60.757(b)(1) and shall recalculate the NMOC mass emission rate annually, as provided in § 60.757(b)(1) using the equations in paragraph (a)(1) of this section and using the site-specific methane generation rate constant and NMOC concentration obtained in paragraph (a)(3) of this section. 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.

(5) The owner or operator may use other methods to determine the NMOC concentration or a site-specific k as an alternative to the methods required in paragraphs (a)(3) and (a)(4) of this section if the method has been approved by the Administrator.

(b) After the installation of a collection and control system in compliance with § 60.755, the owner or operator shall calculate the NMOC emission rate for purposes of determining when the system can be removed as provided in § 60.752(b)(2)(v), 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

(1) The flow rate of landfill gas, QLFG, 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 this part.

(2) The average NMOC concentration, CNMOC, 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 this part. If using Method 18 of appendix A of this part, 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 landfill owner or operator shall divide the NMOC concentration from Method 25C of appendix A of this part by six to convert from C_{NMOC} as carbon to C_{NMOC} as hexane.

(3) The owner or operator may use another method to determine landfill gas flow rate and NMOC concentration if the method has been approved by the Administrator.

(c) When calculating emissions for PSD purposes, the owner or operator of each MSW landfill subject to the provisions of this subpart shall estimate the NMOC emission rate for comparison to the PSD major source and significance levels in §§ 51.166 or 52.21 of this chapter using AP-42 or other approved measurement procedures.

(d) For the performance test required in § 60.752(b)(2)(iii)(B), Method 25, 25C or Method 18 of appendix A of this part 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 Administrator as provided by § 60.752(b)(2)(i)(B). Method 3 or 3A shall be used to determine oxygen for correcting the NMOC concentration as hexane to 3 percent. In cases where the outlet concentration is less than 50 ppm NMOC as carbon (8ppm NMOC as Hexane), Method 25A should be used in place of Method 25. If using Method 18 of appendix A of this part, 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 control device
$NMOC_{out}$ = mass of NMOC exiting control device

§ 60.757 Reporting requirements.

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

(b) Each owner or operator subject to the requirements of this subpart shall submit an NMOC emission rate report to the Administrator initially and annually thereafter, except as provided for in paragraphs (b)(1)(ii) or (b)(3) of this section. The Administrator may request such additional information as may be necessary to verify the reported NMOC emission rate.
(1) The NMOC emission rate report shall contain an annual or 5-year estimate of the NMOC emission rate calculated using the formula and procedures provided in § 60.754(a) or (b), as applicable.

(ii) If the estimated NMOC emission rate as reported in the annual report to the Administrator is less than 50 megagrams per year in each of the next 5 consecutive years, the owner or operator may elect to submit an estimate of the NMOC emission rate for the next 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 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 Administrator. This estimate shall be revised at least once every 5 years. If the actual waste acceptance rate exceeds the estimated waste acceptance rate in any year reported in the 5-year estimate, a revised 5-year estimate shall be submitted to the Administrator. The revised estimate shall cover the 5-year period beginning with the year in which the actual waste acceptance rate exceeded the estimated waste acceptance rate.

(2) The NMOC emission rate report shall include all the data, calculations, sample reports and measurements used to estimate the annual or 5-year emissions.

(3) Each owner or operator subject to the requirements of this subpart is exempted from the requirements of paragraphs (b)(1) and (2) of this section, after the installation of a collection and control system in compliance with § 60.752(b)(2), during such time as the collection and control system is in operation and in compliance with § 60.753 and 60.755.

(d) Each owner or operator of a controlled landfill shall submit a closure report to the Administrator within 30 days of waste acceptance cessation. The Administrator may request additional information as may be necessary to verify that permanent closure has taken place in accordance with the requirements of 40 CFR 258.60. If a closure report has been submitted to the Administrator, no additional wastes may be placed into the landfill without filing a notification of modification as described under § 60.7(a)(4).

(e) Each owner or operator of a controlled landfill shall submit an equipment removal report to the Administrator 30 days prior to removal or cessation of operation of the control equipment.

(1) The equipment removal report shall contain all of the following items:

(i) A copy of the closure report submitted in accordance with paragraph (d) of this section;

(ii) A copy of the initial performance test report demonstrating that the 15 year minimum control period has expired; and

(iii) Dated copies of three successive NMOC emission rate reports demonstrating that the landfill is no longer producing 50 megagrams or greater of NMOC per year.

(2) The Administrator may request such additional information as may be necessary to verify that all of the conditions for removal in § 60.752(b)(2)(v) have been met.

§ 60.758 Recordkeeping requirements.

(a) Except as provided in § 60.752(b)(2)(i)(B), each owner or operator of an MSW landfill subject to the provisions of § 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 § 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 4 hours. Either paper copy or electronic formats are acceptable.

(f) 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.

D.1.6 General Provisions Relating to NESHAP [326 IAC 20-1-1] [40 CFR Part 63, Subpart A]

The provisions of 40 CFR Part 63, Subpart A - General Provisions, which are incorporated by reference in 326 IAC 20-1-1, apply to the facility described in this section where specified by Table 1 of 40 CFR 63, Subpart AAAA.

D.1.7 Municipal Solid Waste Landfill NESHAP Requirements [326 IAC 12] [40CFR 63.1940, Subpart AAAA]

The municipal solid waste landfill has accepted waste since November 8, 1987, has a design capacity greater than 2.5 million megagrams, and is collocated with a major source of HAPs. Therefore, this landfill shall comply with 40 CFR 63, Subpart AAAA. Pursuant to CFR Part 63, Subpart AAAA, the Permittee shall comply with the provisions of 40 CFR Part 63.1955, as specified as follows:

Sec. 63.1930 What is the purpose of this subpart?

This subpart establishes national emission standards for hazardous air pollutants for existing and new municipal solid waste (MSW) landfills. This subpart requires all landfills described in Sec. 63.1935 to meet the requirements of 40 CFR part 60, subpart Cc or WWW and requires timely control of bioreactors. This

subpart also requires such landfills to meet the startup, shutdown, and malfunction (SSM) requirements of the general provisions of this part and provides that compliance with the operating conditions shall be demonstrated by parameter monitoring results that are within the specified ranges. It also includes additional reporting requirements.

Sec. 63.1935 Am I subject to this subpart?

You are subject to this subpart if you meet the criteria in paragraph (a) or (b) of this section.

(a) You are subject to this subpart if you own or operate a MSW landfill that has accepted waste since November 8, 1987 or has additional capacity for waste deposition and meets any one of the three criteria in paragraphs (a)(1) through (3) of this section:

(1) Your MSW landfill is a major source as defined in 40 CFR 63.2 of subpart A.

(2) Your MSW landfill is collocated with a major source as defined in 40 CFR 63.2 of subpart A.

(3) Your MSW landfill is an area source landfill that has a design capacity equal to or greater than 2.5 million megagrams (Mg) and 2.5 million cubic meters (m^3) and has estimated uncontrolled emissions equal to or greater than 50 megagrams per year (Mg/yr) NMOC as calculated according to Sec. 60.754(a) of the MSW landfills new source performance standards in 40 CFR part 60, subpart WWW, the Federal plan, or an EPA approved and effective State or tribal plan that applies to your landfill.

Sec. 63.1940 What is the affected source of this subpart?

(a) An affected source of this subpart is a MSW landfill, as defined in Sec. 63.1990, that meets the criteria in Sec. 63.1935(a) or (b). The affected source includes the entire disposal facility in a contiguous geographic space where household waste is placed in or on land, including any portion of the MSW landfill operated as a bioreactor.

(c) An affected source of this subpart is existing if it is not new.

Sec. 63.1945 When do I have to comply with this subpart?

(b) If your landfill is an existing affected source, you must comply with this subpart by January 16, 2004.

(d) If your landfill is an existing affected source and is a major source or is collocated with a major source, you must comply with the requirements in Sec. Sec. 63.1955(b) and 63.1960 through 63.1980 by the date your landfill is required to install a collection and control system by 40 CFR 60.752(b)(2) of subpart WWW, the Federal plan, or EPA approved and effective State or tribal plan that applies to your landfill or by January 13, 2004, whichever occurs later.

(f) If your landfill is an existing affected source and is an area source meeting the criteria in Sec. 63.1935(a)(3), you must comply with the requirements in Sec. Sec. 63.1955(b) and 63.1960 through 63.1980 by the date your landfill is required to install a collection and control system by 40 CFR 60.752(b)(2) of subpart WWW, the Federal plan, or EPA approved and effective State or tribal plan that applies to your landfill or by January 16, 2004, whichever occurs later.

Sec. 63.1950 When am I no longer required to comply with this subpart?

You are no longer required to comply with the requirements of this subpart when you are no longer required to apply controls as specified in 40 CFR 60.752(b)(2)(v) of subpart WWW, or the Federal plan or EPA approved and effective State plan or tribal plan that implements 40 CFR part 60, subpart Cc, whichever applies to your landfill.

Sec. 63.1955 What requirements must I meet?

(a) You must fulfill one of the requirements in paragraph (a)(1) or (2) of this section, whichever is applicable:

(1) Comply with the requirements of 40 CFR part 60, subpart WWW.

(b) If you are required by 40 CFR 60.752(b)(2) of subpart WWW, the Federal plan, or an EPA approved and effective State or tribal plan to install a collection and control system, you must comply with the requirements in Sec. Sec. 63.1960 through 63.1985 and with the general provisions of this part specified in table 1 of this subpart.

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

Sec. 63.1960 How is compliance determined?

Compliance is determined in the same way it is determined for 40 CFR part 60, subpart WWW, including performance testing, monitoring of the collection system, continuous parameter monitoring, and other credible evidence. In addition, continuous parameter monitoring data, collected under 40 CFR 60.756(b)(1), (c)(1), and (d) of subpart WWW, are used to demonstrate compliance with the operating conditions for control systems. If a deviation occurs, you have failed to meet the control device operating conditions described in this subpart and have deviated from the requirements of this subpart. Finally, you must develop a written SSM plan according to the provisions in 40 CFR 63.6(e)(3). A copy of the SSM plan must be maintained on site. Failure to write or maintain a copy of the SSM plan is a deviation from the requirements of this subpart.

Sec. 63.1965 What is a deviation?

A deviation is defined in Sec. 63.1990. For the purposes of the landfill monitoring and SSM plan requirements, deviations include the items in paragraphs (a) through (c) of this section.

(a) A deviation occurs when the control device operating parameter boundaries described in 40 CFR 60.758(c)(1) of subpart WWW are exceeded.

(b) A deviation occurs when 1 hour or more of the hours during the 3-hour block averaging period does not constitute a valid hour of data. A valid hour of data must have measured values for at least three 15-minute monitoring periods within the hour.

(c) A deviation occurs when a SSM plan is not developed or maintained on site.

Sec. 63.1975 How do I calculate the 3-hour block average used to demonstrate compliance?

Averages are calculated in the same way as they are calculated in 40 CFR part 60, subpart WWW, except that the data collected during the events listed in paragraphs (a), (b), (c), and (d) of this section are not to be included in any average computed under this subpart:

(a) Monitoring system breakdowns, repairs, calibration checks, and zero (low-level) and high-level adjustments.

(b) Startups.

(c) Shutdowns.

(d) Malfunctions.

Sec. 63.1980 What records and reports must I keep and submit?

(a) Keep records and reports as specified in 40 CFR part 60, subpart WWW, or in the Federal plan, EPA approved State plan or tribal plan that implements 40 CFR part 60, subpart Cc, whichever applies to your landfill, with one exception: You must submit the annual report described in 40 CFR 60.757(f) every 6 months.

(b) You must also keep records and reports as specified in the general provisions of 40 CFR part 60 and this part as shown in Table 1 of this subpart. Applicable records in the general provisions include items such as SSM plans and the SSM plan reports.

Sec. 63.1985 Who enforces this subpart?

(a) This subpart can be implemented and enforced by the U.S. EPA, or a delegated authority such as the applicable State, local, or tribal agency. If the EPA Administrator has delegated authority to a State, local, or tribal agency, then that agency as well as the U.S. EPA has the authority to implement and enforce this subpart. Contact the applicable EPA Regional Office to find out if this subpart is delegated to a State, local, or tribal agency.

(b) In delegating implementation and enforcement authority of this subpart to a State, local, or tribal agency under subpart E of this part, the authorities contained in paragraph (c) of this section are retained by the EPA Administrator and are not transferred to the State, local, or tribal agency.

(c) The authorities that will not be delegated to State, local, or tribal agencies are as follows. Approval of alternatives to the standards in Sec. 63.1955. Where these standards reference another subpart, the cited provisions will be delegated according to the delegation provisions of the referenced subpart.

Sec. 63.1990 What definitions apply to this subpart?

Terms used in this subpart are defined in the Clean Air Act, 40 CFR part 60, subparts A, Cc, and WWW; 40 CFR part 62, subpart GGG, and subpart A of this part, and this section that follows:

Bioreactor means a MSW landfill or portion of a MSW landfill where any liquid other than leachate (leachate includes landfill gas condensate) is added in a controlled fashion into the waste mass (often in combination with recirculating leachate) to reach a minimum average moisture content of at least 40 percent by weight to accelerate or enhance the anaerobic (without oxygen) biodegradation of the waste.

Deviation means any instance in which an affected source subject to this subpart, or an owner or operator of such a source:

(1) Fails to meet any requirement or obligation established by this subpart, including, but not limited to, any emissions limitation (including any operating limit) or work practice standard;

(2) Fails to meet any term or condition that is adopted to implement an applicable requirement in this subpart and that is included in the operating permit for any affected source required to obtain such a permit; or

(3) Fails to meet any emission limitation, (including any operating limit), or work practice standard in this subpart during SSM, regardless of whether or not such failure is permitted by this subpart.

Emissions limitation means any emission limit, opacity limit, operating limit, or visible emissions limit.

EPA approved State plan means a State plan that EPA has approved based on the requirements in 40 CFR part 60, subpart B to implement and enforce 40 CFR part 60, subpart Cc. An approved State plan becomes effective on the date specified in the notice published in the Federal Register announcing EPA's approval.

Federal plan means the EPA plan to implement 40 CFR part 60, subpart Cc for existing MSW landfills located in States and Indian country where State plans or tribal plans are not currently in effect. On the effective date of an EPA approved State or tribal plan, the Federal plan no longer applies. The Federal plan is found at 40 CFR part 62, subpart GGG.

Municipal solid waste landfill or MSW landfill means an entire disposal facility in a contiguous geographical space where household waste is placed in or on land. A municipal solid waste landfill may also receive other types of RCRA Subtitle D wastes (see Sec. 257.2 of this chapter) such as commercial solid waste, nonhazardous sludge, conditionally exempt small quantity generator waste, and industrial solid waste. Portions of a municipal solid waste landfill may be separated by access roads. A municipal solid waste landfill may be publicly or privately owned. A municipal solid waste landfill may be a new municipal solid waste landfill, an existing municipal solid waste landfill, or a lateral expansion.

Tribal plan means a plan submitted by a tribal authority pursuant to 40 CFR parts 9, 35, 49, 50, and 81 to implement and enforce 40 CFR part 60, subpart Cc.

Work practice standard means any design, equipment, work practice, or operational standard, or combination thereof, that is promulgated pursuant to section 112(h) of the Clean Air Act.

As stated in Sec. 63.1955 and 63.1980, you must meet each requirement in the following table that applies to you.

Table 1 to Subpart AAAA of Part 63—Applicability of NESHAP General Provisions to Subpart AAAA

Part 63 Citation	Description	Explanation
63.1(a)	Applicability: general applicability of NESHAP in this part.	Affected sources are already subject to the provisions of paragraphs (a)(10)-(12) through the same provisions under 40 CFR, part 60 subpart A.
63.1(b)	Applicability determination for stationary sources.	
63.1(e)	Title V permitting	
63.2	Definitions	
63.4	Prohibited activities and circumvention.	Affected sources are already subject to the provisions of paragraph (b) through the same provisions under 40 CFR, part 60 subpart A.
63.5(b)	Requirements for existing, newly constructed, and reconstructed sources.	
63.6(e)	Operation and maintenance requirements,startup, shutdown and malfunction plan provisions.	
63.6(f)	Compliance with nonopacity emission standards.	Affected sources are already subject to the provisions of paragraphs (f)(1) and (2)(i) through the same provisions under 40 CFR, part 60 subpart A.
63.10(b)(2)(i)-(b)(2)(v)	General recordkeeping requirements.	
63.10(d)(5)	If actions taken during a startup, shutdown and malfunction plan are consistent with the procedures in the startup, shutdown and malfunction plan, this information shall be included in a semi-annual startup, shutdown and malfunction plan report. Any time an action taken during a startup, shutdown and malfunction plan is not consistent with the startup, shutdown and malfunction plan, the source shall report actions taken within 2 working days after commencing such actions, followed by a letter 7 days after the event.	
63.12(a)	These provisions do not preclude the State from adopting and enforcing any standard, limitation, etc., requiring permits, or requiring emissions reductions in excess of those specified.	
63.15	Availability of information and confidentiality.	

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY

PART 70 OPERATING PERMIT
CERTIFICATION

Source Name: Republic Service of Indiana, LP - Worthington sanitary Landfill
Source Address: County Road 500, Worthington, Indiana 46176
Mailing Address: 5621 East Cottom Road, Pimento, Indiana 47866
Part 70 Permit No.: T055-18340-00036

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

Please check what document is being certified:

☐ Annual Compliance Certification Letter

☐ Test Result (specify)

☐ Report (specify)

☐ Notification (specify)

☐ Affidavit (specify)

☐ Other (specify)

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

Signature:
Printed Name:
Title/Position:
Phone:
Date:

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY

COMPLIANCE BRANCH
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251
Phone: 317-233-0178
Fax: 317-233-6865

PART 70 OPERATING PERMIT
EMERGENCY OCCURRENCE REPORT

Source Name: Republic Service of Indiana, LP - Worthington sanitary Landfill
Source Address: County Road 500, Worthington, Indiana 46176
Mailing Address: 5621 East Cottom Road, Pimento, Indiana 47866
Part 70 Permit No.: T055-18340-00036

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

☐ This is an emergency as defined in 326 IAC 2-7-1(12)

- The Permittee must notify the Office of Air Quality (OAQ), within four (**4**) business hours (1-800-451-6027 or 317-233-0178, ask for Compliance Section); and
- The Permittee must submit notice in writing or by facsimile within two (**2**) working days (Facsimile Number: 317-233-6865), and follow the other requirements of 326 IAC 2-7-16.

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

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

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

Page 2 of 2

Date/Time Emergency started:
Date/Time Emergency was corrected:
Was the facility being properly operated at the time of the emergency? Y N
Type of Pollutants Emitted: TSP, PM-10, SO_2, VOC, NO_X, CO, Pb, other:
Estimated amount of pollutant(s) emitted during emergency:
Describe the steps taken to mitigate the problem:
Describe the corrective actions/response steps taken:
Describe the measures taken to minimize emissions:
If applicable, describe the reasons why continued operation of the facilities are necessary to prevent imminent injury to persons, severe damage to equipment, substantial loss of capital investment, or loss of product or raw materials of substantial economic value:

Form Completed by:

Title / Position:

Date:

Phone:

A certification is not required for this report.

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

PART 70 OPERATING PERMIT
QUARTERLY DEVIATION AND COMPLIANCE MONITORING REPORT

Source Name: Republic Service of Indiana, LP - Worthington sanitary Landfill
Source Address: County Road 500, Worthington, Indiana 46176
Mailing Address: 5621 East Cottom Road, Pimento, Indiana 47866
Part 70 Permit No.: T055-18340-00036

Months: _____ to _____ Year: _____

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

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

Form Completed By:

Title/Position:

Date:

Phone:

Attach a signed certification to complete this report.

Indiana Department of Environmental Management
Office of Air Quality

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

Source Background and Description

Source Name:	Republic Services of Indiana, LP-Worthington Sanitary Landfill
Source Location:	County Road 500 Worthington Indiana 46176
County:	Greene
SIC Code:	4953
Operation Permit No.:	MSOP 055-11614-00036
Date of Issuance:	July 5, 2000
Part 70 Permit No.:	T055-18340-00036
Permit Reviewer:	Surya Ramaswamy / EVP

The Office of Air Quality (OAQ) has reviewed a Part 70 Operating Permit application from Republic services of Indiana, LP- Worthington Sanitary Landfill (WSL) relating to the operation of a stationary municipal solid waste sanitary landfill.

History

The Republic Services of Indiana, LP-Worthington Sanitary Landfill opened in 1981. Originally, the source was issued MSOP (055-11614-00036), issued on July 5, 2000 because the design capacity at that time was less than 2.5 million megagrams (Mg). However, on December 20, 2001, the source submitted an application (Significant Permit Revision No. 055-15317-00036) to the OAQ requesting to increase the capacity of the landfill from 2.358 million megagrams (Mg) to 6.337 million Mg. This increase in capacity makes this source subject to the requirements of the New Source Performance Standard (NSPS), 40 CFR 60.750 through 60.759, Subpart WWW and Part 70 permitting requirements. Therefore the source is required to get a Title V Permit, although the source-wide potential to emit of criteria pollutants and HAPs do not exceed Title V thresholds. This source was issued a landfill expansion permit by the IDEM, Office of Land Quality on May 29, 2001. The source has submitted an amended design capacity report to IDEM on August 10, 2001.

Permitted Emission Units and Pollution Control Equipment

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

(a) One (1) municipal solid waste sanitary landfill generating landfill gas, with a maximum design capacity of 6,337,349 megagrams (Mg), constructed in 1980 and expanded in 2002; and

(b) Solid waste dumping operations, constructed in 1981.

Emission Units and Pollution Control Equipment Removed From This Source

The following permitted emission units have been removed from this source:

(a) One (1) non-hazardous industrial and commercial liquid waste solidification process, located in a portable solidification basin (roll-off box) for mixing liquid waste, solid waste, and mixing agents, with a maximum throughput of 1,667 gallons per hour of liquid waste, 65 tons per hour of solidified waste, and 50 tons per hour of mixing agent, constructed in 2002; and

(b) Mixing agent and solidified waste material handling operations, constructed in 2002;

(c) One (1) diesel oil on-road 15,000 gallon storage tank;

(d) One (1) 10,000 gallon diesel oil off-road storage tank, dispensing less than 3,500 gallons of diesel oil per day;

(e) One (1) 275 gallon garage furnace fuel oil storage tank, dispensing less than 3,500 gallons of fuel oil per day;

(f) One (1) 550 gallon hydraulic oil storage tank;

(g) One (1) 550 gallon motor oil storage tank;

(h) One (1) 1,000 gallon waste motor oil storage tank;

(i) One (1) 500 gallon waste motor oil furnace supply tank;

(j) One (1) 275 gallon transmission oil storage tank;

(k) One (1) gasoline oil-fired water pump, rated at 5 HP;

(l) Maintenance cold cleaner degreasers, with total annual solvent usage of less than 145 gallons;

(m) Maintenance drilling; and

(n) Maintenance light welding.

Unpermitted Emission Units and Pollution Control Equipment

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

Insignificant Activities

(a) One (1) 440,000 gallon leachate surface impoundment for leachate storage, with potential VOC emissions of less than 5 tons per year;

(b) Three (3) propane storage tanks with maximum storage capacities of 300*, 400, and 1,000* gallons, respectively;

(c) One (1) office propane furnace, rated at 0.09 MMBtu per hour;

(d) One (1) diesel oil-fired water pump, rated at 50 HP;

(e) One (1) garage propane furnace, rated at 0.15 million British thermal units (MMBtu) per hour*;

(f) One (1) garage fuel oil-fired furnace, rated at 0.134 MMBtu per hour*;

(g) One (1) garage waste oil-fired furnace, rated at 0.196 MMBtu per hour*;

(h) One (1) diesel oil -fired pressure washer, rated at 385 Btu per minute*;

(i) One (1) diesel oil-fired light plant, rated at 30 HP*;

(j) Paved and unpaved roads [326 IAC 6-4].

***** Note: Emission units are physically present at the site location but not being used.

Existing Approvals

The source has constructed or has been operating under the following previous approvals:

(a) MSOP permit no. 055-11614-00036, issued on July 5, 2000;

(b) Significant Permit Revision no. 055-15317-00036, issued on April 18, 2002;

(c) First Notice Only Change no. 055-15884-00036, issued on July 31, 2002; and

(d) First Administrative Amendment no. 055-18857-00036, issued April 14, 2004

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

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 complete Part 70 permit application for the purposes of this review was received on January 7, 2004. Additional information was received on March 11, 2004, April 22, 2004, May 14, 2004, February 1, 2005 and April 23, 2005.

Emission Calculations

See Appendix A of this document for detailed emissions calculations (Eight (8) pages).

Unrestricted Potential Emissions

This table reflects the unrestricted potential emissions of the source.

	Potential to Emit (tons/year)						
Process/emission unit	**PM**	**PM-10**	**SO_2**	**VOC**	**CO**	**NO_X**	**HAPs**
F-2 Sanitary Landfill	0.00	0.00	0.00	14.38	0.00	0.00	Single HAP ≤ 10 Total HAPs ≤ 25
F-4 Solid Waste Unloading & Unpaved Roadways	0.16	0.08	0.00	0.00	0.00	0.00	0.00
Total PTE	0.16	0.08	0.00	14.38	0.00	0.00	Single HAP ≤ 10 Total HAPs ≤ 25

The potential to emit of each regulated criteria pollutant is less than one hundred (100) tons per year. However, since the landfill was modified after May 30, 1991 and has a design capacity of greater than 2.5 million megagrams, this facility is subject to the requirements of the New Source Performance Standards (NSPS) for Municipal Solid Waste Landfills, 40 CFR 60 Subpart WWW. Pursuant to the requirements of 40 CFR 60, Subpart WWW, a landfill with design capacity greater than or equal to 2.5 million megagrams is subject to Part 70 permitting requirements.

Potential to Emit After Issuance

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

	Limited Potential to Emit (tons/year)						
Process/emission unit	**PM**	**PM-10**	**SO_2**	**VOC**	**CO**	**NO_X**	**HAPs**
F-2 Sanitary Landfill	0.00	0.00	0.00	14.38	0.00	0.00	Single HAP ≤ 10 Total HAPs ≤ 25
F-4 Solid Waste Unloading & Unpaved Roadways	0.16	0.08	0.00	0.00	0.00	0.00	0.00
Total PTE	0.16	0.08	0.00	14.38	0.00	0.00	Single HAP ≤ 10 Total HAPs ≤ 25

(a) This existing stationary source is not major for Emission Offset because the emissions of the nonattainment pollutant, VOC and NO_x are less than one hundred (<100) tons per year.

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

Actual Emissions

The following table shows the actual emissions from the source. This information reflects the 2002 OAQ emission data.

Pollutant	Actual Emissions (tons/year)
PM	52.84
PM-10	52.84
SO_2	2.9
VOC	8.76
CO	67
NO_x	12
HAP	Not Reported

County Attainment Status

The source is located in Greene County.

Pollutant	Status
PM-2.5	Attainment
PM-10	Attainment
SO_2	Attainment
NO_2	Attainment
8-hour Ozone	Non-Attainment
CO	Attainment
Lead	Attainment

(a) Volatile organic compounds (VOC) and Nitrogen Oxides (NOx) are regulated under the Clean Air Act (CAA) for the purposes of attaining and maintaining the National Ambient Air Quality Standards (NAAQS) for ozone. Therefore, VOC and NOx emissions are considered when evaluating the rule applicability relating to the ozone standards. Greene County has been designated as nonattainment for the 8-hour ozone standard. Therefore, VOC and NOx emissions were reviewed pursuant to the requirements for Emission Offset, 326 IAC 2-3. See the State Rule Applicability for the source section.

(b) Greene County has been classified as unclassifiable or attainment for PM2.5. U.S. EPA has not yet established the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2 for PM 2.5 emissions. Therefore, until the U.S.EPA adopts specific provisions for PSD review for PM2.5 emissions, it has directed states to regulate PM10 emissions as surrogate for PM2.5 emissions. See the State Rule Applicability for the source section.

(c) Greene County has been classified as attainment or unclassifiable in Indiana for all other criteria pollutants. Therefore, these emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2. See the State Rule Applicability for the source section.

(d) On October 25, 2006, the Indiana Air Pollution Control Board finalized a rule revision to 326 IAC 1-4-1 redesignating Delaware, Greene, Jackson, Vanderburgh, Vigo and Warrick Counties to attainment for the eight-hour ozone standard, redesignating Lake County to attainment for the sulfur dioxide standard, and revoking the one-hour ozone standard in Indiana.

(e) Fugitive Emissions
Since this type of operation is not one of the twenty-eight (28) listed source categories under 326 IAC 2-2 or 326 IAC 2-3 and since there are no applicable New Source Performance Standards that were in effect on August 7, 1980, the fugitive emissions are not counted toward determination of PSD or Emission Offset applicability.

Part 70 Permit Conditions

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

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

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

Federal Rule Applicability

(a) 40 CFR 60.114, 60.114a, and 60.114b, NSPS Subpart K, Ka, and Kb:

The requirements of the New Source Performance Standards, 326 IAC 12, (40 CFR 60.114, 60.114a, and 60.114b), Subparts K, Ka and Kb are not included in this permit for the three (3) propane storage tanks with maximum storage capacities of 300, 400, and 1,000 gallons because the storage capacity of each tank is less than 19813 gallons.

(b) 40 CFR 60, Subpart WWW – Standards of Performance for Municipal Solid Waste Landfills
This municipal solid waste landfill is subject to the New Source Performance Standard, 326 IAC 12, (40 CFR Part 60.750 - 60.759, Subpart WWW), Standards of Performance for Municipal Solid Waste Landfills. This rule applies to each municipal solid waste landfill (MSW) that commenced construction, reconstruction, or modification or began accepting waste on or after May 30, 1991. This municipal solid waste landfill began accepting waste in 1980, but was modified after May 30, 1991, to increase its capacity. Therefore, pursuant to 40 CFR 60, the requirements of the New Source Performance Standard: Municipal Solid Waste Landfills, 40 CFR 60.750, Subpart WWW are included in the permit.

Non applicable portions of the NSPS will not be included in the permit. This source is subject to the following portions of Subpart WWW.

(a) 40 CFR 60.750
(b) 40 CFR 60.751
(c) 40 CFR 60.752(b), and (d)
(d) 40 CFR 60.754
(e) 40 CFR 60.757(b), (d), and (e)
(f) 40 CFR 60.758(a), and (f)

(c) 40 CFR 63, National Emission Standards for Hazardous Air Pollutants (NESHAP): Municipal Solid Waste Landfills

On January 16, 2003, the U.S. EPA promulgated National Emission Standards for Hazardous Air Pollutants (NESHAP) for Municipal Solid Waste Landfills (40 CFR 63.1930 - 63.1952, Subpart AAAA). This rule applies to area source landfills with a design capacity equal to or greater than 2.5 million megagrams (Mg) and 2.5 million cubic meters (m^3) and estimated uncontrolled emissions of 50 Mg/yr NMOC or more, or sources which are collocated with major sources of HAPs. Republic Services of Indiana, LP - Worthington Sanitary Landfill has a design capacity of greater than 2.5 million megagrams (Mg). Therefore, this NESHAP will be applicable to Republic Services of Indiana, LP - Worthington Sanitary Landfill. This landfill site does not include a bioreactor, as defined in 40 CFR 63.1990.

Non applicable portions of the NESHAP will not be included in the permit. This source is subject to the following portions of Subpart AAAA.

(a) 40 CFR 63.1930
(b) 40 CFR 63.1935(a)
(c) 40 CFR 63.1940(a) & (c)
(d) 40 CFR 63.1945(b), (d) & (f)

(e) 40 CFR 63.1950
(f) 40 CFR 63.1955(a) (1), (b) & (c)
(g) 40 CFR 63.1960
(h) 40 CFR 63.1965
(i) 40 CFR 63.1975
(j) 40 CFR 63.1980(a) & (b)
(k) 40 CFR 63.1985
(l) 40 CFR 63.1990

(d) The provisions of 40 CFR 63 Subpart A - General Provisions, which are incorporated as 326 IAC 20-1-1, apply to the facility described in this section except when otherwise specified in 40 CFR 63 Subpart AAAA..

(e) 40 CFR Part 63, Subpart ZZZZ (National Emissions Standards for Reciprocating Internal Combustion Engines)

The requirement of Subpart ZZZZ (National Emissions Standards for Reciprocating Internal Combustion Engines) is not included in the permit because the maximum site rating for the each RICE (pump) is less than 500 brake horsepower (BHP). Therefore, Pursuant to 40 CFR 63.6590, the requirements of 40 CFR 63, Subpart ZZZZ, are not included in the permit.

(f) 40 CFR 64, Compliance Assurance Monitoring

This source does not involve a pollutant-specific emissions unit as defined in 40 CFR 64.1:

(1) With the potential to emit before controls equal to or greater than the major source threshold;
(2) that is subject to an emission limitation or standard; and
(3) Uses a control device as defined in 40 CFR 64.1 to comply with that emission limitation or standard.

The source was issued initial MSOP Permit No. 055-11614-00036, on July 5, 2000. The landfill as PSEU has uncontrolled PTE at less than 100 percent of the applicable major Part 70 threshold. Therefore, the PSEU as landfill does not meet the criteria for Compliance Assurance Monitoring Applicability.

All other emission units as PSEU's have uncontrolled PTE at less than 100 percent of the applicable major Part 70 threshold. Therefore, the PSEU's as all other emission units do not meet the criteria for Compliance Assurance Monitoring applicability.

State Rule Applicability – Entire Source

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

This source was constructed in 1981 which is after the August, 1977 rule applicability date. All modifications to this source after the rule applicability date of August 7, 1977, had potential emissions less than the PSD major modification thresholds. The source is not one of the 28 source categories and since there are no applicable New Source Performance Standards that were in effect on August 7, 1980, the fugitive emissions are not counted toward determination of PSD or Emission Offset applicability. Therefore the potential emissions of PM, PM_{10}, SO_2, NO_x, VOC, and CO from the source are less than 250 tons per year. Therefore the source is a minor source for PSD.

326 IAC 2-3 (Emissions Offset)

Greene County has been designated as nonattainment for the 8-hour ozone standard on June 15, 2004. VOC and NO_X emissions are considered when evaluating the rule applicability relating to the 8-hour ozone standard. The source wide VOC and NOx potential to emit has always remained less than 100 tons per year each since it commenced operation. All modifications to this source after the rule applicability date of August 7, 1977, had potential emissions less than the Emission Offset major modification thresholds and the source is not one of the 28 source categories. Therefore, this source is not subject to the requirements of 326 IAC 2-3 and remains a minor source under this rule.

326 IAC 2-6 (Emission Reporting)

Since this source is required to have an operating permit under 326 IAC 2-7, Part 70 Permit Program, this source is subject to 326 IAC 2-6 (Emission Reporting). In accordance with the compliance schedule in 326 IAC 2-6-3, an emission statement must be submitted triennially by July 1 beginning in 2006 and every 3 years after. The emission statement shall contain, at a minimum, the information specified in 326 IAC 2-6-4.

326 IAC 5-1 (Opacity Limitations)

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

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

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

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

Pursuant to 326 IAC 2-4.1-1 (New Source Toxics Control), any new process or production unit, which in and of itself emits or has the potential to emit (PTE) 10 tons per year of any hazardous air pollutant (HAP) or 25 tons per year of a combination of HAPs, and is constructed or reconstructed after July 27, 1997, must be controlled using technologies consistent with Maximum Achievable Control Technology (MACT). This source is not subject to 326 IAC 2-4.1-1 (New Source Toxics Control) because no new or reconstructed facilities with a PTE of any single HAP at 10 tons per year or 25 tons per year of a combination of HAPs have been installed since July 27, 1997 and the source is not a major source for HAPs. Therefore, 326 IAC 2-4.1-1 does not apply.

326 IAC 6-4 (Fugitive Dust Emissions)

Pursuant to 326 IAC 6-4, the source shall not generate fugitive dust to the extent that some portion of the material escapes beyond the property line or boundaries of the property, right-of-way, or easement on which the source is located. A violation of this section would occur if air crossing the downwind boundaries of the site were to contain fugitive dust concentrations greater than sixty-seven percent (67%) in excess of ambient upwind concentrations.

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

Pursuant to 326 IAC 6-5-1(b), the source shall be required to control fugitive particulate matter emissions. The source is located in Greene County, has received all the necessary preconstruction approvals before December 13, 1985. Therefore, 326 IAC 6-5 will not apply to the source.

State Rule Applicability – Waste Solidification Process – (Individual Facilities)

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

The particulate from the solid waste dumping operations shall not exceed 52.62 pounds per hour when operating at a process weight rate of 114.15 tons per hour. The pounds per hour limitation was calculated using the following equation:

Interpolation and extrapolation of the data for the process weight rate in excess of 60,000 pounds per hour shall be accomplished by use of the equation:

$E = 55.0\ P^{0.11} - 40$ where E = rate of emission in pounds per hour; and P = process weight rate in tons per hour

The controlled PM emission rate from solid waste dumping operations is 0.03 pounds per hour (Page 9 of Appendix A) and thus the operation is able to comply with the rule.

State Rule Applicability – Municipal Solid Waste Landfills

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

This source is located in Greene County, has capacity available for future use and was constructed prior to May 30, 1991. It meets the definition of "existing municipal solid waste landfill" as defined in 326 IAC 8-8.1-2(b). Therefore, this landfill is subject to 326 IAC 8-8.1. 326 IAC 8-8.1 incorporates, by reference, all of the provisions of 40 CFR 60, Subpart WWW, Standards of Performance for Municipal Solid Waste Landfills. Therefore, the landfill fulfills the requirements of 326 IAC 8-8.1 by following the requirements of 40 CFR 60, Subpart WWW.

State Rule Applicability – Storage Vessels

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

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

Testing Requirements

326 IAC 2-7-6(1), (6) 40 CFR 60.754 (a) (Testing Requirements)

(1) Pursuant to 40 CFR 60.754 the Permittee shall calculate the non methane organic compound (NMOC) 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 in 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 310.3 parts per million by volume (based on Tier-2 analysis) 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 in 0.02 per year.

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

$$M_{NMOC} = \sum_{i=1}^{n} 2\ k\ L_o\ M_i\ (e^{-kt_i})\ (C_{NMOC})\ (3.6\times10^{-9})$$

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 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 nondegradable solid waste may be subtracted from the total mass of solid waste in a particular section of the landfill when calculating the value of R, if documentation of the nature and amount of such wastes is maintained.
The Permittee has performed Tier-2 NMOC test on May 7, 2004 to determine the average NMOC concentration. The average NMOC concentration determined was 310.3 parts per million by volume as hexane from landfill. Based on this value and using the equation mentioned above (i.e. using Landgem), the landfill NMOC emissions were calculated. The emissions from the landfill are 36.86 Mg/yr (refer to page 4 of 10 TSD App. A)

(2) If the resulting NMOC mass emission rate is less than 50 megagrams per year, the owner or operator shall submit a periodic estimate of the emission rate report as provided in 40 CFR 60.757(b)(1) and retest the site-specific NMOC concentration every 5 years using the methods specified in Tier-2.

Compliance Requirements

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

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

The landfill owner or operator shall calculate the NMOC emission rate on an annual basis, as specified in 40 CFR 60.754. The results of these annual emissions rate calculations shall be sent to the Compliance Data Section of the State of Indiana's Department of Environmental Management's Office of Air Quality.

Conclusion

The operation of this stationary municipal solid waste landfill (MSLWLF) shall be subject to the conditions of this Part 70 permit T055-18340-00036.

Appendix A: Emission Calculations

EMISSION CALCULATIONS SUMMARY

Company Name: Republic Services of Indiana, LP-Worthington Sanitary Landfill
Address City IN Zip: County Road 500, Worthington Indiana 46176
Part 70 Permit: T055-18340-00036
Reviewer: Surya Ramaswamy / EVP
Date: 11/26/2007

Potential to Emit in (tons/year)			
Pollutant	F-2 Sanitary Landfill	F-4 Solid Waste Unloading & Unpaved Roadways	Total
PM	-	0.16	0.16
PM-10	-	0.08	0.08
SO_2	-	-	-
NO_x	-	-	-
VOC	14.38	-	14.38
CO	-	-	-
Total HAPs	13.93	-	13.93
Worst case HAP	4.97	-	4.97

Limited Potential to Emit in (tons/year)			
Pollutant	F-2 Sanitary Landfill	F-4 Solid Waste Unloading & Unpaved Roadways	Total
PM	-	0.16	0.16
PM-10	-	0.08	0.08
SO_2	-	-	-
NO_x	-	-	-
VOC	14.38	-	14.38
CO	-	-	-
Total HAPs	13.93	-	13.93
Worst case HAP	4.97	-	4.97

Appendix A: Emission Calculations
Tier 2 - LANDGEM

Company Name: Republic Services of Indiana, LP-Worthington Sanitary Landfill
Address City IN Zip: County Road 500, Worthington Indiana 46176
Part 70 Permit: T055-18340-00036
Reviewer: Surya Ramaswamy / EVP
Date: ########

REQUIRED: **DETERMINE THE AVERAGE ANNUAL ACCEPTANCE RATE FOR THE WORTHINGTON SANITARY LANDFILL**

REFERENCE: **EPA, NEW SOURCE PERFORMANCE STANDARDS, §60.754(a)(3).**

SOLUTION: **1. DETERMINE THE ANNUAL WASTE ACCEPTANCE RATE IN MG FOR YEARS IN WHICH ACTUAL ACCEPTANCE IS KNOWN.**

- THE LANDFILL BEGAN ACCEPTING WASTE IN 1982.
- WASTE ACCEPTANCE NUMBERS ARE AVAILABLE FOR 1991-2003.

- ACTUAL WASTE ACCEPTANCE IN FY 1991:	125,500	Mg
- ACTUAL WASTE ACCEPTANCE IN FY 1992:	106,400	Mg
- ACTUAL WASTE ACCEPTANCE IN FY 1993:	113,300	Mg
- ACTUAL WASTE ACCEPTANCE IN FY 1994:	143,000	Mg
- ACTUAL WASTE ACCEPTANCE IN FY 1995:	132,000	Mg
- ACTUAL WASTE ACCEPTANCE IN FY 1996:	124,973	Mg
- ACTUAL WASTE ACCEPTANCE IN FY 1997:	102,152	Mg
- ACTUAL WASTE ACCEPTANCE IN FY 1998:	122,860	Mg
- ACTUAL WASTE ACCEPTANCE IN FY 1999:	226,935	Mg
- ACTUAL WASTE ACCEPTANCE IN FY 2000:	214,808	Mg
- ACTUAL WASTE ACCEPTANCE IN FY 2001:	146,900	Mg
- ACTUAL WASTE ACCEPTANCE IN FY 2002:	174,548	Mg
- ACTUAL WASTE ACCEPTANCE IN FY 2003:	115,712	Mg

2. DETERMINE THE REMAINING WASTE ACCEPTANCE IN MEGAGRAMS.

- DURING THE LAST 5 YEAR PERIOD WASTE ACCEPTANCE HAS DECLINED AND IS EXPECTED TO CONTINUE TO DECLINE. HOWEVER, A CONSERVATIVE ESTIMATE APPROXIMATING THE AVERAGE FROM THE PAST 3 YEARS HAS BEEN USED TO ESTIMATE THE ANNUAL WASTE INFLOW RATE UNTIL CLOSURE IN 2030.

- PROJECTED WASTE ACCEPTANCE IN FY 2004:	160,493	Tons
- CONVERSION FACTOR:	0.9078	Mg/ton
- PROJECTED WASTE ACCEPTANCE IN FY 2004:	145,696	Mg

FISCAL YEAR	ANNUAL WASTE INFLOW (Mg)
2005	145,696
2006	145,696
2007	145,696
2008	145,696

3. PARAMETERS FOR THE EPA LANDFILL GAS EMISSIONS MODEL.

- REFUSE METHANE GENERATION POTENTIAL:	170*	L_o (m^3/Mg)
- REFUSE GENERATION RATE CONSTANT:	0.05*	k (1/yr)
- DESIGN CAPACITY FOR THE LANDFILL:	6,337,000	Mg
- CONCENTRATION OF NMOC:	310.3	C_{NMOC} (ppm as hexane)

*NSPS Default Value

Appendix A: Emission Calculations
Tier 2 - Weighted Average Calculation of NMOC as Hexane

Company Name: Republic Services of Indiana, LP-Worthington Sanitary Landfill
Address City IN Zip: County Road 500, Worthington Indiana 46176
Part 70 Permit: T055-18340-00036
Reviewer: Surya Ramaswamy / EVP
Date: 11/26/2007

Sample ID	Weighted Factor	NMOC as Carbon (ppmv)	Corrected NMOC as Hexane (ppmv)	C_{NMOC} (ppm as hexane)
LF-1,2,3	6.82%	720	120.0	8.18
LF-4,5,6	6.82%	1,240	206.7	14.09
LF-7,8,9	6.82%	1,050	175.0	11.93
48,49,44R	6.82%	1,290	215.0	14.66
21,13,08	6.82%	1,090	181.7	12.39
16,15,25	6.82%	1,110	185.0	12.61
28,35,42	6.82%	1,750	291.7	19.89
X1,37,36	6.82%	5,360	893.3	60.91
43,38,24	6.82%	3,060	510.0	34.77
X3,X4,X11	6.82%	1,560	260.0	17.73
X5,X6,X7	6.82%	2,260	376.7	25.68
29,23,20	6.82%	2,030	338.3	23.07
12,X2,18	6.82%	1,330	221.7	15.11
X8,X9,X10	6.82%	2,270	378.3	25.80
X11,X12	4.55%	1,780	296.7	13.48
Total samples =	44		167.2	**310.30**
	100%			

Appendix A: Emission Calculations
Fugitive NMOC emissions using LGEM

Company Name: Republic Services of Indiana, LP-Worthington Sanitary Landfill
Address City IN Zip: County Road 500, Worthington Indiana 46176
Part 70 Permit: T055-18340-00036
Reviewer: Surya Ramaswamy / EVP
Date: ########

==========
Model Parameters
==========
Lo : 170.00 m^3 / Mg ***** User Mode Selection *****
k : 0.0500 1/yr ***** User Mode Selection *****
NMOC : 310.30 ppmv ***** User Mode Selection *****
Methane : 50.0000 % volume
Carbon Dioxide : 50.0000 % volume

==========
Landfill Parameters
==========
Landfill type : No Co-Disposal
Year Opened : 1982 Current Year : 2009 Closure Year: 2031
Capacity : 6337000 Mg
Average Acceptance Rate Required from
Current Year to Closure Year : 145696.00 Mg/year

==========
Model Results
==========

Year	Refuse In Place (Mg)	NMOC Emission Rate (Mg/yr)	NMOC Emission Rate (Cubic m/yr)
1983	9.12E+04	1.72E+00	4.81E+02
1984	1.82E+05	3.37E+00	9.39E+02
1985	2.74E+05	4.93E+00	1.37E+03
1986	3.65E+05	6.41E+00	1.79E+03
1987	4.32E+05	7.36E+00	2.05E+03
1988	4.99E+05	8.27E+00	2.31E+03
1989	5.66E+05	9.14E+00	2.55E+03
1990	6.33E+05	9.96E+00	2.78E+03
1991	7.00E+05	1.07E+01	3.00E+03
1992	8.25E+05	1.26E+01	3.51E+03
1993	9.32E+05	1.40E+01	3.90E+03
1994	1.05E+06	1.55E+01	4.31E+03
1995	1.19E+06	1.74E+01	4.85E+03
1996	1.32E+06	1.90E+01	5.31E+03
1997	1.45E+06	2.05E+01	5.71E+03
1998	1.55E+06	2.14E+01	5.97E+03
1999	1.67E+06	2.27E+01	6.33E+03
2000	1.90E+06	2.59E+01	7.22E+03
2001	2.11E+06	2.87E+01	8.00E+03
2002	2.26E+06	3.01E+01	8.38E+03
2003	2.43E+06	3.19E+01	8.90E+03
2004	2.55E+06	3.25E+01	9.07E+03
2005	2.70E+06	3.37E+01	9.40E+03
2006	2.84E+06	3.48E+01	9.71E+03
2007	2.99E+06	3.59E+01	1.00E+04
2008	**3.13E+06**	**3.69E+01**	**1.03E+04**
2009	3.28E+06	3.78E+01	1.06E+04
2010	3.42E+06	3.87E+01	1.08E+04
2011	3.57E+06	3.96E+01	1.11E+04
2012	3.71E+06	4.04E+01	1.13E+04
2013	3.86E+06	4.12E+01	1.15E+04
2014	4.01E+06	4.20E+01	1.17E+04
2015	4.15E+06	4.27E+01	1.19E+04
2016	4.30E+06	4.33E+01	1.21E+04
2017	4.44E+06	4.40E+01	1.23E+04
2018	4.59E+06	4.46E+01	1.24E+04
2019	4.73E+06	4.52E+01	1.26E+04
2020	4.88E+06	4.57E+01	1.28E+04
2021	5.03E+06	4.62E+01	1.29E+04
2022	5.17E+06	4.67E+01	1.30E+04
2023	5.32E+06	4.72E+01	1.32E+04
2024	5.46E+06	4.77E+01	1.33E+04
2025	5.61E+06	4.81E+01	1.34E+04
2026	5.75E+06	4.85E+01	1.35E+04
2027	5.90E+06	4.89E+01	1.36E+04
2028	6.05E+06	4.93E+01	1.37E+04
2029	6.19E+06	4.96E+01	1.38E+04
2030	6.34E+06	5.00E+01	1.39E+04
2031	6.34E+06	4.75E+01	1.33E+04
2032	6.34E+06	4.52E+01	1.26E+04

Potential NMOC Emissions	**36.86**	**Mg/yr**	**uncontrolled**
Potential VOC Emissions	**14.38**	**Tons/yr**	**uncontrolled, assuming 39% of NMOC is VOC**

Note 1: The above calculation reflects the potential to emit, based on NSPS default Value of 0.05 (1/Yr) for refuse rate constant, 170 (M^3 / Mg) refuse Methane generation potential and NMOC concentration of 310.3 obtained from Tier-2 testing. The 39% NMOC as VOC is recommended in AP-42 for non co-disposal in Table 2.4-2.

Appendix A: Emission Calculations

Fugitive Methane Emissions using LGEM

Company Name: Republic Services of Indiana, LP-Worthington Sanitary Landfill
Address City IN Zip: County Road 500, Worthington Indiana 46176
Part 70 Permit: T055-18340-00036
Reviewer: Surya Ramaswamy / EVP
Date: 11/26/2007

==========

Model Parameters

==========

Lo : 170.00 m^3 / Mg ***** User Mode Selection *****
k : 0.0500 1/yr ***** User Mode Selection *****
NMOC : 310.30 ppmv ***** User Mode Selection *****
Methane : 50.0000 % volume
Carbon Dioxide : 50.0000 % volume

==========

Landfill Parameters

==========

Landfill type : No Co-Disposal
Year Opened : 1982 Current Year : 2009 Closure Year: 2031
Capacity : 6337000 Mg
Average Acceptance Rate Required from
Current Year to Closure Year : 145696.00 Mg/year

==========

Model Results

==========

Year	Refuse In Place (Mg)	Methane Emission Rate (Mg/yr)	(Cubic m/yr)	scfm
1983	9.12E+04	5.17E+02	7.75E+05	105
1984	1.82E+05	1.01E+03	1.51E+06	205
1985	2.74E+05	1.48E+03	2.21E+06	301
1986	3.65E+05	1.92E+03	2.88E+06	391
1987	4.32E+05	2.21E+03	3.31E+06	449
1988	4.99E+05	2.48E+03	3.72E+06	505
1989	5.66E+05	2.74E+03	4.11E+06	557
1990	6.33E+05	2.99E+03	4.48E+06	608
1991	7.00E+05	3.22E+03	4.83E+06	655
1992	8.25E+05	3.78E+03	5.66E+06	768
1993	9.32E+05	4.19E+03	6.29E+06	854
1994	1.05E+06	4.63E+03	6.94E+06	943
1995	1.19E+06	5.22E+03	7.82E+06	1,062
1996	1.32E+06	5.71E+03	8.56E+06	1,162
1997	1.45E+06	6.14E+03	9.21E+06	1,250
1998	1.55E+06	6.42E+03	9.63E+06	1,307
1999	1.67E+06	6.81E+03	1.02E+07	1,385
2000	1.90E+06	7.76E+03	1.16E+07	1,579
2001	2.11E+06	8.60E+03	1.29E+07	1,750
2002	2.26E+06	9.01E+03	1.35E+07	1,834
2003	2.43E+06	9.56E+03	1.43E+07	1,946
2004	2.55E+06	9.75E+03	1.46E+07	**1,985**
2005	2.70E+06	1.01E+04	1.51E+07	2,056
2006	2.84E+06	1.04E+04	1.56E+07	2,124
2007	2.99E+06	1.08E+04	1.61E+07	2,189
2008	3.13E+06	1.11E+04	1.66E+07	2,250
2009	3.28E+06	1.13E+04	1.70E+07	2,308
2010	3.42E+06	1.16E+04	1.74E+07	2,364
2011	3.57E+06	1.19E+04	1.78E+07	2,417
2012	3.71E+06	1.21E+04	1.82E+07	2,467
2013	3.86E+06	1.24E+04	1.85E+07	2,515
2014	4.01E+06	1.26E+04	1.89E+07	2,561
2015	4.15E+06	1.28E+04	1.92E+07	2,604
2016	4.30E+06	1.30E+04	1.95E+07	2,645
2017	4.44E+06	1.32E+04	1.98E+07	2,684
2018	4.59E+06	1.34E+04	2.00E+07	2,721
2019	4.73E+06	1.36E+04	2.03E+07	2,756
2020	4.88E+06	1.37E+04	2.06E+07	2,790
2021	5.03E+06	1.39E+04	2.08E+07	2,823
2022	5.17E+06	1.40E+04	2.10E+07	2,853
2023	5.32E+06	1.42E+04	2.12E+07	2,882
2024	5.46E+06	1.43E+04	2.14E+07	2,910
2025	5.61E+06	1.44E+04	2.16E+07	2,935
2026	5.75E+06	1.46E+04	2.18E+07	2,961
2027	5.90E+06	1.47E+04	2.20E+07	2,984
2028	6.05E+06	1.48E+04	2.22E+07	3,007
2029	6.19E+06	1.49E+04	2.23E+07	3,029
2030	**6.34E+06**	**1.50E+04**	**2.25E+07**	**3,049**
2031	6.34E+06	1.43E+04	2.14E+07	2,900

Maximum Modelled LFG flow: **1,985 scfm**

Appendix A: Emission Calculations
Fugitive HAP Emissions from Landfill

Company Name: Republic Services of Indiana, LP-Worthington Sanitary Landfill
Address City IN Zip: County Road 500, Worthington Indiana 46176
Part 70 Permit: T055-18340-00036
Reviewer: Surya Ramaswamy / EVP
Date: ########

Potential LFG fugitive flow **1,985 scfm**

						Control Eff.	Landfill Emissions	
LFG Compound	HAP	VOC	CAS	MW '(lb/lb-mol)	Conc '(ppmv)[a]	[b, c]	lb/hr	TPY
1,1,1 - Trichloroethane (methyl chloroform)	x	x	71-55-6	133.42	0.48	0.00	0.020088	0.087985
1,1,2,2 - Tetrachloroethane	x	x	79-34-5	167.85	1.11	0.00	0.058441	0.255971
1,1 - Dichloroethane (ethylidene dichloride)	x	x	75-34-3	98.95	2.35	0.00	0.072938	0.319470
1,1 - Dichloroethene (vinylidene chloride)	x	x	75-35-4	96.94	0.20	0.00	0.006112	0.026770
1,2 - Dichloroethane (ethylene dichloride)	x	x	107-06-2	98.96	0.41	0.00	0.012634	0.055335
1,2 - Dichloropropane (propylene dichloride)	x	x	78-87-5	112.98	0.18	0.00	0.006379	0.027940
2-Propanol (isopropyl alcohol)			67-63-0	60.11	50.10	0.00	0.944619	4.137432
Acetone			67-64-1	58.08	7.01	0.00	0.127708	0.559360
Acrylonitrile	x	x	107-13-1	53.06	6.33	0.00	0.105352	0.461442
Benzene	x	x	71-43-2	78.11	1.91	0.00	0.046796	0.204968
Bromodichloromethane			75-27-4	163.83	3.13	0.00	0.160846	0.704505
Butane			106-97-8	58.12	5.03	0.00	0.091699	0.401643
Carbon Disulfide	x		75-15-0	76.13	0.58	0.00	0.013922	0.060978
Carbon Tetrachloride	x	x	56-23-5	153.84	0.004	0.00	0.000193	0.000845
Carbonyl Sulfide	x		463-58-1	60.07	0.49	0.00	0.009233	0.040439
Chlorobenzene	x	x	108-90-7	112.56	0.25	0.00	0.008968	0.039279
Chlorodifluoromethane			124-48-1	86.47	1.30	0.00	0.035260	0.154438
Chloroethane (ethyl chloride)	x	x	75-00-3	64.52	1.25	0.00	0.025297	0.110803
Chloroform	x	x	67-66-3	119.39	0.03	0.00	0.001123	0.004921
Chloromethane (methyl chloride)	x	x	74-87-3	50.49	1.21	0.00	0.019163	0.083934
1,4 Dichlorobenzene	x	x	106-46-7	147.00	0.21	0.00	0.009821	0.043017
Dichlorodifluoromethane			75-71-8	120.91	15.70	0.00	0.595435	2.608004
Dichlorofluoromethane			75-43-4	102.92	2.62	0.00	0.084581	0.370465
Dichloromethane (methylene chloride)	x	x	75-09-2	84.94	14.30	0.00	0.380996	1.668763
Dimethyl Sulfide (methyl sulfide)			75-18-3	62.13	7.82	0.00	0.152398	0.667505
Ethane			74-84-0	30.07	889	0.00	8.385086	36.726675
Ethanol			64-17-5	46.08	27.20	0.00	0.393146	1.721979
Ethyl Mercaptan (ethanethiol)			75-08-1	62.13	2.28	0.00	0.044433	0.194618
Ethylbenzene	x	x	100-41-4	106.16	4.61	0.00	0.153509	0.672370
Ethylene dibromide (dibromoethane)	x	x	106-93-4	187.88	0.001	0.00	0.000059	0.000258
Fluorotrichloromethane			75-69-4	137.38	0.76	0.00	0.032750	0.143444
Hexane	x	x	110-54-3	86.18	6.57	0.00	0.177600	0.777890
Hydrogen Sulfide			7783-06-4	34.08	35.50	0.00	0.379490	1.662166
Mercury (total)	x		7439-97-6	200.61	0.000292	0.00	0.000018	0.000080
Methyl Ethyl Ketone (2-butanone)		x	78-93-3	72.11	7.09	0.00	0.160367	0.702406
Methyl Isobutyl Ketone (hexone)	x	x	108-10-1	100.16	1.87	0.00	0.058750	0.257325
Methyl Mercaptan			74-93-1	48.11	2.49	0.00	0.037576	0.164582
Pentane			109-66-0	72.15	3.29	0.00	0.074457	0.326121
Tetrachloroethylene (perchloroethylene)	x	x	127-18-4	165.83	3.73	0.00	0.194019	0.849803
Propane			74-98-6	44.09	11.10	0.00	0.153510	0.672372
t - 1,2 - Dichloroethene (1,2 dichloroethylene)			156-60-5	96.94	2.84	0.00	0.086356	0.378240
Toluene	x	x	108-88-3	92.13	39.30	0.00	**1.135706**	**4.974392**
Trichloroethylene (trichloroethene)	x	x	79-01-6	131.38	2.82	0.00	0.116212	0.509008
Vinyl Chloride	x	x	75-01-4	62.50	7.34	0.00	0.143896	0.630264
Xylenes	x	x	1330-20-7	106.16	12.10	0.00	0.402920	1.764789
						0.00	0	0
		x						
Total HAP[e]							**3.18**	**13.93**
Maximum Single HAP, toluene							**1.14**	**4.97**

[a] Source: AP-42 (11/98), tables 2.4-1 and 2.4-2
[b] source: AP-42 (9/97), table 2.4-3
[c] AP-42 gives ranges for control efficiencies. Control efficiencies for halogenated species range from 91 to 99 percent.
Control efficiencies for non-halogenated species range from 38 to 99 percent. There are no controls applied to these fugitive emissions.

Appendix A: Emission Calculations
SW Unloading

Company Name: Republic Services of Indiana, LP-Worthington Sanitary Landfill
Address City IN Zip: County Road 500, Worthington Indiana 46176
Part 70 Permit: T055-18340-00036
Reviewer: Surya Ramaswamy / EVP
Date: 11/26/2007

Emission Unit
Solid Waste Unloading Operations

Purpose
Calculate particulate emissions from drop operations associated with solid waste unloading.

Methodology
AP-42 Section 13.2.4, "Aggregate Handling and Storage Piles"
Assume 8760 hours of operation

Use Equation:

$$E = k(0.0032)\left(\frac{\left(U/5\right)^{1.3}}{\left(M/2\right)^{1.4}}\right)$$

Where, E = Emissions factor, lbs per ton
k = Particle size multiplier
U = mph mean wind speed
M = average material moisture content

Particulate Emissions Calculations

particle size multipiler <10um, k=	0.35	(Permit No. 055-15317)
particle size multipiler <30um, k=	0.74	(Permit No. 055-15317)
Mean wind speed, U =	9.6	mph (Permit No. 055-15317)
Avg. material moisture content, M=	15.0	(Permit No. 055-15317)
Max. Refuse Acceptance=	1,000,000	tons/year

Pollutant	Multiplier	Emission Factor (lb/ton)	Potential Emissions (lb/year)	Potential Emissions (tons/yr)
PM-10	0.35	1.56E-04	155.75	0.08
PM	0.74	3.29E-04	329.30	0.16

Appendix A: Emission Calculations
Fugitive Road Emissions

Company Name: Republic Services of Indiana, LP-Worthington Sanitary Landfill
Address City IN Zip: County Road 500, Worthington Indiana 46176
Part 70 Permit: T055-18340-00036
Reviewer: Surya Ramaswamy / EVP
Date: 11/26/2007

Emission Unit
Fugitive Emissions from Vehicle Traffic.

Purpose
Calculate particulate emissions from site roads constructed of gravel and/or compacted soil.

Methodology
AP-42 Section 13.2.2, "Unpaved Roads"
Assume silt content of roads = 6.4 % (from AP-42 Table 13.2.2-1, Mean value for Municipal Solid Waste Landfills).

Use Equation:

$$E = k\left(\frac{s}{12}\right)^{a}\left(\frac{\left(W/3\right)^{b}}{\left(M/0.2\right)^{c}}\right)\left(\frac{365-p}{365}\right)\left(\frac{S}{15}\right)$$

Where
E = Emissions factor
k = Particle size multiplier
s = Silt content of road surface material, (%)
a = Constant for PM-10
b = Constant for PM-10
c = Constant for PM-10
W = Mean vehicle weight, (tons)
M = surface material moisture content, %
S = Mean vehicle speed, (mph)
p = Number of days per year with at least 0.01 inches of precipitation.

	PM-10	TSP
Particle size multiplier =	2.6	10
Mean silt content =	6.4	6.4
Constant, a =	0.8	0.8
Constant, b =	0.4	0.5
Constant, c =	0.3	0.4

Surface material moisture = 0.2 %
Mean vehicle speed = 10 mph
Number of days/year with precipitation > 0.01 inches = 120 (from AP-42 Figure 13.2.2-1)
Assumed water spray control efficiency = 75%

Vehicle and Particulate Emissions Calculations

					PM-10			PM *		
Truck Type	# of Trips	miles/trip	miles	Weight (tons)	Emission Factor (lb/VMT)	Maximum Theoretical Emissions (tons/yr)	Potential Controlled Emissions (tons/yr)	Emission Factor (lb/VMT)	Maximum Theoretical Emissions (tons/yr)	Potential Controlled Emissions (tons/yr)
Public Hauler	52560	0.07	7576	2	0.60	2.27	0.57	2.21	8.37	2.09
Residential Trucks	8760	0.59	10259	26	1.67	8.56	2.14	7.97	40.87	10.22
Commercial Trucks	26280	0.52	27357	26	1.67	22.83	5.71	7.97	108.98	27.24
Tractor/Trailers/Transfer Trailers	35040	0.65	45355	26	1.67	37.85	9.46	7.97	180.68	45.17
Leachate Trucks	8760	0.04	636	26	1.67	0.53	0.13	7.97	2.53	0.63
Liquid Waste Tankers	8760	0.08	1439	26	1.67	1.20	0.30	7.97	5.73	1.43
Mixing Agent Trucks	35040	0.19	13612	26	1.67	11.36	2.84	7.97	54.22	13.56
Front-End Loaders	280320	0.003	1861	2	0.60	0.56	0.14	2.21	2.06	0.51
Totals						85.16	20.72		403.44	100.86