PART 70 OPERATING PERMIT
INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT OFFICE OF AIR QUALITY
and
CITY OF INDIANAPOLIS
OFFICE OF ENVIRONMENTAL SERVICES

South Side Landfill
2561 Kentucky Avenue
Indianapolis, Indiana 46221

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

This permit is issued in accordance with 326 IAC 2 and 40 CFR Part 70 Appendix A and contains the conditions and provisions specified in 326 IAC 2-7 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 and the Code of Indianapolis and Marion County, Chapter 511.

Operation Permit No.: T097-11621-00366	
Issued by: Original Signed by Janet McCabe Janet G. McCabe, Assistant Commissioner Office of Air Quality Indiana Department of Environmental Management John B. Chavez, Administrator Office of Environmental Services City of Indianapolis	Issuance Date: July 16, 2002 Expiration Date: July 16, 2007

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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) and the City of Indianapolis Office of Environmental Services (OES). The information describing the source contained in conditions A.1, A.3, and 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 landfill, with a landfill gas collection and control system, accepting municipal solid waste, construction and demolition debris and non-hazardous special waste.

Responsible Official:	**John Balkema**
Source Address:	**2561 Kentucky Avenue, Indianapolis, IN 46221**
Mailing Address:	**Kentucky Avenue Land Company, 5300 Miller Road, Kalamazoo, MI 49001**
General Source Phone Number:	**(317)247-6808**
Responsible Official Phone Number:	**(616)226-9200**
SIC Code:	**4953**
County Location:	**Marion**
Source Location Status:	**Attainment, unclassifiable, or maintenance for all criteria pollutants**
Source Status:	**Part 70 Permit Program** **Minor Source, under PSD**

A.2 Part 70 Source Definition [326 IAC 2-7-1(22)]

This stationary source consists of two (2) plants:

(a) South Side Landfill, a municipal solid waste landfill with a landfill gas collection and control system, is located at 2561 Kentucky Avenue; and

(b) Crossroads Greenhouse is located at 2559 Kentucky Avenue.

Since the two (2) plants are located on contiguous or adjacent properties, are under common control of the same entity, and have the same SIC code (the greenhouse is an auxiliary activity), they will be considered one (1) source, effective from the date of issuance of this Part 70 permit.

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

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

(a) One (1) municipal solid waste landfill, identified as P100, which began operations in 1971, controlled by an active landfill gas collection and control system; and with a maximum capacity of 15,008,982 Mg. Five (5) candlestick flares are used as back-up landfill gas control measures. Four (4) have a capacity of 600 cfm and one has a capacity of 2,825 cfm.

(b) Two (2) boilers, each rated at fourteen and six tenths (14.6) MMBtu per hour, exhausting at two (2) stacks, identified as S118A and S118B. The greenhouse boilers use landfill gas and No. 2 fuel oil as fuel. The boilers were constructed in September of 1989.

(c) One Allis Chalmers Diesel fired electric generator (identified as emission unit S503) with a capacity of 9.8 gallons per hour installed in 1989.

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

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

(a) A tertiary stone crusher, identified as emission unit S402, has a capacity of 300 tons per hour and was installed in March, 1999.

A.5 Part 70 Permit Applicability [326 IAC 2-7-2]

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

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

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

SECTION B GENERAL CONDITIONS

B.1 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]

This permit is issued for a fixed term of five (5) years from the original date, as determined in accordance with IC 4-21.5-3-5(f) and IC 13-15-5-3 and the Code of Indianapolis and Marion County Chapter 511. Subsequent revisions, modifications, or amendments of this permit do not affect the expiration date.

B.3 Enforceability [326 IAC 2-7-7]

(a) 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 and OES, the United States Environmental Protection Agency (U.S. EPA) and by citizens in accordance with the Clean Air Act. (In addition, see Attachment A)

(b) Unless otherwise stated, all terms and conditions in this permit that are local requirements, including any provisions designed to limit the source's potential to emit, are enforceable by OES.

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

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

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

and

Office of Environmental Services
Air Quality Management Section, Permits
2700 South Belmont Avenue
Indianapolis, Indiana 46221

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

(b) The Permittee shall furnish to IDEM, OAQ, and OES within a reasonable time, any information that IDEM, OAQ, and OES 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, and OES copies of records required to be kept by this permit or, for information claimed to be confidential, the Permittee may furnish such records directly to the U. S. EPA along with a claim of confidentiality. [326 IAC 2-7-5(6)(E)]

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

(a) The Permittee must comply with all conditions of this permit. Noncompliance with any provision of this permit is grounds for:

(1) Enforcement action;

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

(3) Denial of a permit renewal application.

(b) Noncompliance with any provisions of this permit, except any provision specifically designated as not federally enforceable, constitutes a violation of the Clean Air Act.

(c) 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.

(d) 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.

B.9 Certification [326 IAC 2-7-4(f)] [326 IAC 2-7-6(1)] [326 IAC 2-7-5(3)(C)]

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

(b) One (1) certification shall be included, using the attached Certification Form, with each submittal requiring certification.

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

B.10 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 in letter form no later than April 15 of each year to:

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

and

Office of Environmental Services
Air Quality Management Section
2700 South Belmont Avenue
Indianapolis, Indiana 46221

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, and OES 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, and OES 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.11 Preventive Maintenance Plan [326 IAC 2-7-5(1),(3) and (13)] [326 IAC 2-7-6(1) and (6)] [326 IAC 1-6-3]

(a) If required by specific condition(s) in Section D of this permit, the Permittee shall prepare and maintain Preventive Maintenance Plans (PMPs) within ninety (90) days after issuance of this permit, including the following information on each facility:

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

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

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

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, P. O. Box 6015
Indianapolis, Indiana 46206-6015

and

Office of Environmental Services
Air Quality Management Section
2700 South Belmont Avenue
Indianapolis, Indiana 46221

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

(b) The Permittee shall implement the PMPs as necessary to ensure that failure to implement a PMP does not cause or contribute to a violation of any limitation on emissions or potential to emit.

(c) A copy of the PMPs shall be submitted to IDEM, OAQ, and OES upon request and within a reasonable time, and shall be subject to review and approval by IDEM, OAQ, and OES. IDEM, OAQ, and OES may require the Permittee to revise its PMPs whenever lack of proper maintenance causes or contributes to any violation. The PMP does not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

(d) Records of preventive maintenance shall be retained for a period of at least five (5) years. These records shall be kept 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 IDEM Commissioner or OES Administrator makes a request for records to the Permittee, the Permittee shall furnish the records to the Commissioner or Administrator within a reasonable time.

B.12 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, and OES within four (4) daytime business hours after the beginning of the emergency, or after the emergency was discovered or reasonably should have been discovered;

IDEM's phone and facsimile numbers:
Telephone Number: 1-800-451-6027 (ask for Office of Air Quality, Compliance Section), or
Telephone Number: 317-233-5674 (ask for Compliance Section)
Facsimile Number: 317-233-5967

OES's phone and facsimile numbers:
Telephone Number: 317/327-2234
Facsimile Number: 317/327-2274

(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, P. O. Box 6015
Indianapolis, Indiana 46206-6015

and

Office of Environmental Services
Air Quality Management Section
2700 South Belmont Avenue
Indianapolis, Indiana 46221

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) IDEM, OAQ, and OES may require that the Preventive Maintenance Plans required under 326 IAC 2-7-4-(c)(10) be revised in response to an emergency.

(f) Failure to notify IDEM, OAQ, and OES 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.

B.13 Permit Shield [326 IAC 2-7-15] [326 IAC 2-7-20] [326 IAC 2-7-12]

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

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

(b) If, after issuance of this permit, it is determined that the permit is in nonconformance with an applicable requirement that applied to the source on the date of permit issuance, IDEM, OAQ, or OES 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, or OES 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, or OES has issued the modification. [326 IAC 2-7-12(b)(7)]

B.14 Prior Permits Superseded [326 IAC 2-1.1-9.5]

(a) All terms and conditions of previous permits issued pursuant to permitting programs approved into the state implementation plan have been either

(1) incorporated as originally stated,

(2) revised, or

(3) deleted

by this permit.

(b) All previous registrations and permits are superseded by this permit.

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, P.O. Box 6015
Indianapolis, Indiana 46206-6015

and

Office of Environmental Services
Air Quality Management Section
2700 South Belmont Avenue
Indianapolis, Indiana 46221

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.

(c) Emergencies shall be included in the Quarterly Deviation and Compliance Monitoring Report.

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

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

(b) This permit shall be reopened and revised under any of the circumstances listed in IC 13-15-7-2 or if IDEM, OAQ, or OES 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, or OES to reopen and revise this permit shall follow the same procedures as apply to initial permit issuance and shall affect only those parts of this permit for which cause to reopen exists. Such reopening and revision shall be made as expeditiously as practicable. [326 IAC 2-7-9(b)]

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

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

(a) The application for renewal shall be submitted using the application form or forms prescribed by IDEM, OAQ, and OES 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, P.O. Box 6015
Indianapolis, Indiana 46206-6015

and

Office of Environmental Services
Air Quality Management Section
2700 South Belmont Avenue
Indianapolis, Indiana 46221

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

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

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

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

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

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

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

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

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

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

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

and

Office of Environmental Services
Air Quality Management Section
2700 South Belmont Avenue
Indianapolis, Indiana 46221

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 emissions allowable under this permit (whether expressed herein as a rate of emissions or in terms of total emissions);

(4) The Permittee notifies the:

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

and

Office of Environmental Services
Air Quality Management Section
2700 South Belmont Avenue
Indianapolis, Indiana 46221

and

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

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

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

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

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

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

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

(3) Any change in emissions; and

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

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

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

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

B.21 Source Modification Requirement [326 IAC 2-7-10.5] [IAPCB Reg. 2-1-1]

A modification, construction, or reconstruction is governed by 326 IAC 2, 326 IAC 2-7-10.5 and IAPCB Reg. 2-1-1.

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

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, OES, U.S. EPA, or an authorized representative to perform the following:

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

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

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

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

(e) Utilize any photographic, recording, testing, monitoring, or other equipment for the purpose of assuring compliance with this permit or applicable requirements.

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, P.O. Box 6015
Indianapolis, Indiana 46206-6015

and

Office of Environmental Services
Air Quality Management Section
2700 South Belmont Avenue
Indianapolis, Indiana 46221

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)]

(a) The Permittee shall pay annual fees to IDEM, OAQ, and OES 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, or OES 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 317-233-0425 (ask for OAQ, Technical Support and Modeling Section), to determine the appropriate permit fee.

SECTION C SOURCE OPERATION CONDITIONS

Entire Source

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

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

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

C.2 Opacity [326 IAC 5-1]

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

(a) Opacity shall not exceed an average of thirty percent (30%) 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] [Code of Indianapolis and Marion County Code Chapter 511]

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.

The Permittee shall not open burn any material except as provided in Chapter 4, Code of Indianapolis and Marion County and IAPCB Reg 4-1. Provisions of the code that are more stringent than 326 IAC 4-1 are locally enforceable only by OES.

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

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

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

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

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

Pursuant to 326 IAC 6-5 (Fugitive Particulate Matter Emission Limitations), fugitive particulate matter emissions shall be controlled according to the plan submitted on October 27, 1999. The plan is included as Attachment B.

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

Except as otherwise provided by statute or rule, or in this permit, all air pollution control equipment listed in this permit and used to comply with an applicable requirement shall be operated at all times that the emission units vented to the control equipment are in operation.

C.8 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, P.O. Box 6015
Indianapolis, Indiana 46206-6015

and

Office of Environmental Services
Air Quality Management Section
2700 South Belmont Avenue
Indianapolis, Indiana 46221

The notice shall include a 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 14-10-4, 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) Indiana Accredited Asbestos Inspector
The Permittee shall comply with 326 IAC 14-10-1(a) that requires the owner or operator, prior to a renovation/demolition, to use an Indiana Accredited Asbestos Inspector to thoroughly inspect the affected portion of the facility for the presence of asbestos. The requirement that the inspector be accredited, pursuant to the provisions of 40 CFR 61, Subpart M, is federally enforceable.

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

C.9 Performance Testing [326 IAC 3-6]

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

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

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

and

Office of Environmental Services
Air Quality Management Section
2700 South Belmont Avenue
Indianapolis, Indiana 46221

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 and OES not later than forty-five (45) days after the completion of the testing. An extension may be granted by IDEM, OAQ, and OES, if the source submits to IDEM, OAQ, a reasonable written explanation not later than five (5) days prior to the end of the initial forty-five (45) day period.

Compliance Requirements [326 IAC 2-1.1-11]

C.10 Compliance Requirements [326 IAC 2-1.1-11]

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

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

C.11 Compliance Monitoring [326 IAC 2-7-5(3)] [326 IAC 2-7-6(1)]

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

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

and

Office of Environmental Services
Air Quality Management Section
2700 South Belmont Avenue
Indianapolis, Indiana 46221

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

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

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

C.12 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.13 Pressure Gauge and Other Instrument Specifications [326 IAC 2-1.1-11] [326 IAC 2-7-5(3)] [326 IAC 2-7-6(1)]

(a) Whenever a condition in this permit requires the measurement of pressure drop across any part of the unit or its control device, the gauge employed shall have a scale such that the expected normal reading shall be no less than twenty percent (20%) of full scale and be accurate within plus or minus two percent (±2%) of full scale reading.

(b) Whenever a condition in this permit requires the measurement of a temperature or flow rate, the instrument employed shall have a scale such that the expected normal reading shall be no less than twenty percent (20%) of full scale and be accurate within plus or minus two percent (±2%) of full scale reading.

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

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

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

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

(a) The Permittee prepared and submitted written emergency reduction plans (ERPs) consistent with safe operating procedures on October 27, 1999.

(b) Upon direct notification by IDEM, OAQ, and OES, that a specific air pollution episode level is in effect, the Permittee shall immediately put into effect the actions stipulated in the approved ERP for the appropriate episode level.
[326 IAC 1-5-3]

C.15 Risk Management Plan [326 IAC 2-7-5(12)] [40 CFR 68.215]

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

(a) A compliance schedule for meeting the requirements of 40 CFR 68; or

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

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

C.16 Compliance Response Plan - Preparation, Implementation, Records, and Reports [326 IAC 2-7-5] [326 IAC 2-7-6]

(a) The Permittee is required to prepare a Compliance Response Plan (CRP) for each compliance monitoring condition of this permit. A CRP shall be submitted to IDEM, OAQ and OES upon request. The CRP shall be prepared within ninety (90) days after issuance of this permit by the Permittee, supplemented from time to time by the Permittee, maintained on site, and comprised of:

(1) Reasonable response steps that may be implemented in the event that a response step is needed pursuant to the requirements of Section D of this permit; and an expected timeframe for taking reasonable response steps.

(2) If, at any time, the Permittee takes reasonable response steps that are not set forth in the Permittee's current Compliance Response Plan and the Permittee documents such response in accordance with subsection (e) below, the Permittee shall amend its Compliance Response Plan to include such response steps taken.

(b) For each compliance monitoring condition of this permit, reasonable response steps shall be taken when indicated by the provisions of that compliance monitoring condition as follows:

(1) Reasonable response steps shall be taken as set forth in the Permittee's current Compliance Response Plan; or

(2) If none of the reasonable response steps listed in the Compliance Response Plan is applicable or responsive to the excursion, the Permittee shall devise and implement additional response steps as expeditiously as practical. Taking such additional response steps shall not be considered a deviation from this permit so long as the Permittee documents such response steps in accordance with this condition.

(3) If the Permittee determines that additional response steps would necessitate that the emissions unit or control device be shut down, the IDEM, OAQ and OES shall be promptly notified of the expected date of the shut down, the status of the applicable compliance monitoring parameter with respect to normal, and the results of the actions taken up to the time of notification.

(4) Failure to take reasonable response steps shall constitute a violation of the permit.

(c) The Permittee is not required to take any further response steps for any of the following reasons:

(1) A false reading occurs due to the malfunction of the monitoring equipment and prompt action was taken to correct the monitoring equipment.

(2) The Permittee has determined that the compliance monitoring parameters established in the permit conditions are technically inappropriate, has previously submitted a request for a minor permit modification to the permit, and such request has not been denied.

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

(4) The process has already returned or is returning to operating within "normal" parameters and no response steps are required.

(d) When implementing reasonable steps in response to a compliance monitoring condition, if the Permittee determines that an exceedance of an emission limitation has occurred, the Permittee shall report such deviations pursuant to Section B-Deviations from Permit Requirements and Conditions.

(e) The Permittee shall record all instances when response steps are taken. In the event of an emergency, the provisions of 326 IAC 2-7-16 (Emergency Provisions) requiring prompt corrective action to mitigate emissions shall prevail.

(f) Except as otherwise provided by a rule or provided specifically in Section D, all monitoring as required in Section D shall be performed when the emission unit is operating, except for time necessary to perform quality assurance and maintenance activities.

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

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

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

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

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

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

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

(a) The Permittee shall submit an annual emission statement certified pursuant to the requirements of 326 IAC 2-6, that must be received by April 15 of each year and must comply with the minimum requirements specified in 326 IAC 2-6-4. The annual emission statement shall meet the following requirements and be used for the purpose of a Part 70 fee assessment:

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

(2) Indicate estimated actual emissions of other regulated pollutants (as defined by 326 IAC 2-7-1) from the source, for purposes of Part 70 fee assessment.

(b) The annual emission statement covers the twelve (12) consecutive month time period starting December 1 and ending November 30. The annual emission statement must be submitted to:

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

and

Office of Environmental Services
Air Quality Management Section
2700 South Belmont Avenue
Indianapolis, Indiana 46221

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

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

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

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

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

C.20 General Reporting Requirements [326 IAC 2-7-5(3)(C)] [326 IAC 2-1.1-11]

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

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

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

and

Office of Environmental Services
Air Quality Management Section
2700 South Belmont Avenue
Indianapolis, Indiana 46221

(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, and OES 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.

Stratospheric Ozone Protection

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

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

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

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

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

SECTION D.1 FACILITY OPERATION CONDITIONS

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

One (1) municipal solid waste landfill, identified as P100, which began operations in 1971, controlled by an active landfill gas collection and control system; and with a maximum capacity of 15,008,982 Mg. Five (5) candlestick flares are used as back-up landfill gas control measures. Four (4) have a capacity of 600 cfm and one has a capacity of 2,825 cfm.

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

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

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

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

(b) The provisions of 40 CFR Part 61, Subpart A - General Provisions, which are incorporated in 326 IAC 14-1-1, apply to the facility described in this section except when otherwise specified in 40 CFR Part 61, Subpart M.

D.1.2 Municipal Solid Waste Landfill [326 IAC 12] [326 IAC 8-8.1] [40 CFR 60.752, NSPS Subpart WWW]

(a) The municipal solid waste landfill is subject to 326 IAC 8-8.1 (Municipal Solid Waste Landfills not located in Clark, Floyd, Lake or Porter Counties) which incorporates by reference 40 CFR 60.751, 60.752, 60.753, 60.754, 60.755, 60.756, 60.757, 60.758, and 60.759.

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

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

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

(a) Operate the collection system such that gas is collected from each area, cell, or group of cells in the municipal solid waste landfill in which solid waste has been in place for five years if active or 2 years or more if closed or at final grade.

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

(1) Fire or increased well temperature. The Permittee shall record instances when positive pressure occurs in efforts to avoid a fire. These records shall be submitted with the annual reports as provided in 40 CFR 60.757(f)(1).

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

(3) A decommissioned well. A well may experience a static positive pressure after shut down to accommodate for declining flows. All design changes shall be approved by the Office of Air Quality (OAQ).

(c) Operate each interior wellhead in the collection system with a landfill gas temperature less than 55EC and with either a nitrogen level less than 20 percent or an oxygen level less than 5 percent. The Permittee may establish a higher operating temperature, nitrogen, or oxygen value at a particular well. A higher operating value demonstration shall show supporting data that the elevated parameter does not cause fires or significantly inhibit anaerobic decomposition by killing methanogens.

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

(2) Unless an alternative test method is established as allowed by 40CFR 60.752 (b)(2)(i), the oxygen shall be determined by an oxygen meter using Method 3A except that; the span shall be set so that the regulatory limit is between 20 and 50 percent of the span; a data recorder is not required; only two calibration gases are required, a zero and span, and ambient air may be used as the span; a calibration error check is not required; the allowable sample bias, zero drift, and calibration drift are 10 percent.

(d) Operate the collection system so that the methane concentration is less than 500 parts per million above background at the surface of the landfill. To determine if this level is exceeded, the Permittee shall conduct surface testing around the perimeter of the collection area and along a pattern that traverses the landfill at 30 meter intervals and where visual observations indicate elevated concentrations of landfill gas, such as distressed vegetation and cracks or seeps in the cover. The Permittee may establish an alternative traversing pattern that ensures equivalent coverage. A surface monitoring design plan shall be developed that includes a topographical map with the monitoring route and the rationale for any site-specific deviations from the 30 meter intervals. Areas with steep slopes or other dangerous areas may be excluded from the surface testing.

(e) Operate the system such that all collected gases are vented to a control system designed and operated in compliance with 40CFR 60.752(b)(2)(iii). In the event the collection or control system is inoperable, the gas mover system shall be shut down and all valves in the collection and control system contributing to venting of the gas to the atmosphere shall be closed within one hour.

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

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

D.1.4 National Emission Standards for Hazardous Air Pollutants for Active Asbestos Waste Disposal Sites [40 CFR 61.154, Subpart M]

This source is subject to the National Emission Standards for Hazardous Air Pollutants 326 IAC 14-2-1, (40 CFR 61.154, Subpart M) because the landfill accepts asbestos-containing waste material. This rule requires that any active waste disposal site that receives asbestos-containing waste material must either:

(a) Allow no visible emissions to the outside air from any active waste disposal site where asbestos-containing waste material has been deposited, or comply with (b) or (c) below.

(b) At the end of each operating day or at least once every 24-hour period, asbestos-containing waste material that has been deposited during the previous 24-hour period must:

(1) Be covered with at least 15 centimeters (6 inches) of compacted nonasbestos containing material, or

(2) Be covered with a resinous or petroleum-based dust suppression agent that effectively binds dust and controls wind erosion. Such an agent shall be used in the manner and frequency recommended for the particular dust by the dust suppression agent manufacturer to achieve and maintain dust control. Other equally effective dust suppression agents may be used upon prior approval by the Administrator. Any used, spent, or other waste oil is not considered a dust suppression agent.

(c) Use an alternate emissions control method that has received prior written approval by the Administrator according to the procedures described in 61.149(c)(2).

(d) Also, unless a natural barrier deters access by the general public, warning signs and fencing must be installed or the requirements of paragraph (b)(1) above must be met. The perimeter of the disposal site must be fenced in a manner adequate to deter access by the general public. The warning signs must:

(1) Be posted is such a manner and location that a person can easily read the legend; and

(2) Conform to the requirements of 51cm x 36 cm upright format signs specified in 29 CFR 1910.145(d)(4) and this paragraph; and

(3) Display the information contained in the legend provided in 61.154(b)(1)(iii).

D.1.5 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for this facility and any control devices.

Compliance Determination Requirements

D.1.6 Testing Requirements [326 IAC 2-7-6(1),(6)] [40CFR 60.754] [326 IAC 2-1.1-11]

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

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

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

where,

M_{NMOC} = mass emission rate of NMOC, megagrams per year
Q_{LFG} = flow rate of landfill gas, cubic meters per minute

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

(1) The flow rate of landfill gas, Q_{LFG} , shall be determined by measuring the total landfill gas flow rate at the common header pipe that leads to the control device using a gas flow measuring device calibrated according to the provisions of section 4 of Method 2E of appendix A of 40 CFR 60.

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

(3) The Permittee may use another method to determine landfill gas flow rate and NMOC concentration if the method has been approved by the Office of Air Quality.

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

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

Control Efficiency = $(NMOC_{in} - NMOC_{out})/(NMOC_{in})$

where,

$NMOC_{in}$ = mass of NMOC entering the control device
$NMOC_{out}$ = mass of NMOC exiting control device

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

D.1.7 Monitoring [40 CFR 60.756] Except as provided in 40 CFR 60.752(b)(2)(i)(B)

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

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

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

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

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

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

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

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

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

(1) Heat sensing device, such as an ultraviolet beam sensor or thermocouple, at the pilot light or the flame itself to indicate the continuous presence of a flame

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

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

(e) The Permittee seeking to install a collection system that does not meet the specifications in 40 CFR 60.759 or seeking to monitor alternative parameters to those required by 40 CFR 60.753 through 40 CFR 60.756 shall provide information satisfactory to the Office of Air Quality (OAQ) and OES as provided in 40 CFR 60.752(b)(2)(i)(B) and (C) describing the design and operation of the collection system,

the operating parameters that would indicate proper performance, and appropriate monitoring procedures. The Office of Air Quality (OAQ) and OES may specify additional appropriate monitoring procedures.

(f) The Permittee seeking to demonstrate compliance with 40 CFR 60.755(c), shall monitor surface concentrations of methane according to the instrument specifications and procedures provided in 40 CFR 60.755(d). Any closed landfill that has no monitored exceedances of the operational standard in three consecutive quarterly monitoring periods may skip to annual monitoring. Any methane reading of 500 ppm or more above background detected during the annual monitoring returns the frequency for that landfill to quarterly monitoring.

D.1.8 Compliance Provisions [40CFR 60.755]

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

(1) For the purpose of calculating the maximum expected gas generation flow rate from the landfill to determine compliance with 60.752(b)(2)(ii)(A)(1), one of the following equations shall be used. The k and L_o kinetic factors should be those published in the most recent Compilation of Air Pollution Emission Factors (AP42) or other site-specific values demonstrated to be appropriate and approved by the Office of Air Quality (OAQ). If k has been determine as specified in 40 CFR 60.754(a)(4), the value of k determined from the test shall be used. A value of no more than 15 years shall be used for the intended use period of the gas mover equipment. The active life of the landfill is the age of the landfill plus the estimated number of years until closure.

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

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

where,

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

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

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

where,

Q_M = maximum expected gas generation flow rate, cubic meters per year
k = methane generation rate constant, year^{-1}
L_o = methane generation potential, cubic meters per megagram solid waste

M_i = mass of solid waste in the i^{th} section, megagrams
t_i = age of the i^{th} section, years

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

(2) For the purposes of determining sufficient density of gas collector for compliance with 40 CFR 60.752 (b)(2)(ii)(A)(2), the Permittee shall design a system of vertical wells, horizontal collectors, or other collection devices, satisfactory to the Office of Air Quality (OAQ), capable of controlling and extracting gas from all portions of the landfill sufficient to meet all operational and performance standards.

(3) For the purpose of demonstrating whether the gas collection system flow rate is sufficient to determine compliance with 40 CFR 60.752(b)(2)(ii)(A)(3), the Permittee shall measure gauge pressure in the gas collection header at each individual well, monthly. If a positive pressure exists, action shall be initiated to correct the exceedance within five (5) calendar days, except for the three conditions allowed under 40 CFR 60.753(b). If negative pressure cannot be achieved without excess air infiltration within fifteen (15) calendar days of the first measurement, the gas collection system shall be expanded to correct the exceedance within 120 days of the initial measurement of positive pressure. Any attempted corrective measure shall not cause exceedances of other operational or performance standards. An alternative timeline for correcting the exceedance may be submitted to the Administrator for approval.

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

(5) For the purpose of identifying whether excess air infiltration into the landfill is occurring, the Permittee shall monitor each well monthly for temperature and nitrogen or oxygen as provided in 40 CFR 60.753(c). If a well exceeds one of these operating parameters, action shall be initiated to correct the exceedance within five (5) calendar days. If correction of the exceedance cannot be achieved within fifteen (15) calendar days of the first measurement, the gas collection system shall be expanded to correct the exceedance within 120 days of the initial exceedance. Any attempted corrective measure shall not cause exceedances of other operational or performance standards. An alternative timeline for correcting the exceedance may be submitted to the Administrator for approval.

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

(b) For purposes of compliance with 40 CFR 60.753(a), the Permittee shall place each well or design component of a controlled landfill as specified in the approved design plan as

provided in 40 CFR 60.752(b)(2)(i). Each well shall be installed no later than 60 days after the date on which the initial solid waste has been in place for a period of five (5) years or more if active or two (2) years or more if closed or at final grade.

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

(1) After installation of the collection system, the Permittee shall monitor surface concentrations of methane along the entire perimeter of the collection area and along a pattern that traverses the landfill at 30 meter intervals (or a site-specific established spacing) for each collection area on a quarterly basis using an organic vapor analyzer, flame ionization detector, or other portable monitor meeting the specifications provided in 40 CFR 60.755(d).

(2) The background concentration shall be determined by moving the probe inlet upwind and downwind outside the boundary of the landfill at a distance of at least 30 meters from perimeter wells.

(3) Surface emission monitoring shall be performed in accordance with section 4.3.1 of Method 21 of appendix A of 40 CFR 60, except that the probe inlet shall be placed within five(5) to ten(10) centimeters of the ground. Monitoring shall be performed during typical meteorological conditions.

(4) Any reading of 500 parts per million or more above background at any location shall be recorded as a monitored exceedance and the actions specified in 40 CFR 60.755(c)(4)(i) through (v) should be taken. As long as the specified actions are taken, the exceedance is not a violation of the operational requirements of 40 CFR 60.753(d).

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

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

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

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

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

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

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

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

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

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

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

(e) The provisions of 40 CFR 60.755 shall apply at all times, except during periods of startup, shutdown, or malfunction, provided that the duration of start-up, shutdown, or malfunction, shall not exceed five (5) days for collection systems and shall not exceed one (1) hour for treatment or control devices.

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

D.1.9 Non Methane Organic Compound (NMOC) Rate Calculation [40 CFR 60.754]

Pursuant to 40 CFR 60.754 the Permittee shall:

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

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

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

where,

M_{NMOC}= Total NMOC emission rate from the landfill, megagrams per year
k = methane generation rate constant, $year^{-1}$
L_o= methane generation potential, cubic meters per megagram solid waste
M_i= mass of solid waste in the i^{th} section, megagrams
t_i= age of the i^{th} 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 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.

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

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

Tier 2. The Permittee shall determine the NMOC concentration using the following sampling procedure. The Permittee shall install at least two sample probes per hectare of landfill surface that has retained waste for at least 2 years. If the landfill is larger that

25 hectares in area, only 50 samples are required. The sample probes should be located to avoid known areas of nondegradable solid waste. The Permittee shall collect and analyze one sample of landfill gas from each probe to determine the NMOC concentration using Method 25C of appendix A of 40 CFR 60 or Method 18 of appendix A of 40 CFR 60. If using Method 18 of appendix A of 40 CFR 60, the minimum list of compounds to be tested shall be those published in the most recent Compilation of Air Pollutant Emission Factors (AP-42). If composite sampling is used, equal volumes shall be taken from each sample probe. If more than the required number of samples are taken, all samples shall be used in analysis. The Permittee shall divide the NMOC concentration from Method 25C of appendix A by six to convert from C_{NMOC} as carbon to C_{NMOC} as hexane.

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

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

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

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

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

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

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

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

D.1.10 Reporting Requirements [40 CFR 60.757]

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

(a) Submit an initial design capacity report to the Office of Air Quality (OAQ) no later than 90 days after October 8, 1997. An amended design capacity report shall be submitted to the Office of Air Quality (OAQ) providing notification of any increase in the design capacity of the landfill, a change in the operating procedures, or any other means which results in an increase in the maximum design capacity of the landfill above 2.5 million megagrams or 2.5 million cubic meters. The Permittee's initial design capacity report was submitted on January 14, 1998.

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

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

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

(e) Submit an equipment removal report to the Office of Air Quality (OAQ) thirty (30) days prior to removal or cessation of operation of the control equipment. The equipment removal report shall contain all of the following items: a copy of the closure report submitted in accordance with 40 CFR 60.757(d), a copy of the initial performance test report demonstrating that the fifteen (15) year minimum control period has expired, and dated copies of three (3) successive NMOC emission rate reports demonstrating that the landfill is no longer producing 50 megagrams or greater of NMOC per year. The Office of Air Quality (OAQ) may request such additional information as may be necessary to verify that all of the conditions for removal in 40 CFR 60.752(b)(2)(v) have been met.

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

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

(2) Description and duration of all periods when the gas stream is diverted from the control device through a bypass line or the indication of bypass flow as specified under 40 CFR 60.756.

(3) Description and duration of all periods when the control device was not operating for a period exceeding one (1) hour and length of time the control device was not operating.

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

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

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

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

(1) A diagram of the collection system showing collection system positioning including all wells, horizontal collectors, surface collectors, or other gas extraction devices, including the locations of any areas excluded from collection and the proposed sites for the future collection system expansion.

(2) The data upon which the sufficient density of wells, horizontal collectors, surface collectors, or other gas extraction devices and the gas mover equipment sizing are based.

(3) The documentation of the presence of asbestos or nondegradable material for each area from which collection wells have been excluded based on the presence of asbestos or nondegradable material.

(4) The sum of the gas generation flow rates for all areas from which collection wells have been excluded based on nonproductivity and the calculations of gas generation flow rate for each excluded area.

(5) The provisions for increasing gas mover equipment capacity with increased gas generation flow rate, if the present gas mover equipment is inadequate to move the maximum flow rate expected over the life of the landfill

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

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

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

Pursuant to 40 CFR 60.758:

(a) Except as provided in 40 CFR 60.752(b)(2)(i)(B), the Permittee subject to 40 CFR 60.752(b) shall keep for at least 5 years up-to-date, readily accessible, on-site records of the design capacity report which triggered 40 CFR 60.752(b), the current amount of solid waste in-place, and the year-by-year waste acceptance rate. Off-site records may be maintained if they are retrievable within four (4) hours. Either paper copy or electronic formats are acceptable.

(b) Except as provided in 40 CFR 60.752(b)(2)(i)(B), the Permittee of a controlled landfill shall keep up-to-date, readily accessible records for the life of the control equipment listed in (1) through (4) below as measured during the initial performance test or compliance determination. Records of subsequent tests or monitoring shall be maintained for a minimum of five (5) years. Records of control device vendor specifications shall be maintained until removal.

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

The maximum expected gas generation flow rate as calculated in 40 CFR 60.755(a)(1). The Permittee may use another method to determine the maximum gas generation flow rate, if the method has been approved by the Office of Air Quality (OAQ).

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

(2) Where the Permittee subject to the provisions of 40 CFR 60.758 seeks to demonstrate compliance with 40 CFR 60.752(b)(2)(iii) through use of an enclosed combustion device other than a boiler or process heater with a design heat input capacity greater than 44 megawatts:

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

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

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

(4) Where the Permittee subject to the provisions of 40 CFR 60.758 seeks to demonstrate compliance with 40 CFR 60.752(b)(2)(iii)(A) through use of an open flare, the flare type (i.e., steam-assisted, air -assisted, or nonassisted), all visible emission readings, heat content determination, flow rate or bypass flow rate measurements, and exit velocity determinations made during the performance test as specified in 40 CFR 60.18; continuous records of the flare pilot flame or flare flame monitoring and records of all periods of operations during which the pilot flame of the flare flame is absent.

(c) Except as provided in 40 CFR 60.752(b)(2)(i)(B), the Permittee of a controlled landfill subject to the provisions of this subpart shall keep for 5 years up-to-date, readily accessible continuous records of the equipment operating parameters specified to be monitored in 40 CFR 60.756 as well as up-to-date, readily accessible records for periods of operation during which the parameter boundaries established during the most recent performance test are exceeded.

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

For enclosed combustors except for boilers and process heaters with design heat input capacity of 44 megawatts (150 million British thermal unit per hour) or greater, all 3-hour periods of operation during which the average combustion

temperature was more than 28EC below the average combustion temperature during the most recent performance test at which compliance with 40CFR 60.752(b)(2)(iii) was determined.

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

(2) The Permittee subject to 40 CFR 60.758 shall keep up-to-date, readily accessible continuous records of the indication of flow to the control device or the indication of bypass flow or records of monthly inspections of car-seals or lock-and-key configurations used to seal bypass lines, specified under 40 CFR 60.756.

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

(4) The Permittee seeking to comply with the provisions of 40 CFR 60.758 by use of an open flare shall keep up-to-date, readily accessible continuous records of the flame or flare pilot flame monitoring specified under 40 CFR 60.756(c), and up-todate, readily accessible records of all periods of operation in which the flame or flare pilot flame is absent.

(d) Except as provided in 40 CFR 60.752(b)(2)(i)(B), the Permittee subject to the provisions of this subpart shall keep for the life of the collection system an up-to-date, readily accessible plot map showing each existing and planned collector in the system and providing a unique identification location label for each collector.

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

(2) The Permittee subject to the provisions of 40 CFR 60.758 shall keep readily accessible documentation of the nature, date of deposition, amount, and location of asbestos-containing or nondegradable waste excluded from collection as provided in 40 CFR 60.759 (a)(3)(i) as well as any non-productive areas excluded from collection as provided in 40 CFR 60.759 (a)(3)(ii).

(e) Except as provided in 40 CFR 60.752(b)(2)(i)(B), the Permittee subject to the provisions of this subpart shall keep for at least 5 years up-to-date, readily accessible records of all collection and control system exceedances of the operational standards in 40CFR 60.753, the reading in the subsequent month whether or not the second reading is an exceedance, and the location of each exceedance.

(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 four (4) hours. Either paper copy or electronic formats are acceptable.

(g) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

D.1.12 Recordkeeping and Reporting for NESHAP for Active Waste Disposal Sites [40CFR 61.154]

(a) For all asbestos containing waste material received, the owner or operator of the active waste disposal site shall:

(1) Maintain waste shipment records and include the following information

(A) The name, address, and telephone number of the waste generator;

(B) The name, address, and telephone number of the transporter(s);

(C) The quantity of the asbestos containing waste material in cubic meters (cubic yards).

(D) The presence of improperly enclosed or uncovered waste, or any asbestos-containing waste material not sealed in leak-tight containers. Report in writing to the local, State, or EPA Regional office responsible for administering the asbestos NESHAP program for the waste generator (identified in the waste shipment record), and if different, the local, State, or EPA Regional office responsible for administering the asbestos NESHAP program for the disposal site, by the following working day, the presence of a significant amount of improperly enclosed or uncovered waste. Submit a copy of the waste shipment record along with the report.

(E) The date of the receipt.

(2) As soon as possible and no longer than 30 days after receipt of the waste, send a copy of the signed waste shipment record to the waste generator.

(3) Upon discovering a discrepancy between the quantity of waste designated on the waste shipment records and the quantity actually received, attempt to reconcile the discrepancy with the waste generator. If the discrepancy is not resolved within 15 days after receiving the waste, immediately report in writing to the local, State, or EPA Regional office responsible for administering the asbestos NESHAP program for the waste generator (identified in the waste shipment record), and if different, the local, State, or EPA Regional office responsible for administering the asbestos NESHAP program for the disposal site. Describe the discrepancy and attempts to reconcile it, and submit a copy of the waste shipment record along with the report.

(4) Retain a copy of all records and reports required by this paragraph for at least 2 years.

(b) Maintain until closure, records of the location, depth and area, and quantity in cubic meters (cubic yards) of asbestos-containing waste material within the disposal site on a map or diagram of the disposal area.

(c) Upon closure, comply with all the provisions of 40 CFR 61.151.

(d) Submit to the Administrator, upon closure of the facility, a copy of records of asbestos waste disposal locations and quantities.

(e) Furnish upon request, and make available during normal business hours for inspection by the Administrator, all records required under this section.

(f) Notify the Administrator in writing at least 45 days prior to excavating or otherwise disturbing any asbestos-containing waste material that has been deposited at a waste disposal site and is covered. If the excavation will begin on a date other than the one contained in the original notice, notice of the new start date must be provided to the Administrator at least 10 working days before excavation begins and in no event shall excavation begin earlier than the date specified in the original notification. Include the following information in the notice:

(1) Scheduled starting and completion dates.

(2) Reason for disturbing the waste.

(3) Procedures to be used to control emissions during the excavation, storage, transport, and ultimate disposal of the excavated asbestos-containing waste material. If deemed necessary, the Administrator may require changes in the emission control procedures to be used.

(4) Location of any temporary storage site and the final disposal site.

SECTION D.2 FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)]: Two (2) boilers, each rated at fourteen and six tenths (14.6) MMBtu per hour, exhausting at two (2) stacks, identified as S118A and S118B. The greenhouse boilers use landfill gas and No. 2 fuel oil as fuel. The boilers were constructed in September of 1989.

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

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

D.2.1 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 Dc.

D.2.2 Particulate Matter Limitation (PM) [326 IAC 6-2-4]

Pursuant to 326 IAC 6-2-4 (Particulate emission limitations for sources of indirect heating: emission limitations for facilities specified in 326 IAC 6-2-1(d)), the allowable PM emission rate from the boilers shall not exceed 0.453 pounds per million Btu heat input.

This limitation was calculated with the following equation:

Particulate emissions from indirect heating facilities constructed after September 21, 1983 shall be limited by the following equation:

$$Pt = \frac{1.09}{Q^{0.26}}$$

where Pt = Pounds of particulate matter emitted per million Btu (lb/MMBtu) heat input
Q = Total source maximum operating capacity rating in million Btu per hour (MMBtu/hr) heat input. For these boilers emitting to stacks S118A and S118B, Q = 29.2 MMBtu/hr.

D.2.3 Sulfur Dioxide (SO_2) [326 IAC 7-1.1-1] [326 IAC 12-1] [40 CFR 60, Subpart Dc]

Pursuant to 326 IAC 7-1.1 (SO_2 Emissions Limitations) and 40 CFR 60, Subpart Dc (Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units):

(a) The SO_2 emissions from the 14.6 MMBtu per hour oil-fueled boilers shall not exceed five tenths (0.5) pounds per million Btu heat input; or

(b) The sulfur content of the fuel oil shall not exceed five-tenths percent (0.5%) by weight. [40 CFR 60.42c(d)]

Pursuant to 40 CFR 60 Subpart Dc, the fuel oil sulfur content limit applies at all times, including periods of startup, shutdown, and malfunction.

D.2.4 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

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

Compliance Determination Requirements

D.2.5 Sulfur Dioxide Emissions and Sulfur Content [40 CFR 60, Subpart Dc]

Pursuant to 40 CFR 60, Subpart Dc, the Permittee shall demonstrate compliance with D.2.3 by utilizing one of the following options:

(a) Providing vendor analysis of fuel delivered, if accompanied by a certification; or

(b) Analyzing the oil sample to determine the sulfur content of the oil via the procedures in 40 CFR 60, Appendix A, Method 19.

(1) Oil samples may be collected from the fuel tank immediately after the fuel tank is filled and before any oil is combusted; and

(2) If a partially empty fuel tank is refilled, a new sample and analysis would be required upon filling.

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

D.2.6 Visible Emissions Notations

(a) Visible emission notations of the boiler stack exhaust shall be performed once per shift during normal daylight operations when burning # 2 oil and exhausting to the atmosphere. A trained employee shall record whether emissions are normal or abnormal.

(b) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.

(c) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.

(d) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.

(e) The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when an abnormal emission is observed. Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports, shall be considered a violation of this permit.

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

D.2.7 Record Keeping Requirements

(a) To document compliance with Condition D.2.3, the Permittee shall maintain records in accordance with (1) through (5) below. Note that pursuant to 40 CFR 60 Subpart Dc, the fuel oil sulfur limit applies at all times including periods of startup, shutdown, and malfunction.

(1) Calendar dates covered in the compliance determination period;

(2) Actual daily fuel oil usage since last compliance determination period and equivalent sulfur dioxide emissions;

If the fuel supplier certification is used to demonstrate compliance, when burning alternate fuels and not determining compliance pursuant to 326 IAC 3-7-4, the following, as a minimum, shall be maintained:

(3) Fuel supplier certifications;

(4) The name of the fuel supplier; and

(5) A statement from the fuel supplier that certifies the sulfur content of the fuel oil.

The Permittee shall retain records of all recording/monitoring data and support information for a period of five (5) years, or longer if specified elsewhere in this permit, from the date of the monitoring sample, measurement, or report. Support information includes all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by this permit.

(b) To document compliance with Condition D.2.6, the Permittee shall maintain records of visible emission notations of the boilers stack exhaust once per shift.

(c) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

D.2.8 Reporting Requirements

(a) A certification, signed by the responsible official, that certifies all of the fuels combusted during the period. The landfill gas-fired boiler certification does require the certification by the Aresponsible official@ as defined by 326 IAC 2-7-1(34);

(b) The landfill gas boiler certification shall be submitted to the addresses 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 six (6) month period being reported.

(c) A semi-annual summary of the information to document compliance with Condition D.2.3 shall be submitted to the addresses listed in Section C - General Reporting Requirements, of this permit within thirty (30) days after the end of the six (6) month period being reported. The report submitted by the Permittee does require the certification by the “responsible official” as defined by 326 IAC 2-7-1(34).

SECTION D.3 FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)]: One Allis Chalmers Diesel fired electric generator (identified as emission unit S503) with a capacity of 9.8 gallons per hour installed in 1989.

(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.3.1 General Operation

Any change or modification which may increase potential emissions from the equipment covered in this permit shall obtain prior approval from the Office of Air Quality (OAQ).

SECTION D.4 FACILITY OPERATION CONDITIONS

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

A tertiary stone crusher, identified as emission unit S402, has a capacity of 300 tons per hour and was installed in March, 1999.

(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.4.1 Particulate Matter (PM) [326 IAC 6-3-2] [326 IAC 2-7-1(21)(B)]

(a) Pursuant to 326 IAC 6-3-2 (Process Operations), the allowable PM emission rate from the stone crusher shall not exceed 63 pounds per hour when operating at a process weight rate of 300 tons per hour.

The pounds per hour limitation was calculated with 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 in tons per hour.

(b) The tertiary stone crusher shall not exceed 0.016 lb of PM /PM10 per ton of material processed. Compliance with this makes the unit insignificant pursuant to 326 IAC 2-7-1(21)(B).

(c) Any change or modification which may increase potential emissions from the equipment covered in this permit shall obtain prior approval from the Office of Air Quality (OAQ) and the Office of Environmental Services (OES).

D.4.2 General Provisions Relating to NSPS [326 IAC 12-1] [40 CFR Part 60, Subpart A]

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

D.4.3 Nonmetallic Mineral Processing [40 CFR 60.670 through 60.676, Subpart OOO]

Pursuant to the New Source Performance Standards, 326 IAC 12, 40 CFR 60.670 through 60.676, Subpart OOO:

Fugitive emissions from the crushing operations are limited to fifteen percent (15%) opacity or less.

Compliance Determination Requirements

D.4.4 Testing Requirements [40 CFR 60.8] [40 CFR 60.675]

Within 60 days of issuance, the Permittee shall conduct performance testing as required by 40 CFR 60.8 on the crushing operation utilizing methods approved by the Commissioner and as outlined in 40 CFR 60.675.

D.4.5 Nonmetallic Mineral Processing [40 CFR 60.670 through 60.676, Subpart OOO]

(a) Compliance shall be determined by 40 CFR 60, Appendix A, Method 9, procedures outlined in §60.11, and the procedures outlined in §60.675. The duration of the Method 9 observations may be reduced to 1 hour (ten 6-minute averages) only if the following conditions are met:

(1) There are no individual readings greater than 15% opacity; and

(2) There are no more than 3 readings of 15% for the 1-hour period.

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

D.4.6 Visible Emissions Notations

(a) Visible emission notations of the stone crusher operation shall be performed once per shift during normal daylight operations when exhausting to the atmosphere. A trained employee shall record whether emissions are normal or abnormal.

(b) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.

(c) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.

(d) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.

(e) The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when an abnormal emission is observed. Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports, shall be considered a violation of this permit.

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

D.4.7 Record Keeping Requirements

(a) To document compliance with Condition D.4.6, the Permittee shall maintain records of once per shift visible emission notations for the crushing operations.

(b) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE BRANCH
and
INDIANAPOLIS Office of Environmental Services
AIR QUALITY MANAGEMENT SECTION
DATA COMPLIANCE
PART 70 OPERATING PERMIT
CERTIFICATION

Source Name: South Side Landfill
Source Address: 2561 Kentucky Avenue, Indianapolis, IN 46221
Mailing Address: Kentucky Avenue Land Company, 5300 Miller Road, Kalamazoo, MI 49001
Part 70 Permit No.: T097-11621-00366

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

Please check what document is being certified:

9 Annual Compliance Certification Letter

9 Test Result (specify) _____

9 Report (specify) _____

9 Notification (specify) _____

9 Affidavit (specify) _____

9 Other (specify) _____

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

Signature:

Printed Name:

Title/Position:

Phone:

Date:

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE DATA SECTION
P.O. Box 6015
100 North Senate Avenue
Indianapolis, Indiana 46206-6015
Phone: 317-233-5674
Fax: 317-233-5967
and
INDIANAPOLIS Office of Environmental Services
AIR QUALITY MANAGEMENT SECTION
DATA COMPLIANCE
2700 South Belmont Ave.
Indianapolis Indiana 46221
Phone: 317-327-2234
Fax: 317-327-2274

PART 70 OPERATING PERMIT
EMERGENCY OCCURRENCE REPORT

Source Name: South Side Landfill
Source Address: 2561 Kentucky Avenue, Indianapolis, IN 46221
Mailing Address: Kentucky Avenue Land Company, 5300 Miller Road, Kalamazoo, MI 49001
Part 70 Permit No.: T097-11621-00366
This form consists of 2 pages **Page 1 of 2**

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

- C The Permittee must notify the Office of Air Quality (OAQ), within four (**4**) business hours (1-800-451-6027 or 317-233-5674, ask for Compliance Section); and
- C The Permittee must submit notice in writing or by facsimile within two (**2**) days (Facsimile Number: 317-233-5967), and follow the other requirements of 326 IAC 2-7-16.

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

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

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

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

Form Completed by: _____

Title / Position: _____

Date: _____

Phone: _____

A certification is not required for this report.

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE DATA SECTION
and
INDIANAPOLIS Office of Environmental Services
AIR QUALITY MANAGEMENT SECTION
DATA COMPLIANCE

PART 70 OPERATING PERMIT
SEMI-ANNUAL LANDFILL GAS FIRED BOILER CERTIFICATION

Source Name: South Side Landfill
Source Address: 2561 Kentucky Avenue, Indianapolis, IN 46221
Mailing Address: Kentucky Avenue Land Company, 5300 Miller Road, Kalamazoo, MI 49001
Part 70 Permit No.: T097-11621-00366

9	Landfill Gas Only
9	Alternate Fuel burned From:_____ To:_____

I certify that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete. Signature:
Printed Name:
Title/Position:
Phone:
Date:

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

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE DATA SECTION
and
INDIANAPOLIS Office of Environmental Services
AIR QUALITY MANAGEMENT SECTION
DATA COMPLIANCE
PART 70 OPERATING PERMIT
QUARTERLY DEVIATION AND COMPLIANCE MONITORING REPORT

Source Name:South Side Landfill
Source Address:2561 Kentucky Avenue, Indianapolis, IN 46221
Mailing Address: Kentucky Avenue Land Company, 5300 Miller Road, Kalamazoo, MI 49001
Part 70 Permit No.: T097-11621-00366

Months: _____ to _____ Year: _____

This report is an affirmation that the source has met all the requirements stated in this permit. This report shall be submitted quarterly based on a calendar year. Any deviation from the requirements, the date(s) of each deviation, the probable cause of the deviation, and the response steps taken must be reported. Deviations that are required to be reported by an applicable requirement shall be reported according to the schedule stated in the applicable requirement and do not need to be included in this report. Additional pages may be attached if necessary. If no deviations occurred, please specify in the box marked "No deviations occurred this reporting period".
9 NO DEVIATIONS OCCURRED THIS REPORTING PERIOD.
9 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:	

Page 2 of 2

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.

Attachment A

The following state rules have been adopted by reference by the Indianapolis Air Pollutant Control Board and are enforceable by Indianapolis Office of Environmental Services (OES) using local enforcement procedures.

(1) 326 IAC 1-1-1 through 1-1-3 and 1-1-5;
(2) 326 IAC 1-2-1 through 1-2-91 (In addition, the IAPCB has adopted several local definitions);
(3) 326 IAC 1-3-1 through 1-3-4;
(4) 326 IAC 1-4-1 (The IAPCB added to the adoption by reference a citation to 61 FR 58482 (November 15, 1996));
(5) 326 IAC 1-5-1 through 1-5-5;
(6) 326 IAC 1-6-1 through 1-6-6;
(7) 326 IAC 1-7-1 through 1-7-5
(8) 326 IAC 2-3-1 through 2-3-5;
(9) 326 IAC 2-4-1 through 2-4-6;
(10) 326 IAC 2-6-1 through 2-6-4;
(11) 326 IAC 2-7-1 through 2-7-18, 2-7-20 through 2-7-25;
(12) 326 IAC 2-8-1 through 2-8-15, 2-8-17 through 2-8-10;
(13) 326 IAC 2-9-1 through 2-9-14;
(14) 326 IAC 2-10-1 through 2-10-5 (The IAPCB adoption adds the language “state or local” immediately after the word “federal” in 326 IAC 2-10-1);
(15) 326 IAC 2-11-1, 2-11-3 and 2-11-4 (The IAPCB adoption adds the language “federal, state or local” immediately after the word “by” in 326 IAC 2-11-1);
(16) 326 IAC 3-1.1-1 through 3-1.1-5;
(17) 326 IAC 3-2.1-1 through 3-2.1-5;
(18) 326 IAC 3-3-1 through 3-3-5;
(19) 326 IAC 4-2-1 through 4-2-2;
(20) 326 IAC 5-1-1 (a), (b) and c) (5), 5-1-2 (1), (2)(A), (2)c) (4), 5-1-3 through 5-1-5, 5-1-7;
(21) 326 IAC 7-1.1-1 and 7-1.1-2;
(22) 326 IAC 7-2-1;
(23) 326 IAC 7-3-1 and 7-3-2;
(24) 326 IAC 7-4-2(28) through (31) (Instead of adopting by reference 7-4-2(1) through (27), the IAPCB regulation substitutes the same requirements listed in a format in which the companies are alphabetized and emission points known to no longer exist have been deleted);
(25) 326 IAC 8-1-0.5 except (b), 8-1-1 through 8-1-2, 8-1-3 except c), (g) and (i), 8-1-5 through 8-1-12;
(26) 326 IAC 8-2-1 through 8-2-12 (The IAPCB adoption by reference of 8-2- 5 adds additional language specific to Zimmer Paper Products, Incorporated as subpart c);
(27) 326 IAC 8-3-1 through 8-3-7;
(28) 326 IAC 8-4-1 through 8-4-5, 8-4-6 (a)(6), (a)(8) and (a)(14) and 8-4-6(b)(1), (b)(3) and 8-4-6c) (In place of 8-4-6(b)(2), which was not adopted, the IAPCB adopted language requiring a pressure relief valve set to release at no less than four and eight-tenths (4.8) Kilo Pascals (seven-tenths (0.7) pounds per square inch)), 8-4-7 except (e), 8-4-8 and 8-4-9;
(29) 326 IAC 8-5-1 through 8-5-4, 8-5-5 except (a)(3) and (d)(3);
(30) 326 IAC 8-6-1 and 8-6-2;
(31) 326 IAC 9-1-1 and 9-1-2;
(32) 326 IAC 11-1-1 through 11-1-2;
(33) 326 IAC 11-2-1 through 11-2-3;
(34) 326 IAC 11-3-1 through 11-3-6;
(35) 326 IAC 14-1-1 through 14-1-4;

Attachment A continued

(36) 326 IAC 14-2-1 except 40 CFR 61.145;
(37) 326 IAC 14-3-1;
(38) 326 IAC 14-4-1;
(39) 326 IAC 14-5-1;
(40) 326 IAC 14-6-1;
(41) 326 IAC 14-7-1;
(42) 326 IAC 14-8-1 through 14-8-5;
(43) 326 IAC 15-1-1, 15-1-2(a)(1), (a)(2) and (a)(8), 15-1-3 and 15-1-4;
(44) 326 IAC 20-1-1 through 20-1-4 (In 20-1-3(b)(2) the adoption states that “permitting authority” means the commissioner of IDEM or the administrator of OES, whichever is applicable);
(45) 326 IAC 20-2-1;
(46) 326 IAC 20-3-1;
(47) 326 IAC 20-4-1;
(48) 326 IAC 20-5-1;
(49) 326 IAC 20-6-1;
(50) 326 IAC 20-7-1;
(51) 326 IAC 20-8-1;
(52) 326 IAC 20-9-1;
(53) 326 IAC 20-14-1;
(54) 326 IAC 20-15-1;
(55) 326 IAC 20-16-1;
(56) 326 IAC 20-17-1;
(57) 326 IAC 20-18-1;
(58) 326 IAC 20-19-1;
(59) 326 IAC 20-20-1;
(60) 326 IAC 20-21-1;
(61) 326 IAC 21-1-1 (The adoption states that “or the administrator of OES” is added in (b));
(62) 326 IAC 22-1-1 (The adoption states that “or the administrator of OES” is added in (b)).

Attachment B

SOUTH SIDE LANDFILL
FUGITIVE PARTICULATE MATTER EMISSION CONTROL PLAN
FOR LANDFILL AND RELATED FACIILITES

INTRODUCTION

With IDEM's approval of a recent expansion application, South Side Landfill, Inc. (SSLF) is expected to be subject to regulation under New Source Performance Standards (NSPS) for municipal solid waste landfills (40 CFR 60, Subparts Cc and WWW). According to the NSPS, a part 70 application is to be submitted. Pursuant to 326 IAC 6-5-3 the following fugitive dust control plan is provided in conformance with applicable requirements for sources in the State of Indiana.

CONTROL PLAN CONTENTS

(1) Name and address of the source.

South Side Landfill, Inc.
2561 Kentucky Avenue
Indianapolis, IN 46221

(2) Name and address of the owner or operator(s) responsible for the execution of the control plan.

South Side Landfill, Inc. 2561 Kentucky Avenue Indianapolis, IN 46221	AND	Martin Marietta 2605 Kentucky Ave. Indianapolis, IN 46221

(3) Identification of all processes, operations, and areas which have the potential to emit fugitive particulate matter in accordance with 326 IAC 6-5-4.

See Part 70 Application Narrative Sections 5 & 6.

(4) A map of the source showing aggregate pile areas, access areas around the aggregate pile, unpaved roads, paved roads, parking lots and location of conveyor and transfer points, etc.

See Part 70 Application Narrative Sections 5 & 6 and Plan Sheet 2.

(5) The number and mix of vehicular activity occurring on paved roads, unpaved roads, and parking lots.

See Part 70 Application Narrative Sections 5 & 6 and Calculations.

(6) Type and quantity of material handled.

See Part 70 Application Narrative Sections 5 & 6.

(7) Equipment used to maintain aggregate piles.

Attachment B

Dozers, Loaders, Roadgrader, Scraper, Water Truck, etc.

(8) A description of the measures to be implemented to control fugitive particulate matter emissions resulting from emission points identified in subdivision (3).

See “CONTROL MEASURES”, below.

(9) A specification of the dust suppressant material, such as oil or chemical including the estimated frequency of application rates and concentrations.

See “CONTROL MEASURES”, below.

(10) A specification of the particulate matter collection equipment used as a fugitive particulate matter emission control measure.

See “CONTROL MEASURES”, below.

(11) A schedule of compliance with the provisions of the control plan. Such schedule shall specify the amount of time the source requires to award any necessary contracts, commence and complete construction, installation, or modification of the fugitive particulate matter emission control measures.

See “CONTROL MEASURES”, below.

NOTE: Records shall be kept and maintained which document all control measures and activities to be implemented in accordance with the approved control plan. Said records shall be available upon the request of the commissioner, and shall be retained for three (3) years.

EXCEPTIONS

The following conditions will be considered as primary exceptions to this control plan and therefore constitute an excursion of the fugitive dust control program.

- Fugitive dust from construction or demolition where every reasonable precaution has been taken in minimizing fugitive dust emissions.

- Fugitive dust from a source caused by adverse meteorological conditions.

TERMS

Terms used in this control plan are defined as set forth in this section.

"As needed basis" means the frequency of application necessary to minimize visible particulate matter emissions as defined in the control plan.

"Fugitive particulate matter emissions" means particulate matter which is emitted from any source by means other than a stack.

Attachment B

"Paved road" means any asphalt or concrete surfaced thoroughfare or right-of-way designed or used for vehicular traffic and located on the property of, or owned by, an individual or company.

"Potential emissions" means fugitive particulate matter emissions calculated after the application of air pollution control measures or air pollution control equipment.

"Unpaved roads" means any surfaced thoroughfare or right-of-way, other than a paved road as defined above, which is designed or used for vehicular traffic located on the property of, or owned by an individual or company.

CONTROL MEASURES

Fugitive particulate matter emissions resulting from the emission points specified in this section shall be controlled unless exempted pursuant to 326 IAC 6-5-7(d). All control measures specified in this section shall be considered reasonably available control measures (RCM).

(A) Paved roads, unpaved roads, and parking lots. Fugitive particulate matter emissions resulting from paved roads, unpaved roads, and parking lots shall be controlled unless exempted pursuant to 326 IAC 6-5-7(d).

SSLF may use one or more of the following measures, as needed:

(1) Paved roads and parking lots:

(A) Cleaning by vacuum sweeping.
(B) Flushing.
(C) An equivalent alternate measure.

(2) Unpaved roads and parking lots:

(A) Paving with a material such as asphalt or concrete.
(B) Treating with a suitable and effective oil or chemical dust suppressant approved by the commissioner. The frequency of application shall be on an as needed basis.
(C) Spraying with water, the frequency of application shall be on an as needed basis.
(D) Double chip and seal the road surface and maintain on an as needed basis.
(E) An equivalent alternate measure.

Attachment B

(B) Open aggregate piles, as needed:
(1) Measures to control fugitive particulate matter emissions shall be required for open aggregate piles consisting of material such as, but not limited to, sand, gravel, stone, grain, and coal and which material is finer than two hundred (200) mesh size equal to or greater than one percent (1%) by weight. Open aggregate material mesh size shall be determined by the "American Association of State Highway and Transportation Officials Test Method T27-74," or other equivalent procedures acceptable to the commissioner.
(2) Fugitive particulate matter emissions resulting from open aggregate piles consisting of such material as, but not limited to, sand, gravel, stone, grain, and coal shall be controlled unless exempted pursuant to 326 IAC 6-5-7(d).

SSLF may use one or more of the following measures, as needed:
(A) Cleaning the area around the perimeter of the aggregate piles.
(B) Application of a suitable and effective oil or other dust suppressant on an as needed basis.
(C) An equivalent alternate measure.

(C) Fugitive particulate matter emissions resulting from the transferring of aggregate material shall be controlled unless exempted pursuant to 326 IAC 6-5-7(d).

SSLF may use one or more of the following measures, as needed:
(1) Minimizing the vehicular distance between the transfer points.
(2) Enclosing the transfer points and if needed exhausting emissions to particulate control equipment during the operation of the transferring system.
(3) Application of water or suitable and effective chemical dust suppressant as needed to minimize visible emissions.
(4) An equivalent alternate measure.

(D) Fugitive particulate matter emissions resulting from transportation of aggregate material by truck, front-end loaders, or similar vehicles shall be controlled unless exempted pursuant to 326 IAC 6-5-7(d).

SSLF may use one or more of the following measures, as needed:

(1) Use of completely enclosed vehicles.
(2) Tarping the vehicle.
(3) Maintaining the vehicle body in such a condition that prevents any leaks of aggregate material.
(4) Spraying the materials in the vehicle with a suitable and effective dust suppressant.
(5) An alternate measure.

Attachment B

(E) Fugitive particulate matter emissions resulting from the loading and unloading operations of the material from storage facilities such as bins, hoppers, and silos, onto or out of vehicles, shall be controlled unless exempted pursuant to 326 IAC 6-5-7(d).

SSLF may use one or more of the following measures, as needed:
(1) Enclosure of the material loading/unloading area.
(2) Total or partial enclosure of the facility and exhausting of emissions to particulate collection equipment. Such equipment shall be approved by the board.
(3) Spraying with water or suitable and effective chemical dust suppressant as needed to minimize visible emissions.
(4) Reduction of free fall distance.
(5) An equivalent alternate measure.

(F) Solid waste handling. Fugitive particulate matter emission resulting from activities involving solid waste (as defined in IC 13-7-1-2(10)) disposal shall be controlled unless exempted pursuant to 326 IAC 6-7(d).

SSLF may use one or more of the following measures, as needed:
(1) Hauling:
(A) Wet suppression of the material being transported.
(B) Hauling the material enclosed or covered.
(C) Minimizing the free fall distance when unloading from the particulate collection equipment and/or process equipment onto the hauling vehicle.
(D) An equivalent alternate measure.

(2) Dumping:
(A) Applying water or suitable and effective chemical dust suppressant on an as needed basis to minimize visible emissions.
(B) Minimizing the free fall distance of the material.
(C) An equivalent alternate measure.

(G) Fugitive particulate matter emissions resulting from material handling operations such as crushing, grinding, screening, and mixing shall be controlled unless exempted by 326 IAC 6-5-7(d).

SSLF may use one or more of the following measures, as needed:
(1) Wet suppression.
(2) An equivalent alternate measure.

COMMENCEMENT OF PLANS

The control plan is being implemented consistent with existing operations, as expeditiously as possible.

For new sources or facilities, the control measures will be implemented the date operations commence.

Indiana Department of Environmental Management
Office of Air Quality
and
Indianapolis Office of Environmental Services

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

Source Name: **South Side Landfill**
Source Location: **2561 Kentucky Avenue**
County: **Marion**
SIC Code: **4953**
Operation Permit No.: **T097-11621-00366**
Permit Reviewer: **Amanda Hennessy**

On May 17, 2002, the Office of Air Quality (OAQ) and the City of Indianapolis Office of Environmental Services (OES) had a notice published in the Indianapolis Star, Indianapolis, Indiana, stating that South Side Landfill had applied for a Part 70 Operating Permit to operate a municipal solid waste landfill and greenhouse. The notice also stated that OAQ and OES proposed to issue a permit for this operation and provided information on how the public could review the proposed permit and other documentation. Finally, the notice informed interested parties that there was a period of thirty (30) days to provide comments on whether or not this permit should be issued as proposed.

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

The following change to the draft Title V Permit will be made. The TSD will remain as it originally appeared when published. OAQ and OES prefer that the Technical Support Document reflect the permit that was on public notice. Changes to the permit or technical support material that occur after the permit has been published are documented in this Addendum to the Technical Support Document. This accomplishes the desired result of ensuring that these types of concerns are documented and part of the record regarding this permit decision. Bolded language has been added; the language with a line through it has been deleted.

IDEM and OES have made the following changes:

1) The original (b) was removed from the condition because an ERP has already been submitted.

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

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

(a) The Permittee prepared and submitted written emergency reduction plans (ERPs) consistent with safe operating procedures on October 27, 1999.

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

~~(c)~~ Upon direct notification by IDEM, OAQ, and OES, that a specific air pollution episode level is in effect, the Permittee shall immediately put into effect the actions stipulated in the approved ERP for the appropriate episode level.
[326 IAC 1-5-3]

2) In order to be consistent with language in 326 IAC 2-7-12(b)(2), the "(D)(i)" of rule listed in (b) of Permit Revisions Under Economic Incentives and Other Programs condition has been removed.

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

Indiana Department of Environmental Management
Office of Air Quality
and
Indianapolis Office of Environmental Services

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

Source Background and Description

Source Name:	**South Side Landfill, Inc.**
Source Location:	**2561 Kentucky Avenue, Indianapolis, IN 46221**
County:	**Marion**
SIC Code:	**4953**
Operation Permit No.:	**T097-11621-00366**
Permit Reviewer:	Amanda Hennessy

The Office of Air Quality (OAQ) and the Indianapolis Office of Environmental Services (OES) has reviewed a Part 70 permit application from South Side Landfill relating to the operation of a municipal solid waste landfill, aggregate processing equipment and a greenhouse.

Source Definition

This stationary source consists of two (2) plants:

(a) South Side Landfill, a municipal solid waste landfill with a landfill gas collection and control system, is located at 2561 Kentucky Avenue; and

(b) Crossroads Greenhouse is located at 2559 Kentucky Avenue.

Since the two (2) plants are located on contiguous or adjacent properties, are under common control of the same entity, and have the same SIC code (the greenhouse is an auxiliary activity), they will be considered one (1) source, effective from the date of issuance of this Part 70 permit.

Pursuant to IDEM guidance, different activities can have the same SIC code where one is an auxiliary activity. Many emission units, such as the generator and shop heaters, are shared between the landfill and the greenhouse. The greenhouse is an auxiliary activity of the landfill. If the landfill did not exist, the greenhouse may not have been constructed. The greenhouse boilers burn significant amounts of landfill gas and therefore can be considered a part of the landfill gas control system.

Permitted Emission Units and Pollution Control Equipment

There are no permitted facilities operating at this source during this review process.

Unpermitted Emission Units and Pollution Control Equipment

(a) One (1) municipal solid waste landfill, identified as P100, which began operations in 1971, controlled by an active landfill gas collection and control system; and with a maximum capacity of 15,008,982 Mg. Five (5) candlestick flares are used as back-up landfill gas control measures. Four (4) have a capacity of 600 cfm and one has a capacity of 2,825 cfm.

(b) Two (2) boilers, each rated at fourteen and six tenths (14.6) MMBtu per hour, exhausting at two (2) stacks, identified as S118A and S118B. The greenhouse boilers use landfill gas and No. 2 fuel oil as fuel. The boilers were constructed in September of 1989.

(c) One Allis Chalmers Diesel fired electric generator (identified as emission unit S503) with a capacity of 9.8 gallons per hour installed in 1989.

Notes:

Prior to the issuance of 40 CFR Part 60.750 - 60.759, Subpart WWW, Standards of Performance for Municipal Solid Waste Landfills, on March 12, 1996, landfills were considered fugitive or area sources unless there was a collection device and therefore were not required to be permitted. Subpart WWW established that landfills be treated as point sources (after commencing construction, reconstruction, or modification). Therefore, landfills that are over 2.5 million megagrams and 2.5 million cubic meters or with a calculated NMOC greater than 50 megagrams per year are subject to the Part 70 air permitting rules. In addition, collected landfill emissions are not fugitive emissions.

South Side Landfill modified the msw landfill by adding additional capacity in May of 1999, therefore triggering 40 CFR Part 60.750-60.759. The total landfill capacity with the modification is greater than 2.5 million megagrams and 2.5 million cubic meters and therefore, South Side Landfill is now a Part 70 source pursuant to 40 CFR 60.752.

Pursuant to 326 IAC 2-7, the modified landfill is now a major source due to a potential to emit of a single HAP ten (10) tons or greater per year and a potential to emit a combination of HAPs greater than 25 tons per year. Title V permit application requirements due to this requirement are satisfied by the Title V application submitted to comply with 40 CFR 60, Subpart WWW.

Therefore, OES has determined that South Side Landfill has met requirements for the permit shield under 326 IAC 2-7-3 since this application was received within 90 days of commencing modification (Subpart WWW) and within 12 months of meeting the major source HAP applicability in 326 IAC 2-7-2.

Insignificant Activities

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

(a) A tertiary stone crusher, identified as emission unit S402, has a capacity of 300 tons per hour and was installed in March, 1999.

(b) Four Chevy 454 Internal Combustion Engines all running on landfill gas with a capacity of 18.3 cfm of landfill gas (0.6 MMBtu/hr). Three are used to run generators (identified as emission units S113, S116A, and S116B) and the fourth is used to run the landfill gas pump (identified as emission unit S119).

(c) Fuel oil-fired combustion sources with heat input equal to or less than two million (2,000,000)Btu per hour and firing fuel containing less than five-tenths (0.5) percent sulfur by weight.

(d) Three shop heaters running on landfill gas with a capacity of 7.5 cfm (identified as emission units S114A, B, C).

(e) One Waukesha electric generator which burns landfill gas at a capacity of 96.1 cfm (3.2 MMBtu) identified as emission unit S117.

(f) Combustion source flame safety purging on startup.

(g) A gasoline transfer and dispensing operation handling less than or equal to 1,300 gallons per day, such as filling of tanks, locomotives, automobiles, having a storage capacity less than or equal to 10,500 gallons. Emission unit identified as P501.

(h) A petroleum fuel, other than gasoline, dispensing facility, having a storage capacity of less than or equal to 10,500 gallons, and dispensing less than or equal to 230,000 gallons per month. Emission units identified as P502 A and B.

(i) Vessels storing lubricating oils, hydraulic oils, machining oils, and machining fluids.

(j) Activities associated with the treatment of wastewater streams with an oil and grease content less than or equal to 1% by volume.

(k) Stockpiled soils from soil remediation activities that are covered and waiting transport for disposal.

(l) Paved and unpaved roads and parking lots with public access.

(m) Farm operations.

(n) Any unit emitting greater than 1 pound per day but less than 5 pounds per day or 1 ton per year of a single HAP.

(1) F-141: Waste Compactor Diesel Emissions combined HAPs total 2.2 tpy
5 Al Jon Trash Compactors combined HAPs total 1.7 tpy
2 Rex Trash Compactors combined HAPs total 0.5 tpy

(2) F-142: Dump Truck Diesel Emissions combined HAPs total 2.3 tpy
7 Off Road Volvo Dump Trucks combined HAPs total 1.9 tpy
2 Cline Off Road Dump Trucks combined HAPs total 0.4 tpy

(3) F-143: Dozer Diesel Emissions combined HAPs total 0.4 tpy
3 multi use Dozers combined HAPs total < 0.1 tpy

(4) F-144: Excavator Diesel Emissions combined HAPs total 0.2 tpy
1 PC Excavator combined HAPs total 1.1 lb/day

(5) F-145: Loader Diesel Emissions combined HAPs total 0.5 tpy
3 Fiat Allis Loaders combined HAPs total 1 lb/day

(6) F-401: Stone Crusher Diesel Emissions combined HAPs total 0.1 tpy

(o) A microturbine powered by landfill gas with a fuel flow of 14 scfm installed in 2002.

Existing Approvals

There are no previous air approvals for this source.

Enforcement Issue

(a) OES is aware that no performance tests were performed for the stone crushing operation as required under 40 CFR Part 60, Subpart A.

(b) OES is aware that the boilers, emission units S118A and S118B and the Allis Chalmers diesel fired electric generator, have been constructed and operated prior to receipt of the proper permit.

(c) OES is reviewing these matters and will take appropriate action.

Emission Calculations

See Appendix A of this document for detailed emissions calculations for the municipal solid waste landfill and boilers (pages 1-17).

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 October 27, 1999. Additional information regarding the microturbine was received on February 6, 2002.

Potential To Emit

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

This table reflects the PTE before controls. Control equipment is not considered federally enforceable until it has been required in a federally enforceable permit. Landfill gas controls are designed to control NMOC emissions. Typical controls include flares, boilers, and other gas burning units. Therefore, when controlling NMOC, the source will have higher NOx and CO emissions after controls than NOx and CO emissions before controls. The emissions after controls will not be considered for PSD purposes because they result from a pollution control project as defined in 326 IAC 2-2-1.

PTE for landfills is calculated at the closure year when NMOC emissions are at their greatest levels. For South Side Landfill this is estimated to be 2015. PTE is calculated using default values identified in 40 CFR Part 60 Subpart WWW. Calculations for PSD purposes use default values identified in AP-42. See Appendix A: Calculations for additional calculation information.

Pollutant	Potential To Emit (tons/year)[1,2]
PM	less than 100
PM-10	less than 100
SO_2	less than 100
VOC	111
CO	less than 100
NO_x	less than 100
NMOC	1928

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

HAP's	Potential To Emit (tons/year)[1,2]
Toluene	19.928
1,1,1-Trichloroethane	0.352
1,1,2,2-Tetrachloroethane	1.025
1,1-Dichloroethane	1.280
1,1 Dichloroethene	0.107
1,2-Dichloroethane	0.223
1,2 Dichloropropane	0.112
Acrylonitrile	1.849
Carbon disulfide	0.243
Carbonyl sulfide	0.162
Chlorobenzene	0.155
Chloroethane	0.444
Dichloromethane	6.685
Ethyl benzene	2.694
Hexane	3.116
Hydrogen Chloride	0.51[3]
Methyl chloride	0.336
Methyl ethyl ketone	2.814
Methyl isobutyl ketone	1.031
Perchloroethylene	3.404
Trichloroethylene	2.039
Vinyl chloride	2.525
Xylenes	7.078
Benzene	0.821
TOTAL	59

[1] Maximum potential to emit denotes the potential to emit at landfill closure, when landfill emissions are at a maximum.
[2] PTE includes gas collected in the landfill gas collection system (prior to control), the two boilers and the diesel engine. PTE is calculated as the worst case scenario (ie. No control on the landfill gas collection system and the boilers burning No. 2 fuel).
[3] Hydrogen Chloride emissions are from Cleaver Brooks boilers. All other HAP emissions are from the landfill.

(a) Pursuant to 40 CFR 60.752, Subpart WWW, this source becomes subject to §§ 70.5(a)(1)(i) and 71.5(a)(1)(i) because its design capacity is greater than 2.5 million megagrams and 2.5 million cubic meters.

(b) The potential to emit of NMOC (a pollutant regulated under the New Source Performance Standard, 40 CFR 60, Subpart WWW) is equal to or greater than 100 tons per year. Therefore, the source is subject to the provisions of 326 IAC 2-7.

(c) The potential to emit (as defined in 326 IAC 2-1.1-1(16)) of any single HAP is equal to or greater than ten (10) tons per year and the potential to emit (as defined in 326 IAC 2-7-1(29)) of a combination HAPs is greater than or equal to twenty-five (25) tons per year. Therefore, the source is subject to the provisions of 326 IAC 2-7.

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

Actual Emissions

The following table shows the actual emissions from the source. This information reflects the 2000 OES Point Emissions Summary.

Pollutant	Actual Emissions (tons/year)
PM	not reported
PM-10	4.98
SO_2	2.79
VOC	5.56
CO	121.03
NO_x	9.62
NMOC	13.96

Potential to Emit After Issuance

The table below summarizes the potential to emit, of the emission units after controls. The control equipment is considered federally enforceable only after issuance of this Part 70 operating permit.

	Potential to Emit (tons per year)							
Process/facility	PM	PM-10	SO_2	VOC	CO	NO_X	NMOC	HAPs
Municipal Solid Waste Landfill (w/ flares controlling NMOC)	—	—	12.39[5]	58.36[6]	566 [5]	30 [5]	20 ppm by volume at the outlet or reduce by 98 weight percent[1]	—
Boilers (S118A and S118B)	0.453[2] lb/MMBtu	—	0.5[3] lb/MMBtu	1	4	18	1	—
Stone Crusher	63 lb/hr[4] / 0.016 lb/ton[7]	0.016 lb/ton[7]	—	—	—	—	—	—
Diesel Generator	—	2	2	2	6	26	—	—
Total	—	—	—	—	—	—	—	—

[1]Pursuant to 40 CFR 60, Subpart WWW.
[2] Pursuant to 326 IAC 6-2-4 (Particulate Emissions Limitations for Facilities Constructed after September 21, 1983).
[3] Pursuant to 40 CFR 60, Subpart Dc.
[4] Pursuant to 326 IAC 6-3-2.
[5] Controlled PTE when calculated using NSPS default values for landfill gas emission rate to determine NSPS (40 CFR 60, Subpart WWW) applicability.
[6] Uncontrolled PTE calculated using AP-42 emission factors for landfill gas emission rate to determine PSD applicability.
[7] Limit to keep the unit as an insignificant activity pursuant to 326 IAC 2-7-1(21)(B). Units are lb PM/PM10 per ton of material processed.

County Attainment Status

The source is located in Marion County.

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

(a) Volatile organic compounds (VOC) are precursors for the formation of ozone. Therefore, VOC emissions are considered when evaluating the rule applicability relating to the ozone standards. Marion County has been designated as attainment or unclassifiable for ozone. Therefore, VOC emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2 and 40 CFR 52.21.

(b) Marion County has been classified as maintenance attainment, attainment or unclassifiable for PM-10, SO_2, NO_2, CO and Lead. Therefore, these emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2 and 40 CFR 52.21.

(c) Fugitive Emissions
Since this type of operation is not one of the 28 listed source categories under 326 IAC 2-2 and since there are no applicable New Source Performance Standards that were in effect on August 7, 1980, the fugitive emissions are not counted toward determination of PSD and 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 assume that all reasonable information is provided to evaluate continuous compliance with the applicable requirements.

Federal Rule Applicability

(a) The source is subject to the provisions of 40 CFR 60, Subpart A - General Provisions, except when otherwise specified in 40 CFR 60, Subpart WWW, 40 CFR 60 Subpart OOO, and 40 CFR 60 Subpart Dc.

(b) The storage tanks are not subject to the New Source Performance Standard, 326 IAC 12 or 40 CFR 60, Subpart Kb because each storage tank has a capacity less than 40 cubic meters (m^3).

(c) The municipal solid waste landfill is subject to the New Source Performance Standard, 326 IAC 12, 326 IAC 8-8.1, and 40 CFR 60.750, Subpart WWW because the municipal solid waste landfill commenced modification on or after May 30, 1991. They are also subject to the collection and control requirements of this rule because NMOC emissions are greater

than 50 Mg/yr. NMOC emissions are based on a methane generation rate of 3.47E+07 cubic meters per year. The following outlines the requirements of subpart WWW:

(1) Pursuant to 40 CFR 60.752, a municipal solid waste landfill with a design capacity greater than 2.5 million megagrams (Mg) shall either comply with 40 CFR 60.752 (b)(2) or calculate the non methane organic compound emission (NMOC) rate for the landfill using the procedures specified in 40 CFR 60.754. The Permittee's initial design capacity report was submitted on January 14, 1998.

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

(A) Submit an annual NMOC report to the Office of Air Quality (OAQ) and OES; and

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

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

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

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

An active collection system shall:

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

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

(iii) Collect gas at a sufficient extraction rate.

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

A passive collection system shall:

(i) Comply with the provisions specified in paragraphs (i), (ii), and (iv) above.

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

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

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

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

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

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

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

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

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

where,

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

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

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

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

where,

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

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

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

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

(A) Operate the collection system such that gas is collected from each area, cell, or group of cells in the municipal solid waste landfill in which solid waste has been in place for five years if active or 2 years or more if closed or at final grade.

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

(i) Fire or increased well temperature. The Permittee shall record instances when positive pressure occurs in efforts to avoid a fire. These records shall be submitted with the annual reports as provided in 40 CFR 60.757(f)(1).

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

(iii) A decommissioned well. A well may experience a static positive pressure after shut down to accommodate for declining flows. All design changes shall be approved by the Office of Air Quality (OAQ) and OES.

(C) Operate each interior wellhead in the collection system with a landfill gas temperature less than 55EC and with either a nitrogen level less than 20 percent or an oxygen level less than 5 percent. The Permittee may establish a higher operating temperature, nitrogen, or oxygen value at a particular well. A higher operating value demonstration shall show supporting data that the elevated parameter does not cause fires or

significantly inhibit anaerobic decomposition by killing methanogens. The temperature and nitrogen or oxygen level should be monitored monthly to determine compliance.

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

(ii) Unless an alternative test method is established as allowed by 40 CFR 60.752 (b)(2)(i), the oxygen shall be determined by an oxygen meter using Method 3A except that; the span shall be set so that the regulatory limit is between 20 and 50 percent of the span; a data recorder is not required; only two calibration gases are required, a zero and span, and ambient air may be used as the span; a calibration error check is not required; the allowable sample bias, zero drift, and calibration drift are 10 percent.

(D) Operate the collection system so that the methane concentration is less than 500 parts per million above background at the surface of the landfill. To determine if this level is exceeded, the Permittee shall conduct surface testing around the perimeter of the collection area along a pattern that traverses the landfill at 30 meter intervals and where visual observations indicate elevated concentrations of landfill gas, such as distressed vegetation and cracks or seeps in the cover on a quarterly basis. The Permittee may establish an alternative traversing pattern that ensures equivalent coverage. A surface monitoring design plan shall be developed that includes a topographical map with the monitoring route and the rationale for any site-specific deviations from the 30 meter intervals. Areas with steep slopes or other dangerous areas may be excluded from the surface testing.

(E) Operate the system such that all collected gases are vented to a control system designed and operated in compliance with 40CFR 60.752(b)(2)(iii). In the event the collection or control system is inoperable, the gas mover system shall be shut down and all valves in the collection and control system contributing to venting of the gas to the atmosphere shall be closed within one hour.

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

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

(d) The municipal solid waste landfill is subject to the National Emission Standards for Hazardous Air Pollutants, 326 IAC 14 and 40 CFR 61.154, Subpart M, because it receives asbestos-containing waste material from a source covered under §61.149, 61.150, or 61.155. Pursuant to 40 CFR 61.154, Subpart M and 326 IAC 14-2, the landfill is subject to the following conditions:

(1) Either there must be no visible emissions to the outside air from any active waste disposal site where asbestos-containing waste material has been deposited, or the requirements of paragraph (2) and (3) below must be met.

(2) At least once every 24-hour period, asbestos-containing waste material that has been deposited during the previous 24-hour period must:

(A) Be covered with at least 15 centimeters (6 inches) of compacted nonasbestos containing material, or

(B) Be covered with a resinous or petroleum-based dust suppression agent that effectively binds dust and controls wind erosion. Such an agent shall be used in the manner and frequency recommended for the particular dust by the dust suppression agent manufacturer to achieve and maintain dust control. Other equally effective dust suppression agents may be used upon prior approval by the Administrator. Any used, spent, or other waste oil is not considered a dust suppression agent.

(3) Use an alternate emissions control method that has received prior written approval by the Administrator.

(4) Also, unless a natural barrier deters access by the general public, warning signs and fencing must be installed or the requirements of paragraph (b)(1) above must be met.

(5) For all asbestos containing waste material received, the owner or operator of the active waste disposal site shall:

(A) Maintain waste shipment records and include the following information

(i) The name, address, and telephone number of the waste generator;

(ii) The name, address, and telephone number of the transporter(s);

(iii) The quantity of the asbestos containing waste material in cubic meters (cubic yards).

(iv) The presence of improperly enclosed or uncovered waste, or any asbestos-containing waste material not sealed in leak-tight containers. Report in writing to the local, State, or EPA Regional office responsible for administering the asbestos NESHAP program for the waste generator (identified in the waste shipment record), and if different, the local, State, or EPA Regional office responsible for administering the asbestos NESHAP program for the disposal site, by the following working day, the presence of a significant amount of improperly enclosed or uncovered waste. Submit a copy of the waste shipment record along with the report.

(B) As soon as possible and no longer than 30 days after receipt of the waste, send a copy of the signed waste shipment record to the waste generator.

(C) Upon discovering a discrepancy between the quantity of waste designated on the waste shipment records and the quantity actually received, attempt to reconcile the discrepancy with the waste generator. If

the discrepancy is not resolved within 15 days after receiving the waste, immediately report in writing to the local, State, or EPA Regional office responsible for administering the asbestos NESHAP program for the waste generator (identified in the waste shipment record), and if different, the local, State, or EPA Regional office responsible for administering the asbestos NESHAP program for the disposal site. Describe the discrepancy and attempts to reconcile it, and submit a copy of the waste shipment record along with the report.

(D) Retain a copy of all records and reports required by this paragraph for at least 2 years.

(6) Maintain until closure, records of the location, depth and area, and quantity in cubic meters (cubic yards) of asbestos-containing waste material within the disposal site on a map or diagram of the disposal area.

(7) Upon closure, comply with all the provisions of 40 CFR 61.151.

(8) Submit to the Administrator, upon closure of the facility, a copy of records of asbestos waste disposal locations and quantities.

(9) Furnish upon request, and make available during normal business hours for inspection by the Administrator, all records required under this section.

(10) Notify the Administrator in writing at least 45 days prior to excavating or otherwise disturbing any asbestos-containing waste material that has been deposited at a waste disposal site and is covered.

If the excavation will begin on a date other than the one contained in the original notice, notice of the new start date must be provided to the Administrator at least 10 working days before excavation begins and in no event shall excavation begin earlier than the date specified in the original notification. Include the following information in the notice:

(A) Scheduled starting and completion dates.

(B) Reason for disturbing the waste.

(C) Procedures to be used to control emissions during the excavation, storage, transport, and ultimate disposal of the excavated asbestos-containing waste material. If deemed necessary, the Administrator may require changes in the emission control procedures to be used.

(D) Location of any temporary storage site and the final disposal site.

(e) The provisions of 40 CFR 61 Subpart A - General Provisions apply to the facility described in this section except when otherwise specified in 40 CFR 61 Subpart M.

(f) The two (2) boilers (P118A and P118B) are subject to the New Source Performance Standard, IAC 12 and 40 CFR 60, Subpart Dc because the boilers have a maximum design heat input capacity of 100 MMBtu/hr or less, but greater than or equal to 10 MMBtu/hr and were constructed after June 9, 1989.

(1) Pursuant to 40 CFR 60, Subpart Dc (Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units):

(A) The SO_2 emissions from the 14.6 MMBtu per hour oil-fueled boilers shall not exceed five tenths (0.5) pounds per million Btu heat input; or

(B) The sulfur content of the fuel oil shall not exceed five-tenths percent (0.5%) by weight. [40 CFR 60.42c(d)]

(2) Pursuant to 40 CFR 60 Subpart Dc, the fuel oil sulfur content limit applies at all times, including periods of startup, shutdown, and malfunction.

(3) Pursuant to 40 CFR 60, Subpart Dc, the Permittee shall demonstrate compliance utilizing one of the following options:

(A) Providing vendor analysis of fuel delivered, if accompanied by a certification; or

(B) Analyzing the oil sample to determine the sulfur content of the oil via the procedures in 40 CFR 60, Appendix A, Method 19.

(C) Oil samples may be collected from the fuel tank immediately after the fuel tank is filled and before any oil is combusted; and

(D) If a partially empty fuel tank is refilled, a new sample and analysis would be required upon filling.

(4) To document compliance, the Permittee shall maintain the following records:

Note that pursuant to 40 CFR 60 Subpart Dc, the fuel oil sulfur limit applies at all times including periods of startup, shutdown, and malfunction.

(A) Calendar dates covered in the compliance determination period;

(B) Actual daily fuel oil usage since last compliance determination period and equivalent sulfur dioxide emissions;

If the fuel supplier certification is used to demonstrate compliance, when burning alternate fuels and not determining compliance pursuant to 326 IAC 3-7-4, the following, as a minimum, shall be maintained:

(C) Fuel supplier certifications;

(D) The name of the fuel supplier; and

(E) A statement from the fuel supplier that certifies the sulfur content of the fuel oil.

(5) The Permittee shall retain records of all recording/monitoring data and support information for a period of five (5) years, or longer if specified elsewhere in this permit, from the date of the monitoring sample, measurement, or report. Support information includes all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by this permit.

(g) The stone crushing operation (S402) is subject to the New Source Performance Standard, IAC 12 and 40 CFR Parts 60, Subpart OOO because the crusher has a capacity over 25 tons per hour. There are no transfer points, conveying systems, or stack emissions as

defined in 40 CFR Part 60, Subpart OOO, associated with this equipment. Pursuant to 40 CFR 60.672(c), the crushing operation (S402) is limited to fugitive PM emissions of 15% opacity or less.

Since the Permittee has not completed the performance test required by 40 CFR 60.8, this permit will require that the source perform the required test within 60 days of issuance of this permit.

State Rule Applicability

Entire Source

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

The source has submitted an Emergency Reduction Plan (ERP) on October 27, 1999.

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

Pursuant to 326 IAC 2-7-5(13)(A), Part 70 permits must require that the source maintain preventive maintenance plans as described in 326 IAC 1-6-3.

Based on OES's review PMPs are required for the following emission units and any (non voluntary control equipment) control equipment required by OES and IDEM, OAQ in the permit:

a) Emission unit P100, the municipal solid waste landfill and its controls, is subject to the requirements to prepare and maintain a PMP, since this unit is subject to the municipal solid waste landfill NSPS, Subpart WWW.

b) Emission units S118 A and B, the boilers, are subject to the requirements to prepare and maintain a PMP since these units are significant emission units and are subject to the steam generating NSPS, Subpart Dc.

c) Emission unit S402, the stone crushing operation, is not subject to the requirements to prepare and maintain a PMP. The operation is subject to the nonmetallic mineral processing NSPS, Subpart OOO, however, it is an insignificant activity. It is interpreted that PMPs are intended for significant emission units.

326 IAC 2-2 (PSD)

The source is not subject to 326 IAC 2-2 (PSD), because it is not one of the 28 listed sources and its potential to emit is less than 250 tpy for all air pollutants subject to regulation under the Clean Air Act. Pursuant to 40 CFR 60.744(c), when calculating emissions for PSD purposes, the Permittee shall estimate the NMOC emission rate using AP-42 or other approved measurement procedures. See pages 11 and 12 of Appendix A for calculations.

Below is a table identifying the PTE of the source using AP-42 values for the landfill emissions.

Pollutant	Potential To Emit (tons/year)
PM	less than 100
PM-10	less than 100
SO_2	less than 100
VOC	less than 100
CO	less than 100
NO_x	less than 100
NMOC	136

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

The source is not subject to 326 IAC 2-4.1(Major Sources of Hazardous Air Pollutants), because the modification occurring in May of 1999 in and of itself is not a major source of hazardous air pollutants.

The HAP PTE of the original source was not major for HAPs and the modification in and of itself is not a major source of HAPs. However, the source as a whole has now become major for HAPs under 326 IAC 2-7-1.

326 IAC 2-6 (Emission Reporting)

This source is subject to 326 IAC 2-6 (Emission Reporting), because it is a source in Marion County with the potential to emit more than ten (10) tons per year of VOC and NO_x. Pursuant to this rule, the owner/operator of the source must annually submit an emission statement for the source. The annual statement must be received by April 15 of each year and contain the minimum requirement as specified in 326 IAC 2-6-4. The submittal should cover the period defined in 326 IAC 2-6-2(8)(Emission Statement Operating Year).

326 IAC 5-1 (Opacity Limitations)

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

(a) Opacity shall not exceed an average of thirty percent (30%) any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.

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

326 IAC 6-4 (Fugitive Dust Emissions Limitations)

This rule requires that the source 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.

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

The source is subject to fugitive particulate matter emission limitations since it is located in one of the listed areas and has potential fugitive particulate emissions greater than 25 tons per year. Pursuant to 326 IAC 6-5 (Fugitive Particulate Matter Emission Limitations), the source shall:

(a) Submit a fugitive particulate matter emissions control plan; and

(b)Control fugitive particulate matter emissions as outlined in 326 IAC 6-5-4.

South Side Landfill submitted a fugitive particulate matter emission control plan on October 27, 1999. It is attached to the permit as Attachment B.

Municipal Solid Waste Landfill

326 IAC 6-1 (Nonattainment Area Limitations)

This source is not subject to 326 IAC 6-1 (Nonattainment Area Limitations) since the source has potential emissions less than 100 tons per year and actual emissions less than 10 tons per year of particulate matter. Actual emissions for this source for the year 2000 were 4.98 tons per year.

326 IAC 7-1.1 (Sulfur Dioxide Emission Limitations)

The municipal solid waste landfill has the potential to emit 25 tpy and, therefore, is subject to the requirements in 326 IAC 7-1.1-2. However, there are no limits in this Rule that are applicable to municipal solid waste landfills. Therefore, there are no applicable SO_2 limits for this emission unit.

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

This source, by reference of this section must follow the provisions of 40 CFR 60, Subpart WWW as outlined under Federal Applicability because it is an existing solid waste landfill that is not located in one of the listed counties and has accepted waste since November 9, 1987.

326 IAC 18 (Asbestos Management)

The municipal solid waste landfill is subject to the requirements of 326 IAC 18 because staff of the landfill manage disposal, at a waste disposal facility, of Asbestos Containing Material (ACM) removed from a facility as specified in 326 IAC 10-8-4. Pursuant to 326 IAC 18, persons managing ACM waste must be licensed as outlined in the rule.

Boilers (S118A and S118B)

Particulate Matter limits for Boilers

Applicability:

Although this source is located in Marion County, these units are not subject to 326 IAC 6-1 (Nonattainment Area Limitations) since the source has potential emissions less than 100 tons per year and actual emissions less than 10 tons per year of particulate matter. Actual emissions for this source for the year 2000 were 4.98 tons per year.

These units are subject to 326 IAC 6-2-4 (Particulate Emissions Limitations for Facilities Constructed after September 21, 1983) because the units are indirect heating sources constructed after September 21, 1983.

Limits:

326 IAC 6-2-4 (Particulate Emissions Limitations for Facilities Constructed after September 21, 1983)

Pursuant to 326 IAC 6-2-4 (Particulate Matter Emissions for Sources of Indirect Heating), the PM emissions from Boiler S118A and Boiler S118B each shall not exceed 0.453 pound per million Btu heat input (lb/MMBtu). This limitation was calculated using the following equation:

$$Pt = \frac{1.09}{Q^{0.26}}$$

Where Q = total source capacity (MMBtu)
Pt = Pounds of particulate matter emitted per million Btu heat input

Compliance Determination

South Side Landfill has two boilers, each with a capacity of 14.6 MMBtu, for a Q= 29.2 MMBtu and a Pt = 0.453. Therefore, South Side Landfill's boilers are each limited to a particulate emission rate of 0.453 lb/MMBtu.

The PM PTE for South Side Landfill's two boilers (worst case scenario running on No. 2 fuel oil) is 0.9 tons per year each, or 0.0141 lb PM per MMBtu each.

$$\frac{0.9 \text{ tons}}{\text{year}} \times \frac{1 \text{ hour}}{14.6 \text{ MMBtu}} \times \frac{1 \text{ year}}{8760 \text{ hour}} \times \frac{2000 \text{ lb}}{1 \text{ ton}} = \frac{0.0141 \text{ lb}}{\text{MMBtu}}$$

SO_2 Limits for Boilers

Applicability:

The PTE of SO_2 is less than 25 tons per year, therefore the provisions of 326 IAC 7-1.1 do not apply to the boilers.

Stone Crusher Operation (S402)

Applicability:

This source is not subject to 326 IAC 6-1 (Nonattainment Area Limitations) since the source has potential emissions less than 100 tons per year and actual emissions less than 10 tons per year of particulate matter. Actual emissions for this source for the year 2000 were 4.98 tons per year.

This emission unit is subject to 326 IAC 6-3-2 Particulate Matter (PM) process operations limits.

Limits:

326 IAC 6-3-2 Particulate Matter (PM)

Pursuant to 326 IAC 6-3-2, the PM from the stone crusher (identified as emission unit S402) shall not exceed the pound per hour emission rate established as E in the following formula:

Interpolation and extrapolation of the data for the process weight rate in excess of sixty thousand (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

For South Side Landfill's stone crusher, P = 300 and therefore E = 63.0 pounds per hour.

Compliance Determination:

The potential to emit for the stone crusher is 0.72 lb/hr total particulate matter. Therefore, the crushing unit will comply with this rule. Emission Factors from AP-42 Chapter 11.19.2. The emission factor is not listed for PM, so therefore, use the PM-10 emission factor.
Stone Crusher: TPM = 0.0024 lb/ton * 300 tons/hour = 0.72 lb/hour.

Since the PTE is so much lower than the 326 IAC 6-3-2 limit and if the source did emit up to the limit PSD would be applicable, a limit of 0.016 ton of PM/PM10 per ton of material processed will be established to keep the unit insignificant. This limit will make the unit insignificant pursuant to 326 IAC 2-7-1(21)(B) and therefore, make 326 IAC 2-2 not applicable If the source makes any changes that would increase the PTE of this emission unit, they must notify OES and OAQ.

Testing Requirements

Within 60 days of issuance, the Permittee shall conduct performance testing as required by 40 CFR 60.8 on the crushing operation utilizing methods approved by the Commissioner and as outlined in 40 CFR 60.675.

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 and OES, in conjunction with the source, must develop specific conditions to satisfy 326 IAC 2-7-5. As a result, compliance requirements are divided into two sections: Compliance Determination Requirements and Compliance Monitoring Requirements.

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

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

1. The boilers have applicable compliance monitoring conditions as specified below:

   (a) Visible emissions notations of the boiler stack exhaust shall be performed once per shift during normal daylight operations when burning fuel oil. A trained employee will record whether emissions are normal or abnormal. For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time. In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions. A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process. The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when an abnormal emission is observed. Failure to take response steps in accordance with Section C Compliance Response Plan - Preparation, Implementation, Records, and Reports of the permit shall be considered a violation of the permit.

   These monitoring conditions are necessary because the boilers must operate properly to ensure compliance with 6-2 (Particulate Emissions for Facilities Constructed after September 21, 1983). Visual emissions will indicate to the source whether the units are operating properly.

2. The stone crushing operation has applicable compliance monitoring conditions as specified below:

(a) Visible emissions notations of the stone crusher operation shall be performed once per shift during normal daylight operations. A trained employee will record whether emissions are normal or abnormal. For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time. In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions. A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process. The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when an abnormal emission is observed. Failure to take response steps in accordance with Section C Compliance Response Plan - Preparation, Implementation, Records, and Reports of the permit shall be considered a violation of the permit.

These monitoring conditions are necessary because the stone crusher operation must operate properly to ensure compliance with 6-3-2 Particulate Matter. Visual emissions will indicate to the source whether the units are operating properly.

Conclusion

The operation of this municipal solid waste landfill shall be subject to the conditions of the attached proposed **Part 70 Permit No. T097-11621-00366.**

Appendix A

Appendix A: Emissions Calculations
Commercial/Institutional/Residential Combustors (< 100 mmBtu/hr)
#1 and #2 Fuel Oil

Company Name: **South Side Landfill**
Address, City IN Zip: **2561 Kentucky Avenue**
Plt ID: **T097-11621-00366**
Reviewer: Amanda Hennessy
Date: March, 2002

Potential To Emit Summary

Emission Unit	PTE before Controls tons per year								PTE w/ limits (controls)* tons per year						
	NMOC	PM	PM-10	SO2	VOC	CO	NOx		NMOC	PM	PM-10	SO2	VOC	CO	NOx
Landfill (P110) (NSPS default values)	1928				111				20 ppm	13		12		566	30
Boiler S118A**		1		20	0	2	9		0.5	1		20	0.5	2	9
Boiler S118B**		1		20	0	2	9		0.5	1		20	0.5	2	9
Stone Crusher***		3	3							3	3				
Diesel Generator		2	2	2	2	6	26			2	2	2	2	6	26
TOTAL	**1928**	**7**	**5**	**42**	**113**	**10**	**44**			**20**	**5**	**54**	**3**	**576**	**74**

* PTE with limits (controls) indicates the PTE when considering limits and controls. Sometime the PTE of the emission unit may be less than the limit.

** Boiler PTE is worst case scenerio; burning #2 fuel oil 8760 hours/yr for all pollutants except NMOC and VOC. Worst case NMOC and VOC emissions are when the boiler is burning landfill gas.
Boiler SO2 limits are 32 tpy, however PTE is only 20 tpy. Boiler PM limits are 29 tpy, however, PTE is only 1 tpy.

*** Stone Crusher limit (326 IAC 6-3.2) is 63 lb/hr however, PTE is only 0.72 lb/hr.

Company Name: Southside Landfill
Address City IN Zip: 2561 Kentucky Avenue, Indianapolis, IN 46221
Permit: T097-11621-00366
SIC Code: 4953
Reviewer: Amanda Hennessy
Date: January, 2002

Uncontrolled Landfill Emissions:

2015 (at closure)

Methane Generation Rate (QCH4) = Lo * R * (e^-(kc) - e^-(kt))
Maximum methane generation occurs at closure

Maximum QCH4= 6.71E+07 m3/yr

Maximum QCH4 obtained using the Landfill Gas Emissions Model (Lo = 170 m^3/MG and k = 0.050 /yr)
NSPS default values: Lo = 170 m^3/MG, k = 0.050 / yr, and NMOC at 4000 ppmv
Q values checked with Landfill Gas Emissions Model

NMOC: Maximum PTE = 1749 Mg/yr
3855905.00 lb/yr
1927.95 tpy

Uncontrolled PTE =
=(1/% of CH4) * QCH4 * concentration of pollutant / 1E6 * MW of pollutant * 1 atm / (8.205E-5 * 1000 * (273 + Temp of LFG))
(default % of CH4 =0.55)

Sulfur Compounds:

Sulfur compounds are calculated in order to calculate controlled SO2 emissions.

MW of sulfur = 32.066 g/mol
Concentration of sulfur compounds (per AP-42 2.4) **46.9 ppmv**

Q(sulfur compounds)(m3/yr) = 1.82 * Q(CH4)(m3/yr)*C(sulfur compounds)(ppmv)/1*10^6
Q(sulfur compounds)(m3/yr = 1.82 * 6.71E+007 *46.9 / 1000000
Q(sulfur compounds)(m3/yr = 5727.52 m3/yr

Q(sulfur compounds)(tpy) = Qs(m3/yr)* MW (g/mol)*1000/24.5L/mol)/9.072E+005 (g/ton)
Q(sulfur compounds)(tpy) = 5727.5*32.066*1000/24.5/907200
Q(sulfur compounds)(tpy) = 8.26 tpy

VOC: MW = 86.18 g/mol
Concentration = 235 ppmv
Q(VOC)(m3/yr) = 1.82*Q(CH4)(m3/yr)*C(VOC)(ppmv)/1*10^6
Q(VOC)(m3/yr) = 28698.67 m3/yr

Potential to Emit of VOC(tpy) = Q(VOC)(m3/yr)*MW (g/mol)*1000/24.5(L/mol)/9.072E+005 (g/ton)
Q(VOC)(ton/yr) = 2.87E+004*86.18*1000/24.5/9.072E+005
Q(VOC)(ton/yr) = 111.28 tpy

Company Name: Southside Landfill
Address City IN Zip: 2561 Kentucky Avenue, Indianapolis, IN 46221
Permit: T097-11621-00366
SIC Code: 4953
Reviewer: Amanda Hennessy
Date: January, 2002

Controlled Landfill Emissions:

Flare design capacity: 5225 cfm
flare destruction efficiency = 98%
Methane makes up 55% of LGF

Q(CH4) (cfm) = Maximum LFG throughput (cfm)* 55%
= 5225* 0.5 cfm
= 2612.5 cfm

NMOC

The NSPS requires that landfill gas be collected and routed to a control device with a min. destruction efficiency of 98%
A collection efficiency of 75% is assumed.

Maximum Controlled NMOC Potential to Emit :

Maximum Controlled NMOC PTE (tpy) = collected NMOC after controls + uncollected NMOC
= (Uncontrolled PTE (tpy) * collection eff * (1- flare destruction eff)) + (Uncontrolled PTE (tpy) * (1-collection eff))
= 1928*0.75*(1-0.98)+(1928*0.25)
= 28.92+482
= **510.9 tpy**

Max Controlled NMOC PTE (tpy) of collected NMOC = 1928*0.75*(1-0.98)
28.92 tpy

Flare Emissions:

	NOx	CO	PM
Emission Factor** lb/10^6 dscf	40	750	17
Emissions (tons per year)	**30.209**	**566.416**	**12.839**

** Emission factors from AP-42, chapter 2.4, Table 2.4-5.

SO2:

Controlled PTE SO2 (tpy) = Uncontrolled sulfur comp.s (tpy) * efficiency of landfill gas collection system * 2
= 8.26 * 0.75 * 2
= **12.39 tpy**

** Equation 7 from AP-42 Chapter 2.4.

Company Name: South Side Landfill
Address City IN Zip: 2561 Kentucky Avenue, Indianapolis, IN 46221
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SIC Code: 4953
Reviewer: Amanda Hennessy
Date: January, 2002

Maximum Landfill Uncontrolled Emissions of Hazardous Air Pollutants

Maximum QCH4 (2015) = 6.71E+07 m3/yr
(Methane production at year 2015)

LFG Compound	Molecular Weight	Default Concentration (ppmv)	Maximum Uncontrolled Emission (tpy)	Maximum Controlled Emission (tpy)
1,1,1-Trichloroethane	133.41	0.48	0.352	0.093
1,1,2,2-Tetrachloroethane	167.85	1.11	1.025	0.272
1,1-Dichloroethane	98.97	2.35	1.280	0.339
1,1-Dichloroethene	96.94	0.2	0.107	0.028
1,2-Dichloroethane	98.96	0.41	0.223	0.059
1,2-Dichloropropane	112.99	0.18	0.112	0.030
Acrylonitrile	53.06	6.33	1.849	0.490
Benzene	78.11	1.91	0.821	0.218
Carbon disulfide	76.13	0.58	0.243	0.064
Carbon tetrachloride	153.84	0.004	0.003	0.001
Carbonyl sulfide	60.07	0.49	0.162	0.043
Chlorobenzene	112.56	0.25	0.155	0.041
Chloroethane	64.52	1.25	0.444	0.118
Chloroform	119.39	0.03	0.020	0.005
Dichloromethane	84.94	14.3	6.685	1.772
Ethylbenzene	106.16	4.61	2.694	0.714
Hexane	86.18	6.57	3.116	0.826
Mercury	200.61	2.92E-04	0.000	0.000
Methyl chloride (chloromethane)	50.49	1.21	0.336	0.089
Methyl ethyl ketone	72.11	7.09	2.814	0.746
Methyl isobutyl ketone	100.16	1.87	1.031	0.273
Perchloroethylene	165.83	3.73	3.404	0.902
Toluene	92.13	39.3	19.928	5.281
Trichloroethylene	131.4	2.82	2.039	0.540
Vinyl chloride	62.5	7.34	2.525	0.669
Xylenes	106.16	12.1	7.078	1.876
TOTAL			**58.45**	**15.49**

Source: AP-42, chapter 2.4 for Solid Waste Disposal, p. 2.4-10-12.
METHODOLOGY:
Uncontrolled Potential to Emit (tpy)=
= (1/% of CH4) * QCH4 * concentration of pollutant / 1E6 * MW of pollutant * 1 atm / (8.205E-5 * 1000 * (273 + Temp of LFG))
Controlled Potential to Emit (tpy) =
(Uncontrolled Potential to Emit (tpy) * collection eff * (1- flare destruction eff)) + (Uncontrolled Potential to emit (tpy) * (1-collection eff))
Equations from AP-42 2.4 Equations 3 and 4.

Appendix A: Emissions Calculations
Commercial/Institutional/Residential Combustors (< 100 mmBtu/hr)
#1 and #2 Fuel Oil

Company Name: **South Side Landfill**
Address, City IN Zip: **2561 Kentucky Avenue**
Plt ID: **T097-11621-00366**
Reviewer: Amanda Hennessy
Date: January, 2002

PTE for Emission units S118A and S118B: 14.6 MMBtu/hr boilers burning #2 fuel oil

Heat Input Capacity MMBtu/hr	Potential Throughput kgals/year	S = Weight % Sulfur
		0.3
14.6	913.5429	

	Pollutant				
	PM*	SO2	NOx	VOC	CO
Emission Factor in lb/kgal	2.0	42.6 *(142.0S)*	20.0	0.34	5.0
Potential Emission in tons/yr	0.9	19.5	9.1	0.16	2.3
Potential Emissions for both boilers (tpy)	1.8	38.9	18.3	0.3	4.6

Methodology

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

Potential Throughput (kgals/year) = Heat Input Capacity (MMBtu/hr) x 8,760 hrs/yr x 1kgal per 1000 gallon x 1 gal per 0.140 MM Btu

Emission Factors are from AP 42, Tables 1.3-1, 1.3-2, and 1.3-3 (SCC 1-03-005-01/02/03) Supplement E 9/98 (see erata file)
*PM emission factor is filterable PM only. Condensable PM emission factor is 1.3 lb/kgal.
Emission (tons/yr) = Throughput (kgals/ yr) x Emission Factor (lb/kgal)/2,000 lb/ton

Appendix A: Emissions Calculations
Commercial/Institutional/Residential Combustors (< 100 mmBtu/hr)
#1 and #2 Fuel Oil
HAPs Emissions

Company Name: **Southside Landfill**
Address, City IN Zip: **2561 Kentucky Avenue**
Plt ID: **T097-11621-00366**
Reviewer: Amanda Hennessy
Date: January, 2002

HAPs - Metals

	Arsenic	Beryllium	Cadmium	Chromium	Lead
Emission Factor in lb/mmBtu	4.0E-06	3.0E-06	3.0E-06	3.0E-06	9.0E-06
Potential Emission in tons/yr	2.56E-04	1.92E-04	1.92E-04	1.92E-04	5.76E-04
Potential Emissions for both boilers (tons/yr)	5.12E-04	3.84E-04	3.84E-04	3.84E-04	1.15E-03

HAPs - Metals (continued)

	Mercury	Manganese	Nickel	Selenium
Emission Factor in lb/mmBtu	3.0E-06	6.0E-06	3.0E-06	1.5E-05
Potential Emission in tons/yr	1.92E-04	3.84E-04	1.92E-04	9.59E-04
Potential Emissions for both boilers (tons/yr)	3.84E-04	7.67E-04	3.84E-04	1.92E-03

Methodology

No data was available in AP-42 for organic HAPs.
Potential Emissions (tons/year) = Throughput (mmBtu/hr)*Emission Factor (lb/mmBtu)*8,760 hrs/yr / 2,000 lb/ton

Appendix A: Emissions Calculations
Commercial/Institutional/Residential Combustors (< 100 mmBtu/hr)
Landfill Gas

Company Name: **South Side Landfill**
Address, City IN Zip: **2561 Kentucky Avenue**
Plt ID: **T097-11621-00366**
Reviewer: Amanda Hennessy
Date: March, 2002

PTE for Emission units S118A and S118B: 14.6 MMBtu/hr boilers burning landfill gas
Emissions below are for each boiler individually.

Fuel Use for each boiler
cfm landfill gas MAX
488.3

Methane (assume 55% is LFG methane concentration)
dscfm
269

	Pollutant		
	PM*	CO	NOx
Emission Factor in lb/ 10^6 dscf methane	8.2	5.7	33.0
Potential Emissions in lb/hr	0.13	0.09	0.53
Potential Emission in tons/yr	0.58	0.40	2.33
Potential Emissions for both boilers (tons/yr	1.16	0.80	4.66

	Pollutant		
	CO	VOC	NMOC
Precombustion Emissions	1.3	6.66	17.1
Control Efficiency	0.00	0.98	0.98
Potential Emission in tons/yr	1.32	0.13	0.34
Potential Emissions for both boilers (tons/yr	2.64	0.27	0.68

Methodology

Emission Factors obtained from AP-42 Table 2.4-5.

Control Efficiencies obtained from AP-42 Table 2.4-3.

Company Name: Southside Landfill
Address City IN Zip: 2561 Kentucky Avenue, Indianapolis, IN 46221
Permit: T097-11621-00366
SIC Code: 4953
Reviewer: Amanda Hennessy
Date: January, 2002

Uncontrolled Stone Crusher Emissions:

Maximum Capacity (tons per year)
2628000

	PM10 (lb/ton of material processed)
Emission Factor	0.0024
Emissions (lb/hr)	**0.72**
Emissions (tpy)	**3.15**

PM10 Emission Factor from AP-42 Table 11.19.2-2 Tertiary Crushing per source application.

No PM Emission Factor is listed in the Table - therefore assume PM = PM10.

Emissions of 0.7 lb/hr means this unit is an insignificant activity per 326 IAC 2-7-1(21)(B).
Emissions will be kept under 5 lb/hr (insignificant levels) at an emission factor of 0.016 lb/ton.

Emissions of 3.15 tons per year makes this unit exempt from permitting requirements.

Appendix A: Emissions Calculations
Company Name: Southside Landfill
Address: 2561 Kentucky Avenue, Indianapolis, IN
Permit: T097-11621-00366
SIC Code: 4953
Reviewer: A. Hennessy
Date: March, 2002

Model Parameters (NSPS Default Values)

Lo : 170.00 m^3 / Mg k : 0.0500 1/yr NMOC : 4000.00 ppmv
Methane : 55.0000 % volume Carbon Dioxide : 45.0000 % volume

Landfill Parameters

Landfill type : No Co-Disposal
Year Opened : 1971 Current Year : 2002 Closure Year: 2015 Capacity : 15008982 Mg
Average Acceptance Rate Required from Current Year to Closure Year : 462554.15 Mg/year

Model Results

Methane Emission Rate

Year	Refuse In Place (Mg)	(Mg/yr)	(Cubic m/yr)
1972	1.524E+05	8.642E+02	1.295E+06
1973	3.048E+05	1.686E+03	2.528E+06
1974	4.572E+05	2.468E+03	3.700E+06
1975	6.096E+05	3.212E+03	4.815E+06
1976	7.620E+05	3.920E+03	5.875E+06
1977	9.144E+05	4.593E+03	6.884E+06
1978	1.067E+06	5.233E+03	7.844E+06
1979	1.219E+06	5.842E+03	8.756E+06
1980	1.372E+06	6.421E+03	9.625E+06
1981	1.524E+06	6.972E+03	1.045E+07
1982	1.676E+06	7.496E+03	1.124E+07
1983	1.829E+06	7.995E+03	1.198E+07
1984	1.981E+06	8.469E+03	1.269E+07
1985	2.134E+06	8.920E+03	1.337E+07
1986	2.286E+06	9.350E+03	1.401E+07
1987	2.438E+06	9.758E+03	1.463E+07
1988	2.591E+06	1.015E+04	1.521E+07
1989	2.743E+06	1.052E+04	1.576E+07
1990	2.896E+06	1.087E+04	1.629E+07
1991	3.048E+06	1.120E+04	1.679E+07
1992	3.482E+06	1.311E+04	1.966E+07
1993	3.930E+06	1.501E+04	2.251E+07
1994	4.299E+06	1.638E+04	2.455E+07
1995	4.697E+06	1.784E+04	2.673E+07
1996	5.187E+06	1.975E+04	2.960E+07
1997	5.755E+06	2.200E+04	3.298E+07
1998	6.481E+06	2.505E+04	3.754E+07
1999	7.105E+06	2.736E+04	4.102E+07
2000	7.514E+06	2.835E+04	4.249E+07
2001	8.008E+06	2.977E+04	4.462E+07
2002	8.502E+06	3.112E+04	4.664E+07

Company Name: Southside Landfill
Address: 2561 Kentucky Avenue, Indianapolis, IN
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Reviewer: A. Hennessy
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2003	8.964E+06	3.222E+04	4.830E+07
2004	9.427E+06	3.327E+04	4.987E+07
2005	9.889E+06	3.427E+04	5.137E+07
2006	1.035E+07	3.522E+04	5.280E+07
2007	1.081E+07	3.613E+04	5.416E+07
2008	1.128E+07	3.699E+04	5.545E+07
2009	1.174E+07	3.781E+04	5.667E+07
2010	1.220E+07	3.859E+04	5.784E+07
2011	1.266E+07	3.933E+04	5.895E+07
2012	1.313E+07	4.003E+04	6.001E+07
2013	1.359E+07	4.071E+04	6.101E+07
2014	1.405E+07	4.134E+04	6.197E+07
2015	1.501E+07	4.475E+04	6.708E+07
2016	1.501E+07	4.257E+04	6.381E+07
2017	1.501E+07	4.049E+04	6.069E+07

Appendix A: Emissions Calculations
Company Name: Southside Landfill
Address: 2561 Kentucky Avenue, Indianapolis, IN
Permit: T097-11621-00366
SIC Code: 4953
Reviewer: A. Hennessy
Date: March, 2002

Model Parameters (NSPS Default Values)

Lo : 170.00 m^3 / Mg k : 0.0500 1/yr NMOC : 4000.00 ppmv
Methane : 55.0000 % volume Carbon Dioxide : 45.0000 % volume

Landfill Parameters

Landfill type : No Co-Disposal
Year Opened : 1971 Current Year : 2002 Closure Year: 2015 Capacity : 15008982 Mg
Average Acceptance Rate Required from Current Year to Closure Year : 462554.15 Mg/year

Model Results

Year	Refuse In Place (Mg)	NMOC Emission Rate (Mg/yr)	NMOC Emission Rate (Cubic m/yr)
1972	1.524E+05	3.377E+01	9.421E+03
1973	3.048E+05	6.589E+01	1.838E+04
1974	4.572E+05	9.645E+01	2.691E+04
1975	6.096E+05	1.255E+02	3.502E+04
1976	7.620E+05	1.532E+02	4.273E+04
1977	9.144E+05	1.795E+02	5.007E+04
1978	1.067E+06	2.045E+02	5.704E+04
1979	1.219E+06	2.283E+02	6.368E+04
1980	1.372E+06	2.509E+02	7.000E+04
1981	1.524E+06	2.724E+02	7.601E+04
1982	1.676E+06	2.929E+02	8.172E+04
1983	1.829E+06	3.124E+02	8.715E+04
1984	1.981E+06	3.309E+02	9.232E+04
1985	2.134E+06	3.486E+02	9.724E+04
1986	2.286E+06	3.653E+02	1.019E+05
1987	2.438E+06	3.813E+02	1.064E+05
1988	2.591E+06	3.965E+02	1.106E+05
1989	2.743E+06	4.109E+02	1.146E+05
1990	2.896E+06	4.246E+02	1.185E+05
1991	3.048E+06	4.377E+02	1.221E+05
1992	3.482E+06	5.124E+02	1.430E+05
1993	3.930E+06	5.867E+02	1.637E+05
1994	4.299E+06	6.400E+02	1.785E+05
1995	4.697E+06	6.969E+02	1.944E+05
1996	5.187E+06	7.716E+02	2.153E+05
1997	5.755E+06	8.596E+02	2.398E+05
1998	6.481E+06	9.786E+02	2.730E+05
1999	7.105E+06	1.069E+03	2.983E+05
2000	7.514E+06	1.108E+03	3.090E+05
2001	8.008E+06	1.163E+03	3.245E+05
2002	8.502E+06	1.216E+03	3.392E+05
2003	8.964E+06	1.259E+03	3.512E+05
2004	9.427E+06	1.300E+03	3.627E+05
2005	9.889E+06	1.339E+03	3.736E+05
2006	1.035E+07	1.376E+03	3.840E+05

Company Name: Southside Landfill
Address: 2561 Kentucky Avenue, Indianapolis, IN
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2007	1.081E+07	1.412E+03	3.939E+05
2008	1.128E+07	1.445E+03	4.032E+05
2009	1.174E+07	1.477E+03	4.122E+05
2010	1.220E+07	1.508E+03	4.207E+05
2011	1.266E+07	1.537E+03	4.287E+05
2012	1.313E+07	1.564E+03	4.364E+05
2013	1.359E+07	1.591E+03	4.437E+05
2014	1.405E+07	1.615E+03	4.507E+05
2015	1.501E+07	1.749E+03	4.878E+05
2016	1.501E+07	1.663E+03	4.640E+05
2017	1.501E+07	1.582E+03	4.414E+05

Company Name: Southside Landfill
Address City IN Zip: 2561 Kentucky Avenue, Indianapolis, IN 46221
Permit: T097-11621-00366
SIC Code: 4953
Reviewer: Amanda Hennessy
Date: January, 2002

PSD Calculations: Pursuant to 40 CFR 60.754(c), for PSD purposes, use AP-42 Chapter 2.4 default values.

Uncontrolled Landfill Emissions: **2015 (at closure)**

Methane Generation Rate (QCH4) = Lo * R * (e^-(kc) - e^-(kt))
Maximum methane generation occurs at closure

Maximum QCH4= 3.52E+07 m3/yr

Maximum QCH4 obtained using the Landfill Gas Emissions Model
AP-42 default values: Lo = 100 m^3/MG, k = 0.050 / yr, and NMOC at 595 ppmv
Q values checked with Landfill Gas Emissions Model

NMOC:

Maximum PTE =	136.4	Mg/yr
	272800.00	lb/yr
	136.40	tpy

Maximum Uncontrolled PTE =
=(1/% of CH4) * QCH4 * concentration of pollutant / 1E6 * MW of pollutant * 1 atm / (8.205E-5 * 1000 * (273 + Temp of LFG))

VOC

MW =	86.18	g/mol
Concentration =	235	ppmv

Q(VOC)(m3/yr) = 1.82*Q(CH4)(m3/yr)*C(VOC)(ppmv)/1*10^6
Q(VOC)(m3/yr = 15050.76

Potential to Emit of VOC(tpy) = Q(VOC)(m3/yr)*MW (g/mol)*1000/24.5(L/mol)/9.072E+005 (g/ton)
Q(VOC)(tpy) = 15050.76*86.18*1000/24.5/9.072E+005
Q(VOC)(tpy) = **58.36** **tpy**

Appendix A: Emissions Calculations
Company Name: Southside Landfill
Address: 2561 Kentucky Avenue, Indianapolis, IN
Permit: T097-11621-00366
SIC Code: 4953
Reviewer: A. Hennessy
Date: March, 2002

Model Parameters (AP-42 Default Values)

Lo : 100.00 m^3 / Mg k : 0.0400 1/yr NMOC : 595.00 ppmv
Methane : 55.0000 % volume Carbon Dioxide : 45.0000 % volume

Landfill Parameters

Landfill type : No Co-Disposal Capacity : 15008982 Mg
Year Opened : 1971 Current Year : 2002 Closure Year: 2015
Average Acceptance Rate Required from Current Year to Closure Year : 462554.15 Mg/year

Model Results

Year	Refuse In Place (Mg)	**NMOC Emission Rate** (Mg/yr)	(Cubic m/yr)
1972	1.524E+05	2.364E+00	6.595E+02
1973	3.048E+05	4.635E+00	1.293E+03
1974	4.572E+05	6.817E+00	1.902E+03
1975	6.096E+05	8.914E+00	2.487E+03
1976	7.620E+05	1.093E+01	3.049E+03
1977	9.144E+05	1.286E+01	3.589E+03
1978	1.067E+06	1.472E+01	4.107E+03
1979	1.219E+06	1.651E+01	4.606E+03
1980	1.372E+06	1.823E+01	5.085E+03
1981	1.524E+06	1.987E+01	5.545E+03
1982	1.676E+06	2.146E+01	5.987E+03
1983	1.829E+06	2.298E+01	6.411E+03
1984	1.981E+06	2.444E+01	6.820E+03
1985	2.134E+06	2.585E+01	7.212E+03
1986	2.286E+06	2.720E+01	7.588E+03
1987	2.438E+06	2.850E+01	7.950E+03
1988	2.591E+06	2.974E+01	8.298E+03
1989	2.743E+06	3.094E+01	8.632E+03
1990	2.896E+06	3.209E+01	8.953E+03
1991	3.048E+06	3.320E+01	9.261E+03
1992	3.482E+06	3.862E+01	1.077E+04
1993	3.930E+06	4.406E+01	1.229E+04
1994	4.299E+06	4.806E+01	1.341E+04
1995	4.697E+06	5.235E+01	1.460E+04
1996	5.187E+06	5.790E+01	1.615E+04
1997	5.755E+06	6.443E+01	1.797E+04
1998	6.481E+06	7.317E+01	2.041E+04
1999	7.105E+06	7.998E+01	2.231E+04
2000	7.514E+06	8.319E+01	2.321E+04
2001	8.008E+06	8.759E+01	2.443E+04
2002	8.502E+06	9.181E+01	2.561E+04

Appendix A: Emissions Calculations
Company Name: Southside Landfill
Address: 2561 Kentucky Avenue, Indianapolis, IN
Permit: T097-11621-00366
SIC Code: 4953
Reviewer: A. Hennessy
Date: March, 2002

2003	8.964E+06	9.539E+01	2.661E+04
2004	9.427E+06	9.882E+01	2.757E+04
2005	9.889E+06	1.021E+02	2.849E+04
2006	1.035E+07	1.053E+02	2.937E+04
2007	1.081E+07	1.083E+02	3.022E+04
2008	1.128E+07	1.113E+02	3.104E+04
2009	1.174E+07	1.141E+02	3.183E+04
2010	1.220E+07	1.168E+02	3.258E+04
2011	1.266E+07	1.194E+02	3.330E+04
2012	1.313E+07	1.219E+02	3.400E+04
2013	1.359E+07	1.243E+02	3.467E+04
2014	1.405E+07	1.266E+02	3.531E+04
2015	1.501E+07	1.364E+02	3.806E+04
2016	1.501E+07	1.311E+02	3.657E+04
2017	1.501E+07	1.260E+02	3.514E+04

Appendix A: Emissions Calculations
Company Name: Southside Landfill
Address: 2561 Kentucky Avenue, Indianapolis, IN
Permit: T097-11621-00366
SIC Code: 4953
Reviewer: A. Hennessy
Date: March, 2002

Model Parameters (AP-42 Default Values)

Lo : 100.00 m^3 / Mg k : 0.0400 1/yr NMOC : 595.00 ppmv
Methane : 55.0000 % volume Carbon Dioxide : 45.0000 % volume

Landfill Parameters

Landfill type : No Co-Disposal Year Opened : 1971 Current Year : 2002
Closure Year: 2015 Capacity : 15008982 Mg
Average Acceptance Rate Required from Current Year to Closure Year : 462554.15 Mg/year

Model Results

Year	Refuse In Place (Mg)	Methane Emission Rate (Mg/yr)	(Cubic m/yr)
1972	1.524E+05	4.067E+02	6.096E+05
1973	3.048E+05	7.974E+02	1.195E+06
1974	4.572E+05	1.173E+03	1.758E+06
1975	6.096E+05	1.534E+03	2.299E+06
1976	7.620E+05	1.880E+03	2.818E+06
1977	9.144E+05	2.213E+03	3.317E+06
1978	1.067E+06	2.533E+03	3.797E+06
1979	1.219E+06	2.840E+03	4.257E+06
1980	1.372E+06	3.136E+03	4.700E+06
1981	1.524E+06	3.419E+03	5.125E+06
1982	1.676E+06	3.692E+03	5.534E+06
1983	1.829E+06	3.954E+03	5.927E+06
1984	1.981E+06	4.206E+03	6.304E+06
1985	2.134E+06	4.447E+03	6.666E+06
1986	2.286E+06	4.680E+03	7.014E+06
1987	2.438E+06	4.903E+03	7.349E+06
1988	2.591E+06	5.117E+03	7.670E+06
1989	2.743E+06	5.323E+03	7.979E+06
1990	2.896E+06	5.521E+03	8.276E+06
1991	3.048E+06	5.711E+03	8.561E+06
1992	3.482E+06	6.645E+03	9.960E+06
1993	3.930E+06	7.580E+03	1.136E+07
1994	4.299E+06	8.269E+03	1.239E+07
1995	4.697E+06	9.006E+03	1.350E+07

Appendix A: Emissions Calculations
Company Name: Southside Landfill
Address: 2561 Kentucky Avenue, Indianapolis, IN
Permit: T097-11621-00366
SIC Code: 4953
Reviewer: A. Hennessy
Date: March, 2002

1996	5.187E+06	9.962E+03	1.493E+07
1997	5.755E+06	1.108E+04	1.661E+07
1998	6.481E+06	1.259E+04	1.887E+07
1999	7.105E+06	1.376E+04	2.063E+07
2000	7.514E+06	1.431E+04	2.145E+07
2001	8.008E+06	1.507E+04	2.259E+07
2002	8.502E+06	1.580E+04	2.368E+07
2003	8.964E+06	1.641E+04	2.460E+07
2004	9.427E+06	1.700E+04	2.548E+07
2005	9.889E+06	1.757E+04	2.634E+07
2006	1.035E+07	1.812E+04	2.715E+07
2007	1.081E+07	1.864E+04	2.794E+07
2008	1.128E+07	1.914E+04	2.869E+07
2009	1.174E+07	1.963E+04	2.942E+07
2010	1.220E+07	2.009E+04	3.012E+07
2011	1.266E+07	2.054E+04	3.078E+07
2012	1.313E+07	2.097E+04	3.143E+07
2013	1.359E+07	2.138E+04	3.205E+07
2014	1.405E+07	2.178E+04	3.264E+07
2015	1.501E+07	2.347E+04	3.519E+07
2016	1.501E+07	2.255E+04	3.381E+07
2017	1.501E+07	2.167E+04	3.248E+07