EVERGREEN LANDFILL/FKA PELLEGRENE SITE



COMMONWEALTH OF PENNSYLVANIA DEPARTMENT OF ENVIRONMENTAL PROTECTION AIR QUALITY PROGRAM

TITLE V/STATE OPERATING PERMIT

Issue Date:December 19, 2001Effective Date:October 13, 2010Revision Date:October 13, 2010Expiration Date:October 13, 2015

Revision Type: Amendment

In accordance with the provisions of the Air Pollution Control Act, the Act of January 8, 1960, P.L. 2119, as amended, and 25 Pa. Code Chapter 127, the Owner, [and Operator if noted] (hereinafter referred to as permittee) identified below is authorized by the Department of Environmental Protection (Department) to operate the air emission source(s) more fully described in this permit. This Facility is subject to all terms and conditions specified in this permit. Nothing in this permit relieves the permittee from its obligations to comply with all applicable Federal, State and Local laws and regulations.

The regulatory or statutory authority for each permit condition is set forth in brackets. All terms and conditions in this permit are federally enforceable applicable requirements unless otherwise designated as "State-Only" or "non-applicable" requirements.

TITLE V Permit No: 32-00266

Federal Tax Id - Plant Code: 76-0472693-1

Owner Information

Name: EVERGREEN LDFL INC Mailing Address: 625 CHERRINGTON PKWY

> CHERRINGTON CORPORATE CTR MOON TOWNSHIP, PA 15108-4314

Plant Information

Plant: EVERGREEN LANDFILL/FKA PELLEGRENE SITE

Location: 32 Indiana County 32912 Center Township

SIC Code: 4953 Trans. & Utilities - Refuse Systems

Responsible Official

Name: TERRY L STINE

Title: WPMA LANDFILL DIRECTOR

Phone: (814) 479 - 2537

Permit Contact Person

Name: BRIAN E STEWART Title: AREA ENGINEER Phone: (412) 427 - 6404

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MARK A. WAYNER, SOUTHWEST REGION AIR PROGRAM MANAGER





SECTION A. Table of Contents

Section A. Facility/Source Identification

Table of Contents Site Inventory List

Section B. General Title V Requirements

- #001 Definitions
- #002 Property Rights
- #003 Permit Expiration
- #004 Permit Renewal
- #005 Transfer of Ownership or Operational Control
- #006 Inspection and Entry
- #007 Compliance Requirements
- #008 Need to Halt or Reduce Activity Not a Defense
- #009 Duty to Provide Information
- #010 Reopening and Revising the Title V Permit for Cause
- #011 Reopening a Title V Permit for Cause by EPA
- #012 Significant Operating Permit Modifications
- #013 Minor Operating Permit Modifications
- #014 Administrative Operating Permit Amendments
- #015 Severability Clause
- #016 Fee Payment
- #017 Authorization for De Minimis Emission Increases
- #018 Reactivation of Sources
- #019 Circumvention
- #020 Submissions
- #021 Sampling, Testing and Monitoring Procedures
- #022 Recordkeeping Requirements
- #023 Reporting Requirements
- #024 Compliance Certification
- #025 Operational Flexibility
- #026 Risk Management
- #027 Approved Economic Incentives and Emission Trading Programs
- #028 Permit Shield

Section C. Site Level Title V Requirements

- C-I: Restrictions
- C-II: Testing Requirements
- C-III: Monitoring Requirements
- C-IV: Recordkeeping Requirements
- C-V: Reporting Requirements
- C-VI: Work Practice Standards
- C-VII: Additional Requirements
- C-VIII: Compliance Certification
- C-IX: Compliance Schedule

Section D. Source Level Title V Requirements

- D-I: Restrictions
- D-II: Testing Requirements
- D-III: Monitoring Requirements
- D-IV: Recordkeeping Requirements
- D-V: Reporting Requirements
- D-VI: Work Practice Standards
- D-VII: Additional Requirements





SECTION A. Table of Contents

Note: These same sub-sections are repeated for each source!

Section E. Source Group Restrictions

E-I: Restrictions

E-II: Testing RequirementsE-III: Monitoring RequirementsE-IV: Recordkeeping Requirements

E-V: Reporting Requirements E-VI: Work Practice Standards

E-VII: Additional Requirements

Section F. Alternative Operating Scenario(s)

F-I: Restrictions

F-II: Testing Requirements
F-III: Monitoring Requirements
F-IV: Recordkeeping Requirements
F-V: Reporting Requirements
F-VI: Work Practice Standards
F-VII: Additional Requirements

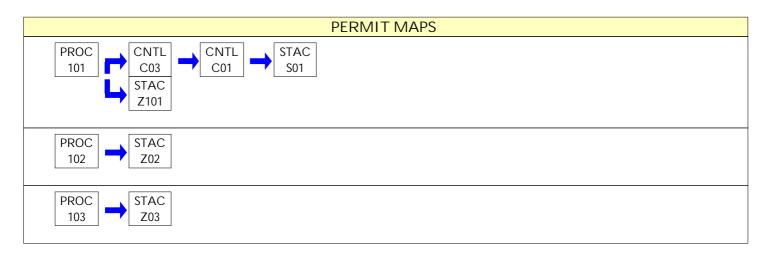
Section G. Emission Restriction Summary

Section H. Miscellaneous



SECTION A. Site Inventory List

Source I	D Source Name	Capacity/Throughput	Fuel/Material
101	LANDFILL WASTE GAS		
102	OPERATIONS AND ROADWAY DUST		
103	SOIL SCREENING UNIT		
C01	ENCLOSED GROUND FLARE		
C03	GAS COLLECTION SYSTEM		
S01	ENCLOSED FLARE STACK		
Z02	ROADWAY DUST FUGITIVE		
Z03	SOIL SCREENING FUGITIVE		
Z101	LANDFILL FUGITIVE EMISSIONS		







#001 [25 Pa. Code § 121.1]

Definitions

Words and terms that are not otherwise defined in this permit shall have the meanings set forth in Section 3 of the Air Pollution Control Act (35 P.S. § 4003) and 25 Pa. Code § 121.1.

#002 [25 Pa. Code § 127.512(c)(4)]

Property Rights

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

#003 [25 Pa. Code § 127.446(a) and (c)]

Permit Expiration

This operating permit is issued for a fixed term of five (5) years and shall expire on the date specified on Page 1 of this permit. The terms and conditions of the expired permit shall automatically continue pending issuance of a new Title V permit, provided the permittee has submitted a timely and complete application and paid applicable fees required under 25 Pa. Code Chapter 127, Subchapter I and the Department is unable, through no fault of the permittee, to issue or deny a new permit before the expiration of the previous permit. An application is complete if it contains sufficient information to begin processing the application, has the applicable sections completed and has been signed by a responsible official.

#004 [25 Pa. Code §§ 127.412, 127.413, 127.414, 127.446(e) & 127.503]

Permit Renewal

- (a) An application for the renewal of the Title V permit shall be submitted to the Department at least six (6) months, and not more than 18 months, before the expiration date of this permit. The renewal application is timely if a complete application is submitted to the Department's Regional Air Manager within the timeframe specified in this permit condition.
- (b) The application for permit renewal shall include the current permit number, the appropriate permit renewal fee, a description of any permit revisions and off-permit changes that occurred during the permit term, and any applicable requirements that were promulgated and not incorporated into the permit during the permit term.
- (c) The renewal application shall also include submission of proof that the local municipality and county, in which the facility is located, have been notified in accordance with 25 Pa. Code § 127.413. The application for renewal of the Title V permit shall also include submission of compliance review forms which have been used by the permittee to update information submitted in accordance with either 25 Pa. Code § 127.412(b) or § 127.412(j).
- (d) The permittee, upon becoming aware that any relevant facts were omitted or incorrect information was submitted in the permit application, shall submit such supplementary facts or corrected information during the permit renewal process. The permittee shall also provide additional information as necessary to address any requirements that become applicable to the source after the date a complete renewal application was submitted but prior to release of a draft permit.

#005 [25 Pa. Code §§ 127.450(a)(4) & 127.464(a)]

Transfer of Ownership or Operational Control

- (a) In accordance with 25 Pa. Code § 127.450(a)(4), a change in ownership or operational control of the source shall be treated as an administrative amendment if:
 - (1) The Department determines that no other change in the permit is necessary;
- (2) A written agreement has been submitted to the Department identifying the specific date of the transfer of permit responsibility, coverage and liability between the current and the new permittee; and,



- (3) A compliance review form has been submitted to the Department and the permit transfer has been approved by the Department.
- (b) In accordance with 25 Pa. Code § 127.464(a), this permit may not be transferred to another person except in cases of transfer-of-ownership which are documented and approved to the satisfaction of the Department.

#006 [25 Pa. Code § 127.513, 35 P.S. § 4008 and § 114 of the CAA]

Inspection and Entry

- (a) Upon presentation of credentials and other documents as may be required by law for inspection and entry purposes, the permittee shall allow the Department of Environmental Protection or authorized representatives of the Department to perform the following:
- (1) Enter at reasonable times upon the permittee's premises where a Title V source is located or emissions related activity is conducted, or where records are kept under the conditions of this permit;
 - (2) Have access to and copy or remove, at reasonable times, records that are kept under the conditions of this permit;
- (3) Inspect at reasonable times, facilities, equipment including monitoring and air pollution control equipment, practices, or operations regulated or required under this permit;
- (4) Sample or monitor, at reasonable times, substances or parameters, for the purpose of assuring compliance with the permit or applicable requirements as authorized by the Clean Air Act, the Air Pollution Control Act, or the regulations promulgated under the Acts.
- (b) Pursuant to 35 P.S. § 4008, no person shall hinder, obstruct, prevent or interfere with the Department or its personnel in the performance of any duty authorized under the Air Pollution Control Act.
- (c) Nothing in this permit condition shall limit the ability of the EPA to inspect or enter the premises of the permittee in accordance with Section 114 or other applicable provisions of the Clean Air Act.

#007 [25 Pa. Code §§ 127.25, 127.444, & 127.512(c)(1)]

Compliance Requirements

- (a) The permittee shall comply with the conditions of this permit. Noncompliance with this permit constitutes a violation of the Clean Air Act and the Air Pollution Control Act and is grounds for one (1) or more of the following:
 - (1) Enforcement action
 - (2) Permit termination, revocation and reissuance or modification
 - (3) Denial of a permit renewal application
- (b) A person may not cause or permit the operation of a source, which is subject to 25 Pa. Code Article III, unless the source(s) and air cleaning devices identified in the application for the plan approval and operating permit and the plan approval issued to the source are operated and maintained in accordance with specifications in the applications and the conditions in the plan approval and operating permit issued by the Department. A person may not cause or permit the operation of an air contamination source subject to 25 Pa. Code Chapter 127 in a manner inconsistent with good operating practices.
- (c) For purposes of Sub-condition (b) of this permit condition, the specifications in applications for plan approvals and operating permits are the physical configurations and engineering design details which the Department determines are essential for the permittee's compliance with the applicable requirements in this Title V permit. Nothing in this sub-condition shall be construed to create an independent affirmative duty upon the permittee to obtain a predetermination from the Department for physical configuration or engineering design detail changes made by the permittee.







#008 [25 Pa. Code § 127.512(c)(2)]

Need to Halt or Reduce Activity Not a Defense

It shall not be a defense for a 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.

#009 [25 Pa. Code §§ 127.411(d) & 127.512(c)(5)]

Duty to Provide Information

- (a) The permittee shall furnish to the Department, within a reasonable time, information that the Department may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit, or to determine compliance with the permit.
- (b) Upon request, the permittee shall also furnish to the Department copies of records that the permittee is required to keep by this permit, or for information claimed to be confidential, the permittee may furnish such records directly to the Administrator of EPA along with a claim of confidentiality.

#010 [25 Pa. Code §§ 127.463, 127.512(c)(3) & 127.542]

Reopening and Revising the Title V Permit for Cause

- (a) This Title V permit may be modified, revoked, reopened and reissued or terminated for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay a permit condition.
- (b) This permit may be reopened, revised and reissued prior to expiration of the permit under one or more of the following circumstances:
- (1) Additional applicable requirements under the Clean Air Act or the Air Pollution Control Act become applicable to a Title V facility with a remaining permit term of three (3) or more years prior to the expiration date of this permit. The Department will revise the permit as expeditiously as practicable but not later than 18 months after promulgation of the applicable standards or regulations. No such revision is required if the effective date of the requirement is later than the expiration date of this permit, unless the original permit or its terms and conditions has been extended.
- (2) Additional requirements, including excess emissions requirements, become applicable to an affected source under the acid rain program. Upon approval by the Administrator of EPA, excess emissions offset plans for an affected source shall be incorporated into the permit.
- (3) The Department or the EPA determines that this permit contains a material mistake or inaccurate statements were made in establishing the emissions standards or other terms or conditions of this permit.
- (4) The Department or the Administrator of EPA determines that the permit must be revised or revoked to assure compliance with the applicable requirements.
- (c) Proceedings to revise this permit shall follow the same procedures which apply to initial permit issuance and shall affect only those parts of this permit for which cause to revise exists. The revision shall be made as expeditiously as practicable.
- (d) Regardless of whether a revision is made in accordance with (b)(1) above, the permittee shall meet the applicable standards or regulations promulgated under the Clean Air Act within the time frame required by standards or regulations.

#011 [25 Pa. Code § 127.543]

Reopening a Title V Permit for Cause by EPA

As required by the Clean Air Act and regulations adopted thereunder, this permit may be modified, reopened and reissued, revoked or terminated for cause by EPA in accordance with procedures specified in 25 Pa. Code § 127.543.



#012 [25 Pa. Code § 127.541]

Significant Operating Permit Modifications

When permit modifications during the term of this permit do not qualify as minor permit modifications or administrative amendments, the permittee shall submit an application for significant Title V permit modifications in accordance with 25 Pa. Code § 127.541.

#013 [25 Pa. Code §§ 121.1 & 127.462]

Minor Operating Permit Modifications

- (a) The permittee may make minor operating permit modifications (as defined in 25 Pa. Code § 121.1) in accordance with 25 Pa. Code § 127.462.
- (b) Unless precluded by the Clean Air Act or the regulations thereunder, the permit shield described in 25 Pa. Code § 127.516 (relating to permit shield) shall extend to an operational flexibility change authorized by 25 Pa. Code § 127.462.

#014 [25 Pa. Code § 127.450]

Administrative Operating Permit Amendments

- (a) The permittee may request administrative operating permit amendments, as defined in 25 Pa. Code § 127.450(a), according to procedures specified in § 127.450. Administrative amendments are not authorized for any amendment precluded by the Clean Air Act or the regulations thereunder from being processed as an administrative amendment.
- (b) Upon taking final action granting a request for an administrative permit amendment in accordance with § 127.450(c), the Department will allow coverage under 25 Pa. Code § 127.516 (relating to permit shield) for administrative permit amendments which meet the relevant requirements of 25 Pa. Code Article III, unless precluded by the Clean Air Act or the regulations thereunder.

#015 [25 Pa. Code § 127.512(b)]

Severability Clause

The provisions of this permit are severable, and if any provision of this permit is determined by the Environmental Hearing Board or a court of competent jurisdiction to be invalid or unenforceable, such a determination will not affect the remaining provisions of this permit.

#016 [25 Pa. Code §§ 127.704, 127.705 & 127.707]

Fee Payment

- (a) The permittee shall pay fees to the Department in accordance with the applicable fee schedules in 25 Pa. Code Chapter 127, Subchapter I (relating to plan approval and operating permit fees).
- (b) Emission Fees. The permittee shall, on or before September 1st of each year, pay applicable annual Title V emission fees for emissions occurring in the previous calendar year as specified in 25 Pa. Code § 127.705. The permittee is not required to pay an emission fee for emissions of more than 4,000 tons of each regulated pollutant emitted from the facility.
- (c) As used in this permit condition, the term "regulated pollutant" is defined as a VOC, each pollutant regulated under Sections 111 and 112 of the Clean Air Act and each pollutant for which a National Ambient Air Quality Standard has been promulgated, except that carbon monoxide is excluded.
- (d) Late Payment. Late payment of emission fees will subject the permittee to the penalties prescribed in 25 Pa. Code § 127.707 and may result in the suspension or termination of the Title V permit. The permittee shall pay a penalty of fifty percent (50%) of the fee amount, plus interest on the fee amount computed in accordance with 26 U.S.C.A. § 6621(a)(2) from the date the emission fee should have been paid in accordance with the time frame specified in 25 Pa. Code § 127.705(c).



- (e) The permittee shall pay an annual operating permit administration fee according to the fee schedule established in 25 Pa. Code § 127.704(c) if the facility, identified in Subparagraph (iv) of the definition of the term "Title V facility" in 25 Pa. Code § 121.1, is subject to Title V after the EPA Administrator completes a rulemaking requiring regulation of those sources under Title V of the Clean Air Act.
- (f) This permit condition does not apply to a Title V facility which qualifies for exemption from emission fees under 35 P.S. § 4006.3(f).

#017 [25 Pa. Code §§ 127.14(b) & 127.449]

Authorization for De Minimis Emission Increases

- (a) This permit authorizes de minimis emission increases from a new or existing source in accordance with 25 Pa. Code §§ 127.14 and 127.449 without the need for a plan approval or prior issuance of a permit modification. The permittee shall provide the Department with seven (7) days prior written notice before commencing any de minimis emissions increase that would result from either: (1) a physical change of minor significance under § 127.14(c)(1); or (2) the construction, installation, modification or reactivation of an air contamination source. The written notice shall:
 - (1) Identify and describe the pollutants that will be emitted as a result of the de minimis emissions increase.
- (2) Provide emission rates expressed in tons per year and in terms necessary to establish compliance consistent with any applicable requirement.

The Department may disapprove or condition de minimis emission increases at any time.

- (b) Except as provided below in (c) and (d) of this permit condition, the permittee is authorized during the term of this permit to make de minimis emission increases (expressed in tons per year) up to the following amounts without the need for a plan approval or prior issuance of a permit modification:
- (1) Four tons of carbon monoxide from a single source during the term of the permit and 20 tons of carbon monoxide at the facility during the term of the permit.
- (2) One ton of NOx from a single source during the term of the permit and 5 tons of NOx at the facility during the term of the permit.
- (3) One and six-tenths tons of the oxides of sulfur from a single source during the term of the permit and 8.0 tons of oxides of sulfur at the facility during the term of the permit.
- (4) Six-tenths of a ton of PM10 from a single source during the term of the permit and 3.0 tons of PM10 at the facility during the term of the permit. This shall include emissions of a pollutant regulated under Section 112 of the Clean Air Act unless precluded by the Clean Air Act or 25 Pa. Code Article III.
- (5) One ton of VOCs from a single source during the term of the permit and 5.0 tons of VOCs at the facility during the term of the permit. This shall include emissions of a pollutant regulated under Section 112 of the Clean Air Act unless precluded by the Clean Air Act or 25 Pa. Code Article III.
- (c) In accordance with § 127.14, the permittee may install the following minor sources without the need for a plan approval:
- (1) Air conditioning or ventilation systems not designed to remove pollutants generated or released from other sources.
 - (2) Combustion units rated at 2,500,000 or less Btu per hour of heat input.
- (3) Combustion units with a rated capacity of less than 10,000,000 Btu per hour heat input fueled by natural gas supplied by a public utility, liquefied petroleum gas or by commercial fuel oils which are No. 2 or lighter, viscosity less



than or equal to 5.82 c St, and which meet the sulfur content requirements of 25 Pa. Code § 123.22 (relating to combustion units). For purposes of this permit, commercial fuel oil shall be virgin oil which has no reprocessed, recycled or waste material added.

- (4) Space heaters which heat by direct heat transfer.
- (5) Laboratory equipment used exclusively for chemical or physical analysis.
- (6) Other sources and classes of sources determined to be of minor significance by the Department.
- (d) This permit does not authorize de minimis emission increases if the emissions increase would cause one or more of the following:
- (1) Increase the emissions of a pollutant regulated under Section 112 of the Clean Air Act except as authorized in Subparagraphs (b)(4) and (5) of this permit condition.
- (2) Subject the facility to the prevention of significant deterioration requirements in 25 Pa. Code Chapter 127, Subchapter D and/or the new source review requirements in Subchapter E.
- (3) Violate any applicable requirement of the Air Pollution Control Act, the Clean Air Act, or the regulations promulgated under either of the acts.
- (4) Changes which are modifications under any provision of Title I of the Clean Air Act and emission increases which would exceed the allowable emissions level (expressed as a rate of emissions or in terms of total emissions) under the Title V permit.
- (e) Unless precluded by the Clean Air Act or the regulations thereunder, the permit shield described in 25 Pa. Code § 127.516 (relating to permit shield) applies to de minimis emission increases and the installation of minor sources made pursuant to this permit condition.
- (f) Emissions authorized under this permit condition shall be included in the monitoring, recordkeeping and reporting requirements of this permit.
- (g) Except for de minimis emission increases allowed under this permit, 25 Pa. Code § 127.449, or sources and physical changes meeting the requirements of 25 Pa. Code § 127.14, the permittee is prohibited from making physical changes or engaging in activities that are not specifically authorized under this permit without first applying for a plan approval. In accordance with § 127.14(b), a plan approval is not required for the construction, modification, reactivation, or installation of the sources creating the de minimis emissions increase.
- (h) The permittee may not meet de minimis emission threshold levels by offsetting emission increases or decreases at the same source.

#018 [25 Pa. Code §§ 127.11a & 127.215]

Reactivation of Sources

- (a) The permittee may reactivate a source at the facility that has been out of operation or production for at least one year, but less than or equal to five (5) years, if the source is reactivated in accordance with the requirements of 25 Pa. Code §§ 127.11a and 127.215. The reactivated source will not be considered a new source.
- (b) A source which has been out of operation or production for more than five (5) years but less than 10 years may be reactivated and will not be considered a new source if the permittee satisfies the conditions specified in 25 Pa. Code § 127.11a(b).





#019 [25 Pa. Code §§ 121.9 & 127.216]

Circumvention

- (a) The owner of this Title V facility, or any other person, may not circumvent the new source review requirements of 25 Pa. Code Chapter 127, Subchapter E by causing or allowing a pattern of ownership or development, including the phasing, staging, delaying or engaging in incremental construction, over a geographic area of a facility which, except for the pattern of ownership or development, would otherwise require a permit or submission of a plan approval application.
- (b) No person may permit the use of a device, stack height which exceeds good engineering practice stack height, dispersion technique or other technique which, without resulting in reduction of the total amount of air contaminants emitted, conceals or dilutes an emission of air contaminants which would otherwise be in violation of this permit, the Air Pollution Control Act or the regulations promulgated thereunder, except that with prior approval of the Department, the device or technique may be used for control of malodors.

#020 [25 Pa. Code §§ 127.402(d) & 127.513(1)]

Submissions

(a) Reports, test data, monitoring data, notifications and requests for renewal of the permit shall be submitted to the:

Regional Air Program Manager
PA Department of Environmental Protection
(At the address given on the permit transmittal letter, or otherwise notified)

(b) Any report or notification for the EPA Administrator or EPA Region III should be addressed to:

Air Enforcement Branch (3AP00)
United States Environmental Protection Agency
Region 3
1650 Arch Street
Philadelphia, PA 19103-2029

(c) An application, form, report or compliance certification submitted pursuant to this permit condition shall contain certification by a responsible official as to truth, accuracy, and completeness as required under 25 Pa. Code § 127.402(d). Unless otherwise required by the Clean Air Act or regulations adopted thereunder, this certification and any other certification required pursuant to this permit shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate and complete.

#021 [25 Pa. Code §§ 127.441(c) & 127.463(e); Chapter 139; & 114(a)(3), 504(b) of the CAA]

Sampling, Testing and Monitoring Procedures

- (a) The permittee shall perform the emissions monitoring and analysis procedures or test methods for applicable requirements of this Title V permit. In addition to the sampling, testing and monitoring procedures specified in this permit, the Permittee shall comply with any additional applicable requirements promulgated under the Clean Air Act after permit issuance regardless of whether the permit is revised.
- (b) The sampling, testing and monitoring required under the applicable requirements of this permit, shall be conducted in accordance with the requirements of 25 Pa. Code Chapter 139 unless alternative methodology is required by the Clean Air Act (including §§ 114(a)(3) and 504(b)) and regulations adopted thereunder.

#022 [25 Pa. Code §§ 127.511 & Chapter 135]

Recordkeeping Requirements

(a) The permittee shall maintain and make available, upon request by the Department, records of required monitoring information that include the following:





- (1) The date, place (as defined in the permit) and time of sampling or measurements.
- (2) The dates the analyses were performed.
- (3) The company or entity that performed the analyses.
- (4) The analytical techniques or methods used.
- (5) The results of the analyses.
- (6) The operating conditions as existing at the time of sampling or measurement.
- (b) The permittee shall retain records of the required monitoring data and supporting information for at least five (5) years from the date of the monitoring sample, measurement, report or application. Supporting information includes the calibration data and maintenance records and original strip-chart recordings for continuous monitoring instrumentation, and copies of reports required by the permit.
- (c) The permittee shall maintain and make available to the Department upon request, records including computerized records that may be necessary to comply with the reporting, recordkeeping and emission statement requirements in 25 Pa. Code Chapter 135 (relating to reporting of sources). In accordance with 25 Pa. Code Chapter 135, § 135.5, such records may include records of production, fuel usage, maintenance of production or pollution control equipment or other information determined by the Department to be necessary for identification and quantification of potential and actual air contaminant emissions. If direct recordkeeping is not possible or practical, sufficient records shall be kept to provide the needed information by indirect means.

#023 [25 Pa. Code §§ 127.411(d), 127.442, 127.463(e) & 127.511(c)]

Reporting Requirements

- (a) The permittee shall comply with the reporting requirements for the applicable requirements specified in this Title V permit. In addition to the reporting requirements specified herein, the permittee shall comply with any additional applicable reporting requirements promulgated under the Clean Air Act after permit issuance regardless of whether the permit is revised.
- (b) Pursuant to 25 Pa. Code § 127.511(c), the permittee shall submit reports of required monitoring at least every six (6) months unless otherwise specified in this permit. Instances of deviations (as defined in 25 Pa. Code § 121.1) from permit requirements shall be clearly identified in the reports. The reporting of deviations shall include the probable cause of the deviations and corrective actions or preventative measures taken, except that sources with continuous emission monitoring systems shall report according to the protocol established and approved by the Department for the source. The required reports shall be certified by a responsible official.
- (c) Every report submitted to the Department under this permit condition shall comply with the submission procedures specified in Section B, Condition #020(c) of this permit.
- (d) Any records, reports or information obtained by the Department or referred to in a public hearing shall be made available to the public by the Department except for such records, reports or information for which the permittee has shown cause that the documents should be considered confidential and protected from disclosure to the public under Section 4013.2 of the Air Pollution Control Act and consistent with Sections 112(d) and 114(c) of the Clean Air Act and 25 Pa. Code § 127.411(d). The permittee may not request a claim of confidentiality for any emissions data generated for the Title V facility.

#024 [25 Pa. Code § 127.513]

Compliance Certification

(a) One year after the date of issuance of the Title V permit, and each year thereafter, unless specified elsewhere in the permit, the permittee shall submit to the Department and EPA Region III a certificate of compliance with the terms and conditions in this permit, for the previous year, including the emission limitations, standards or work practices. This



certification shall include:

- (1) The identification of each term or condition of the permit that is the basis of the certification.
- (2) The compliance status.
- (3) The methods used for determining the compliance status of the source, currently and over the reporting period.
- (4) Whether compliance was continuous or intermittent.
- (b) The compliance certification should be postmarked or hand-delivered within thirty days of each anniversary date of the date of issuance or, of the submittal date specified elsewhere in the permit, to the Department and EPA in accordance with the submission requirements specified in condition #020 of this section.

#025 [25 Pa. Code § 127.3]

Operational Flexibility

- (a) The permittee is authorized to make changes within the Title V facility in accordance with the following provisions in 25 Pa. Code Chapter 127 which implement the operational flexibility requirements of Section 502(b)(10) of the Clean Air Act and Section 6.1(i) of the Air Pollution Control Act:
 - (1) Section 127.14 (relating to exemptions)
 - (2) Section 127.447 (relating to alternative operating scenarios)
 - (3) Section 127.448 (relating to emissions trading at facilities with Federally enforceable emissions caps)
 - (4) Section 127.449 (relating to de minimis emission increases)
 - (5) Section 127.450 (relating to administrative operating permit amendments)
 - (6) Section 127.462 (relating to minor operating permit amendments)
 - (7) Subchapter H (relating to general plan approvals and operating permits)
- (b) Unless precluded by the Clean Air Act or the regulations adopted thereunder, the permit shield authorized under 25 Pa. Code § 127.516 shall extend to operational flexibility changes made at this Title V facility pursuant to this permit condition and other applicable operational flexibility terms and conditions of this permit.

#026 [25 Pa. Code §§ 127.441(d), 127.512(i) and 40 CFR Part 68]

Risk Management

- (a) If required by Section 112(r) of the Clean Air Act, the permittee shall develop and implement an accidental release program consistent with requirements of the Clean Air Act, 40 CFR Part 68 (relating to chemical accident prevention provisions) and the Federal Chemical Safety Information, Site Security and Fuels Regulatory Relief Act (P.L. 106-40).
- (b) The permittee shall prepare and implement a Risk Management Plan (RMP) which meets the requirements of Section 112(r) of the Clean Air Act, 40 CFR Part 68 and the Federal Chemical Safety Information, Site Security and Fuels Regulatory Relief Act when a regulated substance listed in 40 CFR § 68.130 is present in a process in more than the listed threshold quantity at the Title V facility. The permittee shall submit the RMP to the federal Environmental Protection Agency according to the following schedule and requirements:
- (1) The permittee shall submit the first RMP to a central point specified by EPA no later than the latest of the following:
 - (i) Three years after the date on which a regulated substance is first listed under § 68.130; or,



- (ii) The date on which a regulated substance is first present above a threshold quantity in a process.
- (2) The permittee shall submit any additional relevant information requested by the Department or EPA concerning the RMP and shall make subsequent submissions of RMPs in accordance with 40 CFR § 68.190.
- (3) The permittee shall certify that the RMP is accurate and complete in accordance with the requirements of 40 CFR Part 68, including a checklist addressing the required elements of a complete RMP.
- (c) As used in this permit condition, the term "process" shall be as defined in 40 CFR § 68.3. The term "process" means any activity involving a regulated substance including any use, storage, manufacturing, handling, or on-site movement of such substances or any combination of these activities. For purposes of this definition, any group of vessels that are interconnected, or separate vessels that are located such that a regulated substance could be involved in a potential release, shall be considered a single process.
- (d) If the Title V facility is subject to 40 CFR Part 68, as part of the certification required under this permit, the permittee shall:
- (1) Submit a compliance schedule for satisfying the requirements of 40 CFR Part 68 by the date specified in 40 CFR § 68.10(a); or,
- (2) Certify that the Title V facility is in compliance with all requirements of 40 CFR Part 68 including the registration and submission of the RMP.
- (e) If the Title V facility is subject to 40 CFR Part 68, the permittee shall maintain records supporting the implementation of an accidental release program for five (5) years in accordance with 40 CFR § 68.200.
- (f) When the Title V facility is subject to the accidental release program requirements of Section 112(r) of the Clean Air Act and 40 CFR Part 68, appropriate enforcement action will be taken by the Department if:
 - (1) The permittee fails to register and submit the RMP or a revised plan pursuant to 40 CFR Part 68.
- (2) The permittee fails to submit a compliance schedule or include a statement in the compliance certification required under Condition #24 of Section B of this Title V permit that the Title V facility is in compliance with the requirements of Section 112(r) of the Clean Air Act, 40 CFR Part 68, and 25 Pa. Code § 127.512(i).

#027 [25 Pa. Code § 127.512(e)]

Approved Economic Incentives and Emission Trading Programs

No permit revision shall be required under approved economic incentives, marketable permits, emissions trading and other similar programs or processes for changes that are provided for in this Title V permit.

#028 [25 Pa. Code §§ 127.516, 127.450(d), 127.449(f) & 127.462(g)]

Permit Shield

- (a) The permittee's compliance with the conditions of this permit shall be deemed in compliance with applicable requirements (as defined in 25 Pa. Code § 121.1) as of the date of permit issuance if either of the following applies:
 - (1) The applicable requirements are included and are specifically identified in this permit.
- (2) The Department specifically identifies in the permit other requirements that are not applicable to the permitted facility or source.
- (b) Nothing in 25 Pa. Code § 127.516 or the Title V permit shall alter or affect the following:
- (1) The provisions of Section 303 of the Clean Air Act, including the authority of the Administrator of the EPA provided thereunder.



- (2) The liability of the permittee for a violation of an applicable requirement prior to the time of permit issuance.
- (3) The applicable requirements of the acid rain program, consistent with Section 408(a) of the Clean Air Act.
- (4) The ability of the EPA to obtain information from the permittee under Section 114 of the Clean Air Act.
- (c) Unless precluded by the Clean Air Act or regulations thereunder, final action by the Department on minor or significant permit modifications, and operational flexibility changes shall be covered by the permit shield. Upon taking final action granting a request for an administrative permit amendment, the Department will allow coverage of the amendment by the permit shield in § 127.516 for administrative amendments which meet the relevant requirements of 25 Pa. Code Article III.
- (d) The permit shield authorized under § 127.516 is in effect for the permit terms and conditions in this Title V permit, including administrative operating permit amendments and minor operating permit modifications.





I. RESTRICTIONS.

Emission Restriction(s).

001 [25 Pa. Code §123.1]

Prohibition of certain fugitive emissions

- (a) No person may permit the emission into the outdoor atmosphere of fugitive air contaminant from a source other than the following:
 - (1) Construction or demolition of buildings or structures.
 - (2) Grading, paving and maintenance of roads and streets.
- (3) Use of roads and streets. Emissions from material in or on trucks, railroad cars and other vehicular equipment are not considered as emissions from use of roads and streets.
 - (4) Clearing of land.
 - (5) Stockpiling of materials.
 - (6) Open burning operations.
 - (7) Blasting in open pit mines. Emissions from drilling are not considered as emissions from blasting.
- (8) Coke oven batteries, provided the fugitive air contaminants emitted from any coke oven battery comply with the standards for visible fugitive emissions in
- (9) Sources and classes of sources other than those identified in paragraphs (1)-(8), for which the operator has obtained a determination from the Department that fugitive emissions from the source, after appropriate control, meet the following requirements:
 - (i) the emissions are of minor significance with respect to causing air pollution; and
- (ii) the emissions are not preventing or interfering with the attainment or maintenance of any ambient air quality standard.
- (b) An application form for requesting a determination under either subsection (a)(9) or 129.15(c) is available from the Department. In reviewing these applications, the Department may require the applicant to supply information including, but not limited to, a description of proposed control measures, characteristics of emissions, quantity of emissions, and ambient air quality data and analysis showing the impact of the source on ambient air quality. The applicant shall be required to demonstrate that the requirements of subsections (a)(9) and (c) and 123.2 (relating to fugitive particulate matter) or of the requirements of 129.15(c) have been satisfied. Upon such demonstration, the Department will issue a determination, in writing, either as an operating permit condition, for those sources subject to permit requirements under the act, or as an order containing appropriate conditions and limitations.

002 [25 Pa. Code §123.2]

Fugitive particulate matter

A person may not permit fugitive particulate matter to be emitted into the outdoor atmosphere from a source specified in 123.1(a)(1) -- (9) (relating to prohibition of certain fugitive emissions) if such emissions are visible at the point the emissions pass outside the person's property.

003 [25 Pa. Code §123.31]

Limitations

(a) Limitations are as follows:



- (1) If control of malodorous air contaminants is required under subsection (b), emissions shall be incinerated at a minimum of 1200F for at least 0.3 seconds prior to their emission into the outdoor atmosphere.
- (2) Techniques other than incineration may be used to control malodorous air contaminants if such techniques are equivalent to or better than the required incineration in terms of control of the odor emissions and are approved in writing by the Department.
- (b) A person may not permit the emission into the outdoor atmosphere of any malodorous air contaminants from any source in such a manner that the malodors are detectable outside the property of the person on whose land the source is being operated.

004 [25 Pa. Code §123.41]

Limitations

A person may not permit the emission into the outdoor atmosphere of visible air contaminants in such a manner that the opacity of the emission is either of the following:

- (1) Equal to or greater than 20% for a period or periods aggregating more than three minutes in any 1 hour.
- (2) Equal to or greater than 60% at any time.

005 [25 Pa. Code §123.42]

Exceptions

The limitations of 123.41 (relating to limitations) shall not apply to a visible emission in any of the following instances:

- (1) when the presence of uncombined water is the only reason for failure of the emission to meet the limitations.
- (2) When the emission results from the operation of equipment used solely to train and test persons in observing the opacity of visible emissions.
- (3) When the emission results from sources specified in 123.1(a)(1) -- (9) (relating to prohibition of certain fugitive emissions).
- (4) When arising from the production of agricultural commodities in their unmanufactured state on the premises of the farm operation.

006 [25 Pa. Code §127.441]

Operating permit terms and conditions.

The design capacity of this landfill is established at 7.3 million tons of municipal solid waste. This include the waste deposited in the existing Phase I and Phase II areas, and the anticipated capacity of the proposed Phase III area. Any increase in the design capacity above this level is subject to permitting by both Air Quality(AQ) and the Bureau of Waste Management(BWM).

007 [25 Pa. Code §127.441]

Operating permit terms and conditions.

The owner/operator shall comply with the fugitive emission standards established at 25 PA Code 123.1 and 123.2. All reasonable actions shall be taken to prevent particulate matter from aforementioned activities from becoming airborne.

a) All roadways shall be maintained as specified in the Form (A) (Air Resources Protection) which was submitted as part of the BWM application. Paved roadways shall be flushed with a pressurized





water truck or similar vehicle. If this method of control is deemed to be inadequate, the Department reserves the right to require the use of a vacuum type sweeper to further control fugitive emissions. Unpaved roadways shall be treated on a preventative basis using dust suppressants and/or water to minimize fugitive dust generation. All road surfaces shall be maintained so that dust control measures can be effectively applied or operated.

- b) For paved roadways, the following records shall be maintained on-site and be made available to the Department upon request:
 - i) Daily log of time and location of any water flushing or vacuum sweeping conducted.
 - ii) Log of type, time, and location of any maintenance repairs, patching, or repaving of roads.
 - iii) A log explaining why any water flushing or vacuum sweeping was not performed.
- c) For unpaved roadways, the following records shall be maintained on-site, and be made available to the Department upon request:
 - i) A daily log of time and location of treated areas.
 - ii) An indication of dust suppressants used.
 - iii) A log of dilution ratios of dust suppressants and diluents used if chemical suppressants are used.
 - iv) A purchase record of all dust suppressants used.
- d) All vehicles which come into contact with unpaved roadways shall be processed through an operating truck wash as needed before exiting the facility in order to prevent any mud, waste, or debris from being tracked onto the approach route(s).
- e) A pressurized water truck or similar vehicle shall be available on-site to minimize the generation of fugitive dust from landfill construction, filling, or covering operations.
- f) Vehicular traffic operating within the landfill shall be limited to a 15 mph speed limit. Clear legible notices of this speed limit shall be posted on all access routes, and speed limit shall be strictly enforced by landfill personnel.

008 [25 Pa. Code §127.441]

Operating permit terms and conditions.

The amount of waste accepted at this landfill shall be limited to 1500 tons per day. Records demonstrating compliance with this condition shall be kept on site for a period of five years and be made available to the Department upon request.

009 [25 Pa. Code §127.441]

Operating permit terms and conditions.

Emissions from the facility shall be limited as follows:

Pollutants	Facility Emission Limits (12 month rolling average)
NOx	34.37
CO	76.97
SO2	6.53
PM10	57.95
NMOC	40.3
HAPs	7.80



010 [25 Pa. Code §129.14]

Open burning operations

- (a) Air basins. No person may permit the open burning of material in an air basin.
- (b) Outside of air basins. No person may permit the open burning of material in an area outside of air basins in a manner that:
- (1) The emissions are visible, at any time, at the point such emissions pass outside the property of the person on whose land the open burning is being conducted.
- (2) Malodorous air contaminants from the open burning are detectable outside the property of the person on whose land the open burning is being conducted.
 - (3) The emissions interfere with the reasonable enjoyment of life or property.
 - (4) The emissions cause damage to vegetation or property.
 - (5) The emissions are or may be deleterious to human or animal health.
- (c) Exceptions: The requirements of subsections (a) and (b) do not apply where the open burning operations result from:
- (1) A fire set to prevent or abate a fire hazard, when approved by the Department and set by or under the supervision of a public officer.
 - (2) A fire set for the purpose of instructing personnel in fire fighting, when approved by the Department.
 - (3) A fire set for the prevention and control of disease or pests, when approved by the Department.
- (4) A fire set in conjunction with the production of agricultural commodities in their unmanufactured state on the premises of the farm operation.
- (5) A fire set for the purpose of burning domestic refuse, when the fire is on the premises of a structure occupied solely as a dwelling by two families or less and when the refuse results from the normal occupancy of such structure.
 - (6) A fire set solely for recreational or ceremonial purposes.
 - (7) A fire set solely for cooking food.
 - (d) Clearing and grubbing wastes. The following is applicable to clearing and grubbing wastes:
 - (1) As used in this subsection the following terms shall have the following meanings:

Air curtain destructor -- A mechanical device which forcefully projects a curtain of air across a pit in which open burning is being conducted so that combustion efficiency is increased and smoke and other particulate matter are contained.

Clearing and grubbing wastes -- Trees, shrubs, and other native vegetation which are cleared from land during or prior to the process of construction. The term does not include demolition wastes and dirt laden roots.

- (2) Subsection (a) notwithstanding, clearing and grubbing wastes may be burned in a basin subject to the following requirements:
 - (i) Air curtain destructors shall be used when burning clearing and grubbing wastes.



- (ii) Each proposed use of air curtain destructors shall be reviewed and approved by the Department in writing with respect to equipment arrangement, design and existing environmental conditions prior to commencement of burning. Proposals approved under this subparagraph need not obtain plan approval or operating permits under Chapter 127 (relating to construction modification, reactivation and operation of sources).
- (iii) Approval for use of an air curtain destructor at one site may be granted for a specified period not to exceed 3 months, but may be extended for additional limited periods upon further approval by the Department.
- (iv) The Department reserves the right to rescind approval granted if a determination by the Department indicates that an air pollution problem exists.
- (3) Subsection (b) notwithstanding clearing and grubbing wastes may be burned outside of an air basin, subject to the following limitations:
- (i) Upon receipt of a complaint or determination by the Department that an air pollution problem exists, the Department may order that the open burning cease or comply with subsection (b) of this section.
- (ii) Authorization for open burning under this paragraph does not apply to clearing and grubbing wastes transported from an air basin for disposal outside of an air basin.
- (4) During an air pollution episode, open burning is limited by Chapter 137 (relating to air pollution episodes) and shall cease as specified in such chapter.
- # 011 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.752] Subpart WWW--Standards of Performance for Municipal Solid Waste Landfills Standards for air emissions from municipal solid waste landfills.

In accordance with 40 CFR 60.752(b)(2)(iii)(B), flare shall be operated to either reduce NMOC emissions by 98 weight percent, or to reduce the outlet NMOC concentration to less than 20 parts per million, by volume, dry basis, as hexane, at 3 percent oxygen.

012 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.752] Subpart WWW--Standards of Performance for Municipal Solid Waste Landfills

Standards for air emissions from municipal solid waste landfills.

- (a) Each owner or operator of an MSW landfill having a design capacity less than 2.5 million megagrams by mass or 2.5 million cubic meters by volume shall submit an initial design capacity report to the Administrator as provided in 60.757(a). The landfill may calculate design capacity in either megagrams or cubic meters for comparison with the exemption values. Any density conversions shall be documented and submitted with the report. For purposes of part 70 permitting, a landfill with a design capacity less than 2.5 million megagrams or 2.5 million cubic meters does not require an operating permit under part 70 of this chapter. Submittal of the initial design capacity report shall fulfill the requirements of this subpart except as provided for in paragraphs (a)(1) and (a)(2) of this section.
- (1) The owner or operator shall submit to the Administrator an amended design capacity report, as provided for in 60.757(a)(3), when there is any increase in the design capacity of a landfill subject to the provisions of this subpart, whether the increase results from an increase in the area or depth of the landfill, a change in the operating procedures of the landfill, or any other means.
- (2) If any increase in the maximum design capacity of a landfill exempted from the provisions of 60.752(b)through60.759 of this subpart on the basis of the design capacity exemption in paragraph (a) of this section results in a revised maximum design capacity equal to or greater than 2.5 million megagrams or 2.5 million cubic meters, the owner or operator shall comply with the provision of paragraph (b) of this section.



- (b) Each owner or operator of an MSW landfill having a design capacity equal to or greater than 2.5 million megagrams or 2.5 million cubic meters, shall either comply with paragraph (b)(2) of this section or calculate an NMOC emission rate for the landfill using the procedures specified in 60.754. The NMOC emission rate shall be recalculated annually, except as provided in 60.757(b)(1)(ii) of this subpart. The owner or operator of an MSW landfill subject to this subpart with a design capacity greater than or equal to 2.5 million megagrams or 2.5 million cubic meters is subject to part 70 permitting requirements. When a landfill is closed, and either never needed control or meets the conditions for control system removal specified in 60.752(b)(2)(v) of this subpart, a part 70 operating permit is no longer required.
 - (1) If the calculated NMOC emission rate is less than 50 megagrams per year, the owner or operator shall:
 - (i) Submit an annual emission report to the Administrator, except as provided for in 60.757(b)(1)(ii); and
- (ii) Recalculate the NMOC emission rate annually using the procedures specified in 60.754(a)(1) until such time as the calculated NMOC emission rate is equal to or greater than 50 megagrams per year, or the landfill is closed.
- (A) If the NMOC emission rate, upon recalculation required in paragraph (b)(1)(ii) of this section, is equal to or greater than 50 megagrams per year, the owner or operator shall install a collection and control system in compliance with paragraph (b)(2) of this section.
- (B) If the landfill is permanently closed, a closure notification shall be submitted to the Administrator as provided for in 60.757(d).
- (2) If the calculated NMOC emission rate is equal to or greater than 50 megagrams per year, the owner or operator shall:
- (i) Submit a collection and control system design plan prepared by a professional engineer to the Administrator within 1 year:
- (A) The collection and control system as described in the plan shall meet the design requirements of paragraph (b)(2)(ii) of this section.
- (B) The collection and control system design plan shall include any alternatives to the operational standards, test methods, procedures, compliance measures, monitoring, recordkeeping or reporting provisions of 60.753 through 60.758 proposed by the owner or operator.
- (C) The collection and control system design plan shall either conform with specifications for active collection systems in 60.759 or include a demonstration to the Administrator's satisfaction of the sufficiency of the alternative provisions to 60.759.
- (D) The Administrator shall review the information submitted under paragraphs (b)(2)(i)(A), (B) and (C) of this section and either approve it, disapprove it, or request that additional information be submitted. Because of the many site-specific factors involved with landfill gas system design, alternative systems may be necessary. A wide variety of system designs are possible, such as vertical wells, combination horizontal and vertical collection systems, or horizontal trenches only, leachate collection components, and passive systems.
- (ii) Install a collection and control system within 18 months of the submittal of the design plan under paragraph (b)(2)(i) of this section that effectively captures the gas generated within the landfill.
 - (A) An active collection system shall:
- (1) 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;



- (2) 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:
 - (i) 5 years or more if active; or
 - (ii) 2 years or more if closed or at final grade;
 - (3) Collect gas at a sufficient extraction rate;
 - (4) Be designed to minimize off-site migration of subsurface gas.
 - (B) A passive collection system shall:
 - (1) Comply with the provisions specified in paragraphs (b)(2)(ii), (A)(1), (2), and (4) of this section.
- (2) 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 this title.
- (iii) Route all the collected gas to a control system that complies with the requirements in either paragraph (b)(2)(iii)(A), (B) or (C) of this section.
 - (A) An open flare designed and operated in accordance with 60.18;
- (B) A control system designed and operated to reduce NMOC by 98 weight-percent, or, when an enclosed combustion device is used for control, to either reduce NMOC by 98 weight percent or reduce the outlet NMOC concentration to less than 20 parts per million by volume, dry basis as hexane at 3 percent oxygen. The reduction efficiency or parts per million by volume shall be established by an initial performance test, required under 60.8 using the test methods specified in 60.754(d).
- (1) If a boiler or process heater is used as the control device, the landfill gas stream shall be introduced into the flame zone.
- (2) The control device shall be operated within the parameter ranges established during the initial or most recent performance test. The operating parameters to be monitored are specified in 60.756;
- (C) Route the collected gas to a treatment system that processes the collected gas for subsequent sale or use. All emissions from any atmospheric vent from the gas treatment system shall be subject to the requirements of paragraph (b)(2)(iii) (A) or (B) of this section.
- (iv) Operate the collection and control device installed to comply with this subpart in accordance with the provisions of 60.753, 60.755 and 60.756.
- (v) The collection and control system may be capped or removed provided that all the conditions of paragraphs (b)(2)(v) (A), (B), and (C) of this section are met:
- (A) The landfill shall be no longer accepting solid waste and be permanently closed under the requirements of 258.60 of this title. A closure report shall be submitted to the Administrator as provided in 60.757(d);
 - (B) The collection and control system shall have been in operation a minimum of 15 years; and
- (C) Following the procedures specified in 60.754(b) of this subpart, the calculated NMOC gas produced by the landfill

32-00266

SECTION C. Site Level Requirements



shall be less than 50 megagrams per year on three successive test dates. The test dates shall be no less than 90 days apart, and no more than 180 days apart.

013 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.755] Subpart WWW--Standards of Performance for Municipal Solid Waste Landfills Compliance provisions.

- (a) Except as provided in 60.752(b)(2)(i)(B), the specified methods in paragraphs (a)(1) through (a)(6) of this section shall be used to determine whether the gas collection system is in compliance with 60.752(b)(2)(ii).**
- (1) For the purposes of calculating the maximum expected gas generation flow rate from the landfill to determine compliance with 60.752(b)(2)(ii)(A) (1), one of the following equations shall be used. The k and Lo kinetic factors should be those published in the most recent Compilation of Air Pollutant Emission Factors (AP-42) or other site specific values demonstrated to be appropriate and approved by the Administrator. If k has been determined as specified in 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.
 - (i) For sites with unknown year-to-year solid waste acceptance rate:

Qm = 2Lo R (e-kc - e-kt)

where,

Qm = maximum expected gas generation flow rate, cubic meters per year

Lo = methane generation potential, cubic meters per megagram solid waste

R = average annual acceptance rate, megagrams per year

k = methane generation rate constant, year -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 = O and e-kc = 1)
- (ii) For sites with known year-to-year solid waste acceptance rate:

where,

QM=maximum expected gas generation flow rate, cubic meters per year

k=methane generation rate constant, year-1

Lo=methane generation potential, cubic meters per megagram solid waste



Mi=mass of solid waste in the ith section, megagrams

ti=age of the ith section, years

- (iii) 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 paragraphs (a)(1)(i) and (ii) of this section. 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 paragraphs (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 collectors for compliance with 60.752(b)(2)(ii)(A)(2), the owner or operator shall design a system of vertical wells, horizontal collectors, or other collection devices, satisfactory to the Administrator, 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 60.752(b)(2)(ii)(A) (3), the owner or operator 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 5 calendar days, except for the three conditions allowed under 60.753(b). If negative pressure cannot be achieved without excess air infiltration within 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.
- (4) Owners or operators are not required to install additional wells as required in paragraph(a)(3) of this section 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 owner or operator shall monitor each well monthly for temperature and nitrogen or oxygen as provided in 60.753(c). If a well exceeds one of these operating parameters, action shall be initiated to correct the exceedance within 5 calendar days. If correction of the exceedance cannot be achieved within 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.
- (6) An owner or operator seeking to demonstrate compliance with 60.752(b)(2)(ii)(A)(4) through the use of a collection system not conforming to the specifications provided in 60.759 shall provide information satisfactory to the Administrator as specified in 60.752(b) (2)(i)(C) demonstrating that off-site migration is being controlled.
- (b) For purposes of compliance with 60.753(a), each owner or operator of a controlled landfill shall place each well or design component as specified in the approved design plan as provided in 60.752(b)(2)(i). Each well shall be installed within 60 days of the date in which the initial solid waste has been in place for a period of:
 - (1) 5 years or more if active; or
 - (2) 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 60.753(d).
- (1) After installation of the collection system, the owner or operator shall monitor surface concentrations of methane along the entire perimeter of the collection area and along a serpentine pattern spaced 30 meters apart (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 paragraph (d) of this section.

- (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 the perimeter wells.
- (3) Surface emission monitoring shall be performed in accordance with section 4.3.1 of Method 21 of appendix A of this part, except that the probe inlet shall be placed within 5 to 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 paragraphs (c)(4) (i) through (v) of this section shall be taken. As long as the specified actions are taken, the exceedance is not a violation of the operational requirements of 60.753(d).
 - (i) The location of each monitored exceedance shall be marked and the location recorded.
- (ii) 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 10 calendar days of detecting the exceedance.
- (iii) 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 10 days of the second exceedance. If the re-monitoring shows a third exceedance for the same location, the action specified in paragraph (c)(4)(v) of this section shall be taken, and no further monitoring of that location is required until the action specified in paragraph (c)(4)(v)has been taken.
- (iv) Any location that initially showed an exceedance but has a methane concentration less than 500 ppm methane above background at the 10-day re-monitoring specified in paragraph (c)(4)(ii) or (iii) of this section shall be re-monitored 1 month from the initial exceedance. If the 1-month remonitoring 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 1-month remonitoring shows an exceedance, the actions specified in paragraph (c)(4)(iii) or (v) shall be taken.
- (v) 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 days of the initial exceedance. An alternative remedy to the exceedance, such as upgrading the blower, header pipes or control device, and a corresponding timeline for installation may be submitted to the Administrator for approval.
- (5) The owner or operator shall implement a program to monitor for cover integrity and implement cover repairs as necessary on a monthly basis.
- (d) Each owner or operator seeking to comply with the provisions in paragraph (c) of this section 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 this part, except that "methane" shall replace all references to 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 this part, the instrument evaluation procedures of section 4.4 of Method 21 of appendix A of this part shall be used.
- (4) The calibration procedures provided in section 4.2 of Method 21 of appendix A of this part shall be followed immediately before commencing a surface monitoring survey.



- (e) The provisions of this subpart apply at all times, except during periods of start-up, shutdown, or malfunction, provided that the duration of start-up, shutdown, or malfunction shall not exceed 5 days for collection systems and shall not exceed 1 hour for treatment or control devices.
- **Additionally, Alternative Compliance procedures as provided for in accordance with 40 CFR Part 60. 753 (c) have been approved and can be found under Section C, Site Level requirements, Sections III. Monitoring Requirements and V. Reporting Requirements, Elective Restrictions.

014 [40 CFR Part 61 NESHAPs §40 CFR 61.154]

Subpart M--National Emission Standard for Asbestos

Standard for active waste disposal sites.

Each owner or operator of an active waste disposal site that receives asbestos-containing waste material from a source covered under 61.149, 61.150, or 61.155 shall meet the requirements of this section:

- (a) 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 (c) or (d) of this section must be met.
- (b) Unless a natural barrier adequately deters access by the general public, either warning signs and fencing must be installed and maintained as follows, or the requirements of paragraph (c)(1) of this section must be met.
- (1) Warning signs must be displayed at all entrances and at intervals of 100 m (330 ft) or less along the property line of the site or along the perimeter of the sections of the site where asbestos-containing waste material is deposited. The warning signs must:
 - (i) Be posted in such a manner and location that a person can easily read the legend; and
- (ii) Conform to the requirements of 51 cm 36 cm (20"X14") upright format signs specified in 29 CFR 1910.145(d)(4) and this paragraph; and
- (iii) Display the following legend in the lower panel with letter sizes and styles of a visibility at least equal to those specified in this paragraph.

Legend Notation

Asbestos Waste Disposal Site 2.5 cm (1 inch) Sans Serif, Gothic or

Block

Do Not Create Dust...... 1.9 cm (3/4 inch) Sans Serif, Gothic

or Block

Breathing Asbestos is Hazardous to 14 Point Gothic.

Your Health

Spacing between any two lines must be at least equal to the height of the upper of the two lines.

(2) The perimeter of the disposal site must be fenced in a manner adequate to deter access by the general public.



- (3) Upon request and supply of appropriate information, the Administrator will determine whether a fence or a natural barrier adequately deters access by the general public.
- (c) Rather than meet the no visible emission requirement of paragraph (a) of this section, at the end of each operating day, or at least once every 24-hour period while the site is in continuous operation, the asbestos-containing waste material that has been deposited at the site during the operating day or previous 24-hour period shall:
 - (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. For purposes of this paragraph, any used, spent, or other waste oil is not considered a dust suppression agent.
- (d) Rather than meet the no visible emission requirement of paragraph (a) of this section, use an alternative emissions control method that has received prior written approval by the Administrator according to the procedures described in 61.149(c)(2).
- (e) For all asbestos-containing waste material received, the owner or operator of the active waste disposal site shall:
- (1) Maintain waste shipment records, using a form similar to that shown in Figure 4, 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.
 - (v) 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.



- (f) Maintain, until closure, records of the location, depth and area, and quantity in cubic meters (cubic yards) of asbestoscontaining waste material within the disposal site on a map or diagram of the disposal area.
 - (g) Upon closure, comply with all the provisions of 61.151.
- (h) Submit to the Administrator, upon closure of the facility, a copy of records of asbestos waste disposal locations and quantities.
- (i) Furnish upon request, and make available during normal business hours for inspection by the Administrator, all records required under this section.
- (j) Notify the Administrator in writing at least 45 days prior to excavating or otherwise disturbing any asbestoscontaining 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. (Secs. 112 and 301(a) of the Clean Air Act as amended (42 USC 7412, 7601(a))

II. TESTING REQUIREMENTS.

[40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.754] Subpart WWW--Standards of Performance for Municipal Solid Waste Landfills Test methods and procedures.

- (a)(1) The landfill owner or operator shall calculate the NMOC emission rate using either the equation provided in paragraph (a)(1)(i) of this section or the equation provided in paragraph (a)(1)(ii) of this section. The values to be used in both equations are 0.05 per year for k, 170 cubic meters per megagram for Lo, and 4,000 parts per million by volume as hexane for the CNMOC.
 - (i) The following equation shall be used if the actual year-to-year solid waste acceptance rate is known.

MNMOC = Sum $[i = 1 \text{ to } i = n]^* 2kLo Mi *(e-kt) *(CNMOC)*(3.6 X10-9)$

where,

MNMOC=Total NMOC emission rate from the landfill, megagrams per year



k=methane generation rate constant, year -1

Lo=methane generation potential, cubic meters per megagram solid waste

Mi=mass of solid waste in the ith section, megagrams

ti=age of the ith section, years

CNMOC=concentration of NMOC, parts per million by volume as hexane

3.6 X 10-9=conversion factor

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

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

MNMOC=Sum [from i= 1 to i=n] 2kLo Mi (e-kti) (CNMOC) (3.6 X10-9)

where.

MNMOC=mass emission rate of NMOC, megagrams per year

Lo=methane generation potential, cubic meters per megagram solid waste

R=average annual acceptance rate, megagrams per year

k=methane generation rate constant, year-1

t=age of landfill, years

CNMOC=concentration of NMOC, parts per million by volume as hexane

c=time since closure, years. For active landfill c = O and e-kc=1

3.6 X 10-9=conversion factor

The mass of nondegradable solid waste may be subtracted from the average annual acceptance rate when calculating a value for R, if the documentation provisions of 60.758(d)(2) are followed.

- (2) Tier 1. The owner or operator shall compare the calculated NMOC mass emission rate to the standard of 50 megagrams per year.
- (i) If the NMOC emission rate calculated in paragraph (a)(1) of this section is less than 50 megagrams per year, then the landfill owner shall submit an emission rate report as provided in 60.757(b)(1), and shall recalculate the NMOC mass emission rate annually as required under 60.752(b)(1).
- (ii) If the calculated NMOC emission rate is equal to or greater than 50 megagrams per year, then the landfill owner shall either comply with 60.752(b)(2), or determine a site-specific NMOC concentration and recalculate the NMOC emission rate using the procedures provided in paragraph (a)(3)of this section.
 - (3) Tier 2. The landfill owner or operator shall determine the NMOC concentration using the following sampling



procedure. The landfill owner or operator shall install at least two sample probes per hectare of landfill surface that has retained waste for at least 2 years. If the landfill is larger than 25 hectares in area, only 50 samples are required. The sample probes should be located to avoid known areas of nondegradable solid waste. The owner or operator shall collect and analyze one sample of landfill gas from each probe to determine the NMOC concentration using Method 25C of appendix A of this part or Method 18 of appendix A of this part. If using Method 18 of appendix A of this part, the minimum list of compounds to be tested shall be those published in the most recent Compilation of Air Pollutant Emission Factors (AP-42). 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 the analysis. The landfill owner or operator shall divide the NMOC concentration from Method 25C of appendix A of this part by six to convert from CNMOC as carbon to CNMOC as hexane.

- (i) The landfill owner or operator shall recalculate the NMOC mass emission rate using the equations provided in paragraph (a)(1)(i) or (a)(1)(ii) of this section and using the average NMOC concentration from the collected samples instead of the default value in the equation provided in paragraph (a)(1) of this section.
- (ii) If the resulting mass emission rate calculated using the site-specific NMOC concentration is equal to or greater than 50 megagrams per year, then the landfill owner or operator shall either comply with 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 paragraph (a)(4) of this section.
- (iii) If the resulting NMOC mass emission rate is less than 50 megagrams per year, the owner or operator shall submit a periodic estimate of the emission rate report as provided in 60.757(b)(1) and retest the site-specific NMOC concentration every 5 years using the methods specified in this section.
- (4) Tier 3. The site-specific methane generation rate constant shall be determined using the procedures provided in Method 2E of appendix A of this part. The landfill owner or operator shall estimate the NMOC mass emission rate using equations in paragraph (a)(1)(i) or (a)(1)(ii) of this section and using a site-specific methane generation rate constant k, and the site-specific NMOC concentration as determined in paragraph (a)(3) of this section instead of the default values provided in paragraph (a)(1) of this section. The landfill owner or operator shall compare the resulting NMOC mass emission rate to the standard of 50 megagrams per year.
- (i) 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 owner or operator shall comply with 60.752(b)(2).
- (ii) If the NMOC mass emission rate is less than 50 megagrams per year, then the owner or operator shall submit a periodic emission rate report as provided in 60.757(b)(1) and shall recalculate the NMOC mass emission rate annually, as provided in 60.757(b)(1) using the equations in paragraph (a)(1) of this section and using the site-specific methane generation rate constant and NMOC concentration obtained in paragraph (a)(3) of this section. The calculation of the methane generation rate constant is performed only once, and the value obtained is used in all subsequent annual NMOC emission rate calculations.
- (5) The owner or operator may use other methods to determine the NMOC concentration or a site-specific k as an alternative to the methods required in paragraphs (a)(3) and (a)(4) of this section if the method has been approved by the Administrator as provided in 60.752(b)(2)(i)(B).
- (b) After the installation of a collection and control system in compliance with 60.755, the owner or operator shall calculate the NMOC emission rate for purposes of determining when the system can be removed as provided in 60.752(b)(2)(v), using the following equation:

MNMOC = 1.89 X 10-3 QLFG CNMOC

where,



MNMOC = mass emission rate of NMOC, megagrams per year

QLFG = flow rate of landfill gas, cubic meters per minute

CNMOC = NMOC concentration, parts per million by volume as hexane

- (1) The flow rate of landfill gas, QLFG, shall be determined by measuring the total landfill gas flow rate at the common header pipe that leads to the control device using a gas flow measuring device calibrated according to the provisions of section 4 of Method 2E of appendix A of this part.
- (2) The average NMOC concentration, CNMOC, shall be determined by collecting and analyzing landfill gas sampled from the common header pipe before the gas moving or condensate removal equipment using the procedures in Method 25C or Method 18 of appendix A of this part. If using Method 18 of appendix A of this part, the minimum list of compounds to be tested shall be those published in the most recent Compilation of Air Pollutant Emission Factors (AP-42). The sample location on the common header pipe shall be before any condensate removal or other gas refining units. The landfill owner or operator shall divide the NMOC concentration from Method 25C of appendix A of this part by six to convert from CNMOC as carbon to CNMOC as hexane.
- (3) The owner or operator may use another method to determine landfill gas flow rate and NMOC concentration if the method has been approved by the Administrator as provided in 60.752(b)(2)(i)(B).
- (c) The owner or operator of each MSW landfill subject to the provisions of this subpart shall estimate the NMOC emission rate for comparison to the PSD major source and significance levels in 51.166 or 52.21 of this chapter using AP-42 or other approved measurement procedures. If a collection system, which complies with the provisions in 60.752(b)(2) is already installed, the owner or operator shall estimate the NMOC emission rate using the procedures provided in paragraph (b) of this section.
- (d) For the performance test required in 60.752(b)(2)(iii)(B), Method 25 or Method 18 of appendix A of this part shall be used to determine compliance with 98 weight-percent efficiency or the 20 ppmv outlet concentration level, unless another method to demonstrate compliance has been approved by the Administrator as provided by 60.752(b)(2)(i)(B). If using Method 18 of appendix A of this part, the minimum list of compounds to be tested shall be those published in the most recent Compilation of Air Pollutant Emission Factors (AP-42). The following equation shall be used to calculate efficiency:

Control Efficiency = (NMOCin - NMOCout)/(NMOCin)

where,

NMOCin = mass of NMOC entering control device

NMOCout = mass of NMOC exiting control device

III. MONITORING REQUIREMENTS.

016 [25 Pa. Code §123.43]

Measuring techniques

Visible emissions may be measured using either of the following:

- (1) A device approved by the Department and maintained to provide accurate opacity measurements.
- (2) Observers, trained and qualified to measure plume opacity with the naked eye or with the aid of any devices approved by the Department.



017 [25 Pa. Code §127.511]

Monitoring and related recordkeeping and reporting requirements.

- a) Permittee shall measure gauge pressure at each wellhead on a monthly basis. If a positive pressure exists, action shall be initiated to correct this condition within 5 days.
- b) Permittee shall monitor the temperature, and nitrogen or oxygen content of each well on a monthly basis to check for air infiltration into the landfill.
- c) Permittee shall monitor surface methane concentrations on a quarterly basis, using the procedures found at 40 CFR 60.753(d) and 40 CFR 60.755(c).
- d) All monitoring and measuring devices shall be calibrated, maintained and operated in accordance with the manufacturers' recommendations. Permittee shall also comply with the provisions of 40 CFR 60.756(b) or (c) or (d).

018 [25 Pa. Code §127.511]

Monitoring and related recordkeeping and reporting requirements.

The owner/operator shall conduct daily visible emission inspections of this facility, when this source is in operation, to determine the presence of visible air emissions. Daily visible emission observations shall be conducted to ensure compliance with 25 Pa Code 123.1 and 123.2, and 123.41.

019 [25 Pa. Code §127.511]

Monitoring and related recordkeeping and reporting requirements.

The owner/operator shall conduct daily inspections of this facility, when this source is in operation, to determine the presence of malodorous air emissions detectable beyond the boundaries of this facility.

020 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.756] Subpart WWW--Standards of Performance for Municipal Solid Waste Landfills Monitoring of operations.

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

- (a) Each owner or operator seeking to comply with 60.752(b)(2)(ii)(A) for an active gas collection system shall install a sampling port and a thermometer or other temperature measuring device at each wellhead and:
 - (1) Measure the gauge pressure in the gas collection header on a monthly basis as provided in 60.755(a)(3); and
 - (2) Monitor nitrogen or oxygen concentration in the landfill gas on a monthly basis as provided in 60.755(a)(5); and
 - (3) Monitor temperature of the landfill gas on a monthly basis as provided in 60.755(a)(5).
- (b) Each owner or operator seeking to comply with 60.752(b)(2)(iii) using an enclosed combustor shall calibrate, maintain, and operate according to the manufacturer's specifications, the following equipment.
- (1) A temperature monitoring device equipped with a continuous recorder and having an accuracy of 1 percent of the temperature being measured expressed in degrees Celsius or 0.5 C, whichever is greater. A temperature monitoring device is not required for boilers or process heaters with design heat input capacity greater than 44 megawatts.
- (2) A gas flow rate measuring device that provides a measurement of gas flow to or bypass of the control device. The owner or operator shall either:
- (i) Install, calibrate, and maintain a gas flow rate measuring device that shall record the flow to the control device at least every 15 minutes; or



- (ii) 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) Each owner or operator seeking to comply with 60.752(b)(2)(iii) using an open flare shall install, calibrate, maintain, and operate according to the manufacturer's specifications the following equipment:
- (1) A heat sensing device, such as an ultraviolet beam sensor or thermocouple, at the pilot light or the flame itself to indicate the continuous presence of a flame.
 - (2) A device that records flow to or bypass of the flare. The owner or operator shall either:
- (i) Install, calibrate, and maintain a gas flow rate measuring device that shall record the flow to the control device at least every 15 minutes; or
- (ii) Secure the bypass line valve in the closed position with a car-seal or a lock-and-key type configuration. A visual inspection of the seal or closure mechanism shall be performed at least once every month to ensure that the valve is maintained in the closed position and that the gas flow is not diverted through the bypass line.
- (d) Each owner or operator seeking to demonstrate compliance with 60.752(b)(2)(iii) using a device other than an open flare or an enclosed combustor shall provide information satisfactory to the Administrator as provided in 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 Administrator shall review the information and either approve it, or request that additional information be submitted. The Administrator may specify additional appropriate monitoring procedures.
- (e) Each owner or operator seeking to install a collection system that does not meet the specifications in 60.759 or seeking to monitor alternative parameters to those required by 60.753 through 60.756 shall provide information satisfactory to the Administrator as provided in 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 Administrator may specify additional appropriate monitoring procedures.
- (f) Each owner or operator seeking to demonstrate compliance with 60.755(c), shall monitor surface concentrations of methane according to the instrument specifications and procedures provided in 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.

021 elective restriction

In accordance with 40 CFR Part 60.753(c), alternative compliance requirements are allowed for specific categories of gas extraction wells as noted below:

Alternative 1: Wells in uncapped areas and leachate collection piping used for gas extraction may be operated at an oxygen level as high as 15 percent (volumetric basis), since the majority of the air intrusion occurs directly from the ground surface and not through the waste mass. Documentation of extraction point readings shall be performed as required to insure that the higher operating value does not cause an adverse reaction or combustion within the waste mass, and that degradation of the anaerobic decomposition process is not occurring. In the event that monitoring data for an Alternative 1 well indicates temperatures above 55°C (131°F), the well will be shut down. If the temperature does not subside to an acceptable level within 5 days, carbon monoxide monitoring (to ensure a carbon monoxide level below 100 ppmv) will be conducted to verify that combustion within the waste mass is not occurring.





Alternative 2: A well may be placed on an inactive list if it exhibits a methane quality that is consistently below 40 percent by volume and an oxygen level that is consistently above 5 percent while the throttle is either closed or slightly open with a negative pressure applied to the well of less than one-inch of water column. During the period of inactivity and while on the inactive list, the well will be exempt from oxygen concentration and negative pressure requirements. If at any time the landfill observes conditions that warrant the operation of a well on the inactive list, the well shall be reactivated and normal default operational standards shall apply.

Alternative 3: A well in an area of active waste placement that is inaccessible due to its casing height (generally having a casing height of five feet or greater) may be temporarily placed on the inactive list, whereby the well would be exempt from wellhead monitoring requirements until landfilling around the well allows for safe access.

Alternative 4: A well may be operated at temperatures higher than 55°C (131°F), provided the following steps are taken:

- (a) Upon observation of a well temperature greater than 55°C (131°F), the initial course of action shall be to adjust the valve to either reduce or eliminate the vacuum applied to the well. This corrective action shall be taken within 5 days of the observation of an elevated reading.
- (b) If the reduction of vacuum favorably lowers the temperature but appears to be detrimental to gas collection, the operator shall adjust the well to the benefit of gas collection. If, as a result, the temperature climbs above 55°C (131°F), or if the temperature remained elevated throughout the well adjustments, carbon monoxide monitoring (to ensure carbon monoxide levels below 100 ppmv) will be conducted to verify that combustion within the waste mass is not occurring. In addition to measuring the temperature and carbon monoxide levels, the operator shall visually inspect the area around the well for signs of settlement or distressed vegetation, and shall inspect the wellhead for soot or other indications of combustion.
- (c) If the elevated temperatures persist at a well, and there are no signs of combustion or detrimental effects on anaerobic activity, the operator shall consider the well to be an Alternative 4 well and shall place the well under a period of observation. The observation period shall be characterized by the inclusion of carbon monoxide monitoring with the regular monthly monitoring events. This monitoring is in addition to the regular measurement of gauge pressure, temperature, and oxygen or nitrogen levels. Visual inspection of the wellhead and the area immediately surrounding the well will also be conducted.
- (d) At such time when the landfill has acquired sufficient background data, a new maximum operating temperature shall be selected for the well. The new temperature and supporting data shall be provided to PADEP and USEPA through a notification letter. If no objections are received from the regulatory agencies within 15 days of the letter submittal date, the landfill may conclude that the alternative temperature is acceptable. At that time, routine carbon monoxide monitoring of the well will be discontinued. However, visual inspection of the wellhead and the area immediately surrounding the well shall be included with the regular monthly monitoring events throughout the entire period of time that a well is operated under Alternative 4.

IV. RECORDKEEPING REQUIREMENTS.

022 [25 Pa. Code §127.511]

Monitoring and related recordkeeping and reporting requirements.

The owner/operator shall keep a log of daily visible emissions observations and malodor inspections. This log shall include at a minumum, the date, the time, the name and title of the observer, observation, and action if necessary. This visible emission observation and malodor inspection log shall be kept and maintained on site for five years.

023 [25 Pa. Code §127.511]

Monitoring and related recordkeeping and reporting requirements.

The permittee shall comply with the recordkeeping requirements of 40 CFR 60.758.

a) The permittee shall maintain on site records of the maximum design capacity, the current amount of solid waste in



place, and a year-by-year waste acceptance rate.

- b) The permittee shall maintain records of gas flow to the control device and any parameters that are available to indicate that the control device operating properly.
- c) In accordance with 40 CFR 60.758(c), permittee maintain records of periods of operation during which the parameter boundaries which were established the most recent performance test are exceeded.
- d) In accordance with 40 CFR 60.758(d), permittee shall keep an up-to-date, readily accessible plot map which shows each existing and planned collector in the gas collection system, and provides a unique identifier for each collector. Records shall be kept of wells in operation, and wells out of operation (if any) on a daily basis.
- e) In accordance with 40 CFR 60.758(d)(1), permittee shall keep records of the installation date and location of all newly installed or replaced collection wells, pipe headers, and other collection assemblies.
- f) In accordance with 40 CFR 60.758(d)(2), permittee shall keep documentation of the nature, date of deposition, amount and location of asbestos containing or no degradable waste excluded from the land fill gas collection system, as well as any non-landfill gas producing areas excluded from the landfill gas collection system.
- g) Permittee shall keep records of all monitoring activities performed to meet the operational requirements of 40 CFR 60.753.
- h) Permittee shall keep records of any exceedances detected during the monitoring activities performed to meet the operational requirements of 40 CFR 60.753, and all actions taken to remediate the exceedances.
- i) Records required under this operating permit shall be maintained as described in 40 CFR 60.758, and shall be made available to the Department upon request.

024 [25 Pa. Code §135.5]

Recordkeeping

Source owners or operators shall maintain and make available upon request by the Department records including computerized records that may be necessary to comply with 135.21 (relating to reporting; and emission statements). These may include records of production, fuel usage, maintenance of production or pollution control equipment or other information determined by the Department to be necessary for identification and quantification of potential and actual air contaminant emissions. If direct recordkeeping is not possible or practical, sufficient records shall be kept to provide the needed information by indirect means.

025 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.758] Subpart WWW--Standards of Performance for Municipal Solid Waste Landfills Recordkeeping requirements.

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

- (a) Each owner or operator of an MSW landfill subject to the provisions of 60.752(b) shall keep for at least 5 years up-to-date, readily accessible, on-site records of the maximum design capacity, the current amount of solid waste in-place, and the year-by-year waste acceptance rate. Off-site records may be maintained if they are retrievable within 4 hours. Either paper copy or electronic formats are acceptable.
- (b) Each owner or operator of a controlled landfill shall keep up-to-date, readily accessible records for the life of the control equipment of the data listed in paragraphs (b)(1) through (b)(4) of this section as measured during the initial performance test or compliance determination. Records of subsequent tests or monitoring shall be maintained for a minimum of 5 years. Records of the control device vendor specifications shall be maintained until removal.
 - (1) Where an owner or operator subject to the provisions of this subpart seeks to demonstrate compliance with



60.752(b)(2)(ii):

- (i) The maximum expected gas generation flow rate as calculated in 60.755(a)(1). The owner or operator may use another method to determine the maximum gas generation flow rate, if the method has been approved by the Administrator.
- (ii) The density of wells, horizontal collectors, surface collectors, or other gas extraction devices determined using the procedures specified in 60.759(a)(1).
- (2) Where an owner or operator subject to the provisions of this subpart seeks to demonstrate compliance with 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:
- (i) The average combustion temperature measured at least every 15 minutes and averaged over the same time period of the performance test.
- (ii) The percent reduction of NMOC determined as specified in 60.752(b)(2)(iii)(B) achieved by the control device.
- (3) Where an owner or operator subject to the provisions of this subpart seeks to demonstrate compliance with 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 an owner or operator subject to the provisions of this subpart seeks to demonstrate compliance with 60.752(b)(2)(iii)(A) through use of an open flare, the flare type (i.e., steam-assisted, air-assisted, or non-assisted), 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 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) Each owner or operator 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 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 60.757(f):
- (i) For enclosed combustors except for boilers and process heaters with design heat input capacity of 44 megawatts (150 million British thermal unit per hour) or greater, all 3-hour periods of operation during which the average combustion temperature was more than 28 oC below the average combustion temperature during the most recent performance test at which compliance with 60.752(b)(2)(iii) was determined.
- (ii) 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 paragraph (b)(3)(i) of this section.
- (2) Each owner or operator subject to the provisions of this subpart 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 60.756.
- (3) Each owner or operator subject to the provisions of this subpart who uses a boiler or process heater with a design heat input capacity of 44 megawatts or greater to comply with 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) Each owner or operator seeking to comply with the provisions of this subpart 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 60.756(c), and up-to-date, readily accessible records of all periods of operation in which the flame or flare pilot flame is absent.

- (d) Each owner or operator subject to the provisions of this subpart shall keep for the life of the collection system an upto-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) Each owner or operator subject to the provisions of this subpart shall keep up-to-date, readily accessible records of the installation date and location of all newly installed collectors as specified under 60.755(b).
- (2) Each owner or operator subject to the provisions of this subpart shall keep readily accessible documentation of the nature, date of deposition, amount, and location of asbestos-containing or non-degradable waste excluded from collection as provided in 60.759(a)(3)(i) as well as any nonproductive areas excluded from collection as provided in 60.759(a)(3)(ii).
- (e) Each owner or operator 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 60.753, the reading in the subsequent month whether or not the second reading is an exceedance, and the location of each exceedance.

V. REPORTING REQUIREMENTS.

026 [25 Pa. Code §127.402]

General provisions.

An application, form, report or compliance certification submitted under this subchapter shall contain certification by a responsible official as to truth, accuracy and completeness. This certification and other certification required under this subchapter shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate and complete.

027 [25 Pa. Code §127.441]

Operating permit terms and conditions.

The program of dustfall monitoring as approved by the Bureau of Waste Management shall continue to operate. Dustfall reports shall be submitted to Air Quality on a quarterly basis. The report must be received no later than 60 days after the end of each calendar quarter. If review of this data indicates a violation of the Ambient Air Quality Standards found at PA Code, Title 25, Section 131.3, additional sampling or monitoring may be required.

028 [25 Pa. Code §127.441]

Operating permit terms and conditions.

The owner/operator shall include with the Annual Inventory and EmissionStatement a forecast of the total (before controls) VOC emission generation rate anticipated for each of the next five years. Additionallly, the owner/operator shall calculate the actual VOC emission rate, taking into account reductions achieved through the use of the collection and control system. The forecast shall include the current and scheduled collection system configurations for the forecast years, and shall include emissions from the actual waste in place, and the waste scheduled to be collected during the forecast years.

- i) The owner/operator shall use the value of the methane generation rate constant, k, published at the most recent compilation of air pollution emission factors (AP-42) to calculate VOC emission rates. Other values of k may be used, provided that the use of
 - an alternate value can be demonstrated through testing or engineering calculations.
- ii) The owner/operator shall use the value of the methane generation



W. C.

SECTION C. Site Level Requirements

potential, Lo, published at the most recent compliation of air pollution emission factors (AP-42) to calculate VOC emission rates. Other values of Lo may be used, provided that the use of an alternate value can be demonstrated through testing or engineering calculations.

iii) The VOC concentration determined during the initial performance test shall be used when calculating VOC emission rates.

029 [25 Pa. Code §127.441]

Operating permit terms and conditions.

The owner/operator shall comply with all of the reporting requirements of 40 CFR 60.757, including initial design capacity report, amended design capacity report (when applicable), NMOC emission rate report (when applicable), collection and control system design plan, initial performance test report, annual report, closure report, and equipment removal report requirements.

030 [25 Pa. Code §127.442]

Reporting requirements.

- (a) The owner/operator shall report each malfunction that poses an imminent and substantial danger to the public health and safety or the environment or which the permittee should reasonably believe may result in citizen complaints to the Department that occurs at this Title V facility. For purposes of this condition a malfunction is defined as any sudden, infrequent, and not reasonably preventable failure of air pollution control equipment, process equipment or a process to operate in a normal or usual manner that may result in an increase in the emissions of air contaminants.
- (b) When the malfunction poses an imminent and substantial danger to the public health and safety or harm to the environment, the notification shall be submitted to the Department no later than one hour after the incident.
 - (1) The notice shall describe the:
 - (i) name and location of the facility;
 - (ii) nature and cause of the malfunction or breakdown;
 - (iii) time when the malfunction or breakdown was first observed;
 - (iv) expected duration of excess emissions; and
 - (v) estimated rate of emissions.
 - (2) The owner or operator shall notify the Department immediately when corrective measures have been accomplished.
- (3) Subsequent to the malfunction, the owner or operator shall submit a full report on the malfunction to the Department within 15 days, if requested.
- (4) The owner or operator shall submit reports on the operation and maintenance of the source to the Regional Air Program Manager at such intervals and in such form and detail as may be required by the Department. Information required in the reports may include, but is not limited to, process weight rates, firing rates, hours of operation, and maintenance schedules.
- (c) Malfunctions shall be reported to the Department at the following address:



PADEP Office of Air Quality 400 Waterfront Drive Pittsburgh, PA 15222-4745 (412)442-4000

(d) Any report or notification for the EPA Adminstrator or EPA Region III shall be submitted to:

United States Environmental Protection Agency Technical Assessment Section (3AT22) Region III 1650 Arch Street Philadelphia, PA 19103-2029

031 [25 Pa. Code §127.442]

Reporting requirements.

- (a) The owner or operator shall submit by March 1 of each year an Annual Inventory and Emission Statement for the previous year on forms provided by the Department. The report shall include information for all previously reported sources, new sources which were first operated during the proceeding calendar year and sources modified during the same period which were not previously reported.
- (b) The owner or operator may request an extension of time from the Department for the filing of a source report, and the Department may grant the extension for reasonable cause.
- (c) The owner/operator shall include with the Annual Inventory and Emission Statement a forecast of the total (before controls) VOC emission generation rate anticipated for each of the next five years. Additionally, permittee shall calculate the actual VOC emission rate, taking into account reductions achieved through the use of the collection and control system. Forecast shall include the current and scheduled collection system configurations for the forecast years, and shall include emissions from the actual waste in place, and the waste scheduled to be collected during the forecast years.
- (1) The owner/operator shall use the value of the methane generation rate constant, k, published at the most recent compilation of air pollution emission factors (AP-42) to calculate VOC emission rates. Other values of k may be used, provided that the use of an alternate value can be demonstrated through testing or engineering calculations.
- (2) The owner/operator shall use the value of the methane generation potential, Lo, published at the most recent compilation of air pollution emission factors (AP-42) to calculate VOC emission rates. Other values of Lo may be used, provided that the use of an alternate value can be demonstrated through testing or engineering calculations.
- (3) The VOC concentration determined during the initial performance test shall be used when calculating VOC emission rates.

032 [25 Pa. Code §127.511]

Monitoring and related recordkeeping and reporting requirements.

With respect to reporting, the permit shall incorporate the applicable reporting requirements and require the following:

- (1) Submittal of reports of required monitoring at least every 6 months. Reports are due on January 31 for the period of July 1 December 31 and on July 31 for the period of January 1 June 30. Instances of deviations from permit requirements shall be clearly identified in the reports. Required reports shall be certified by a responsible official.
- (2) Reporting of deviations from permit requirements within the time required by the terms and conditions of the permit including those attributable to upset conditions as defined in the permit, the probable cause of the deviations and



corrective actions or preventive measures taken, except that sources with continuous emission monitoring systems shall report according to the protocol established and approved by the Department for the source.

033 [25 Pa. Code §127.513]

Compliance certification.

Requirements for compliance certification with terms and conditions contained in the permit, including emission limitations, standards or work practices. Permits shall include the following:

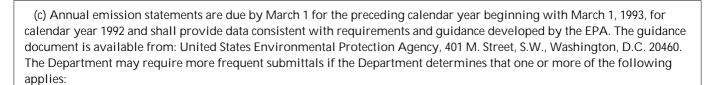
- (i) The frequency, not less than annually or more frequent periods as specified in the applicable requirement or by the Department, of submissions of compliance certifications. Required annual compliance certification shall be submitted annually no later than January 31 for the previous calendar year.
- (ii) A means of monitoring the compliance of the source with its emissions limitations, standards and work practices, consistent with the requirements of this article.
 - (iii) A requirement that the compliance certification include the following:
 - (A) The identification of each term or condition of the permit that is the basis of the certification.
 - (B) The compliance status.
- (C) The methods used for determining the compliance status of the source, currently and over the reporting period.
 - (D) Whether compliance was continuous or intermittent.
 - (E) Other facts the Department may require to determine the compliance status of the source.
- (iv) A requirement that compliance certifications be submitted to the Administrator of the EPA, as well as to the Department.
- (v) Additional requirements as may be specified under sections 114(a)(3) and 504(b) of the Clean Air Act (42 U.S.C.A. 7414(a)(3) and 7661(c).

034 [25 Pa. Code §135.21]

Emission statements

- (a) Except as provided in subsection (d), this section applies to stationary sources or facilities:
- (1) Located in an area designated by the Clean Air Act as a marginal, moderate, serious, severe or extreme ozone nonattainment area and which emit oxides of nitrogen or VOC.
- (2) Not located in an area described in subparagraph (1) and included in the Northeast Ozone Transport Region which emit or have the potential to emit 100 tons or more oxides of nitrogen or 50 tons or more of VOC per year.
- (b) The owner or operator of each stationary source emitting oxides of nitrogen or VOC's shall provide the Department with a statement, in a form as the Department may prescribe, for classes or categories of sources, showing the actual emissions of oxides of nitrogen and VOCs from that source for each reporting period, a description of the method used to calculate the emissions and the time period over which the calculation is based. The statement shall contain a certification by a company officer or the plant manager that the information contained in the statement is accurate.





- (1) A more frequent submission is required by the EPA.
- (2) Analysis of the data on a more frequent basis is necessary to implement the requirements of the act.
- (d) Subsection (a) does not apply to a class or category of stationary sources which emits less than 25 tons per year of VOC's or oxides of nitrogen, if the Department in its submissions to the Administrator of the EPA under section 182(a)(1) or (3)(B)(ii) of the Clean Air Act (42 U.S.C.A. 7511a(a)(1) or (3)(B)(ii)) provides an inventory of emissions from the class or category of sources based on the use of the emission factors established by the Administrator or other methods acceptable to the Administrator. The Department will publish in the Pennsylvania Bulletin a notice of the lists of classes or categories of sources which are exempt from the emission statement requirement under this subsection.

035 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.4] Subpart A - General Provisions

Address

This source is subject to 40 CFR 60, Subpart WWW, and shall comply with all applicable requirements therein. Per 40 CFR 60.4, copies of all requests, reports, applications, submittals, and other communications shall be submitted to both EPA and the Department at the following addresses:

Regional Air Quality Manager PADEP 400 Waterfront Drive Pittsburgh, PA 15222-4745

and

Director Air, Toxics, and Radiation Div. EPA Region III 1650 Arch Street Philadelphia, PA 19103

036 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.757] Subpart WWW--Standards of Performance for Municipal Solid Waste Landfills Reporting requirements.

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

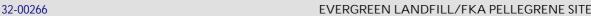
- (a) Each owner or operator subject to the requirements of this subpart shall submit an initial design capacity report to the Administrator.
- (1) The initial design capacity report shall fulfill the requirements of the notification of the date construction is commenced as required under 60.7(a)(1) and shall be submitted no later than the earliest day from the following:
 - (i) 90 days of the issuance of the State, Local, Tribal, or RCRA construction or operating permit; or
 - (ii) 30 days of the date of construction or reconstruction as defined under 60.15; or



- (iii) 30 days of the initial acceptance of solid waste.
- (2) The initial design capacity report shall contain the following information:
- (i) A map or plot of the landfill, providing the size and location of the landfill, and identifying all areas where solid waste may be landfilled according to the provisions of the State, local, Tribal, or RCRA construction or operating permit;
- (ii) The maximum design capacity of the landfill. Where the maximum design capacity is specified in the State or local construction or RCRA permit, a copy of the permit specifying the maximum design capacity may be submitted as part of the report. If the maximum design capacity of the landfill is not specified in the permit, the maximum design capacity shall be calculated using good engineering practices. The calculations shall be provided, along with such parameters as depth of solid waste, solid waste acceptance rate, and compaction practices as part of the report. The State, Tribal, local agency or Administrator may request other reasonable information as may be necessary to verify the maximum design capacity of the landfill.
- (3) An amended design capacity report shall be submitted to the Administrator providing notification of any increase in the design capacity of the landfill, whether the increase results from an increase in the permitted area or depth 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 amended design capacity report shall be submitted within 90 days of the issuance of an amended construction or operating permit, or the placement of waste in additional land, or the change in operating procedures which will result in an increase in maximum design capacity, whichever occurs first.
- (b) Each owner or operator subject to the requirements of this subpart shall submit an NMOC emission rate report to the Administrator initially and annually thereafter, except as provided for in paragraphs (b)(1)(ii) or (b)(3) of this section. The Administrator may request such additional information as may be necessary to verify the reported NMOC emission rate.
- (1) The NMOC emission rate report shall contain an annual or 5-year estimate of the NMOC emission rate calculated using the formula and procedures provided in 60.754(a) or (b), as applicable.
- (i) The initial NMOC emission rate report shall be submitted within 90 days of the date waste acceptance commences and may be combined with the initial design capacity report required in paragraph (a) of this section. Subsequent NMOC emission rate reports shall be submitted annually thereafter, except as provided for in paragraphs (b)(1)(ii) and (b)(3) of this section.
- (ii) If the estimated NMOC emission rate as reported in the annual report to the Administrator is less than 50 megagrams per year in each of the next 5 consecutive years, the owner or operator may elect to submit an estimate of the NMOC emission rate for the next 5-year period in lieu of the annual report. This estimate shall include the current amount of solid waste-in-place and the estimated waste acceptance rate for each year of the 5 years for which an NMOC emission rate is estimated. All data and calculations upon which this estimate is based shall be provided to the Administrator. This estimate shall be revised at least once every 5 years. If the actual waste acceptance rate exceeds the estimated waste acceptance rate in any year reported in the 5-year estimate, a revised 5-year estimate shall be submitted to the Administrator. The revised estimate shall cover the 5-year period beginning with the year in which the actual waste acceptance rate exceeded the estimated waste acceptance rate.
- (2) The NMOC emission rate report shall include all the data, calculations, sample reports and measurements used to estimate the annual or 5-year emissions.
- (3) Each owner or operator subject to the requirements of this subpart is exempted from the requirements of paragraphs (b)(1) and (2) of this section, after the installation of a collection and control system in compliance with 60.752(b)(2), during such time as the collection and control system is in operation and in compliance with 60.753 and 60.755.



- (c) Each owner or operator subject to the provisions of 60.752(b)(2)(i) shall submit a collection and control system design plan to the Administrator within 1 year of the first report, required under paragraph (b) of this section, in which the emission rate exceeds 50 megagrams per year, except as follows:
- (1) If the owner or operator elects to recalculate the NMOC emission rate after Tier 2 NMOC sampling and analysis as provided in 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.
- (2) If the owner or operator elects to recalculate the NMOC emission rate after determining a site-specific methane generation rate constant (k), as provided in Tier 3 in 60.754(a)(4), and the resulting NMOC emission rate is less than 50 Mg/yr, 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 60.754(a)(4) and the resulting site-specific methane generation rate constant (k) shall be submitted to the Administrator within 1 year of the first calculated emission rate exceeding 50 megagrams per year.
- (d) Each owner or operator of a controlled landfill shall submit a closure report to the Administrator within 30 days of waste acceptance cessation. The Administrator may request additional information as may be necessary to verify that permanent closure has taken place in accordance with the requirements of 40 CFR258.60. If a closure report has been submitted to the Administrator, no additional wastes may be placed into the landfill without filing a notification of modification as described under 60.7(a)(4).
- (e) Each owner or operator of a controlled landfill shall submit an equipment removal report to the Administrator 30 days prior to removal or cessation of operation of the control equipment.
 - (1) The equipment removal report shall contain all of the following items:
 - (i) A copy of the closure report submitted in accordance with paragraph (d) of this section;
 - (ii) A copy of the initial performance test report demonstrating that the 15 year minimum control period has expired; and
- (iii) Dated copies of three successive NMOC emission rate reports demonstrating that the landfill is no longer producing 50 megagrams or greater of NMOC per year.
- (2) The Administrator may request such additional information as may be necessary to verify that all of the conditions for removal in 60.752(b)(2)(v) have been met.
- (f) Each owner or operator of a landfill seeking to comply with 60.752(b)(2) using an active collection system designed in accordance with 60.752(b)(2)(ii) shall submit to the Administrator annual reports of the recorded information in (f)(1) through (f)(6) of this paragraph. 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 60.8. For enclosed combustion devices and flares, reportable exceedances are defined under 60.758(c).
 - (1) Value and length of time for exceedance of applicable parameters monitored under 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 60.756.
- (3) Description and duration of all periods when the control device was not operating for a period exceeding 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 5 days.
- (5) The location of each exceedance of the 500 parts per million methane concentration as provided in 60.753(d) and the concentration recorded at each location for which an exceedance was recorded in the previous month.
- (6) The date of installation and the location of each well or collection system expansion added pursuant to paragraphs (a)(3), (b), and (c)(4) of 60.755.
- (g) Each owner or operator seeking to comply with 60.752(b)(2)(i) shall include the following information with the initial performance test report required under 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 non-degradable material for each area from which collection wells have been excluded based on the presence of asbestos or non-degradable 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; and
- (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; and
 - (6) The provisions for the control of off-site migration.

037 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.6]

Subpart A--General Provisions

Compliance with standards and maintenance requirements.

- e) Operation and maintenance requirements. (1)(i) At all times, including periods of startup, shutdown, and malfunction, the owner or operator must operate and maintain any affected source, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. During a period of startup, shutdown, or malfunction, this general duty to minimize emissions requires that the owner or operator reduce emissions from the affected source to the greatest extent which is consistent with safety and good air pollution control practices. The general duty to minimize emissions during a period of startup, shutdown, or malfunction does not require the owner or operator to achieve emission levels that would be required by the applicable standard at other times if this is not consistent with safety and good air pollution control practices, nor does it require the owner or operator to make any further efforts to reduce emissions if levels required by the applicable standard have been achieved. Determination of whether such operation and maintenance procedures are being used will be based on information available to the Administrator which may include, but is not limited to, monitoring results, review of operation and maintenance procedures (including the startup, shutdown, and malfunction plan required in paragraph (e)(3) of this section), review of operation and maintenance records, and inspection of the source.
- (iii) When actions taken by the owner or operator during a startup or shutdown (and the startup or shutdown causes the source to exceed any applicable emission limitation in the relevant emission standards), or malfunction (including actions taken to correct a malfunction) are consistent with the procedures specified in the affected source's startup, shutdown, and



malfunction plan, the owner or operator must keep records for that event which demonstrate that the procedures specified in the plan were followed. These records may take the form of a ¿checklist,¿ or other effective form of recordkeeping that confirms conformance with the startup, shutdown, and malfunction plan and describes the actions taken for that event. In addition, the owner or operator must keep records of these events as specified in paragraph 63.10(b), including records of the occurrence and duration of each startup or shutdown (if the startup or shutdown causes the source to exceed any applicable emission limitation in the relevant emission standards), or malfunction of operation and each malfunction of the air pollution control and monitoring equipment. Furthermore, the owner or operator shall confirm that actions taken during the relevant reporting period during periods of startup, shutdown, and malfunction were consistent with the affected source's startup, shutdown and malfunction plan in the semiannual (or more frequent) startup, shutdown, and malfunction report required in §63.10(d)(5).

(iv) If an action taken by the owner or operator during a startup, shutdown, or malfunction (including an action taken to correct a malfunction) is not consistent with the procedures specified in the affected source's startup, shutdown, and malfunction plan, and the source exceeds any applicable emission limitation in the relevant emission standard, then the owner or operator must record the actions taken for that event and must report such actions within 2 working days after commencing actions inconsistent with the plan, followed by a letter within 7 working days after the end of the event, in accordance with §63.10(d)(5) (unless the owner or operator makes alternative reporting arrangements, in advance, with the Administrator).

(v) The owner or operator must maintain at the affected source a current startup, shutdown, and malfunction plan and must make the plan available upon request for inspection and copying by the Administrator. In addition, if the startup, shutdown, and malfunction plan is subsequently revised as provided in paragraph (e)(3)(viii) of this section, the owner or operator must maintain at the affected source each previous (i.e., superseded) version of the startup, shutdown, and malfunction plan, and must make each such previous version available for inspection and copying by the Administrator for a period of 5 years after revision of the plan. If at any time after adoption of a startup, shutdown, and malfunction plan the affected source ceases operation or is otherwise no longer subject to the provisions of this part, the owner or operator must retain a copy of the most recent plan for 5 years from the date the source ceases operation or is no longer subject to this part and must make the plan available upon request for inspection and copying by the Administrator. The Administrator may at any time request in writing that the owner or operator submit a copy of any startup, shutdown, and malfunction plan (or a portion thereof) which is maintained at the affected source or in the possession of the owner or operator. Upon receipt of such a request, the owner or operator must promptly submit a copy of the requested plan (or a portion thereof) to the Administrator. The owner or operator may elect to submit the required copy of any startup, shutdown, and malfunction plan to the Administrator in an electronic format. If the owner or operator claims that any portion of such a startup, shutdown, and malfunction plan is confidential business information entitled to protection from disclosure under section 114(c) of the Act or 40 CFR 2.301, the material which is claimed as confidential must be clearly designated in the submission.

(viii) The owner or operator may periodically revise the startup, shutdown, and malfunction plan for the affected source as necessary to satisfy the requirements of this part or to reflect changes in equipment or procedures at the affected source. Unless the permitting authority provides otherwise, the owner or operator may make such revisions to the startup, shutdown, and malfunction plan without prior approval by the Administrator or the permitting authority. However, each such revision to a startup, shutdown, and malfunction plan must be reported in the semiannual report required by \$63.10(d)(5). If the startup, shutdown, and malfunction plan fails to address or inadequately addresses an event that meets the characteristics of a malfunction but was not included in the startup, shutdown, and malfunction plan at the time the owner or operator developed the plan, the owner or operator must revise the startup, shutdown, and malfunction plan within 45 days after the event to include detailed procedures for operating and maintaining the source during similar malfunction events and a program of corrective action for similar malfunctions of process or air pollution control and monitoring equipment. In the event that the owner or operator makes any revision to the startup, shutdown, and malfunction plan which alters the scope of the activities at the source which are deemed to be a startup, shutdown, or malfunction, or otherwise modifies the applicability of any emission limit, work practice requirement, or other requirement in a standard established under this part, the revised plan shall not take effect until after the owner or operator has provided a written notice describing the revision to the permitting authority.



038 elective restriction

32-00266

The following requirements apply to landfill gas extraction wells:

- 1. In all recordkeeping and compliance reporting to regulatory agencies, the landfill shall identify the basis for determination of compliance of each well (i.e., which conditions apply-default NSPS, Alternative 1, Alternative 2, Alternative 3, or Alternative 4). A summary list of all inactive LFG wells shall be provided in each semi-annual and annual Title V compliance certification report. This list will include the rationale for placing each well on the list, and the dates that they were deemed inactive.
- 2. Any notification regarding the use of an alternative maximum operating temperature ("Alternative 4") for a well shall be submitted to both PADEP and USEPA. The notification shall show supporting data sufficient to show that no combustion is occurring and that anaerobic activity is not adversely affected. If no objections are received from the regulatory agencies within 15 days of the letter submittal date, the landfill may conclude that the alternative temperature is acceptable.
- 3. In the event that carbon monoxide readings indicate possible combustion within the waste mass, the landfill shall promptly notify PADEP and the USEPA Region 3. Details regarding the cause of the elevated carbon monoxide readings and actions taken for remediation will be submitted as soon as they are available. All parameter exceedances for the LFG extraction devices operated under Alternatives 1 or 4 (i.e., for pressure, temperature, oxygen, and carbon monoxide, if applicable) shall be included in the semi-annual and annual Title V compliance certification reports.

VI. WORK PRACTICE REQUIREMENTS.

039 [25 Pa. Code §123.1]

Prohibition of certain fugitive emissions

A person responsible for any source specified in subsections (a)(1) -- (7) or (9) shall take all reasonable actions to prevent particulate matter from becoming airborne. These actions shall include, but not be limited to, the following:

- (1) Use, where possible, of water or chemicals for control of dust in the demolition of buildings or structures, construction operations, the grading of roads, or the clearing of land.
- (2) Application of asphalt, oil, water or suitable chemicals on dirt roads, material stockpiles and other surfaces which may give rise to airborne dusts.
 - (3) Paving and maintenance of roadways.
- (4) Prompt removal of earth or other material from paved streets onto which earth or other material has been transported by trucking or earth moving equipment, erosion by water, or other means.

040 [25 Pa. Code §127.441]

Operating permit terms and conditions.

The owner/operator shall:

- (a) Comply with the operational standards for Collection and Control Systems set forth in 40 CFR 60.753.
- (b) Operate the collection system with a methane leakage concentration of less than 500 ppm at any exposed piping, at all points aroung the perimeter of the collection area, and along a serpentine pattern spaced 30 meters apart across the collection area. The methane leakage testing plan shall include a topographical map with the proposed monitoring route. Methane leakage testing shall be done in accordance with EPA Method 21, found in Appendix A of 40 CFR 60, and in accordance with 40 CFR 755(c).



- (c) Add additional wells and piping as necessary to comply with operational standards. Permittee shall inform both BWM and Air Quality by letter at least 15 days ahead of time of their intentions. As-built drawings shall be submitted within 60 days of installation of new wells.
- # 041 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.753] Subpart WWW--Standards of Performance for Municipal Solid Waste Landfills Operational standards for collection and control systems.

Each owner or operator of an MSW landfill gas collection and control system used to comply with the provisions of 60.752(b)(2)(ii) of this subpart shall:

- (a) Operate the collection system such that gas is collected from each area, cell, or group of cells in the MSW landfill in which solid waste has been in place for:
 - (1) 5 years or more if active; or
 - (2) 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) A fire or increased well temperature. The owner or operator 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 60.757(f)(1);
- (2) Use of a geomembrane or synthetic cover. The owner or operator 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 Administrator;
- (c)* Operate each interior wellhead in the collection system with a landfill gas temperature less than 55 C and with either a nitrogen level less than 20 percent or an oxygen level less than 5 percent. The owner or operator 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 test method is established as allowed by 60.752(b)(2)(i) of this subpart.
- (2) Unless an alternative test method is established as allowed by 60.752(b)(2)(i) of this subpart, the oxygen shall be determined by an oxygen meter using Method 3A except that:
 - (i) The span shall be set so that the regulatory limit is between 20 and 50 percent of the span;
 - (ii) A data recorder is not required;
 - (iii) Only two calibration gases are required, a zero and span, and ambient air may be used as the span;
 - (iv) A calibration error check is not required;
 - (v) 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 owner or operator shall conduct surface testing



around the perimeter of the collection area along a pattern that traverses the landfill at 30 meter intervals and where visual observations indicate elevated concentrations of landfill gas, such as distressed vegetation and cracks or seeps in the cover. The owner or operator 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 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 1 hour; and
 - (f) Operate the control or treatment system at all times when the collected gas is routed to the system.
- (g) If monitoring demonstrates that the operational requirement in paragraphs (b), (c), or (d) of this section are not met, corrective action shall be taken as specified in 60.752(a)(3) through (5)or 60.755(c) of this subpart. If corrective actions are taken as specified in 60.755, the monitored exceedance is not a violation of the operational requirements in this section.
- *This language has been clarified through plan approval conditions. Please refer to Section C, Site Level Requirements, VII. Additional Requirements, Elective restrictions for the approved clarified language.
- **Additionally, Alternative Compliance procedures as provided for in accordance with 40 CFR Part 60. 753 (c) have been approved and can be found under Section C, Site Level requirements, Sections III. Monitoring Requirements and V. Reporting Requirements, Elective Restrictions.

VII. ADDITIONAL REQUIREMENTS.

042 [25 Pa. Code §127.441]

Operating permit terms and conditions.

The owner/operator shall comply with all the applicable requirements of 40 CFR 60, Subpart Cc (relating to Emission Guidelines and Compliance Times for Municipal Solid Waste Landfills) which implement the Section 111(d) requirements of the Clean Air Act. The applicable requirements include emission standards, operational standards, test methods and procedures, initial design capacity report, and monitoring, recordkeeping and reporting requirements.

043 [25 Pa. Code §127.441]

Operating permit terms and conditions.

For purposes of meeting the requirements of Section 111(d) of the Clean Air Act, the terms and conditions in this permit relating to 40 CFR 60, Subpart Cc, are non-expiring, and shall continue in full force and effect until modified by the Department.

044 elective restriction

Added as clarification to 40 CFR 60.753 (b) and (c) and consistent with PA 32-00266, Condition #024 requirements:

- b(4) When collection or control systems are experiencing down times due to routine maitenance. Routine equipment maintenance includes gas collection header repairs, wellhead and valve repairs, replacement or modifications, and other similar activities: and
- b(5) When negative pressure has the potential to induce air intrusion.



32-00266



SECTION C. Site Level Requirements

(c) Operate each interior wellhead in the collection system with a landfill gas temperature less than 55°C and with either a nitrogen level less than 20 percent or an oxygen level less than 5 percent. The owner or operator 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. These requirements do not apply to wells outside of the waste mass or to wells that meet specific Administrator-approved criteria that allow a temporary inactive status designation.

VIII. COMPLIANCE CERTIFICATION.

No additional compliance certifications exist except as provided in other sections of this permit including Section B (relating to Title V General Requirements).

IX. COMPLIANCE SCHEDULE.

No compliance milestones exist.

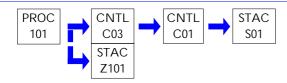
*** Permit Shield In Effect ***





Source ID: 101 Source Name: LANDFILL WASTE GAS

Source Capacity/Throughput:



I. RESTRICTIONS.

Emission Restriction(s).

001 [25 Pa. Code §123.21]

General

No person may permit the emission into the outdoor atmosphere of sulfur oxides from a source in a manner that the concentration of the sulfur oxides, expressed as SO2, in the effluent gas exceeds 500 parts per million, by volume, dry basis.

002 [25 Pa. Code §127.441]

Operating permit terms and conditions.

Particulate matter emissions from the flare(s) shall not exceed 0.02 gr/dscf.

003 [25 Pa. Code §127.441]

Operating permit terms and conditions.

The gas collection system shall maintain an overall average collection efficiency of 75%.

004 [25 Pa. Code §127.441]

Operating permit terms and conditions.

The flare(s) shall operate with no visible emissions except for periods not exceeding a total of 5 minutes during any two consecutive hours. Visible emissions shall be evaluated using EPA Reference Method 22, found at 40 CFR 60, Appendix A.

005 [25 Pa. Code §127.441]

Operating permit terms and conditions.

Landfill gas shall be conveyed to an enclosed flare rated at approximately 1500 scfm. Enclosed flare shall be equipped with electronic spark ignitor, a flue gas temperature thermocouple, an ultraviolet flame scanner, and auto start-up/shut-down controls. Operating temperature shall be monitored and recorded continuously. Unit shall be equipped with a fail-closed inlet valve which will shut automatically whenever flare fails to operate. Unit shall also be equipped with a flame arrestor, and an auxiliary fuel supply for start/restart.

006 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.752]

Subpart WWW--Standards of Performance for Municipal Solid Waste Landfills

Standards for air emissions from municipal solid waste landfills.

In accordance with 40 CFR § 752(b)(2)(iii)(B), the enclosed flare shall be operated to either reduce NMOC emissions by 98 weight-percent, or reduce the outlet NMOC concentration to less than 20 parts per million by volume, dry basis as hexane at 3 percent oxygen.

007 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.759]

Subpart WWW--Standards of Performance for Municipal Solid Waste Landfills

Specifications for active collection systems.

(a) Each owner or operator seeking to comply with 60.752(b)(2)(i) shall site active collection wells, horizontal collectors, surface collectors, or other extraction devices at a sufficient density throughout all gas producing areas using the following procedures unless alternative procedures have been approved by the Administrator as provided in 60.752(b)(2)(i)(C) and (D):



- (1) The collection devices within the interior and along the perimeter areas shall be certified to achieve comprehensive control of surface gas emissions by a professional engineer. The following issues shall be addressed in the design: depths of refuse, refuse gas generation rates and flow characteristics, cover properties, gas system expandability, leachate and condensate management, accessibility, compatibility with filling operations, integration with closure end use, air intrusion control, corrosion resistance, fill settlement, and resistance to the refuse decomposition heat.
- (2) The sufficient density of gas collection devices determined in paragraph (a)(1) of this section shall address landfill gas migration issues and augmentation of the collection system through the use of active or passive systems at the landfill perimeter or exterior.
- (3) The placement of gas collection devices determined in paragraph (a)(1) of this section shall control all gas producing areas, except as provided by paragraphs (a)(3)(i) and (a)(3)(ii) of this section.
- (i) Any segregated area of asbestos or non-degradable material may be excluded from collection if documented as provided under 60.758(d). The documentation shall provide the nature, date of deposition, location and amount of asbestos or non-degradable material deposited in the area, and shall be provided to the Administrator upon request.
- (ii) Any nonproductive area of the landfill may be excluded from control, provided that the total of all excluded areas can be shown to contribute less than 1 percent of the total amount of NMOC emissions from the landfill. The amount, location, and age of the material shall be documented and provided to the Administrator upon request. A separate NMOC emissions estimate shall be made for each section proposed for exclusion, and the sum of all such sections shall be compared to the NMOC emissions estimate for the entire landfill. Emissions from each section shall be computed using the following equation:

Qi = 2 k Lo Mi (e-kti) (CNMOC) (3.6 X 10-9)

where,

Qi = NMOC emission rate from the ith section, megagrams per year

k = methane generation rate constant, year -1

Lo = methane generation potential, cubic meters per megagram solid waste

Mi = mass of the degradable solid waste in the ith section, megagram

ti = age of the solid waste in the ith section, years

CNMOC = concentration of non-methane organic compounds, parts per million by volume

 $3.6 \times 10 - 9 = conversion factor$

- (iii) The values for k, Lo, and CNMOC determined in field testing shall be used, if field testing has been performed in determining the NMOC emission rate or the radii of influence. If field testing has not been performed, the default values for k, Lo and CNMOC provided in 60.754(a)(1) shall be used. The mass of non-degradable solid waste contained within the given section may be subtracted from the total mass of the section when estimating emissions provided the nature, location, age, and amount of the non-degradable material is documented as provided in paragraph (a)(3)(i)of this section.
- (b) Each owner or operator seeking to comply with 60.752(b)(2)(i)(A) shall construct the gas collection devices using the following equipment or procedures:
 - (1) The landfill gas extraction components shall be constructed of polyvinyl chloride (PVC), high density polyethylene





(HDPE) pipe, fiberglass, stainless steel, or other nonporous corrosion resistant material of suitable dimensions to: convey projected amounts of gases; withstand installation, static, and settlement forces; and withstand planned overburden or traffic loads. The collection system shall extend as necessary to comply with emission and migration standards. Collection devices such as wells and horizontal collectors shall be perforated to allow gas entry without head loss sufficient to impair performance across the intended extent of control. Perforations shall be situated with regard to the need to prevent excessive air infiltration.

- (2) Vertical wells shall be placed so as not to endanger underlying liners and shall address the occurrence of water within the landfill. Holes and trenches constructed for piped wells and horizontal collectors shall be of sufficient cross-section so as to allow for their proper construction and completion including, for example, centering of pipes and placement of gravel backfill. Collection devices shall be designed so as not to allow indirect short circuiting of air into the cover or refuse into the collection system or gas into the air. Any gravel used around pipe perforations should be of a dimension so as not to penetrate or block perforations.
- (3) Collection devices may be connected to the collection header pipes below or above the landfill surface. The connector assembly shall include a positive closing throttle valve, any necessary seals and couplings, access couplings and at least one sampling port. The collection devices shall be constructed of PVC, HDPE, fiberglass, stainless steel, or other nonporous material of suitable thickness.
- (c) Each owner or operator seeking to comply with 60.752(b)(2)(i)(A) shall convey the landfill gas to a control system in compliance with 60.752(b)(2)(iii) through the collection header pipe(s). The gas mover equipment shall be sized to handle the maximum gas generation flow rate expected over the intended use period of the gas moving equipment using the following procedures:
- (1) For existing collection systems, the flow data shall be used to project the maximum flow rate. If no flow data exists, the procedures in paragraph (c)(2) of this section shall be used.
 - (2) For new collection systems, the maximum flow rate shall be in accordance with 60.755(a)(1).

II. TESTING REQUIREMENTS.

008 [25 Pa. Code §127.511]

Monitoring and related recordkeeping and reporting requirements.

In order to demonstrate compliance with the emission restrictions in the permit, the flare shall be stack tested for all pollutants no less frequently than once every five years.

[40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.34c]

Subpart Cc - Emission Guidelines and Compliance Times for Municipal Solid Waste Landfills

Test methods and procedures

All performance tests shall be conducted in accordance with 40 CFR 60.754 and the Department's source testing procedures described in the latest Source Testing Manual referenced in 25 PA. Code 139.4(5).

III. MONITORING REQUIREMENTS.

010 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.34c]

Subpart Cc - Emission Guidelines and Compliance Times for Municipal Solid Waste Landfills

Test methods and procedures

- (a) Permittee shall measure gauge pressure at each wellhead on a monthly basis. If a positive pressure exists, action shall be initiated to correct this condition within 5 days.
- (b) Permittee shall monitor the temperature, and nitrogen or oxygen content of each well on a monthly basis to check for air







infiltration into the landfill.

- (c) Permittee shall monitor surface methane concentrations on a quarterly basis, using the procedures found at 40 CFR 60.753(d) and 40 CFR 60.755(c).
- (d) All monitoring and measuring devices shall be calibrated, maintained and operated in accordance with the manufacturers' recommendations. Permittee shall also comply with the provisions of 40 CFR 60.756(b) or (c) or (d).

IV. RECORDKEEPING REQUIREMENTS.

011 [25 Pa. Code §127.441]

Operating permit terms and conditions.

Compliance with the particulate emissions limitations shall be demonstrated through the use of an accepted emission factor, engineering estimates, and the records of gas flow to flare.

REPORTING REQUIREMENTS.

No additional reporting requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements).

VI. WORK PRACTICE REQUIREMENTS.

012 [25 Pa. Code §127.441]

Operating permit terms and conditions.

The flare shall be installed and operated in accordance with the manufacturer's specifications.

VII. ADDITIONAL REQUIREMENTS.

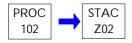
No additional requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements).

*** Permit Shield in Effect. ***



Source ID: 102 Source Name: OPERATIONS AND ROADWAY DUST

Source Capacity/Throughput:



I. RESTRICTIONS.

No additional requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements).

II. TESTING REQUIREMENTS.

No additional testing requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements).

III. MONITORING REQUIREMENTS.

No additional monitoring requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements).

IV. RECORDKEEPING REQUIREMENTS.

No additional record keeping requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements).

V. REPORTING REQUIREMENTS.

No additional reporting requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements).

VI. WORK PRACTICE REQUIREMENTS.

No additional work practice requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements).

VII. ADDITIONAL REQUIREMENTS.

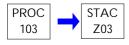
No additional requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements).

*** Permit Shield in Effect. ***



Source ID: 103 Source Name: SOIL SCREENING UNIT

Source Capacity/Throughput:



This source occurs in alternate operation: TEMPORARY CRUSHING OPERATION

RESTRICTIONS.

Emission Restriction(s).

001 [25 Pa. Code §123.21]

General

No person may permit the emission into the outdoor atmosphere of sulfur oxides from a source in a manner that the concentration of the sulfur oxides, expressed as SO2, in the effluent gas exceeds 500 parts per million, by volume, dry basis.

002 [25 Pa. Code §127.441]

Operating permit terms and conditions.

The owner/operator may only process soils and/or materials with prior Department approval. Current acceptable materials include but are not limited to: uncontaminated soil excavated on site, shale, or strip mine spoil.

II. TESTING REQUIREMENTS.

No additional testing requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements).

III. MONITORING REQUIREMENTS.

No additional monitoring requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements).

IV. RECORDKEEPING REQUIREMENTS.

003 [25 Pa. Code §127.511]

Monitoring and related recordkeeping and reporting requirements.

The owner/operator shall demonstrate compliance with the sulfur oxides limitation through the use of fuel usage records and an accepted emission factor. These records shall be kept and maintained on site for 5 years.

V. REPORTING REQUIREMENTS.

No additional reporting requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements).

VI. WORK PRACTICE REQUIREMENTS.

004 [25 Pa. Code §127.441]

Operating permit terms and conditions.

The material being processed must be kept moist enough as to prevent and minimize fugitive emissions.





VII. ADDITIONAL REQUIREMENTS.

No additional requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements).

*** Permit Shield in Effect. ***



SECTION E. Source Group Restrictions.





Alternative Operation Name: TEMPORARY CRUSHING OPERATION

#001 CHANGES FROM NORMAL OPERATION

The following provisions are applicable when a crusher is used on site for soil processing.

Sources included in this Alternative Operation:

ID	Name	Source Type
103	SOIL SCREENING UNIT	Process

I. RESTRICTIONS.

Emission Restriction(s).

001 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.670] Subpart OOO - Standards of Performance for Nonmetallic Mineral Processing Plants Applicability and designation of affected facility.

- (a) Except as provided in paragraphs (b), (c) and (d) of this section, the provisions of this subpart are applicable to the following affected facilities in fixed or portable nonmetallic mineral processing plants: each crusher, grinding mill, screening operation, bucket elevator, belt conveyor, bagging operation, storage bin, enclosed truck or railcar loading station.
- (b) An affected facility that is subject to the provisions of subpart F or I or that follows in the plant process any facility subject to the provisions of subparts F or I of this part is not subject to the provisions of this subpart.
 - (c) Facilities at the following plants are not subject to the provisions of this subpart:
- (1) Fixed sand and gravel plants and crushed stone plants with capacities, as defined in 60.671, of 23 megagrams per hour (25 tons per hour) or less;
- (2) Portable sand and gravel plants and crushed stone plants with capacities, as defined in 60.671, of 136 megagrams per hour (150 tons per hour) or less; and
- (3) Common clay plants and pumice plants with capacities, as defined in 60.671, of 9 megagrams per hour (10 tons per hour) or less.
- (d)(1) When an existing facility is replaced by a piece of equipment of equal or smaller size, as defined in 60.671, having the same function as the existing facility, the new facility is exempt from the provisions of 60.672, 60.674, and 60.675 except as provided for in paragraph (d)(3) of this section.
- (2) An owner or operator seeking to comply with this paragraph shall comply with the reporting requirements of 60.676(a) and (b).
- (3) An owner or operator replacing all existing facilities in a production line with new facilities does not qualify for the exemption described in paragraph (d)(1) of this section and must comply with the provisions of 60.672, 60.674 and 60.675.
- (e) An affected facility under paragraph (a) of this section that commences construction, reconstruction, or modification after August 31, 1983 is subject to the requirements of this part.

002 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.672] Subpart OOO - Standards of Performance for Nonmetallic Mineral Processing Plants Standard for particulate matter.

(a) On and after the date on which the performance test required to be conducted by 60.8 is completed, no owner or operator subject to the provisions of this subpart shall cause to be discharged into the atmosphere from any transfer point on belt conveyors or from any other affected facility any stack emissions which:

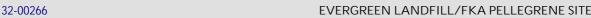


- (1) Contain particulate matter in excess of 0.05 g/dscm; or
- (2) Exhibit greater than 7 percent opacity, unless the stack emissions are discharged from an affected facility using a wet scrubbing control device. Facilities using a wet scrubber must comply with the reporting provisions of 60.676(c), (d), and (e).
- (b) On and after the sixtieth day after achieving the maximum production rate at which the affected facility will be operated, but not later than 180 days after initial startup, no owner or operator subject to the provisions of this subpart shall cause to be discharged into the atmosphere from any transfer point on belt conveyors or from any other affected facility any fugitive emissions which exhibit greater than 10 percent opacity, except as provided in paragraphs (c), (d) and (e) of this section.
- (c) On and after the sixtieth day after achieving the maximum production rate at which the affected facility will be operated, but not later than 180 days after initial startup, no owner or operator shall cause to be discharged into the atmosphere from any crusher, at which a capture system is not used, fugitive emissions which exhibit greater than 15 percent opacity.
- (d) Truck dumping of nonmetallic minerals into any screening operation, feed hopper, or crusher is exempt from the requirements of this section.
- (e) If any transfer point on a conveyor belt or any other affected facility is enclosed in a building, then each enclosed affected facility must comply with the emission limits in paragraphs (a), (b) and (c) of this section, or the building enclosing the affected facility or facilities must comply with the following emission limits:
- (1) No owner or operator shall cause to be discharged into the atmosphere from any building enclosing any transfer point on a conveyor belt or any other affected facility any visible fugitive emissions except emissions from a vent as defined in 60.671.
- (2) No owner or operator shall cause to be discharged into the atmosphere from any vent of any building enclosing any transfer point on a conveyor belt or any other affected facility emissions which exceed the stack emissions limits in paragraph (a) of this section.

II. TESTING REQUIREMENTS.

003 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.675] Subpart OOO - Standards of Performance for Nonmetallic Mineral Processing Plants Test methods and procedures.

- (a) In conducting the performance tests required in 60.8, the owner or operator shall use as reference methods and procedures the test methods in appendix A of this part or other methods and procedures as specified in this section, except as provided in 60.8(b). Acceptable alternative methods and procedures are given in paragraph (e) of this section.
 - (b) The owner or operator shall determine compliance with the particulate matter standards in 60.272(a) as follows:
- (1) Method 5 or Method 17 shall be used to determine the particulate matter concentration. The sample volume shall be at least 1.70 dscm (60 dscf). For Method 5, if the gas stream being sampled is at ambient temperature, the sampling probe and filter may be operated without heaters. If the gas stream is above ambient temperature, the sampling probe and filter may be operated at a temperature high enough, but no higher than 121C (250F), to prevent water condensation on the filter.
 - (2) Method 9 and the procedures in 60.11 shall be used to determine opacity.
- (c) In determining compliance with the particulate matter standards in 60.672 (b) and (c), the owner or operator shall use Method 9 and the procedures in 60.11, with the following additions:



- (1) The minimum distance between the observer and the emission source shall be 4.57 meters (15 feet).
- (2) The observer shall, when possible, select a position that minimizes interference from other fugitive emission sources (e.g., road dust). The required observer position relative to the sun (Method 9, Section 2.1) must be followed.
- (3) For affected facilities using wet dust suppression for particulate matter control, a visible mist is sometimes generated by the spray. The water mist must not be confused with particulate matter emissions and is not to be considered a visible emission. When a water mist of this nature is present, the observation of emissions is to be made at a point in the plume where the mist is no longer visible.
- (d) In determining compliance with 60.672(e), the owner or operator shall use Method 22 to determine fugitive emissions. The performance test shall be conducted while all affected facilities inside the building are operating. The performance test for each building shall be at least 75 minutes in duration, with each side of the building and the roof being observed for at least 15 minutes.
- (e) The owner or operator may use the following as alternatives to the reference methods and procedures specified in this section:
- (1) For the method and procedure of paragraph (c) of this section, if emissions from two or more facilities continuously interfere so that the opacity of fugitive emissions from an individual affected facility cannot be read, either of the following procedures may be used:
- (i) Use for the combined emission stream the highest fugitive opacity standard applicable to any of the individual affected facilities contributing to the emissions stream.
 - (ii) Separate the emissions so that the opacity of emissions from each affected facility can be read.
- (f) To comply with 60.676(d), the owner or operator shall record the measurements as required 60.676(c) using the monitoring devices in 60.674(a) and (b) during each particulate matter run and shall determine the averages.

III. MONITORING REQUIREMENTS.

No additional monitoring requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements).

IV. RECORDKEEPING REQUIREMENTS.

004 [25 Pa. Code §127.447]

Alternate operating scenarios.

The owner/operator may process soil with a crusher under this alternate operating scenario provided that the following recordkeepoing requirements are met.

The owner/operator shall record in a log a record of the scenario under which it is operating at all times and at a minimum shall include:

- a. The number of hours the engine is operated per month.
- b. The amount of fuel used per month.
- c. The degree of ignition retardation for spark ignition engine or injection retardation for compression ignition engine.

V. REPORTING REQUIREMENTS.

005 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.676]

Subpart OOO - Standards of Performance for Nonmetallic Mineral Processing Plants

Reporting and recordkeeping.



- (a) Each owner or operator seeking to comply with 60.670(d) shall submit to the Administrator the following information about the existing facility being replaced and the replacement piece of equipment.
 - (1) For a crusher, grinding mill, bucket elevator, bagging operation, or enclosed truck or railcar loading station:
 - (i) The rated capacity in tons per hour of the existing facility being replaced and
 - (ii) The rated capacity in tons per hour of the replacement equipment.
 - (2) For a screening operation:
 - (i) The total surface area of the top screen of the existing screening operation being replaced and
 - (ii) The total surface area of the top screen of the replacement screening operation.
 - (3) For a conveyor belt:
 - (i) The width of the existing belt being replaced and
 - (ii) The width of the replacement conveyor belt.
 - (4) For a storage bin:
 - (i) The rated capacity in tons of the existing storage bin being replaced and
 - (ii) The rated capacity in tons of replacement storage bins.
- (b) Each owner or operator seeking to comply with 60.670(d) shall submit the following data to the Director of the Emission Standards and Engineering Division, (MD-13), U.S. Environmental Protection Agency, Research Triangle Park, North Carolina 27711.
 - (1) The information described in 60.676(a).
- (2) A description of the control device used to reduce particulate matter emissions from the existing facility and a list of all other pieces of equipment controlled by the same control device; and
 - (3) The estimated age of the existing facility.
- (c) During the initial performance test of a wet scrubber, and daily thereafter, the owner or operator shall record the measurements of both the change in pressure of the gas stream across the scrubber and the scrubbing liquid flow rate.
- (d) After the initial performance test of a wet scrubber, the owner or operator shall submit semiannual reports to the Administrator of occurrences when the measurements of the scrubber pressure loss (or gain) and liquid flow rate differ by more than 30 percent from the averaged determined during the most recent performance test.
- (e) The reports required under paragraph (d) shall be postmarked within 30 days following end of the second and fourth calendar quarters.
- (f) The owner or operator of any affected facility shall submit written reports of the results of all performance tests conducted to demonstrate compliance with the standards set forth in 60.672, including reports of opacity observations made using Method 9 to demonstrate compliance with 60.672(b) and (c) and reports of observations using Method 22 to demonstrate compliance with 60.672(e).



(g) The requirements of this paragraph remain in force until and unless the Agency, in delegating enforcement authority to a State under section 111(c) of the Act, approves reporting requirements or an alternative means of compliance surveillance adopted by such States. In that event, affected sources within the State will be relieved of the obligation to comply with paragraphs (a), (c), (d), (e), and (f) of this section, provided that they comply with requirements established by the State. Compliance with paragraph (b) of this section will still be required.

VI. WORK PRACTICE REQUIREMENTS.

006 [25 Pa. Code §127.447]

Alternate operating scenarios.

Water spray dust suppression systems on portable nonmetallic mineral processing plants(crusher) shall be operated on any and all occasions that the respective plant is operated. Operation without simultaneous operation of the water spray dust suppression system can take place only in those unusual instances where process materials contain sufficient moisture so as not to create air contaminant emission in excess of the limitations and standards of this permit.

VII. ADDITIONAL REQUIREMENTS.

No additional requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements).

*** Permit Shield in Effect. ***





SECTION G. Emission Restriction Summary.

Alternative Operation Emission Restricted in sthis section of the permit.

Source Id

Source Description







The following sources have been determined to qualify as insignificant activities by the Department:

Source-Size/Capacity(qty)

Leachate Collection System- Manholes/Lift stations
Leachate Storage ponds
Condensate Collection System
Backup/Standby generator 25 KW with8 gallon tank
Portable Pump/generators<100hp
Backup/Standby generator tank-8gallons
Gasoline Storage Tank-300 gallons
Waste Oil Storage Tank-300 gallons
Lubricant Storage Tanks-300 gallons(3)
Miscellaneous Oil Storage tanks
Maintenance Shop activities

Parts Washer-Safety-Kleen pedestal parts washer<10 sq ft

Combustion heater/furnace-0.5 MMBTU/hr

DEP Auth ID: 729715



***** End of Report *****