



COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
AIR QUALITY PROGRAM

TITLE V/STATE OPERATING PERMIT

Issue Date: March 30, 2006

Effective Date: March 30, 2006

Expiration Date: March 30, 2011

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: 48-00037](#)

Federal Tax Id - Plant Code: 23-2821848-1

Owner Information

Name: CHRIN BROS INC
Mailing Address: 635 INDUSTRIAL DR
EASTON, PA 18042-7339

Plant Information

Plant: CHRIN BROS SANI LDFL/CHRIN LDFL
Location: 48 Northampton County 48937 Williams Township
SIC Code: 4953 Trans. & Utilities - Refuse Systems

Responsible Official

Name: GREGORY CHRIN
Title: LANDFILL MGR
Phone: (610) 258 - 8737

Permit Contact Person

Name: THOMAS E MCMONIGLE
Title: LANDFILL ENGINEER
Phone: (610) 258 - 8737

[Signature] _____
THOMAS A DILAZARO, NORTHEAST REGION AIR PROGRAM MANAGER



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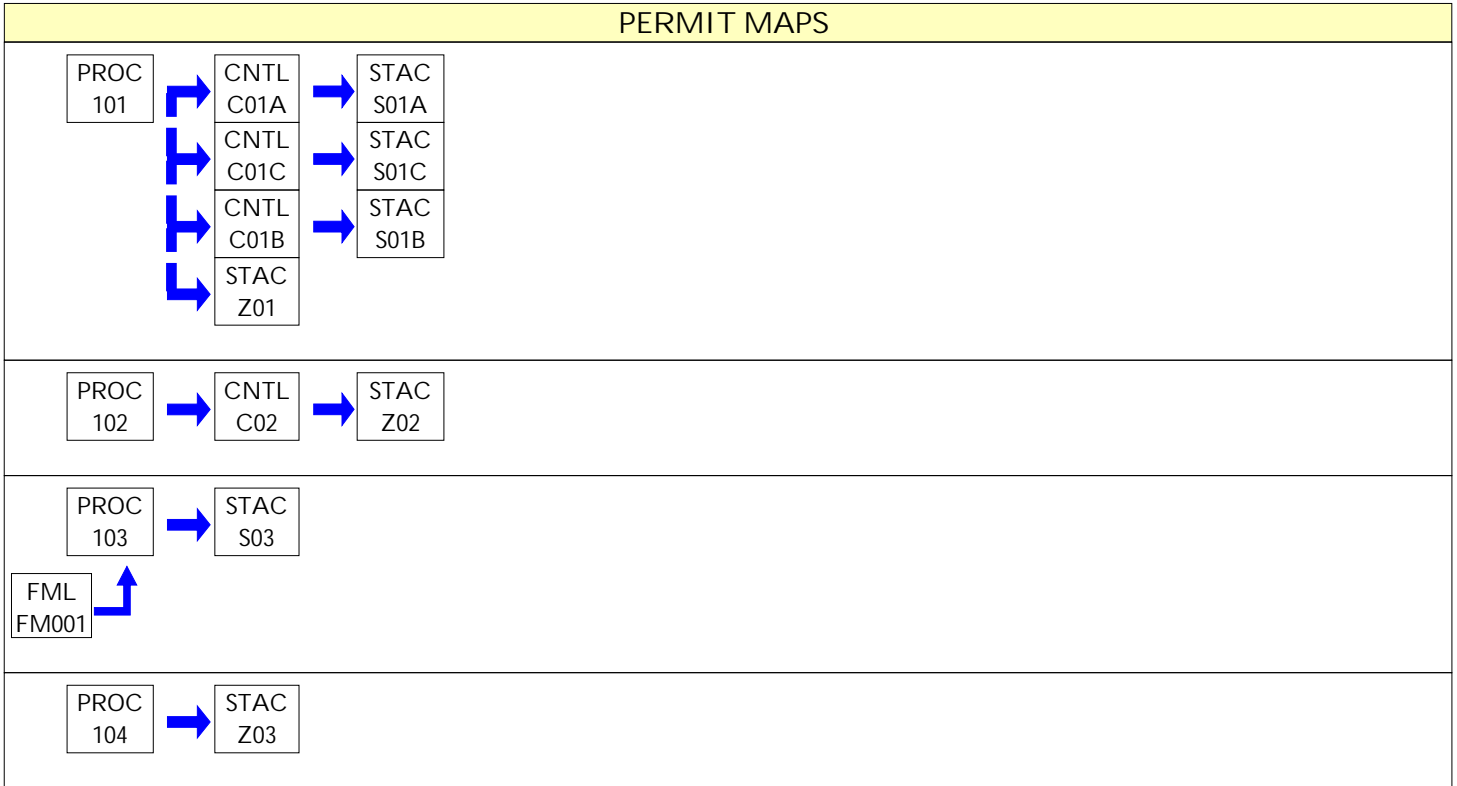
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SECTION A. Site Inventory List

Source ID	Source Name	Capacity/Throughput		Fuel/Material
101	GAS COLLECTION/PROCESSING SYSTEM	800.000	Th Sq Ft/HR	LANDFILL GAS
102	PORTABLE ROCK CRUSHING OPERATION	250.000	Tons/HR	GRANITE
103	CRUSHING OPER DIESEL GENERATOR		N/A	Diesel Fuel
104	FUGITIVE DUST EMISSIONS		N/A	PARTICULATE
C01A	LANDFILL GAS FLARE #1 (ENCLOSED FLARE)		N/A	LANDFILL GAS
C01B	LANDFILL GAS FLARE #2 (ENCLOSED FLARE)		N/A	LANDFILL GAS
C01C	CANDLESTICK FLARE (UTILITY FLARE)	35.400	MCF/HR	LANDFILL GAS
C02	WATER SPRAY DUST SUPPRESSION SYSTEM			
FM001	DIESEL FUEL			
S01A	ENCLOSED FLARE #1 EXHAUST			
S01B	ENCLOSED FLARE #2 EXHAUST			
S01C	CANDLESTICK FLARE STACK			
S03	DIESEL GENERATOR STACK			
Z01	FUGITIVE LANDFILL VOCS			
Z02	CRUSHER EMISSIONS			
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PERMIT MAPS





SECTION B. General Title V Requirements

#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,



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(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.

**SECTION B. General Title V Requirements**

#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.



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#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).



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(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 NO_x from a single source during the term of the permit and 5 tons of NO_x 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



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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).



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#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 (3AP12)
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:



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(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

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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,

**SECTION B. General Title V Requirements**

(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.

SECTION B. General Title V Requirements

- (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.



SECTION C. Site Level Requirements

I. RESTRICTIONS.

Emission Restriction(s).

001 [25 Pa. Code §123.1]

Prohibition of certain fugitive emissions

The permittee may not permit the emission into the outdoor atmosphere of a fugitive air contaminant from a source other than the following:

- (a) Construction or demolition of buildings or structures.
- (b) Grading, paving and maintenance of roads and streets.
- (c) 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.
- (d) Clearing of land.
- (e) Stockpiling of materials.
- (f) Open burning operations.
- (g) Sources and classes of sources other than those identified in paragraphs (a)-(f), for which the operator has obtained a determination from the Department that fugitive emissions from the source, after appropriate control, meet the following requirements:

(1) the emissions are of minor significance with respect to causing air pollution; and

(2) the emissions are not preventing or interfering with the attainment or maintenance of any ambient air quality standard.

002 [25 Pa. Code §123.2]

Fugitive particulate matter

The permittee may not permit fugitive particulate matter to be emitted into the outdoor atmosphere from a source specified in Site Level Condition #001(a) -- (g) (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

MALODOR EMISSIONS

The permittee 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

VISIBLE EMISSIONS

(a) 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.

(b) The limitations of section (a) 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 emission.
- (3) When the emission results from sources specified in Site Level Condition #001 (relating to prohibition of certain fugitive emissions).



SECTION C. Site Level Requirements

II. TESTING REQUIREMENTS.

005 [25 Pa. Code §127.511]

Monitoring and related recordkeeping and reporting requirements.

All sampling, testing and analyses performed in compliance with the requirements of any section of this permit shall be done in accordance with General Title V Requirement #021.

006 [25 Pa. Code §127.511]

Monitoring and related recordkeeping and reporting requirements.

(a) If requested by the Department, the permittee shall perform a stack test within the time frame specified by the Department.

(b) All performance tests shall be conducted in accordance with 40 CFR Part 60, Section 60.754 and the Department's source testing procedures described in the latest Source Testing Manual reference in 25 Pa. Code, Section 139.4(5).

III. MONITORING REQUIREMENTS.

007 [25 Pa. Code §123.43]

Measuring techniques

Visible emissions may be measured using either of the following:

(a) A device approved by the Department and maintained to provide accurate opacity measurements.

(b) Observers, trained and qualified to measure plume opacity with the naked eye or with the aid of any devices approved by the Department.

008 [25 Pa. Code §127.511]

Monitoring and related recordkeeping and reporting requirements.

FUGITIVE AND VISIBLE EMISSIONS

The permittee shall conduct weekly inspections of the facility, during daylight hours when the plant is in operation, to detect visible and fugitive emissions as follows:

(a) Visible emissions in excess of the limits stated in this permit. Visible emissions may be measured according to the methods specified in Site Level Condition #007, or alternatively, plant personnel who observe any visible emissions (i.e. emissions in excess of 0% opacity) will report the incident of visible emissions to the Department within four (4) hours of each incident and make arrangements for a certified observer to verify the opacity of the emissions.

(b) The presence of fugitive emissions visible beyond the boundaries of the facility, as stated in Site Level Condition #002.

IV. RECORDKEEPING REQUIREMENTS.

009 [25 Pa. Code §127.511]

Monitoring and related recordkeeping and reporting requirements.

FUGITIVE AND VISIBLE EMISSIONS

(a) The permittee shall, at the conclusion of each weekly inspection, record all occurrences of fugitive or visible emissions which deviate from the limitations (Site Level Conditions #002 and #004) in a log book.

(b) The permittee shall record any and all corrective action(s) taken to abate each recorded deviation or prevent future occurrences.

010 [25 Pa. Code §127.511]

Monitoring and related recordkeeping and reporting requirements.

All records, reports and analyses results generated in compliance with the requirements of any section of this permit shall be maintained in accordance with General Title V Requirement #022, Section (b), and shall be made available to the Department upon written or verbal request at a reasonable time.



SECTION C. Site Level Requirements

V. REPORTING REQUIREMENTS.

011 [25 Pa. Code §127.511]

Monitoring and related recordkeeping and reporting requirements.

FUGITIVE AND VISIBLE EMISSIONS

(a) On a semi-annual basis, the permittee shall compile a report of all logged instances of deviation from the fugitive or visible emission limitations that occurred and the actions taken in response to them. This report shall be submitted to the Department.

(b) If no deviations have been logged during the reported period, this report shall be retained at the facility and be made available to the Department upon request.

012 [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.

(c) Annual emission statements are due by March 1 for the preceding calendar year beginning with March 1, 1993, for calendar year 1992 and shall provide data consistent with requirements and guidance developed by the EPA. The guidance document is available from: United States Environmental Protection Agency, 401 M. Street, S.W., Washington, D.C. 20460. The Department may require more frequent submittals if the Department determines that one or more of the following applies:

(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.

013 [25 Pa. Code §135.3]

Reporting

(a) A person who owns or operates a source to which this chapter applies, and who has previously been advised by the Department to submit a source report, shall submit by March 1 of each year a source report for the preceding calendar year. The report shall include information for all previously reported sources, new sources which were first operated during the preceding calendar year and sources modified during the same period which were not previously reported.

(b) A person who receives initial notification by the Department that a source report is necessary shall submit an initial source report within 60 days after receiving the notification or by March 1 of the year following the year for which the report is required, whichever is later.



SECTION C. Site Level Requirements

(c) A source 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.

VI. WORK PRACTICE REQUIREMENTS.

014 [25 Pa. Code §123.1]

Prohibition of certain fugitive emissions

The permittee shall take all reasonable actions to prevent particulate matter from becoming airborne. These actions shall include, but not be limited to, the following:

- (a) 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.
- (b) Application of asphalt, oil, water or suitable chemicals on dirt roads, material stockpiles and other surfaces which may give rise to airborne dusts.
- (c) Paving and maintenance of roadways.
- (d) 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.

015 [25 Pa. Code §129.14]

Open burning operations

(a) 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.

(b) Exceptions: The requirements of subsection (a) 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.

(c) Clearing and grubbing wastes. The following is applicable to clearing and grubbing waste:

(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 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



SECTION C. Site Level Requirements

Department may order that the open burning cease or comply with subsection (a) 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.

(3) During an air pollution episode, open burning is limited by 25 Pa. Code, Chapter 137 (relating to air pollution episodes) and shall cease as specified in such chapter.

VII. ADDITIONAL REQUIREMENTS.

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

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.

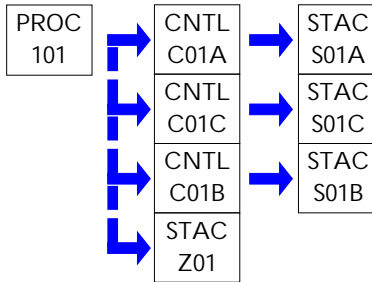
*** Permit Shield In Effect ***

SECTION D. Source Level Requirements

Source ID: 101

Source Name: GAS COLLECTION/PROCESSING SYSTEM

Source Capacity/Throughput: 800.000 Th Sq Ft/HR LANDFILL GAS

**I. RESTRICTIONS.****Emission Restriction(s).**

001 [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.

The landfill gas collection system must be operated so as to prevent the concentration of methane at the surface of the landfill from exceeding 500.0000 PPMV above background.

002 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.1965]

Subpart AAAA - National Emission Standards for Hazardous Air Pollutants: Municipal Solid Waste Landfills

What is a deviation?

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

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

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

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

Control Device Efficiency Restriction(s).

003 [25 Pa. Code §127.441]

Operating permit terms and conditions.

The active gas collection system may not have a collection efficiency of less than 70% for Volatile Organic Compounds.

II. TESTING REQUIREMENTS.

004 [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 C(NMOC).

(i) The equation shown in 40 CFR Part 60.754(a)(1)(i) shall be used if the actual year-to-year solid waste acceptance rate

SECTION D. Source Level Requirements

is known. The mass of nondegradable solid waste may be subtracted from the total mass of solid waste in a particular section of the landfill when calculating the value for M_i if the documentation provisions of 40 CFR Part 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.

$$M(\text{NMOC}) = 2(\text{Lo})(R)[e^{-(kc)} - e^{-(kt)}][C(\text{NMOC})][3.6 \times 10^{-9}]$$

where,

$M(\text{NMOC})$ = 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

$C(\text{NMOC})$ = concentration of NMOC, parts per million by volume as hexane

c = time since closure, years. For active landfill $c=0$ and $e^{-(kc)}=1$

3.6×10^{-9} = conversion factor

The mass of nondegradable solid waste may be subtracted from the average annual acceptance rate when calculating a value for R , if the documentation provisions of 40 CFR Part 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 40 CFR Part 60.757(b)(1), and shall recalculate the NMOC mass emission rate annually as required under 40 CFR Part 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 40 CFR Part 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 40 CFR Part 60 or Method 18 of appendix A of 40 CFR Part 60. If using Method 18 of appendix A of 40 CFR Part 60, the minimum list of compounds to be tested shall be those published in the most recent Compilation of Air Pollutant Emission Factors (AP-42). If composite sampling is used, equal volumes shall be taken from each sample probe. If more than the required number of samples are taken, all samples shall be used in the analysis. The landfill owner or operator shall divide the NMOC concentration from Method 25C of appendix A of 40 CFR Part 60 by six to convert from $C(\text{NMOC})$ as carbon to $C(\text{NMOC})$ 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 40 CFR Part 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 40 CFR Part 60.757(b)(1) and retest the site-specific NMOC concentration every 5 years using the methods specified in this section.



SECTION D. Source Level Requirements

(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 40 CFR Part 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 40 CFR Part 60.757(b)(1) and shall recalculate the NMOC mass emission rate annually, as provided in 40 CFR Part 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 Department & EPA as provided in 40 CFR Part 60.752(b)(2)(i)(B).

(b) After the installation of a collection and control system in compliance with 40 CFR Part 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 40 CFR Part 60.752(b)(2)(v), using the following equation:

$$M(\text{NMOC}) = [1.89 \times 10^{(-3)}][Q(\text{LFG})][C(\text{NMOC})]$$

where,

$M(\text{NMOC})$ = mass emission rate of NMOC, megagrams per year

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

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

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

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

(3) The owner or operator may use another method to determine landfill gas flow rate and NMOC concentration if the method has been approved by the Department & EPA as provided in 40 CFR Part 60.752(b)(2)(i)(B).

(c) The owner or operator of each Municipal Solid Waste 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 40 CFR Part 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 40 CFR Part 60.752(b)(2)(iii)(B), Method 25 or Method 18 of appendix A of 40 CFR Part 60 shall be used to determine compliance with 98 weight-percent efficiency or the 20 ppmv outlet concentration level,



SECTION D. Source Level Requirements

unless another method to demonstrate compliance has been approved by the Department & EPA as provided by 40 CFR Part 60.752(b)(2)(i)(B). If using Method 18 of appendix A of 40 CFR Part 60, the minimum list of compounds to be tested shall be those published in the most recent Compilation of Air Pollutant Emission Factors (AP-42). The following equation shall be used to calculate efficiency:

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

where,

NMOC(in) = mass of NMOC entering control device

NMOC(out) = mass of NMOC exiting control device

III. MONITORING REQUIREMENTS.

005 [25 Pa. Code §127.511]

Monitoring and related recordkeeping and reporting requirements.

The permittee shall, on a daily basis, determine the total amount of landfill gas generated by the landfill and the total amount of landfill gas combusted by the flares. The total volume of landfill gas generated shall be determined using the EPA Landfill Gas Emissions Model (2.0 or latest version) by inputting actual waste landfilling rates and actual landfill gas (NMOC) concentrations.

006 [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 40 CFR Part 60.752(b)(2)(i)(B),

(a) Each owner or operator seeking to comply with 40 CFR Part 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 40 CFR Part 60.755(a)(3);

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

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

(b) Each owner or operator seeking to comply with 40 CFR Part 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 40 CFR Part 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

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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 40 CFR Part 60.752(b)(2)(iii) using a device other than an open flare or an enclosed combustor shall provide information satisfactory to the Department & EPA as provided in 40 CFR Part 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 Department & EPA shall review the information and either approve it, or request that additional information be submitted. The Department and/or EPA may specify additional appropriate monitoring procedures.

(e) Each owner or operator seeking to install a collection system that does not meet the specifications in 40 CFR Part 60.759 or seeking to monitor alternative parameters to those required by 40 CFR Parts 60.753 through 60.756 shall provide information satisfactory to the Department & EPA as provided in 40 CFR Part 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 Department and/or EPA may specify additional appropriate monitoring procedures.

(f) Each owner or operator seeking to demonstrate compliance with 40 CFR Part 60.755(c), shall monitor surface concentrations of methane according to the instrument specifications and procedures provided in 40 CFR Part 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.

IV. RECORDKEEPING REQUIREMENTS.

007 [25 Pa. Code §127.511]

Monitoring and related recordkeeping and reporting requirements.

The permittee shall maintain records sufficient to demonstrate that the collection/capture efficiency of the landfill gas collection system is at least 70%.

008 [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 40 CFR Part in 60.752(b)(2)(i)(B),

(a) Each owner or operator of Municipal Solid Waste landfill subject to the provisions of 40 CFR Part 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 40 CFR Part 60.752(b)(2)(ii):

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(i) The maximum expected gas generation flow rate as calculated in 40 CFR Part 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 Department & EPA.

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

(2) Where an owner or operator subject to the provisions of 40 CFR Part 60, Subpart WWW seeks to demonstrate compliance with 40 CFR Part 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 40 CFR Part 60.752(b)(2)(iii)(B) achieved by the control device.

(3) Where an owner or operator subject to the provisions of 40 CFR Part 60, Subpart WWW seeks to demonstrate compliance with 40 CFR Part 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 40 CFR Part 60, Subpart WWW seeks to demonstrate compliance with 40 CFR Part 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 40 CFR Part 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 40 CFR Part 60, Subpart WWW shall keep for 5 years up-to-date, readily accessible continuous records of the equipment operating parameters specified to be monitored in 40 CFR Part 60.756 as well as up-to-date, readily accessible records for periods of operation during which the parameter boundaries established during the most recent performance test are exceeded.

(1) The following constitute exceedances that shall be recorded and reported under 40 CFR Part 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 degrees C below the average combustion temperature during the most recent performance test at which compliance with 40 CFR Part 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 40 CFR Part 60, Subpart WWW shall keep up-to-date, readily accessible continuous records of the indication of flow to the control device or the indication of bypass flow or records of monthly inspections of car-seals or lock-and-key configurations used to seal bypass lines, specified under 40 CFR Part 60.756.

(3) Each owner or operator subject to the provisions of 40 CFR Part 60, Subpart WWW who uses a boiler or process heater with a design heat input capacity of 44 megawatts or greater to comply with 40 CFR Part 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 or Federal regulatory requirements.)

(4) Each owner or operator seeking to comply with the provisions of 40 CFR Part 60, Subpart WWW by use of an open flare shall keep up-to-date, readily accessible continuous records of the flame or flare pilot flame monitoring specified under 40 CFR Part 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.



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(d) Each owner or operator subject to the provisions of 40 CFR Part 60, Subpart WWW shall keep for the life of the collection system an up-to-date, readily accessible plot map showing each existing and planned collector in the system and providing a unique identification location label for each collector.

(1) Each owner or operator subject to the provisions of 40 CFR Part 60, Subpart WWW shall keep up-to-date, readily accessible records of the installation date and location of all newly installed collectors as specified under 40 CFR Part 60.755(b).

(2) Each owner or operator subject to the provisions of 40 CFR Part 60, Subpart WWW 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 40 CFR Part 60.759(a)(3)(i) as well as any nonproductive areas excluded from collection as provided in 40 CFR Part 60.759(a)(3)(ii).

(e) Each owner or operator subject to the provisions of 40 CFR Part 60, Subpart WWW 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 40 CFR Part 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.

009 [25 Pa. Code §127.511]

Monitoring and related recordkeeping and reporting requirements.

The permittee shall, on a quarterly basis, submit a report demonstrating that the collection/capture efficiency of the landfill gas collection system was in compliance during the preceding three (3) months. This report shall be submitted to the Department within thirty (30) days of the close of the quarter.

010 [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 40 CFR Part 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 Department & EPA.

(1) The initial design capacity report shall fulfill the requirements of the notification of the date construction is commenced as required under 40 CFR Part 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, or RCRA construction or operating permit; or
- (ii) 30 days of the date of construction or reconstruction as defined under 40 CFR Part 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, 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, local agency or EPA may request other reasonable information as may be necessary to verify the maximum design capacity of the landfill.

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(3) An amended design capacity report shall be submitted to the Department & EPA 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 Department & EPA initially and annually thereafter, except as provided for in paragraphs (b)(1)(ii) or (b)(3) of this section. The Department and/or EPA 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 40 CFR Part 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 Department & EPA 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 Department & EPA. 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 Department & EPA. 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 40 CFR Part 60, Subpart WWW 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 40 CFR Part 60.752(b)(2), during such time as the collection and control system is in operation and in compliance with 40 CFR Parts 60.753 and 60.755.

(c) Each owner or operator subject to the provisions of 40 CFR Part 60.752(b)(2)(i) shall submit a collection and control system design plan to the Department & EPA 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 40 CFR Part 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 40 CFR Part 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 40 CFR Part 60.754(a)(4) and the resulting site-specific



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methane generation rate constant (k) shall be submitted to the Department & EPA 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 Department and/or EPA may request additional information as may be necessary to verify that permanent closure has taken place in accordance with the requirements of 40 CFR Part 258.60. If a closure report has been submitted to the Department & EPA, no additional wastes may be placed into the landfill without filing a notification of modification as described under 40 CFR Part 60.7(a)(4).

(e) Each owner or operator of a controlled landfill shall submit an equipment removal report to the Department & EPA 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 Department and/or EPA may request such additional information as may be necessary to verify that all of the conditions for removal in 40 CFR Part 60.752(b)(2)(v) have been met.

(f) Each owner or operator of a landfill seeking to comply with 40 CFR Part 60.752(b)(2) using an active collection system designed in accordance with 40 CFR Part 60.752(b)(2)(ii) shall submit to the Department & EPA 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 40 CFR Part 60.8. For enclosed combustion devices and flares, reportable exceedances are defined under 40 CFR Part 60.758(c).

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

(2) Description and duration of all periods when the gas stream is diverted from the control device through a bypass line or the indication of bypass flow as specified under 40 CFR Part 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 40 CFR Part 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 40 CFR Part 60.755.

(g) Each owner or operator seeking to comply with 40 CFR Part 60.752(b)(2)(i) shall include the following information with the initial performance test report required under 40 CFR Part 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 non-



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productivity and the calculations of gas generation flow rate for each excluded area;

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

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

011 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.1980]

Subpart AAAA - National Emission Standards for Hazardous Air Pollutants: Municipal Solid Waste Landfills

What records and reports must I keep and submit?

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

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

VI. WORK PRACTICE REQUIREMENTS.

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 Department & EPA as provided in 40 CFR Part 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 Department & EPA an amended design capacity report, as provided for in 40 CFR Part 60.757(a)(3), when there is any increase in the design capacity of a landfill subject to the provisions of 40 CFR Part 60, Subpart WWW, 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 40 CFR Parts 60.752(b) through 60.759 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 a Municipal Solid Waste 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 40 CFR Part 60.754. The NMOC emission rate shall be recalculated annually, except as provided in 40 CFR Part 60.757(b)(1)(ii) of this subpart. The owner or operator of an Municipal Solid Waste landfill subject to 40 CFR Part 60, Subpart WWW 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 40 CFR Part 60.752(b)(2)(v) of subpart WWW, 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 Department & EPA, except as provided for in 40 CFR Part 60.757(b)(1)(ii); and

(ii) Recalculate the NMOC emission rate annually using the procedures specified in 40 CFR Part 60.754(a)(1) until such

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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 Department & EPA as provided for in 40 CFR Part 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 Department & EPA 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 40 CFR Parts 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 40 CFR Part 60.759 or include a demonstration to the Department's & EPA's satisfaction of the sufficiency of the alternative provisions to 40 CFR Part 60.759.

(D) The Department & EPA shall review the information submitted under paragraphs (b)(2)(i)(A)-(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 section Section 258.40 of Title 40.

(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.



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(A) An open flare designed and operated in accordance with 40 CFR Part 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 40 CFR Part 60.8 using the test methods specified in 40 CFR Part 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 40 CFR Part 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 40 CFR Part 60, Subpart WWW in accordance with the provisions of 40 CFR Parts 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 Section 258.60 of Title 40. A closure report shall be submitted to the Department & EPA as provided in 40 CFR Part 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 40 CFR Part 60.754(b), the calculated NMOC gas produced by the landfill 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 60.753]

[Subpart WWW--Standards of Performance for Municipal Solid Waste Landfills](#)

[Operational standards for collection and control systems.](#)

Each owner or operator of a Municipal Solid Waste landfill gas collection and control system used to comply with the provisions of 40 CFR Part 60.752(b)(2)(ii) shall:

(a) Operate the collection system such that gas is collected from each area, cell, or group of cells in the Municipal Solid Waste landfill in which solid waste has been in place for:

- (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 40 CFR Part 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 Department and EPA.

(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



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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 40 CFR Part 60.752(b)(2)(i).

(2) Unless an alternative test method is established as allowed by 40 CFR Part 60.752(b)(2)(i), 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 40 CFR Part 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.

(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 40 CFR Part 60.752(a)(3)-(5) or 40 CFR Part 60.755(c). If corrective actions are taken as specified in 40 CFR Part 60.755, the monitored exceedance is not a violation of the operational requirements in this section.

014 [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 40 CFR Part 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 40 CFR Part 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 40 CFR Part 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 40 CFR Part 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:

$$Q_m = 2(L_o)(R)[e^{-(k_c)} - e^{-(k_t)}]$$

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where,

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

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

R = average annual acceptance rate, megagrams per year

k = methane generation rate constant, year^{-1}

t = age of the landfill at equipment installation plus the time the owner or operator intends to use the gas mover equipment or active life of the landfill, whichever is less. If the equipment is installed after closure, t is the age of the landfill at installation, years

c = time since closure, years (for an active landfill $c=0$ and $e^{(-kc)}=1$)

(ii) Use the equation in 40 CFR Part 60.755(a)(1)(ii) for sites with known year-to-year solid waste acceptance rate:

(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 40 CFR Part 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 Department & EPA, capable of controlling and extracting gas from all portions of the landfill sufficient to meet all operational and performance standards.

(3) For the purpose of demonstrating whether the gas collection system flow rate is sufficient to determine compliance with 40 CFR Part 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 40 CFR Part 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 40 CFR Part 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 40 CFR Part 60.752(b)(2)(ii)(A)(4) through the use of a collection system not conforming to the specifications provided in 40 CFR Part 60.759 shall provide information satisfactory to the Department & EPA as specified in 40 CFR Part 60.752(b)(2)(i)(C) demonstrating that off-site migration is being controlled.

(b) For purposes of compliance with 40 CFR Part 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 40 CFR Part 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 40 CFR Part 60.753(d).

- (1) After installation of the collection system, the owner or operator shall monitor surface concentrations of methane



SECTION D. Source Level Requirements

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 Part 60, 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 40 CFR Part 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 re-monitoring shows a concentration less than 500 parts per million above background, no further monitoring of that location is required until the next quarterly monitoring period. If the 1-month re-monitoring 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 Department or EPA 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 Part 60, 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 Part 60 shall be used.

(4) The calibration procedures provided in Section 4.2 of Method 21 of appendix A of Part 60 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.

015 [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 40 CFR Part 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



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following procedures unless alternative procedures have been approved by the Department & EPA as provided in 40 CFR Part 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 40 CFR Part 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 Department and/or EPA 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 Department and/or EPA 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:

$$Q_i = 2(k)(L_o)(M_i)[e^{-(k t_i)}][C(\text{NMOC})][3.6 \times 10^{(-9)}]$$

where,

Q_i = NMOC emission rate from the i th section, megagrams per year

k = methane generation rate constant, year^{-1}

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

M_i = mass of the degradable solid waste in the i th section, megagram

t_i = age of the solid waste in the i th section, years

$C(\text{NMOC})$ = concentration of non-methane organic compounds, parts per million by volume

$3.6 \times 10^{(-9)}$ = conversion factor

(iii) The values for k , L_o , and $C(\text{NMOC})$ 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 , L_o and $C(\text{NMOC})$ provided in 40 CFR Part 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 40 CFR Part 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



SECTION D. Source Level Requirements

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 40 CFR Part 60.752(b)(2)(i)(A) shall convey the landfill gas to a control system in compliance with 40 CFR Part 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 40 CFR Part 60.755(a)(1).

016 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.1975]

[Subpart AAAA - National Emission Standards for Hazardous Air Pollutants: Municipal Solid Waste Landfills](#)

[How do I calculate the 3-hour block average used to demonstrate compliance?](#)

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

- (a) Monitoring system breakdowns, repairs, calibration checks, and zero (low-level) and high-level adjustments.
- (b) Startups.
- (c) Shutdowns.
- (d) Malfunctions.

017 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.6]

[Subpart A--General Provisions](#)

[Compliance with standards and maintenance requirements.](#)

(a) The owner or operator must develop and implement a written startup, shutdown, and malfunction plan that describes, in detail, procedures for operating and maintaining these sources during periods of startup, shutdown, or malfunction, and a program of corrective action for malfunctioning process, air pollution control, or monitoring equipment used to comply with the relevant standard.

(b) During periods of startup, shutdown, or malfunction the owner or operator must operate and maintain these sources (and any associated air pollution control or monitoring equipment) in accordance with the procedures specified in the startup, shutdown, and malfunction plan.

(c) The owner or operator may periodically revise the startup, shutdown, and malfunction plan for these sources, as necessary, to reflect changes in equipment or procedures at this facility. If the owner or operator makes any revision to the plan and such revision alters the scope of the activities at this facility that are deemed to be a startup, shutdown, or malfunction, or otherwise modifies the applicability of any emission limitation, work practice requirement, or other requirement contained within this operating permit, the revised plan shall not take effect until the owner or operator submits a written notice describing the proposed revision to the Department and EPA.

SECTION D. Source Level Requirements

(d) If a plan created under paragraph (a) of this requirement 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 it was developed, the owner or operator must revise the plan, as allowed under paragraph (c) of the requirement, within 45 days after the event to include detailed procedures for operating and maintaining these sources during similar malfunction events and a program of corrective action for similar malfunction events.

(e) The owner or operator will maintain a current startup, shutdown, and malfunction plan at this facility, and must make the plan available upon request for inspection and copying by the Department and/or EPA. In addition, if the startup, shutdown, and malfunction plan is subsequently revised, the owner or operator must maintain each previous (i.e., superceded) version of the plan at this facility, and must make each such previous version available for inspection and copying by the Department and/or EPA for a period of five (5) years after revision of the plan. If at any time after adoption of a startup, shutdown, and malfunction plan this facility ceases operation or is otherwise no longer subject to the provisions of 40 CFR Part 63, the owner or operator must retain a copy of the most recent plan for five (5) year from the date this facility ceases operation or is no longer subject to 40 CFR Part 63, and must make this plan available for inspection and copying by the Department and/or EPA. The Department and/or EPA 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 this facility 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 Department and EPA.

(f) When action taken by the owner or operator during a startup, shutdown, or malfunction (including actions taken to correct a malfunction) are consistent with the procedures specified in the facility'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 for that event. In addition, the owner or operator must keep records of the occurrence and duration of each startup, shutdown, or malfunction of operation and each malfunction of air pollution control and monitoring equipment.

(g) 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 this facility'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 two (2) working days after commencing actions inconsistent with the plan, followed by a letter within 7 working days after the end of the event (unless the owner or operator makes alternative reporting arrangements, in advance, with the Department and/or EPA).

(h) During any period of startup, shutdown, or malfunction, the owner or operator shall reduce emissions from these sources to the greatest extent that is consistent with good safety and 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 effort to reduce emissions if the levels in excess of the applicable standard have been achieved.

(i) All malfunctions must be corrected as soon as practicable after their occurrence in accordance with the plan developed in accordance with paragraph (a) of this requirement. To the extent that an unexpected event arises during a startup, shutdown or malfunction, and owner or operator must minimize emissions during such an event consistent with paragraph (h) of this requirement.

VII. ADDITIONAL REQUIREMENTS.

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



SECTION D. Source Level Requirements

*** Permit Shield in Effect. ***



SECTION D. Source Level Requirements

Source ID: 102

Source Name: PORTABLE ROCK CRUSHING OPERATION

Source Capacity/Throughput: 250.000 Tons/HR GRANITE



I. RESTRICTIONS.

Emission Restriction(s).

001 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.672]

Subpart 000 - Standards of Performance for Nonmetallic Mineral Processing Plants

Standard for particulate matter.

(a) 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 unit, any stack emissions which:

- (1) Contain particulate matter in excess of 0.05 g/dscm; or
- (2) Exhibit greater than 7% opacity, unless the stack emissions are discharged from an affected facility using a wet scrubbing control device.

(b) 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 unit, any fugitive emissions which exhibit greater than 10% opacity, except as provided in paragraphs (c), (d) and (e) of this section.

(c) 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 unit, is enclosed in a building, then each enclosed affected unit must comply with the emission limits in paragraphs (a), (b) and (c) of this section, or the building enclosing the affected unit(s) 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 unit, any visible fugitive emissions except emissions from a vent as defined in 40 CFR Part 60, Section 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 unit, emissions which exceed the stack emissions limits in paragraph (a) of this section.

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).



SECTION D. Source Level 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.

002 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.676]

Subpart 000 - Standards of Performance for Nonmetallic Mineral Processing Plants

Reporting and recordkeeping.

(a) Each owner or operator seeking to comply with 40 CFR Part 60, Section 60.670(d) shall submit to the Department and EPA the following information about the existing sources 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 40 CFR Part 60, Section 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 above in paragraph (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) 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 40 CFR Part 60, Section 60.672, including reports of opacity observations made using Method 9 to demonstrate compliance with 40 CFR Part 60, Sections 60.672(b)&(c) and reports of observations using Method 22 to demonstrate compliance with 40 CFR Part 60, Section 60.672(e).

VI. WORK PRACTICE REQUIREMENTS.

003 [25 Pa. Code §127.441]

Operating permit terms and conditions.

At all times that this source is in operation, the Water Spray Dust Suppression System (Control Device C03) shall be operated so as to prevent fugitive emissions from the Rock Crushing Operation in excess of the limitations of this permit.

SECTION D. Source Level Requirements**VII. ADDITIONAL REQUIREMENTS.**

004 [25 Pa. Code §127.441]

Operating permit terms and conditions.

This source consists of the following equipment:

- (a) One (1) Cedarapids Model 2542 primary rock crusher;
- (b) One (1) EL-JAY Model 1140 secondary rock crusher;
- (c) One (1) EL-JAY secondary crusher screen;
- (d) Two (2) EL-JAY conveyors; and
- (e) Three (3) miscellaneous conveyors.

*** Permit Shield in Effect. ***

**SECTION D. Source Level Requirements**

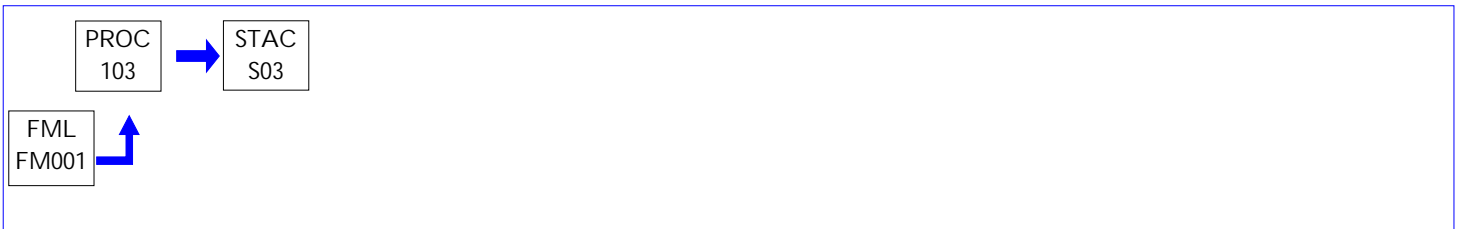
Source ID: 103

Source Name: CRUSHING OPER DIESEL GENERATOR

Source Capacity/Throughput:

N/A

Diesel Fuel

**I. RESTRICTIONS.****Emission Restriction(s).**

001 [25 Pa. Code §123.13]

Processes

No person may permit the emission into the outdoor atmosphere of particulate matter in a manner that the concentration of particulate matter in the effluent gas exceeds 0.0400 grain per dry standard cubic foot of Total Suspended Particulate.

002 [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.

Fuel Restriction(s).

003 [25 Pa. Code §127.444]

Compliance requirements.

This source shall only combust diesel fuel.

Throughput Restriction(s).

004 [25 Pa. Code §127.441]

Operating permit terms and conditions.

The total consumption of diesel fuel by this source may not exceed 49,000 gallons/year, as a 12-month rolling summation.

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.

005 [25 Pa. Code §127.441]

Operating permit terms and conditions.

The permittee shall monitor and record the hours of operation and fuel consumption of this generator.



SECTION D. Source Level 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. ***

SECTION D. Source Level Requirements

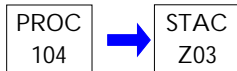
Source ID: 104

Source Name: FUGITIVE DUST EMISSIONS

Source Capacity/Throughput:

N/A

PARTICULATE

**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. ***



SECTION D. Source Level Requirements

Source ID: C01A	Source Name: LANDFILL GAS FLARE #1 (ENCLOSED FLARE)
Source Capacity/Throughput:	N/A LANDFILL GAS

Conditions for this source occur in the following groups: GROUP 1

I. RESTRICTIONS.

No additional requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements) and/or Section E (Source Group Restrictions).

II. TESTING REQUIREMENTS.

No additional testing requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements) and/or Section E (Source Group Restrictions).

III. MONITORING REQUIREMENTS.

No additional monitoring requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements) and/or Section E (Source Group Restrictions).

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) and/or Section E (Source Group Restrictions).

V. REPORTING REQUIREMENTS.

No additional reporting requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements) and/or Section E (Source Group Restrictions).

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) and/or Section E (Source Group Restrictions).

VII. ADDITIONAL REQUIREMENTS.

No additional requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements) and/or Section E (Source Group Restrictions).

*** Permit Shield in Effect. ***



SECTION D. Source Level Requirements

Source ID: C01B

Source Name: LANDFILL GAS FLARE #2 (ENCLOSED FLARE)

Source Capacity/Throughput:

N/A

LANDFILL GAS

Conditions for this source occur in the following groups: GROUP 1

I. RESTRICTIONS.

No additional requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements) and/or Section E (Source Group Restrictions).

II. TESTING REQUIREMENTS.

No additional testing requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements) and/or Section E (Source Group Restrictions).

III. MONITORING REQUIREMENTS.

No additional monitoring requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements) and/or Section E (Source Group Restrictions).

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) and/or Section E (Source Group Restrictions).

V. REPORTING REQUIREMENTS.

No additional reporting requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements) and/or Section E (Source Group Restrictions).

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) and/or Section E (Source Group Restrictions).

VII. ADDITIONAL REQUIREMENTS.

No additional requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements) and/or Section E (Source Group Restrictions).

*** Permit Shield in Effect. ***

**SECTION D. Source Level Requirements**

Source ID: C01C

Source Name: CANDLESTICK FLARE (UTILITY FLARE)

Source Capacity/Throughput: 35.400 MCF/HR LANDFILL GAS

I. RESTRICTIONS.**Emission Restriction(s).**

001 [25 Pa. Code §127.441]

Operating permit terms and conditions.

In addition to the visible emission limitations of 25 Pa. Code, Section 123.41, these control devices shall also be subject to the following additional limitation:

(a) No flare shall produce visible flames or emissions, except for periods not to exceed a total of 5 minutes in any 2 consecutive hours. Emissions during these periods shall not exceed 10% opacity.

Operation Hours Restriction(s).

002 [25 Pa. Code §127.441]

Operating permit terms and conditions.

The Candlestick Flare may only be used on those occasions when the Enclosed Flare (Control Device C01) is out of service or to control emissions from localized "hot spots" not connected to the overall gas collection system. Notification of intent to activate Control Device C01C shall be reported to the Department prior to actual start-up.

Control Device Efficiency Restriction(s).

003 [25 Pa. Code §127.441]

Operating permit terms and conditions.

Control Device C02, Candlestick Flare (Utility Flare), may not have a destruction efficiency less than 98% for Volatile Organic Compounds.

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.

004 [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.**

The permittee shall install, calibrate, maintain, and operate according to the manufacturer's specifications the following equipment on the open flare:

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

(b) A device that records flow to or bypass of the flare. The permittee shall either:

(1) 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

(2) 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.



SECTION D. Source Level 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.

005 [25 Pa. Code §127.441]

Operating permit terms and conditions.

(a) The operating temperature of the flare shall be maintained at a temperature of 1600 degrees Fahrenheit or the minimum temperature achieved during the performance test in which compliance with the destruction removal efficiency (DRE) requirements was demonstrated.

(b) Landfill gas being flared shall be retained at the aforementioned temperature for a period of not less than 0.5 seconds.

006 [25 Pa. Code §127.441]

Operating permit terms and conditions.

The open flare(s) incorporated in the landfill gas extraction, collection and control system associated with the solid waste disposal area shall meet the following criteria:

(a) The flare shall be equipped with the necessary equipment to allow auxiliary fuel to be bled into the landfill gas to enhance its heat content.

(b) The flare shall be equipped with a continuous pilot ignition source using an auxiliary fuel.

(c) There shall be sufficient flow of auxiliary fuel during system start-up or re-start such that a flame is supported and unburnt gases are not emitted to the atmosphere.

(d) The flare shall be equipped with a heat sensing flame scanner.

(e) In the event that the heat sensing flame scanner does not detect a flame, an automatic shut-off device shall immediately stop the flow of landfill gas to the flare and the flare shall be automatically shut down while sounding an alarm.

(f) The flare shall, at any given point in time, be capable of accommodating the maximum gas collection rate which will exist at that point in time while maintaining compliance with the limitations and requirements specified in, or established pursuant to, all applicable rules and regulations contained in Article III of the Rules and Regulations of the Department of Environmental Protection, as well as compliance with all conditions contained herein.

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.**

Group Name: GROUP 1

Group Description: Enclosed Flares

Sources included in this group:

ID	Name
C01A	LANDFILL GAS FLARE #1 (ENCLOSED FLARE)
C01B	LANDFILL GAS FLARE #2 (ENCLOSED FLARE)

I. RESTRICTIONS.**Emission Restriction(s).**

001 [25 Pa. Code §127.441]

Operating permit terms and conditions.

In addition to the visible emission limitations of 25 Pa. Code, Section 123.41, these control devices shall also be subject to the following additional limitation:

(a) No flare shall produce visible flames or emissions, except for periods not to exceed a total of 5 minutes in any 2 consecutive hours. Emissions during these periods shall not exceed 10% opacity.

Control Device Efficiency Restriction(s).

002 [25 Pa. Code §127.441]

Operating permit terms and conditions.

(a) Control Device C01, Landfill Gas Flare #1 (Enclosed Flare), may not have a destruction efficiency less than 98% for Volatile Organic Compounds.

(b) Control Device C02, Landfill Gas Flare #2 (Enclosed Flare), may not have a destruction efficiency less than 98% for Volatile Organic Compounds.

II. TESTING REQUIREMENTS.

003 [25 Pa. Code §127.441]

Operating permit terms and conditions.

(a) The permittee shall test the flares for Non-Methane Organic Compounds (NMOC), including the inlet and outlet concentrations, to determine the destruction efficiency of each flare according to the following procedures:

(1) The initial testing is to be conducted within sixty (60) days after achieving the maximum production rate and Department approval of the stack test protocol, but not later than 120 days after start-up of the flare.

(2) Testing procedures shall be submitted to the Regional Air Quality Program Manager as specified in General Title V Requirement #020.

(b) All performance tests shall be conducted in accordance with 40 CFR Part 60, Section 60.754 and the Department's source testing procedures described in the latest Source Testing Manual reference in 25 Pa. Code, Section 139.4(5).

III. MONITORING REQUIREMENTS.

004 [25 Pa. Code §127.511]

Monitoring and related recordkeeping and reporting requirements.

The permittee shall calibrate, maintain, and operate according to the manufacturer's specifications, the following equipment on each enclosed flare.

(a) 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 greater.

(b) A gas flow rate measuring device that provides a measurement of gas flow to or bypass of the control device. The permittee shall either:



SECTION E. Source Group Restrictions.

- (1) 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
- (2) 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.

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.

005 [25 Pa. Code §127.441]
Operating permit terms and conditions.
 The enclosed flare incorporated in the landfill gas extraction, collection and control system associated with the solid waste disposal area shall meet the following criteria:

- (a) The flare shall be equipped with the necessary equipment to allow auxiliary fuel to be bled into the landfill gas to enhance its heat content.
- (b) The flare shall be equipped with a continuous pilot ignition source using an auxiliary fuel.
- (c) There shall be sufficient flow of auxiliary fuel during system start-up or re-start such that a flame is supported and unburnt gases are not emitted to the atmosphere.
- (d) The temperature sensor associated with the continuous temperature monitor shall be positioned so that it will indicate the temperature of the gases after they have been in the flare for a period of at least 0.5 seconds.
- (e) In the event that the flare is not operating between 1560 and 1800 degrees Fahrenheit, an automatic shut-off device shall immediately stop the flow of landfill gas to the flare and the flare shall be automatically shut down while sounding an alarm.
- (f) The flare shall, at any given point in time, be capable of accommodating the maximum gas collection rate which will exist at that point in time while maintaining compliance with the limitations and requirements specified in, or established pursuant to, all applicable rules and regulations contained in Article III of the Rules and Regulations of the Department of Environmental Protection, as well as compliance with all conditions contained herein.

006 [25 Pa. Code §127.441]
Operating permit terms and conditions.

- (a) The operating temperature of the flare shall be maintained at a temperature of 1600 degrees Fahrenheit or the minimum temperature achieved during the performance test in which compliance with the destruction removal efficiency (DRE) requirements was demonstrated.
- (b) Landfill gas being flared shall be retained at the aforementioned temperature for a period of not less than 0.5 seconds.

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 F. Alternative Operation Requirements.

No Alternative Operations exist for this Title V facility.



SECTION G. Emission Restriction Summary.

Source Id	Source Description		
101	GAS COLLECTION/PROCESSING SYSTEM		
Emission Limit		Pollutant	
500.000	PPMV	above surface background	Methane

Site Emission Restriction Summary

Emission Limit	Pollutant
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SECTION H. Miscellaneous.

The following sources located at this facility have been determined to be of minor significance with regards to air pollution, and have no applicable emission, testing monitoring recordkeeping or reporting requirements:

- (1) Source 007: An oil-fired space heater in the storage building with a rated capacity of 0.184 MMBtu/hr (this unit was part of the former Source 105).
- (2) Source 008: An oil-fired space heater in the maintenance building with a rated fuel throughput of 1gallon/hr (this unit was part of the former Source 105).
- (3) Source 009: An oil-fired space heater in Building 501 with a rated capacity of 0.25 MMBtu/hr (this unit was part of the former Source 105).
- (4) Source 010: A 275 gall vented tank located in the basement of the storage building (estimated emission are less than 0.1 tons per year of VOCs).
- (5) Sources 011 & 013: Three (3) 500 gallon outdoor, above-ground vented storage tank (estimated emission are less than 0.1 tons per year of VOCs each).
- (6) Sources 014 thru 017: Four (4) 275 gallon tanks in the maintenance building (estimated emission are less than 0.1 tons per year of VOCs each).
- (7) Source 018: A 10,000 gallon underground storage tank in Building 501(estimated emission are less than 0.5 tons per year of VOCs).
- (8) Source 019: A 500 gallon above-ground storage tank in Building 501 (estimated emission are less than 0.1 tons per year of VOCs).
- (9) Source 020: A 1000 gallon above-ground storage tank in Building 501 (estimated emission are less than 0.1 tons per year of VOCs).
- (10) Sources 021 & 022: Two (2) drums in the maintenance building (estimated emission are less than 0.1 tons per year of VOCs each).
- (11) Source 023: A parts cleaner in the maintenance building (estimated emission are less than 0.1 tons per year of VOCs).
- (12) Source 024: A perforated tray air stripper (estimated emission are less than 0.1 tons per year of VOCs).
- (13) Sources 025 thru 027: Three (3) leachate storage tanks (estimated emission are less than 0.1 tons per year of VOCs each).
- (14) Source 028: A stormwater rretention basin (estimated emission are less than 0.1 tons per year of VOCs).
- (15) Sources 029 & 030: Two (2) Gas-fired space heaters with rated capacities of 0.34 MMBtu/hr each.



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