



**COMMONWEALTH OF PENNSYLVANIA  
DEPARTMENT OF ENVIRONMENTAL PROTECTION  
AIR QUALITY PROGRAM**

**TITLE V/STATE OPERATING PERMIT**

Issue Date:	May 21, 2021	Effective Date:	May 23, 2023
Revision Date:	May 23, 2023	Expiration Date:	May 21, 2026
Revision Type:	Amendment		

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

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

**TITLE V Permit No: 09-00024**

Federal Tax Id - Plant Code: 25-1232336-2

**Owner Information**

Name: WASTE MGMT PA INC  
Mailing Address: 1000 NEW FORD MILL RD  
MORRISVILLE, PA 19067-6702

**Plant Information**

Plant: WASTE MGMT PATULLYTOWN RES REC FAC  
Location: 09 Bucks County 09814 Tullytown Borough  
SIC Code: 4953 Trans. & Utilities - Refuse Systems

**Responsible Official**

Name: GLEN A SCHULTZ  
Title: AREA DIRECTOR  
Phone: (215) 269 - 2198 Email: gschultz@wm.com

**Permit Contact Person**

Name: CHRISTOPHER P BOLTON  
Title: LANDFILL OPERATIONS MGR  
Phone: (215) 907 - 0374 Email: cbolton1@wm.com

[Signature] \_\_\_\_\_  
JAMES D. REBARCHAK, SOUTHEAST REGION AIR PROGRAM MANAGER



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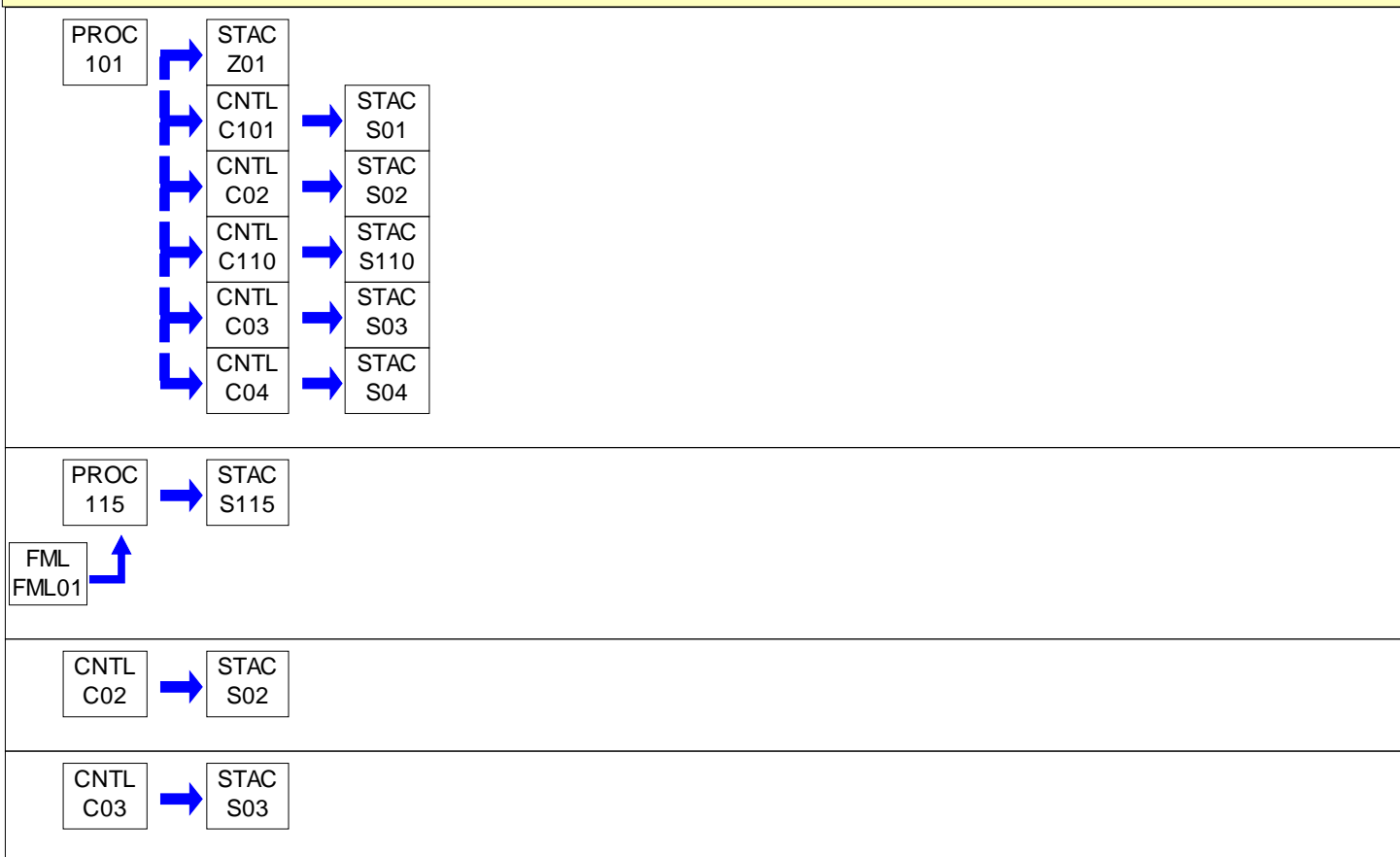
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**SECTION A. Site Inventory List**

Source ID	Source Name	Capacity/Throughput	Fuel/Material
101	MSW LANDFILL (EXIST LF, SOUTH, WEST, EAST, VALLEY F EXP)	347.200 Tons/HR	SOLID WASTE
115	EMERGENCY GENERATOR (99 HP)	4.400 Gal/HR	Diesel Fuel
999	40 CFR 63, SUBPART AAAAA		
C02	BACK-UP ENCLOSED FLARE 2	300.000 MCF/HR	LANDFILL GAS
C03	ENCLOSED ULE FLARE 1	360.000 MCF/HR	LANDFILL GAS
C04	ENCLOSED ULE FLARE 2	360.000 MCF/HR	LANDFILL GAS
C101	BACK-UP ENCLOSED FLARE 1	300.000 CF/HR	LANDFILL GAS
C110	2242 BHP, CAT G3520C IC ENGINE, SN GZJ00448	35.600 MCF/HR	LANDFILL GAS
FML01	DIESEL FUEL		
S01	BACK-UP ENCLOSED FLARE 1 STACK		
S02	BACK-UP ENCLOSED FLARE 2 STACK		
S03	ENCLOSED ULE FLARE 1 STACK		
S04	ENCLOSED ULE FLARE 2 STACK		
S110	ENGINE STACK		
S115	EMERGENCY GENERATOR (99 HP) STACK		
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**PERMIT MAPS**



**PERMIT MAPS**

CNTL  
C04 → STAC  
S04

CNTL  
C101 → STAC  
S01

CNTL  
C110 → STAC  
S110

**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 § 121.7]****Prohibition of Air Pollution**

No person may permit air pollution as that term is defined in the act.

**#003 [25 Pa. Code § 127.512(c)(4)]****Property Rights**

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

**#004 [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.

**#005 [25 Pa. Code §§ 127.412, 127.413, 127.414, 127.446(e), 127.503 & 127.704(b)]****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. The fees shall be made payable to "The Commonwealth of Pennsylvania Clean Air Fund" and submitted with the fee form to the respective regional office.

(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 promptly submit such supplementary facts or corrected information during the permit renewal process. The permittee shall also promptly 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.

**#006 [25 Pa. Code §§ 127.450(a)(4) & 127.464(a)]****Transfer of Ownership or Operational Control**

(a) In accordance with 25 Pa. Code § 127.450(a)(4), a change in ownership or operational control of the source shall be treated as an administrative amendment if:

- (1) The Department determines that no other change in the permit is necessary;
- (2) A written agreement has been submitted to the Department identifying the specific date of the transfer of permit responsibility, coverage and liability between the current and the new permittee; and,
- (3) A compliance review form has been submitted to the Department and the permit transfer has been approved by

**SECTION B. General Title V Requirements**

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.

**#007 [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.

**#008 [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.

**#009 [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.

**SECTION B. General Title V Requirements****#010 [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.

**#011 [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.

**#012 [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.

**#013 [25 Pa. Code § 127.522(a)]****Operating Permit Application Review by the EPA**

The applicant may be required by the Department to provide a copy of the permit application, including the compliance plan, directly to the Administrator of the EPA. Copies of title V permit applications to EPA, pursuant to 25 PA Code §127.522(a), shall be submitted, if required, to the following EPA e-mail box:

R3\_Air\_Apps\_and\_Notices@epa.gov

Please place the following in the subject line: TV [permit number], [Facility Name].



**SECTION B. General Title V Requirements****#014 [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. Notifications to EPA, pursuant to 25 PA Code §127.522(a), if required, shall be submitted, to the following EPA e-mail box:

R3\_Air\_Apps\_and\_Notices@epa.gov

Please place the following in the subject line: TV [permit number], [Facility Name].

**#015 [25 Pa. Code §§ 121.1 & 127.462]****Minor Operating Permit Modifications**

The permittee may make minor operating permit modifications (as defined in 25 Pa. Code §121.1), on an expedited basis, in accordance with 25 Pa. Code §127.462 (relating to minor operating permit modifications). Notifications to EPA, pursuant to 25 PA Code §127.462(c), if required, shall be submitted, to the following EPA e-mail box:

R3\_Air\_Apps\_and\_Notices@epa.gov

Please place the following in the subject line: TV [permit number], [Facility Name].

**#016 [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). Copies of request for administrative permit amendment to EPA, pursuant to 25 PA Code §127.450(c)(1), if required, shall be submitted to the following EPA e-mail box:

R3\_Air\_Apps\_and\_Notices@epa.gov

Please place the following in the subject line: TV [permit number], [Facility Name].

(b) Upon final action by the Department granting a request for an administrative operating permit amendment covered under §127.450(a)(5), the permit shield provisions in 25 Pa. Code § 127.516 (relating to permit shield) shall apply to administrative permit amendments incorporated in this Title V Permit in accordance with §127.450(c), unless precluded by the Clean Air Act or the regulations thereunder.

**#017 [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, or US EPA to be invalid or unenforceable, such a determination will not affect the remaining provisions of this permit.

**#018 [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). The applicable fees shall be made payable to "The Commonwealth of Pennsylvania Clean Air Fund" with the permit number clearly indicated and submitted to the respective regional office.

(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.

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(d) Late Payment. Late payment of emission fees will subject the permittee to the penalties prescribed in 25 Pa. Code § 127.707 and may result in the suspension or termination of the Title V permit. The permittee shall pay a penalty of fifty percent (50%) of the fee amount, plus interest on the fee amount computed in accordance with 26 U.S.C.A. § 6621(a)(2) from the date the emission fee should have been paid in accordance with the time frame specified in 25 Pa. Code § 127.705(c).

(e) The permittee shall pay an annual operating permit maintenance fee according to the following fee schedule established in 25 Pa. Code § 127.704(d) on or before December 31 of each year for the next calendar year.

(1) Eight thousand dollars (\$8,000) for calendar years 2021—2025.

(2) Ten thousand dollars (\$10,000) for calendar years 2026—2030.

(3) Twelve thousand five hundred dollars (\$12,500) for the calendar years beginning with 2031.

**#019 [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<sub>x</sub> from a single source during the term of the permit and 5 tons of NO<sub>x</sub> 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 PM<sub>10</sub> from a single source during the term of the permit and 3.0 tons of PM<sub>10</sub> 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.

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(3) Combustion units with a rated capacity of less than 10,000,000 Btu per hour heat input fueled by natural gas supplied by a public utility, liquefied petroleum gas or by commercial fuel oils which are No. 2 or lighter, viscosity less than or equal to 5.82 c St, and which meet the sulfur content requirements of 25 Pa. Code § 123.22 (relating to combustion units). For purposes of this permit, commercial fuel oil shall be virgin oil which has no reprocessed, recycled or waste material added.

(4) Space heaters which heat by direct heat transfer.

(5) Laboratory equipment used exclusively for chemical or physical analysis.

(6) Other sources and classes of sources determined to be of minor significance by the Department.

(d) This permit does not authorize de minimis emission increases if the emissions increase would cause one or more of the following:

(1) Increase the emissions of a pollutant regulated under Section 112 of the Clean Air Act except as authorized in Subparagraphs (b)(4) and (5) of this permit condition.

(2) Subject the facility to the prevention of significant deterioration requirements in 25 Pa. Code Chapter 127, Subchapter D and/or the new source review requirements in Subchapter E.

(3) Violate any applicable requirement of the Air Pollution Control Act, the Clean Air Act, or the regulations promulgated under either of the acts.

(4) Changes which are modifications under any provision of Title I of the Clean Air Act and emission increases which would exceed the allowable emissions level (expressed as a rate of emissions or in terms of total emissions) under the Title V permit.

(e) Unless precluded by the Clean Air Act or the regulations thereunder, the permit shield described in 25 Pa. Code § 127.516 (relating to permit shield) shall extend to the changes made under 25 Pa. Code § 127.449 (relating to de minimis emission increases).

(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.

**#020 [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).

**#021 [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

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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.

**#022 [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:

Enforcement & Compliance Assurance Division  
Air, RCRA and Toxics Branch (3ED21)  
Four Penn Center  
1600 John F. Kennedy Boulevard  
Philadelphia, PA 19103-2852

The Title V compliance certification shall be emailed to EPA at R3\_APD\_Permits@epa.gov.

(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.

**#023 [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.

**#024 [25 Pa. Code §§ 127.511 & Chapter 135]****Recordkeeping Requirements**

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

- (1) The date, place (as defined in the permit) and time of sampling or measurements.
- (2) The dates the analyses were performed.
- (3) The company or entity that performed the analyses.
- (4) The analytical techniques or methods used.

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(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.

**#025 [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 #022(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.

**#026 [25 Pa. Code § 127.513]****Compliance Certification**

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

- (1) The identification of each term or condition of the permit that is the basis of the certification.
- (2) The compliance status.
- (3) The methods used for determining the compliance status of the source, currently and over the reporting period.
- (4) Whether compliance was continuous or intermittent.

(b) The compliance certification shall be postmarked or hand-delivered no later than thirty days after each anniversary of the date of issuance of this Title V Operating Permit, or on the submittal date specified elsewhere in the permit, to the Department in accordance with the submission requirements specified in Section B, Condition #022 of this permit. The Title V compliance certification shall be emailed to EPA at R3\_APD\_Permits@epa.gov.

**SECTION B. General Title V Requirements****#027 [25 Pa. Code § 127.3]****Operational Flexibility**

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)

**#028 [25 Pa. Code §§ 127.441(d), 127.512(i) and 40 CFR Part 68]****Risk Management**

(a) If required by Section 112(r) of the Clean Air Act, the permittee shall develop and implement an accidental release program consistent with requirements of the Clean Air Act, 40 CFR Part 68 (relating to chemical accident prevention provisions) and the Federal Chemical Safety Information, Site Security and Fuels Regulatory Relief Act (P.L. 106-40).

(b) The permittee shall prepare and implement a Risk Management Plan (RMP) which meets the requirements of Section 112(r) of the Clean Air Act, 40 CFR Part 68 and the Federal Chemical Safety Information, Site Security and Fuels Regulatory Relief Act when a regulated substance listed in 40 CFR § 68.130 is present in a process in more than the listed threshold quantity at the Title V facility. The permittee shall submit the RMP to the federal Environmental Protection Agency according to the following schedule and requirements:

- (1) The permittee shall submit the first RMP to a central point specified by EPA no later than the latest of the following:
  - (i) Three years after the date on which a regulated substance is first listed under § 68.130; or,
  - (ii) The date on which a regulated substance is first present above a threshold quantity in a process.

(2) The permittee shall submit any additional relevant information requested by the Department or EPA concerning the RMP and shall make subsequent submissions of RMPs in accordance with 40 CFR § 68.190.

(3) The permittee shall certify that the RMP is accurate and complete in accordance with the requirements of 40 CFR Part 68, including a checklist addressing the required elements of a complete RMP.

(c) As used in this permit condition, the term "process" shall be as defined in 40 CFR § 68.3. The term "process" means any activity involving a regulated substance including any use, storage, manufacturing, handling, or on-site movement of such substances or any combination of these activities. For purposes of this definition, any group of vessels that are interconnected, or separate vessels that are located such that a regulated substance could be involved in a potential release, shall be considered a single process.

(d) If the Title V facility is subject to 40 CFR Part 68, as part of the certification required under this permit, the permittee shall:

- (1) Submit a compliance schedule for satisfying the requirements of 40 CFR Part 68 by the date specified in 40 CFR § 68.10(a); or,
- (2) Certify that the Title V facility is in compliance with all requirements of 40 CFR Part 68 including the registration and submission of the RMP.

**SECTION B. General Title V Requirements**

(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 Section B, Condition #026 of this 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).

**#029 [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.

**#030 [25 Pa. Code §§ 127.516, 127.450(d), 127.449(f) & 127.462(g)]****Permit Shield**

(a) The permittee's compliance with the conditions of this permit shall be deemed in compliance with applicable requirements (as defined in 25 Pa. Code § 121.1) as of the date of permit issuance if either of the following applies:

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

(2) The Department specifically identifies in the permit other requirements that are not applicable to the permitted facility or source.

(b) Nothing in 25 Pa. Code § 127.516 or the Title V permit shall alter or affect the following:

(1) The provisions of Section 303 of the Clean Air Act, including the authority of the Administrator of the EPA provided thereunder.

(2) The liability of the permittee for a violation of an applicable requirement prior to the time of permit issuance.

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

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

(c) Unless precluded by the Clean Air Act or regulations thereunder, final action by the Department incorporating a significant permit modification in this Title V Permit shall be covered by the permit shield at the time that the permit containing the significant modification is issued.

**#031 [25 Pa. Code §135.3]****Reporting**

(a) The permittee shall submit by March 1 of each year an annual emissions report for the preceding calendar year. The report shall include information for all active 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. All air emissions from the facility should be estimated and reported.

(b) A source owner or operator may request an extension of time from the Department for the filing of an annual emissions report, and the Department may grant the extension for reasonable cause.

**#032 [25 Pa. Code §135.4]****Report Format**

Emissions reports shall contain sufficient information to enable the Department to complete its emission inventory. Emissions reports shall be made by the source owner or operator in a format specified by the Department.



**SECTION C. Site Level Requirements****I. RESTRICTIONS.****Emission Restriction(s).****# 001 [25 Pa. Code §121.7]****Prohibition of air pollution.**

Except as authorized elsewhere in this Permit, no person may permit air pollution as that term is defined in the Air Pollution Control Act (35 P.S. Section 4003).

**# 002 [25 Pa. Code §123.1]****Prohibition of certain fugitive emissions**

No person may permit the emission into the outdoor atmosphere of 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, as specified in 25 Pa. Code § 129.14;
- (g) Blasting in open pit mines. Emissions from drilling are not considered as emissions from blasting;
- (h) Coke oven batteries, provided the fugitive air contaminants emitted from any coke oven battery comply with the standards for visible fugitive emissions in 25 Pa. Code §§ 123.44 and 129.15 (relating to limitations of visible fugitive air contaminants from operation of any coke oven battery; and coke pushing operations); and
- (i) Sources and classes of sources other than those identified in (a)-(h), above, for which the permittee 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.

**# 003 [25 Pa. Code §123.2]****Fugitive particulate matter**

A person may not permit fugitive particulate matter to be emitted into the outdoor atmosphere from a source specified in 25 Pa. Code § 123.1(a)(1)-(9) (relating to prohibition of certain fugitive emissions) if such emissions are visible at the point the emissions pass outside the person's property.

**# 004 [25 Pa. Code §123.31]****Limitations**

A person may not permit the emission into the outdoor atmosphere of any malodorous air contaminants from any source in such a manner that the malodors are detectable outside the property of the person on whose land the source is being operated.

**# 005 [25 Pa. Code §123.41]****Limitations**

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

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



**SECTION C. Site Level Requirements**

(b) Equal to or greater than 60% at any time.

**# 006 [25 Pa. Code §123.42]****Exceptions**

The opacity limitations as per 25 Pa. Code § 123.41 shall not apply to a visible emission in either of the following instances:

- (a) When the presence of uncombined water is the only reason for failure to meet the limitations.
- (b) When the emission results from the operation of equipment used solely to train and test persons in observing the opacity of visible emissions.
- (c) When the emission results from the sources specified in 25 Pa. Code § 123.1(a)(1)-(9) (relating to prohibition of certain fugitive emissions).

**# 007 [25 Pa. Code §129.14]****Open burning operations**

No person may permit the open burning of material in the Southeast Air Basin except where the open burning operations result from:

- (a) 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;
- (b) Any fire set for the purpose of instructing personnel in fire fighting, when approved by the Department;
- (c) A fire set for the prevention and control of disease or pests, when approved by the Department;
- (d) A fire set in conjunction with the production of agricultural commodities in their unmanufactured state on the premises of the farm operation;
- (e) A fire set for the purpose of burning domestic refuse, when the fire is on the premises of a structure occupied solely as a dwelling by two families or less and when the refuse results from the normal occupancy of the structure;
- (f) A fire set solely for recreational or ceremonial purposes; or
- (g) A fire set solely for cooking food.

**# 008 [25 Pa. Code §127.441]****Operating permit terms and conditions.**

(a) Total particulate matter emissions, including both point source and fugitive emissions, from all sources at the Landfill (existing, Southern Expansion, Western Expansion, Eastern Expansion and Valley Fill Expansion) shall be limited as follows:

- (1) PM10 - less than 100 tons per year on a 12-month rolling basis
- (2) PM2.5 - less than 100 tons per year on a 12-month rolling basis

(b) Fugitive emissions from landfill operations shall be calculated in accordance with the methods and emission factors used in the application for plan approval 09-0024F.

Note: The Department reserves the right to require the permittee to use a different method in this calculation. In the event that use of such different calculation method, or in the event that the relevant emission factors published in the most recent compilation of AP-42, would result in a calculated increase in PM10 and PM2.5 emissions from the entire landfill, the Department may require the permittee to submit an appropriate application to incorporate the changes in calculated PM10 and PM2.5 emissions.

**SECTION C. Site Level Requirements****II. TESTING REQUIREMENTS.****# 009 [25 Pa. Code §127.441]****Operating permit terms and conditions.**

(a) If at any time the Department has cause to believe that air contaminant emissions from any source(s) listed in section A, of this Permit, may be in excess of the limitations specified in this permit, or established pursuant to, any applicable rule or regulation contained in 25 Pa. Code Article III, the permittee may be required to conduct whatever tests are deemed necessary by the Department to determine the actual emission rate(s).

(b) Such testing shall be conducted in accordance with the provisions of 25 Pa. Code Chapter 139, when applicable, and in accordance with any restrictions or limitations established by the Department at such time as it notifies the permittee that testing is required.

**# 010 [25 Pa. Code §127.441]****Operating permit terms and conditions.**

(a) The permittee shall submit one paper copy plus one electronic copy of all source test submissions (notifications, protocols, reports, supplemental information, etc.) to both the AQ Program Manager for the Southeast Regional Office and the PSIMS Administrator in Central Office (mail and email addresses are provided below). Any questions or concerns about source testing submissions can be sent to RA-EPstacktesting@pa.gov and the PSIMS Administrator will address them.

(b) The following pertinent information shall be listed on the title page.

## (1) Test Date(s)

(i) For protocols, provide the proposed date on which testing will commence or "TBD"

(ii) For reports, provide the first and last day of testing

(2) Facility Identification Number (Facility - ID): For test programs that were conducted under a multi-site protocol, also include the PF Id under which the protocol was stored in PSIMS, as indicated in the protocol response letter.

(3) Source ID(s) for the applicable source(s) and air pollution control device(s): The term Source ID is used in the permit but "Other Id" is used in DEP electronic systems. They are the same number and must also be listed for control equipment

## (4) Testing Requirements (all that apply)

(i) Plan approval number(s)

(ii) Operating permit number

(iii) Applicable federal subpart(s) (i.e. 40 CFR 60, Subpart JJJJ)

(iv) Special purpose(s) (Consent Order, RFD, RACT II, Tier II, etc.)

(c) Mail all paper submissions to both the PSIMS Administrator and the Air Quality Program Manager for the Southeast Regional Office. Mailing addresses are provided below.

Central Office  
 Pennsylvania Department of Environmental Protection  
 Attn: PSIMS Administrator  
 P.O. Box 8468  
 Harrisburg, PA 17105-8468

Southeast Region  
 Pennsylvania Department of Environmental Protection  
 Attn: Air Quality Program Manager  
 2 East Main Street  
 Norristown, PA 19401

(d) Eliminate shading, color ink for data emphasis, small font size, and color saturation as the scanning to create an electronic file is done in black and white. Shading and color emphasis do not scan well and make the electronic copies

**SECTION C. Site Level Requirements**

difficult to read.

(e) Email all electronic submissions to both the PSIMS Administrator in Central Office and the Air Quality Program Manager for the Southeast Regional Office. Email addresses are provided below.

Central Office  
RA-EPstacktesting@pa.gov

Southeast Region  
RA-EPSEstacktesting@pa.gov

(f) The Department limits emails to 15 MB and PSIMS has a file size limitation of 100 MB for electronic files. Submit just one electronic file (convert any Microsoft Word or Excel files to an Adobe PDF format and combine them with the report or protocol), unless the submission contains CONFIDENTIAL information.

(g) If confidential information must be submitted, submit both a public copy, which has been redacted, and a confidential copy. The cover page of each submittal should state whether it is a "Public Copy" or "Confidential Copy" and each page of the latter must be marked "CONFIDENTIAL".

**III. MONITORING REQUIREMENTS.****# 011 [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.

**# 012 [25 Pa. Code §127.441]****Operating permit terms and conditions.**

[Additional authority for this permit condition is also derived from 25 Pa. Code § 127.511]

- (a) The permittee shall monitor the facility for the following:
  - (1) Odors, (pursuant to 25 Pa. Code § 123.31), once per operating day.
  - (2) Visible emissions, (pursuant to 25 Pa. Code §§ 123.41 and 123.42), once per day when the flare is operating. The permittee shall conduct monitoring of the facility boundary once per day. If an exceedance is suspected as a result of that monitoring, a person shall perform a follow-up inspection pursuant to Condition #010 of Section C.
  - (3) Fugitive particulate matter, (pursuant to 25 Pa. Code §§ 123.1 and 123.2), once per operating day.
- (b) Objectionable odors, which may cause annoyance or discomfort to the public noticed at the site property boundaries that are caused, or may be caused, by operations at the site; fugitive particulate matter emitted from the landfill and visible at the point the emissions pass beyond the property boundary; or fugitive emissions in excess of Condition #002 of this Section, or visible emissions in excess of Condition #005 of this Section shall:
  - (1) Be investigated.
  - (2) Be reported to the Environmental Department, or individual(s) designated by the permittee.
  - (3) Have appropriate corrective action taken (for emissions that originate on-site).
  - (4) Be recorded in a permanent written log, or other method of recordation approved by the Department.

**SECTION C. Site Level Requirements****# 013 [25 Pa. Code §127.441]****Operating permit terms and conditions.**

- (a) The permittee shall calculate fugitive emissions of PM10 and PM2.5 from the Landfill (existing, Southern Expansion, Western Expansion, Eastern Expansion and Valley Fill Expansion) monthly and on a twelve (12) month rolling basis.
- (b) The permittee shall calculate the sum of the point source and fugitive emissions of PM10 and PM2.5 from all sources at the facility monthly and on a twelve month rolling basis.

**IV. RECORDKEEPING REQUIREMENTS.****# 014 [25 Pa. Code §127.441]****Operating permit terms and conditions.**

[Additional authority for this permit condition is also derived from 25 Pa. Code § 127.511]

- (a) Records of the monitoring data and supporting information required by this permit shall be maintained for a minimum of five (5) years.
- (b) The permittee shall maintain recordkeeping formats as previously approved by the Department.

**# 015 [25 Pa. Code §127.441]****Operating permit terms and conditions.**

[Additional authority for this permit condition is also derived from 25 Pa. Code § 127.511]

The permittee shall maintain a record of all monitoring of fugitive emissions, visible emissions and odors, including those that deviate from the conditions found in this permit. The record of deviations shall contain, at the minimum, the following items:

- (a) Date, time, and location of the incident(s).
- (b) The cause of the event.
- (c) The corrective action taken, if necessary, to abate the situation and prevent future occurrences.

**# 016 [25 Pa. Code §127.441]****Operating permit terms and conditions.**

(a) The permittee shall keep records of the fugitive emissions of PM10 and PM2.5 from the Landfill (existing, Southern Expansion, Western Expansion, Eastern Expansion and Valley Fill Expansion) monthly and on a twelve (12) month rolling basis.

(b) The permittee shall keep records of the sum of the point source and fugitive emissions of PM10 and PM2.5 from all sources at the facility monthly and on a twelve month rolling basis.

**# 017 [25 Pa. Code §127.441]****Operating permit terms and conditions.**

The permittee shall maintain records of all the facility's increases of emissions from the following categories:

- (a) Emissions increase of minor significance without notification to the Department.
- (b) De minimis increases with notification to the Department, via letter.
- (c) Increases resulting from a Request for Determination (RFD) to the Department.
- (d) Increases resulting from the issuance of a plan approval and subsequent operating permit.

**V. REPORTING REQUIREMENTS.****# 018 [25 Pa. Code §127.441]****Operating permit terms and conditions.**

[Additional authority for this permit condition is also derived from 40 CFR § 60.4]

- (a) Copies of all notices, requests, reports, submittals, and other communications are required to be submitted to both the EPA and the Department.

**SECTION C. Site Level Requirements**

(b) The Department address for submissions required by this Operating Permit is:

Regional Air Quality Manager  
PA Department of Environmental Protection  
2 East Main Street  
Norristown, PA 19401

(c) The EPA address for submissions required by this Operating Permit is:

Enforcement & Compliance Assurance Division  
Air, RCRA and Toxics Branch (3ED21)  
Four Penn Center  
1600 John F. Kennedy Boulevard  
Philadelphia, PA 19103-2852

**# 019 [25 Pa. Code §127.441]****Operating permit terms and conditions.**

(a) The permittee shall report malfunctions and emergencies causing excess emissions to the Department at 484-250-5920. A malfunction is any sudden, infrequent, and not reasonably preventable failure of air pollution control equipment, process equipment, or a process to operate in a normal or usual manner. An emergency is any situation arising from sudden and reasonably unforeseeable events beyond the control of the owner or operator of a facility which requires immediate corrective action to restore normal operation and which causes the emission source to exceed emissions, due to unavoidable increases in emissions attributable to the situation. An emergency shall not include situations caused by improperly designed equipment, lack of preventive maintenance, careless or improper operation, or operator error.

(b) When the malfunction or emergency causing excess emissions poses an imminent danger to the public health, safety, welfare, or environment, it shall be reported to the Department and the County Emergency Management Agency by telephone within one (1) hour after the discovery of the malfunction or emergency of excess emissions. The owner or operator shall submit a written or emailed report of instances of such malfunctions or emergencies of excess emissions to the Department within three (3) business days of the telephone report.

(c) The report shall describe the following:

- (1) Name, permit or authorization number, and location of the facility;
- (2) Nature and cause of the malfunction or emergency;
- (3) Date and time when the malfunction or emergency was first observed;
- (4) Expected duration of excess emissions;
- (5) Estimated rate of emissions; and
- (6) Corrective actions or preventative measures taken.

(d) Any malfunction or emergency causing emissions that is not subject to the notice requirements of paragraph (b) of this condition shall be reported to the Department by telephone within 24 hours (or by 4:00 PM of the next business day, whichever is later) of discovery and in writing or by e-mail within five (5) business days of discovery. The report shall contain the same information required by paragraph (c), and any permit specific malfunction reporting requirements.

(e) During an emergency an owner or operator may continue to operate the source at their discretion provided they submit justification for continued operation of a source during the emergency and follow all the notification and reporting requirements in accordance with paragraphs (b)-(d), as applicable, including any permit specific malfunction reporting requirements.

(f) Reports regarding malfunctions or emergencies causing emissions shall be submitted to the appropriate DEP Regional Office Air Program Manager.

(g) Any emissions resulted from malfunction or emergency are to be reported in the annual emissions inventory report, if the annual emissions inventory report is required by permit or authorization.

**SECTION C. Site Level Requirements****# 020 [25 Pa. Code §127.441]****Operating permit terms and conditions.**

[Additional authority for this condition is also derived from 25 Pa. Code § 127.511(c)]

The permittee shall submit the following:

(a) An annual certificate of compliance, due by April 1st of each year, for the period covering January 1 through December 31 of the previous year. This certificate of compliance shall document compliance with all permit terms and conditions set forth in this Title V permit as required under condition #26 of section B of this permit. The annual certificate of compliance shall be submitted to the Department in paper form, and EPA Region III in electronic form at the following email address: R3\_APD\_Permits@epa.gov. The subject line shall read: "TVOP No. 09-00024, Waste Management - Tullytown."

(b) A semi-annual deviation report, due by October 1, of each year, for the period covering January 1 through June 30 of the same year. Note: The annual certification of compliance fulfills the obligation for the second deviation reporting period (July 1 through December 31 of the previous year).

**VI. WORK PRACTICE REQUIREMENTS.****# 021 [25 Pa. Code §123.1]****Prohibition of certain fugitive emissions**

[Additional authority for this condition is from 25 Pa. Code § 127.441]

A person responsible for any source specified in 25 Pa. Code § 123.1 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 suitable chemicals, as approved by the Department, 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, water, or other suitable chemicals, on dirt roads, material stockpiles and other surfaces which may give rise to airborne dusts. A logbook shall be maintained to determine compliance with this condition.

(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.

**# 022 [25 Pa. Code §127.441]****Operating permit terms and conditions.**

[Additional authority for this Permit condition is also derived from 25 Pa. Code § 127.512(h)]

The permittee may not modify any source identified in this permit prior to obtaining Department approval, except those modifications authorized by Condition #019(g), of Section B, of this permit.

**# 023 [25 Pa. Code §127.441]****Operating permit terms and conditions.**

[Additional authority for this Permit condition is also derived from 25 Pa. Code § 127.512(h)]

The permittee shall immediately, upon discovery, implement measures which may include the application for the installation of an air cleaning device(s), if necessary, to reduce the air contaminant emissions to within applicable limitations, if at any time the operation of the source(s) identified in this permit is causing the emission of air contaminants in excess of the limitations specified in, or established pursuant to 25 Pa. Code Article III or any other applicable rule promulgated under the Clean Air Act.

**# 024 [25 Pa. Code §127.441]****Operating permit terms and conditions.**

Nothing in this permit shall be construed to preclude the permittee from proposing, in accordance with 40 CFR § 62.16724(e) and 40 CFR § 63.1981(e), and upon written Department approval implementing, any regulatory permitted

**SECTION C. Site Level Requirements**

alternatives to the operational standards, test methods, procedures, compliance measures, monitoring, recordkeeping or reporting provisions of 40 CFR §§ 62.16714 through 62.16728, (found under Source ID: 101) as restated or incorporated herein.

**# 025 [25 Pa. Code §127.441]****Operating permit terms and conditions.**

[Additional authority for this permit condition is also derived from 25 Pa. Code § § 127.512 and 129.91]

The permittee shall ensure that the source(s) and air pollution control device(s), listed in this permit are operated and maintained in a manner consistent with good operating and maintenance practices, and in accordance with manufacturer's specifications.

**VII. ADDITIONAL REQUIREMENTS.****# 026 [25 Pa. Code §127.441]****Operating permit terms and conditions.**

As specified within Section D of this permit, the Landfill and associated sources are subject to the provisions of 40 CFR Part 62, Subpart OOO and 40 CFR 60, Subpart JJJJ, of the Standards of Performance for New Stationary Sources (NSPS), 40 CFR Part 61, Subpart M, of the National Emission Standard for Asbestos and 40 CFR Part 63, Subparts AAAA and ZZZZ, of the National Emission Standards for Hazardous Air Pollutants (NESHAPs). Permittee shall comply with the major compliance provisions of 40 CFR 63, Subpart AAAA as set forth in Source ID: 999 of this permit, in lieu of complying with the analogous provisions in 40 CFR Part 62, Subpart OOO.

**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.

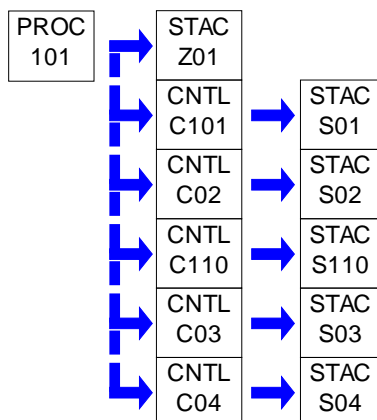
**\*\*\* Permit Shield In Effect \*\*\***

**SECTION D. Source Level Requirements**

Source ID: 101

Source Name: MSW LANDFILL (EXIST LF, SOUTH, WEST, EAST, VALLEY F EXP)

Source Capacity/Throughput: 347.200 Tons/HR SOLID WASTE

**I. RESTRICTIONS.****Emission Restriction(s).****# 001 [25 Pa. Code §127.441]****Operating permit terms and conditions.**

[Additional authority for this permit condition is also derived from 25 Pa. Code § 127.512]

- (a) Fugitive emissions of VOC from the existing landfill shall not exceed 19.80 tons per year, calculated after closure in accordance with the definitions of "closed landfill" and "closure" in 40 CFR § 62.16730 [40 CFR § 63.1990].
- (b) Fugitive emissions of VOC from the Southern Expansion shall not exceed 19.89 tons per year, calculated after closure in accordance with the definitions of "closed landfill" and "closure" in 40 CFR § 62.16730 [40 CFR § 63.1990].
- (c) Fugitive emissions of VOC from the Western Expansion shall not exceed 13.1 tons/year (on a 12-month rolling basis), calculated after closure in accordance with the definitions of "closed landfill" and "closure" in 40 CFR § 62.16730 [40 CFR § 63.1990].
- (d) Fugitive emissions of VOC from the Eastern Expansion shall not exceed 6.1 tons per year, calculated after closure in accordance with the definitions of "closed landfill" and "closure" in 40 CFR § 62.16730 [40 CFR § 63.1990], annually, measured as hexane.
- (e) Fugitive emissions of Volatile Organic Compounds (VOC) from the Valley Fill Expansion shall not exceed 10.5 tons per year, calculated after closure in accordance with the definitions of "closed landfill" and "closure" in 40 CFR § 62.16730 [40 CFR § 63.1990], measured as hexane.

**# 002 [25 Pa. Code §127.441]****Operating permit terms and conditions.**

[Additional authority for this permit condition is also derived from 25 Pa. Code §§ 127.512, 127.12(a)(5) and 129.91 and 40 CFR §§ 62.16724(d) and (e) [40 CFR § 63.1981(d) and (e)], 62.16714(b)(2) [40 CFR § 63.1959(b)(2)(ii)(B)], 62.16714(b)(2)(i-iv) [40 CFR § 63.1959(b)(2)(ii)(B)(1-4)], 40 CFR §§ 63.1958(a), 63.1958(a)(1)-(2), 63.1960(b), 63.1960(b)(1)-(2)]

- (a) The permittee shall install, operate and maintain the collection and control system, as designed and approved, to capture the gas generated within the landfill, in accordance with the landfill's gas collection and control system ("GCCS") plan.
- (b) The gas collection system shall be designed to:



**SECTION D. Source Level Requirements**

- (1) 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 5 years or more if active; or 2 years or more if closed or at final grade;
- (3) Collect gas at a sufficient extraction rate as required in paragraphs (f) - (j) of this condition; and
- (4) Minimize off-site migration of subsurface gas.
- (c) 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 §§ 63.1958 through 63.1961 and 62.16724 through 62.16726 [40 CFR §§ 63.1981 through 63.1983] proposed by the permittee.
- (d) The collection and control system design plan shall either conform with specifications for active collection systems in 40 CFR § 62.16728 [40 CFR § 63.1962] (Condition # 012) or include a demonstration to the Department's satisfaction of the sufficiency of the alternative provisions to 40 CFR § 62.16728 [40 CFR § 63.1962].
- (e) The Department shall review the information submitted under paragraphs 40 CFR §§ 62.16724(d) and (e) [40 CFR § 63.1981(d) and (e)] 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.
- (f) The collection efficiency of the gas management system for the final design of the existing landfill at closure shall be not less than a minimum of 90%.
- (g) The collection efficiency of the gas management system for the final design of the Southern Expansion at closure shall be not less than 92%.
- (h) The collection efficiency of the gas management system for the final design of the Western Expansion at closure shall not be less than 92%.
- (i) The collection efficiency of the gas management system for the final design of the Eastern Expansion at closure shall be not less than 92%.
- (j) The collection efficiency of the gas management system for the final design of the Valley Fill Expansion at closure shall be not less than 92%.

Note 1: The permittee shall demonstrate compliance with collection efficiency using the Radius of Influence method based on the Darcy equation, as submitted with the respective Plan Approval application for each expansion.

Note 2: The Department reserves the right to reevaluate the adequacy of the GCCS design plan.

**Throughput Restriction(s).**

**# 003 [25 Pa. Code §127.441]**  
**Operating permit terms and conditions.**

[Additional authority for this permit condition is also derived from 25 Pa. Code § 127.512]

The maximum amount of solid waste disposal at the Tullytown Resource Recovery Facility (including the Existing Landfill, Southern Expansion, Western Expansion, Eastern Expansion, and Valley Fill Expansion) shall be limited to 8,333 tons per day of municipal solid waste (MSW) as a quarterly average over the calendar year.

- (a) The design capacity of the Southern Expansion shall not exceed 11,760,000 tons of MSW excluding municipal incinerator ash and asbestos waste.

**SECTION D. Source Level Requirements**

(b) Of the 8,798,804 cubic yards design capacity of the Western Expansion, no more than 7,522,977 tons shall be municipal solid waste (MSW).

(c) The design capacity of the Eastern Expansion shall not exceed 5,500,000 tons (7,400,000 cubic yards) of MSW excluding municipal incinerator ash and asbestos waste.

(d) The Valley Fill expansion shall be limited to a maximum disposal volume of 5,423,308 bank cubic yards in compliance with the Solid Waste Permit issued by the DEP and as approved herein this Air Quality Title V Operating Permit. Waste disposal at the Valley Fill expansion shall be limited to a maximum of 4,906,800 tons of MSW excluding municipal incinerator ash and asbestos waste. The permittee shall not dispose of MSW in excess of this tonnage without obtaining approval from the DEP.

**Control Device Efficiency Restriction(s).****# 004 [25 Pa. Code §127.441]****Operating permit terms and conditions.**

[Additional authority for this permit condition is derived from 25 Pa. Code §§ 127.441 and 127.512 and 40 CFR §§ 62.16714(c) [40 CFR § 63.1959(b)(2)(iii)], 40 CFR § 63.1960(e)]

(a) The permittee shall route all the collected landfill gas to a control system that complies with the requirements in either paragraph (1) or (2) of this condition.

(1) ULE flares, Source IDs C03 and C04, or backup enclosed flares, Source IDs C02 and C101, designed and operated in accordance with the conditions for the respective source in the facility operating permit TVOP 09-00024.

(2) A treatment system that processes the collected gas for subsequent sale or use, including in Source C110. All emissions from any atmospheric vent from such gas treatment system shall be subject to the requirements of paragraph (a)(1) above.

(b) 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.

(c) The permittee shall operate the control or treatment system at all times when the collected gas is routed to the system.

**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.****# 005 [25 Pa. Code §127.441]****Operating permit terms and conditions.**

[Additional authority for this permit condition is derived from 25 Pa. Code § 127.512]

(a) The permittee shall demonstrate annually the site-specific NMOC concentration and VOC concentrations. Except as provided below in paragraphs (a)(1)-(3), the permittee shall use the following parameters in calculating VOC emission rate: methane generation rate constant, k, equal to 0.023/year; and methane generation potential Lo, equal to 6004 Ft3/Mg (Mega gram) of solid waste.

(1) The permittee shall annually reevaluate the k value listed in paragraph (a). The permittee shall submit the results of the reevaluation of the Department. If such reevaluation demonstrates a k value different than that listed in paragraph (a), then the permittee shall provide a notification to the Department of the permittee's intent to use such k value. The notification shall include a discussion of the bases for use of such k value. Within thirty (30) days of its receipt of the notification, the Department may provide to the permittee a written determination, and basis for such determination, rejecting the permittee's use of such alternative parameter.

**SECTION D. Source Level Requirements**

(2) In the event that the permittee derives additional data that demonstrates that values different than those listed in paragraph (a) should be used, or otherwise intends to use a value other than the values listed in paragraph (a) (such as the value for the parameter published in the most recent Compilation of Air Pollutant Emission Factors (AP-42)) in the calculation of the annual VOC emission rate pursuant to paragraph (a), then the permittee shall provide a notification to the Department of the permittee's intent to use such alternative parameter. The notification shall include a discussion of the bases for use of such alternative parameter. Within thirty (30) days of its receipt of the notification, the Department may provide to the permittee a written determination, and basis for such determination, rejecting the permittee's use of such alternative parameter.

(3) Notwithstanding the Department's failure to object within 30 days of notification to the permittee's use of an alternative parameter pursuant to paragraph (a)(1) or (2), the Department reserves the right to reevaluate such parameters and to reject the permittee's continued use of such alternative parameter.

(b) The permittee shall calculate the NMOC emission rate for the purpose of determining when the collection and control system can be removed by using the equation given in 40 CFR § 62.16718(b) [40 CFR § 63.1959(c)].

**# 006 [25 Pa. Code §127.441]**

**Operating permit terms and conditions.**

[Additional authority for this condition is derived from 25 Pa. Code §§ 127.441 and 127.512]

The permittee shall monitor off-site migration of landfill gas by methods approved by the Department.

**IV. RECORDKEEPING REQUIREMENTS.**

**# 007 [25 Pa. Code §127.441]**

**Operating permit terms and conditions.**

[Additional authority for this permit condition is also derived from 25 Pa. Code § 127.512]

(a) The permittee shall keep records of the annual calculations of the Volatile Organic Compound (VOC) emission rate for each landfill area: the Existing Landfill and the Southern, the Western, the Eastern, and the Valley Fill Expansions.

(b) Emissions calculated for the Existing Landfill, Southern Expansion, Western Expansion, Eastern Expansion, and Valley Fill Expansion shall be used to determine compliance with the applicable limits in Condition #001 of Source ID 101.

**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.**

**# 008 [25 Pa. Code §127.441]**

**Operating permit terms and conditions.**

[Additional authority for this permit condition is also derived from 40 C.F.R. § 62.16714(f) [40 CFR § 63.1957(b)]

(a) Consistent with the authority of 40 C.F.R. § 62.16714(f) [40 CFR § 63.1957(b)], the permittee may cap or remove the collection and control system provided that the following conditions are met:

(1) The landfill (to include all landfill areas and expansions) shall be a closed landfill, which is defined as a landfill in which solid waste is no longer being placed, and in which no additional solid wastes will be placed without first filing a notification of modification as prescribed under 40 CFR § 60.7(a)(4).

(2) The collection and control system shall have been in operation a minimum of 15 years; and,

(3) Following the procedures specified in 40 CFR § 62.16714(f)(4) [40 CFR § 63.1957(b)(3)], 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

**SECTION D. Source Level Requirements**

no less than 90 days apart, and no more than 180 days apart.

(b) Nothing in this Condition shall be construed to limit or impair any obligation of the permittee to maintain and/or operate the gas collection and control system under then-applicable law other than the Pennsylvania Air Pollution Control Act.

(c) The Department reserves all rights under the Pennsylvania Air Pollution Control Act (including without limitation Section 4(14) of that Act, 35 P.S. Section 4004(14)), to require the permittee to maintain and/or operate the gas collection and control system to meet the requirements of that Act.

**# 009 [25 Pa. Code §127.441]****Operating permit terms and conditions.**

Additional authority for this permit condition is also derived from 40 C.F.R. § 62.16718(b) [40 CFR § 63.1959(c)].

(a) The permittee shall calculate the NMOC emission rate for purposes of determining when the collection and control system can be removed, using the following equation:

$$\text{MNMOC} = 1.89 \times 10^{-3} \text{ QLFG CNMOC}$$

MNMOC = mass emission rate of NMOC, megagrams per year

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

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

(b) The flow rate of landfill gas, QLFG, shall be determined by measuring the total landfill gas flow rate at the common header pipe that leads to the control device using a gas flow measuring device calibrated according to the provision of section 10 of Method 2E of appendix A-1 of Part 60.

(c) The average NMOC concentration, CNMOC, must 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 25 or 25C of appendix A-7 to part 60 of this chapter. The sample location on the common header pipe must be before any condensate removal or other gas refining units. The permittee must divide the NMOC concentration from EPA Method 25 or Method 25C of appendix A-7 to part 60 by six to convert from CNMOC as carbon to CNMOC as hexane.

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

**# 010 [25 Pa. Code §127.441]****Operating permit terms and conditions.**

[Additional authority for this permit condition is also derived from 40 CFR § 62.16720(a)(1) and 40 CFR § 63.1960(a)(1)]

(a) For the purposes of calculating the maximum expected gas generation flow rate from the landfill, the equation pursuant to 40 CFR § 62.16720(a)(1)(ii) and 40 CFR § 63.1960(a)(1)(ii) must be used, unless another method has been approved by the Administrator and the Department. 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.

(b) If a collection and control system has been installed at the facility, actual flow data may be used to project the maximum expected gas generation flow rate instead of, or in conjunction with, the equation referenced in paragraph (a), above. 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 equation referenced in paragraph (a), above, 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.

**# 011 [25 Pa. Code §127.441]****Operating permit terms and conditions.**

[Additional authority for this permit condition is also derived from 40 CFR §§ 62.16728(b) and (c)(1) [40 CFR §§ 63.1962(b) and (c)(1)].]

(a) The permittee shall construct the gas collection devices using the following equipment and procedures, or in



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accordance with alternative parameters approved by EPA pursuant to 40 CFR § 62.16724(d) and (e) [40 CFR § 63.1981(d) and (e)]:

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

(2) Vertical wells shall be placed so as not to endanger underlying liners and shall address the occurrence of water within the landfill. Holes and trenches constructed for piped wells and horizontal collectors shall be of sufficient cross-section so as to allow for their proper construction and completion, including, 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 piper 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.

(b) Permittee shall convey the landfill gas to the control system 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. For the permittee's existing collection system, the flow data shall be used to project the maximum flow rate.

**# 012 [40 CFR Part 61 NESHAPs §40 CFR 61.154]**

**Subpart M--National Emission Standard for Asbestos Standard for active waste disposal sites.**

To the extent that the permittee receives asbestos-containing waste material from a source covered under 40 CFR §§ 61.149, 61.150, or 61.155, the permittee shall meet the requirements of this condition:

(a) Either there must be no visible emissions to the outside air from any active waste disposal site where asbestos-containing waste material has been deposited, or the requirements of paragraph (c) or (d) of this condition must be met.

(b) Unless a natural barrier adequately deters access by the general public, either warning signs and fencing must be installed and maintained as follows, or the requirements of paragraph (c)(1) of this condition must be met.

(1) Warning signs must be displayed at all entrances and at intervals of 100 m (330 ft) or less along the property line of the site or along the perimeter of the sections of the site where asbestos-containing waste material is deposited. The warning signs must:

- (i) Be posted in such a manner and location that a person can easily read the legend; and,
- (ii) Conform to the requirements of 51 cm x 36 cm (20"x14") upright format signs specified in 29 CFR § 1910.145(d)(4) and this paragraph; and,
- (iii) Display the following legend in the lower panel with letter sizes and styles of a visibility at least equal to those specified in this paragraph.

Legend

Notation

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

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

Breathing Asbestos is Hazardous to.....14 Point Gothic.  
Your Health

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

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

(3) Upon request and supply of appropriate information, the Administrator will determine whether a fence or a natural barrier adequately deters access by the general public.

(c) Rather than meet the no visible emission requirement of paragraph (a) of this condition, at the end of each operating day, or at least once every 24-hour period while the site is in continuous operation, the asbestos-containing waste material that has been deposited at the site during the operating day or previous 24-hour period shall:

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

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

(d) Rather than meet the no visible emission requirement of paragraph (a) of this condition, use an alternative emissions control method that has received prior written approval by the Administrator according to the procedures described in 40 CFR § 61.149(c)(2).

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

(1) Maintain waste shipment records, using a form similar to that shown in Figure 4 of 40 CFR § 61.149, and include the following information:

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

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

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

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

(v) The date of the receipt.

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

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

**SECTION D. Source Level Requirements**

program for the disposal site. Describe the discrepancy and attempts to reconcile it, and submit a copy of the waste shipment record along with the report.

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

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

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

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

(i) Furnish upon request, and make available during normal business hours for inspection by the Administrator, all records required per this condition.

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

(1) Scheduled starting and completion dates.

(2) Reason for disturbing the waste.

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

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

**VII. ADDITIONAL REQUIREMENTS.**

**# 013 [25 Pa. Code §127.441]**

**Operating permit terms and conditions.**

Source ID 101 named (Exist LF, South, West, East, Valley F Exp) includes the following landfill areas, referred to as:

- (a) Existing Landfill
- (b) Southern Expansion (Source ID 102)
- (c) Western Expansion (Source ID 103)
- (d) Eastern Expansion (Source ID 104)
- (e) Valley Fill Expansion (Source ID 105)

**\*\*\* Permit Shield in Effect. \*\*\***

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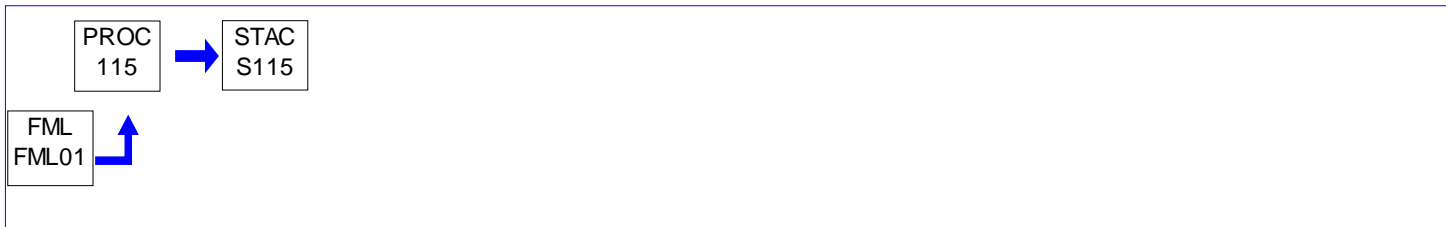
Source ID: 115

Source Name: EMERGENCY GENERATOR (99 HP)

Source Capacity/Throughput:

4.400 Gal/HR

Diesel Fuel

**I. RESTRICTIONS.****Operation Hours Restriction(s).****# 001 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.6640]****Subpart ZZZZ - National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines****How do I demonstrate continuous compliance with the emission limitations, operating limitations, and other requirements?**

[Additional authority for this permit condition is from 40 CFR § 63.6640(f) and 25 Pa. Code § 127.441]

The permittee shall operate this engine as an "emergency stationary RICE" as follows:

(a) The engine is operated to provide electrical power or mechanical work during an emergency situation. There is no restriction on hours of operation during an emergency situation, unless elsewhere restricted.

(b) The permittee shall operate the emergency stationary R.I.C.E. according to the requirements in the most recent version of 40 C.F.R. § 63.6640(f).

(c) If the permittee does not operate the engine according to the requirements of 40 C.F.R. § 63.6640(f), the engine will not be considered an emergency engine under 40 CFR Part 60, Subpart ZZZZ, and must meet all requirements for non-emergency engines.

**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.****# 002 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.6655]****Subpart ZZZZ - National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines****What records must I keep?**

Pursuant to 40 CFR §§ 63.6655(a)(1), (2) and (5), the permittee shall keep the following records:

(a) A copy of each notification and report submitted to comply with 40 CFR Part 63, Subpart ZZZZ, with relevant documentation;

(b) Records of the occurrence and duration of each malfunction of operation;



**SECTION D. Source Level Requirements**

(c) Records of actions taken during periods of malfunction to minimize emissions in accordance with 40 CFR § 63.6605(b) including corrective actions to restore the malfunctioning process to its normal method of operation.

**# 003 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.6655]****Subpart ZZZZ - National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines****What records must I keep?**

Pursuant to 40 CFR §§ 63.6655(d), (e) and (e)(1), the permittee shall keep the following maintenance records:

- (a) Either the manufacturer's emission related operation and maintenance instructions or the facility's maintenance plan.
- (b) Records of maintenance conducted on the engine.

**# 004 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.6655]****Subpart ZZZZ - National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines****What records must I keep?**

Pursuant to 40 CFR §§ 63.6655(f) and (f)(2), the permittee shall keep the records of the hours of operation of the engine that is recorded through the non-resettable hour meter. The permittee shall document how many hours are spent for emergency operation, including what classified the operation as emergency and how many hours are spent for non-emergency operation. If the engine is used for the purposes specified in 40 CFR §§ 63.6640(f)(2)(ii) or (iii) or 63.6640(f)(4)(ii), the permittee shall keep records of the notification of the emergency situation, and the date, start time, and end time of engine operation for these purposes.

**V. REPORTING REQUIREMENTS.****# 005 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.6650]****Subpart ZZZZ - National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines****What reports must I submit and when?**

Pursuant to 40 CFR § 63.6650(f), all deviations from the conditions required by 40 CFR Part 60, Subpart ZZZZ, shall be reported with the Title V semiannual monitoring reports.

**VI. WORK PRACTICE REQUIREMENTS.****# 006 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.6603]****Subpart ZZZZ - National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines****What emission limitations, operating limitations, and other requirements must I meet if I own or operate an existing stationary RICE located at an area source of HAP emissions?**

Pursuant to 40 CFR § 63.6603(a) and Table 2d, Item 4, the permittee shall perform the following service on the engine:

- (a) Change the oil and filter every 500 hours of operation or annually, whichever comes first;
- (b) Inspect the air cleaner every 1,000 hours of operation or annually, whichever comes first, and replace as necessary; and
- (c) Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary.
- (d) The permittee has the option of using an oil analysis program, as described in 40 CFR § 63.6625(i) to extend the above oil change requirements.

**# 007 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.6605]****Subpart ZZZZ - National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines****What are my general requirements for complying with this subpart?**

**SECTION D. Source Level Requirements**

Pursuant to 40 CFR § 63.6605(b), the permittee shall operate and maintain the engine and any associated air pollution control equipment and monitoring equipment in a manner consistent with safety and good air pollution control practices for minimizing emissions.

**# 008 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.6625]****Subpart ZZZZ - National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines****What are my monitoring, installation, operation, and maintenance requirements?**

In accordance with 40 CFR § 63.6625(i), the permittee has the option of using an oil analysis program, in order to extend the oil change requirement.

(a) The oil analysis must be performed at the same frequency specified in 40 CFR Part 63, Subpart ZZZZ, Table 2d, Item 4. The analysis program must at a minimum analyze the following three parameters: Total Base Number, viscosity, and percent water content. The condemning limits for these parameters are as follows: Total Base Number is less than 30 percent of the Total Base Number of the oil when new; viscosity of the oil has changed by more than 20 percent from the viscosity of the oil when new; or percent water content (by volume) is greater than 0.5. If all of these condemning limits are not exceeded, the engine owner or operator is not required to change the oil. If any of the limits are exceeded, the engine owner or operator must change the oil within 2 business days of receiving the results of the analysis.

(b) If the engine is not in operation when the results of the analysis in paragraph (a) are received, the engine owner or operator must change the oil within 2 business days of receiving the results or before commencing operation, whichever is later, pursuant to 40 CFR § 63.6625(i).

(c) The permittee shall keep records of the parameters that are analyzed as part of the oil analysis program, the results of the analysis, and the oil changes for the engine.

(d) If the permittee uses an oil analysis program, as indicated in paragraph (a), the oil analysis program shall be part of the maintenance plan for the facility, as required by 40 CFR § 63.6625(i).

**# 009 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.6625]****Subpart ZZZZ - National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines****What are my monitoring, installation, operation, and maintenance requirements?**

Pursuant to 40 CFR §§ 63.6625(e) and (e)(3), the permittee shall operate and maintain the engine and after-treatment control device (if any) according to the manufacturer's emission-related written instructions or develop his/her own maintenance plan which must provide to the extent practicable for the maintenance and operation of the engine in a manner consistent with good air pollution control practice for minimizing emissions.

**# 010 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.6625]****Subpart ZZZZ - National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines****What are my monitoring, installation, operation, and maintenance requirements?**

Pursuant to 40 CFR § 63.6625(h), the permittee shall minimize the engine's time spent at idle and minimize the engine's startup time at startup to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes.

**VII. ADDITIONAL REQUIREMENTS.****# 011 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.6585]****Subpart ZZZZ - National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines****Am I subject to this subpart?**

This source is subject to 40 CFR Part 63, Subpart ZZZZ, and shall comply with all applicable requirements.

**\*\*\* Permit Shield in Effect. \*\*\***

**SECTION D. Source Level Requirements**

Source ID: 999

Source Name: 40 CFR 63, SUBPART AAAAA

Source Capacity/Throughput:

**I. RESTRICTIONS.****Control Device Efficiency Restriction(s).****# 001 [25 Pa. Code §127.441]****Operating permit terms and conditions.**

[Additional authority for this permit condition is also derived from 40 CFR §§ 63.1995(c), 63.1960(e) and 63.1964(b)]

## Operational Standards for Collection and Control Systems

(1) At all times, permittee must operate and maintain the affected source, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. The general duty to minimize emissions does not require permittee to make any further efforts to reduce emissions if the requirements of Subpart AAAAA have been achieved. Determination of whether a source is operating in compliance with operation and maintenance requirements will be based on information available to the Department and EPA which may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source.

(2) The Startup Shutdown and Malfunction ("SSM") provisions of 40 CFR 63.6(e) of subpart A no longer apply, and the SSM plan developed under Subpart AAAAA no longer applies. Compliance with the emissions standards and the operating standards of 40 CFR § 63.1958 of Subpart AAAAA is required at all times.

(3) The provisions of Subpart AAAAA apply at all times, including periods of SSM. During periods of SSM, permittee must comply with the work practice requirement set forth in Condition #002 in lieu of the compliance provisions in 40 CFR § 63.1960.

**# 002 [25 Pa. Code §127.441]****Operating permit terms and conditions.**

[Additional authority for this permit condition is also derived from 40 CFR § 63.1958(e)]

## Operational Standards for Collection and Control Systems

The permittee shall:

(1) Operate the system in accordance with 40 CFR § 63.1955(c) such that all collected gases are vented to a control system designed and operated in compliance with 40 CFR § 63.1959(b)(2)(iii). In the event the collection or control system is not operating:

(i) The gas mover system must be shut down and all valves in the collection and control system contributing to venting of the gas to the atmosphere must be closed within 1 hour of the collection or control system not operating; and

(ii) Efforts to repair the collection or control system must be initiated and completed in a manner such that downtime is kept to a minimum, and the collection and control system must be returned to operation.

**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.****# 003 [25 Pa. Code §127.441]****Operating permit terms and conditions.**

[Additional authority for this permit condition is also derived from 25 Pa. Code §§ 63.1960 and 63.1961]

Compliance and Monitoring Requirements – Wellhead Pressure

**SECTION D. Source Level Requirements**

(1) Permittee shall measure the gauge pressure in the gas collection header on a monthly basis. If a positive pressure exists, permittee must initiate action to correct the exceedance within 5 days, except for the three conditions allowed under Condition #012 [40 CFR § 63.1958(b)]. Any attempted corrective measure must not cause exceedances of other operational or performance standards.

(a) If negative pressure cannot be achieved without excess air infiltration within 15 days of the first measurement of positive pressure, permittee must conduct a root cause analysis and correct the exceedance as soon as practicable, but no later than 60 days after positive pressure was first measured. Permittee must keep records according to Condition #009(6) [40 CFR § 63.1983(e)(3)].

(b) If corrective actions cannot be fully implemented within 60 days following the positive pressure measurement for which the root cause analysis was required, permittee must also conduct a corrective action analysis and develop an implementation schedule to complete the corrective action(s) as soon as practicable, but no more than 120 days following the positive pressure measurement. Permittee must submit the items listed in Condition #010(4) [40 CFR § 63.1981(h)(7)] as part of the next semi-annual report. Permittee must keep records according to Condition #009(8) [40 CFR § 63.1983(e)(5)].

(c) If corrective action is expected to take longer than 120 days to complete after the initial exceedance, permittee must submit the root cause analysis, corrective action analysis, and corresponding implementation timeline to the Department and EPA, according to Condition #010(4) [40 CFR § 63.1981(j)]. Permittee must keep records according to Condition #009(8) [40 CFR § 63.1983(e)(5)].

**# 004 [25 Pa. Code §127.441]****Operating permit terms and conditions.**

[Additional authority for this permit condition is also derived from 40 CFR §§ 63.1960 and 63.1961]

**Compliance and Monitoring Requirements – Wellhead Temperature**

(1) Permittee shall monitor each well monthly for temperature for the purpose of identifying whether excess air infiltration exists. If a well exceeds 62.8 degrees Celsius (145 degrees Fahrenheit), action must be initiated to correct the exceedance within 5 days. Any attempted corrective measure must not cause exceedances of other operational or performance standards. The temperature measuring device must be calibrated annually using the procedure in Section 10.3 of EPA Method 2 of appendix A–1 to part 60 and records must be kept as specified in 40 CFR § 63.1983(e).

(a) If a landfill gas temperature less than or equal to 62.8 degrees Celsius (145 degrees Fahrenheit) cannot be achieved within 15 days of the first measurement of landfill gas temperature greater than 62.8 degrees Celsius (145 degrees Fahrenheit), the permittee must conduct a root cause analysis and correct the exceedance as soon as practicable, but no later than 60 days after a landfill gas temperature greater than 62.8 degrees Celsius (145 degrees Fahrenheit) was first measured. The permittee must keep records according to Condition #009(6) [40 CFR § 63.1983(e)(3)].

(b) If corrective actions cannot be fully implemented within 60 days following the temperature measurement for which the root cause analysis was required, the permittee must also conduct a corrective action analysis and develop an implementation schedule to complete the corrective action(s) as soon as practicable, but no more than 120 days following the measurement of landfill gas temperature greater than 62.8 degrees Celsius (145 degrees Fahrenheit). Permittee must submit the items listed in Condition #010(4) [40 CFR § 63.1981(h)(7)] as part of the next semi-annual report. Permittee must keep records according to Condition #009(8) [40 CFR § 63.1983(e)(4)].

(c) If corrective action is expected to take longer than 120 days to complete after the initial exceedance, permittee must submit the root cause analysis, corrective action analysis, and corresponding implementation timeline to the Department and to EPA, according to Condition #010(4) [40 CFR § 63.1981(h)(7) and (j)]. Permittee must keep records according to Condition #009(8) [40 CFR § 63.1983(e)(5)].

(d) If a landfill gas temperature measured at either the wellhead or at any point in the well is greater than or equal to 76.7 degrees Celsius (170 degrees Fahrenheit) and the carbon monoxide concentration measured, according to the procedures in Condition #004(2)(f) [40 CFR 63.1961(a)(5)(vi)] is greater than or equal to 1,000 ppmv the corrective action(s) for the wellhead temperature standard (62.8 degrees Celsius or 145 degrees Fahrenheit) must be completed within 15 days.

**SECTION D. Source Level Requirements**

(2) Unless a higher operating temperature value has been approved by the Department or EPA under Subpart AAAA or under 40 CFR part 60, subpart WWW; 40 CFR part 60, subpart XXX; or a federal plan or EPA-approved and effective state plan or tribal plan that implements either 40 CFR part 60, subpart Cc or 40 CFR part 60, subpart Cf, permittee must initiate enhanced monitoring at each well with a measurement of landfill gas temperature greater than 62.8 degrees Celsius (145 degrees Fahrenheit) as follows:

(a) Visual observations for subsurface oxidation events (smoke, smoldering ash, damage to well) within the radius of influence of the well.

(b) Monitor oxygen concentration as provided in Condition #006 of this section.

(c) Monitor temperature of the landfill gas at the wellhead as provided in Condition #004(1).

(d) Monitor temperature of the landfill gas every 10 vertical feet of the well as provided in paragraph (3) of this condition.

(e) Monitor the methane concentration with a methane meter using EPA Method 3C of appendix A-6 to part 60, EPA Method 18 of appendix A-6 to part 60 of this chapter, or a portable gas composition analyzer to monitor the methane levels provided that the analyzer is calibrated, and the analyzer meets all quality assurance and quality control requirements for EPA Method 3C or EPA Method 18.

(f) Monitor carbon monoxide concentrations, as follows:

(i) Collect the sample from the wellhead sampling port in a passivated canister or multi-layer foil gas sampling bag (such as the Cali-5-Bond Bag) and analyze that sample using EPA Method 10 of appendix A-4 to part 60 of this chapter, or an equivalent method with a detection limit of at least 100 ppmv of carbon monoxide in high concentrations of methane; or

(ii) Collect and analyze the sample from the wellhead using EPA Method 10 of appendix A-4 to part 60 to measure carbon monoxide concentrations.

(iii) When sampling directly from the wellhead, you must sample for 5 minutes plus twice the response time of the analyzer. These values must be recorded. The five 1-minute averages are then averaged to give you the carbon monoxide reading at the wellhead.

(iv) When collecting samples in a passivated canister or multi-layer foil sampling bag, you must sample for the period of time needed to assure that enough sample is collected to provide five (5) consecutive, 1-minute samples during the analysis of the canister or bag contents, but no less than 5 minutes plus twice the response time of the analyzer. The five (5) consecutive, 1-minute averages are then averaged together to give you a carbon monoxide value from the wellhead.

(g) The enhanced monitoring this Condition #004(2) must begin 7 calendar days after the first measurement of landfill gas temperature greater than 62.8 degrees Celsius (145 degrees Fahrenheit).

(h) The enhanced monitoring in this Condition #004(2) must be conducted on a weekly basis. If four consecutive weekly carbon monoxide readings are under 100 ppmv, then enhanced monitoring may be decreased to monthly. However, if carbon monoxide readings exceed 100 ppmv again, the landfill must return to weekly monitoring.

(i) The enhanced monitoring in this Condition #004(2) can be stopped once a higher operating value is approved, at which time the monitoring provisions issued with the higher operating value should be followed, or once the measurement of landfill gas temperature at the wellhead is less than or equal to 62.8 degrees Celsius (145 degrees Fahrenheit).

(3) For each wellhead with a measurement of landfill gas temperature greater than or equal to 73.9 degrees Celsius (165 degrees Fahrenheit), annually monitor temperature of the landfill gas every 10 vertical feet of the well. This temperature can be monitored either with a removable thermometer or using temporary or permanent thermocouples installed in the well.

**# 005 [25 Pa. Code §127.441]**

**Operating permit terms and conditions.**

[Additional authority for this permit condition is also derived from 40 CFR § 63.1960 and 63.1961]

**SECTION D. Source Level Requirements****Compliance and Monitoring Requirements – Surface Emissions**

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

(a) The background concentration must 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.

(b) Surface emission monitoring must be performed in accordance with section 8.3.1 of EPA Method 21 of appendix A-7 of part 60 of this chapter, except that the probe inlet must be placed within 5 to 10 centimeters of the ground. Monitoring must be performed during typical meteorological conditions.

(c) Any reading of 500 ppm or more above background at any location must be recorded as a monitored exceedance and the actions specified in paragraphs (c)(i) through (v) of this condition must be taken. As long as the specified actions are taken, the exceedance is not a violation of the operational requirements of 40 CFR 63.1958(d).

(i) The location of each monitored exceedance must be marked, and the location and concentration recorded. The location must be recorded using an instrument with an accuracy of at least 4 meters. The coordinates must be in decimal degrees with at least five decimal places.

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

(iii) If the re-monitoring of the location shows a second exceedance, additional corrective action must be taken, and the location must 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)(v) of this section must be taken, and no further monitoring of that location is required until the action specified in paragraph (c)(v) of this section 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)(ii) or (iii) of this section must be re-monitored 1 month from the initial exceedance. If the 1-month re-monitoring shows a concentration less than 500 ppm 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)(iii) or (v) of this section must be taken.

(v) For any location where monitored methane concentration equals or exceeds 500 ppm above background three times within a quarterly period, a new well or other collection device must be installed within 120 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 for approval.

(d) Permittee shall comply with the following instrumentation specifications and procedures for surface emission monitoring devices:

(i) The portable analyzer must meet the instrument specifications provided in section 6 of EPA Method 21 of appendix A of part 60 of this chapter, except that "methane" replaces all references to "VOC".

(ii) The calibration gas must be methane, diluted to a nominal concentration of 500 ppm in air.

(iii) To meet the performance evaluation requirements in section 8.1 of EPA Method 21 of appendix A of part 60 of this chapter, the instrument evaluation procedures of section 8.1 of EPA Method 21 of appendix A of part 60 must be used.

(iv) The calibration procedures provided in sections 8 and 10 of EPA Method 21 of appendix A of part 60 of this chapter must be followed immediately before commencing a surface monitoring survey.

(e) The owner or operator must implement a program to monitor for cover integrity and implement cover repairs as

**SECTION D. Source Level Requirements**

necessary on a monthly basis.

(f) 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.

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

[Additional authority for this permit condition is also derived from 40 CFR §§ 63.1960 and 63.1961]

Compliance and Monitoring Requirements – Nitrogen or Oxygen

(1) Monitor nitrogen or oxygen concentration in the landfill gas on a monthly basis as follows:

(a) The nitrogen level must be determined using EPA Method 3C of appendix A–2 to part 60 of this chapter, unless an alternative test method is established as allowed by 40 CFR § 63.1981(d)(2).

(b) Unless an alternative test method is established as allowed by 40 CFR § 63.1981(d)(2), the oxygen level must be determined by an oxygen meter using EPA Method 3A or 3C of appendix A–2 to part 60 of this chapter or ASTM D6522–11 (incorporated by reference, see 40 CFR § 63.14). Determine the oxygen level by an oxygen meter using EPA Method 3A or 3C of appendix A–2 to part 60 or ASTM D6522–11 (if sample location is prior to combustion) except that: (i) The span must be set between 10- and 12-percent oxygen; (ii) A data recorder is not required; (iii) Only two calibration gases are required, a zero and span; (iv) A calibration error check is not required; and (v) The allowable sample bias, zero drift, and calibration drift are  $\pm 10$  percent.

(c) A portable gas composition analyzer may be used to monitor the oxygen levels provided: (i) The analyzer is calibrated; and (ii) The analyzer meets all quality assurance and quality control requirements for EPA Method 3A of appendix A–2 to part 60 of this chapter or ASTM D6522–11 (incorporated by reference, see 40 CFR § 63.14).

**# 007 [25 Pa. Code §127.441]****Operating permit terms and conditions.**

[Additional authority for this permit condition is also derived from 25 Pa. Code §§ 40 CFR 63.1961 and 63.1983]

Compliance and Monitoring Requirements – Control Devices and Treatment System

(1) If permittee seeks to comply with 40 CFR § 63.1959(b)(2)(iii) using an enclosed combustor, permittee must calibrate, maintain, and operate according to the manufacturer's specifications, the following equipment:

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

(b) A device that records flow to the control device and bypass of the control device (if applicable). Permittee must:

(i) Install, calibrate, and maintain a gas flow rate measuring device that must record the flow to the control device at least every 15 minutes; and

(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 must 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.

(2) If permittee seeks to comply with 40 CFR § 63.1959(b)(2)(iii) using a non-enclosed flare, permittee must install, calibrate, maintain, and operate according to the manufacturer's specifications the following equipment:

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

**SECTION D. Source Level Requirements**

indicate the continuous presence of a flame; and

(b) A device that records flow to the flare and bypass of the flare (if applicable). Permittee must:

(i) Install, calibrate, and maintain a gas flow rate measuring device that records the flow to the control device at least every 15 minutes; and

(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 must be performed at least once every month to ensure that the valve is maintained in the closed position and that the gas flow is not diverted through the bypass line.

(3) If permittee seeks to demonstrate compliance with 40 CFR § 63.1959(b)(2)(iii)(C) using a landfill gas treatment system, permittee must maintain and operate all monitoring systems associated with the treatment system in accordance with a site-specific treatment system monitoring plan as required in Condition #009(2)(e) [40 CFR § 63.1983(b)(5)(ii)]. Permittee must calibrate, maintain, and operate according to the manufacturer's specifications a device that records flow to the treatment system and bypass of the treatment system (if applicable). Permittee must:

(a) Install, calibrate, and maintain a gas flow rate measuring device that records the flow to the treatment system at least every 15 minutes; and

(b) 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 must be performed at least once every month to ensure that the valve is maintained in the closed position and that the gas flow is not diverted through the bypass line.

(4) The monitoring requirements of paragraphs (1), (2) and (3) of this section apply at all times the affected source is operating, except for periods of monitoring system malfunctions, repairs associated with monitoring system malfunctions, and required monitoring system quality assurance or quality control activities. A monitoring system malfunction is any sudden, infrequent, not reasonably preventable failure of the monitoring system to provide valid data. Monitoring system failures that are caused in part by poor maintenance or careless operation are not malfunctions. Permittee is required to complete monitoring system repairs in response to monitoring system malfunctions and to return the monitoring system to operation as expeditiously as practicable.

**# 008 [25 Pa. Code §127.441]**

**Operating permit terms and conditions.**

[Additional authority for this permit condition is also derived from 40 CFR § CFR 63.1975]

Calculation of 3-Hour Block Average

(1) 3-hour averages shall be calculated according to Condition #009(2)(b)(i) for average combustion temperature and #009(3)(a)(i) for 3-hour average combustion temperature for enclosed combustors, except that the data collected during the event listed in paragraph (a) of this section are not to be included in any average computed under this condition. [40 CFR 63.1983(b)(2)(i) and 63.1983(c)(1)(i)].

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

(b) Startups

(c) Shutdowns

(d) Malfunctions



**SECTION D. Source Level Requirements****IV. RECORDKEEPING REQUIREMENTS.****# 009 [25 Pa. Code §127.441]****Operating permit terms and conditions.**

[Additional authority for this permit condition is also derived from 40 CFR § 63.1983]

**Recordkeeping Requirements**

Permittee must keep records as specified in Subpart AAAA and as specified in the general provisions of 40 CFR part 63 as shown in Table 1 to Subpart AAAA.

(1) Permittee must keep for at least 5 years up-to-date, readily accessible, on-site records of the design capacity report that triggered 40 CFR § 63.1959(b), the current amount of solid waste in-place, and the year-by-year waste acceptance rate. Off-site records may be maintained if they are retrievable within 4 hours. Either paper copy or electronic formats are acceptable.

(2) Permittee must keep up-to-date, readily accessible records for the life of the control system equipment of the data listed in paragraphs (2)(a) through (e) of this section as measured during the initial performance test or compliance determination. Records of subsequent tests or monitoring must be maintained for a minimum of 5 years. Records of the control device vendor specifications must be maintained until removal.

(a) Where permittee seeks to demonstrate compliance through the operation of a landfill gas collection and control system:

(i) The maximum expected gas generation flow rate as calculated in 40 CFR § 63.1960(a)(1).

(ii) The density of wells, horizontal collectors, surface collectors, or other gas extraction devices determined using the procedures specified in 40 CFR § 63.1962(a)(1) and (2).

(b) Where permittee seeks to demonstrate compliance through use of an enclosed combustion device other than a boiler or process heater with a design heat input capacity equal to or greater than 44 megawatts:

(i) The average 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 § 63.1959(b)(2)(iii)(B) achieved by the control device.

(c) Where permittee seeks to demonstrate compliance through use of a boiler or process heater of any size: A description of the location at which the collected gas vent stream is introduced into the boiler or process heater over the same time period of the performance testing.

(d) Where permittee seeks to demonstrate compliance through use of a non- enclosed flare:

(i) The flare type (i.e., steam-assisted, air-assisted, or nonassisted).

(ii) 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 § 63.111.

(iii) Continuous records of the flare pilot flame or flare flame monitoring and records of all periods of operations during which the pilot flame or the flare flame is absent.

(e) Where permittee seeks to demonstrate compliance through use of a landfill gas treatment system:

(i) Bypass records. Records of the flow of landfill gas to, and bypass of, the treatment system.

(ii) Site-specific treatment monitoring plan. Permittee must prepare a site-specific treatment monitoring plan to include: (A) Monitoring records of parameters that are identified in the treatment system monitoring plan and that ensure the treatment

**SECTION D. Source Level Requirements**

system is operating properly for each intended end use of the treated landfill gas. At a minimum, records should include records of filtration, de-watering, and compression parameters that ensure the treatment system is operating properly for each intended end use of the treated landfill gas. (B) Monitoring methods, frequencies, and operating ranges for each monitored operating parameter based on manufacturer's recommendations or engineering analysis for each intended end use of the treated landfill gas. (C) Documentation of the monitoring methods and ranges, along with justification for their use. (D) List of responsible staff (by job title) for data collection. (E) Processes and methods used to collect the necessary data. (F) Description of the procedures and methods that are used for quality assurance, maintenance, and repair of all continuous monitoring systems (CMS).

(3) Permittee must keep for 5 years up-to-date, readily accessible continuous records of the equipment operating parameters as well as up-to-date, readily accessible records for periods of operation during which the parameter boundaries established during the most recent performance test are exceeded.

(a) The following constitute exceedances that must be recorded and reported in the semi-annual report required under Condition #010(3) [40 CFR § 63.1981(h)]:

(i) For enclosed combustors except for boilers and process heaters with design heat input capacity of 44 megawatts (150 million Btu per hour) or greater, all 3-hour periods of operation during which the average temperature was more than 28 degrees Celsius (82 degrees Fahrenheit) below the average combustion temperature during the most recent performance test at which compliance with 40 CFR § 63.1959(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) of this section.

(b) Permittee must keep up-to-date, readily accessible continuous records of the indication of flow to the control system and 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 Condition #007 [40 CFR §§ 63.1961(b)(2)(ii), (c)(2)(ii), and (g)(2)].

(c) For each non-enclosed flare, Permittee must keep up-to-date, readily accessible continuous records of the flame or flare pilot flame monitoring specified under Condition #007 [40 CFR § 63.1961(c)], and up-to-date, readily accessible records of all periods of operation in which the flame or flare pilot flame is absent.

(d) Permittee must keep records of periods when the collection system or control device is not operating.

(e) Where permittee seeks to demonstrate compliance with the operational standard in Condition #002 [40 CFR § 63.1958(e)(1)], the date, time, and duration of each startup and/or shutdown period, recording the periods when the affected source was subject to the standard applicable to startup and shutdown.

(f) Where permittee seeks to demonstrate compliance with the operational standard in Condition #002 [40 CFR § 63.1958(e)(1)], in the event that an affected unit fails to meet an applicable standard, record the information below in this paragraph:

(i) For each failure record the date, time and duration of each failure and the cause of such events (including unknown cause, if applicable).

(ii) For each failure to meet an applicable standard; record and retain a list of the affected sources or equipment.

(iii) Record actions taken to minimize emissions in accordance with the general duty of 40 CFR § 63.1955(c) and any corrective actions taken to return the affected unit to its normal or usual manner of operation.

(g) In lieu of the requirements specified in 40 CFR § 63.8(d)(3) of subpart A, permittee must keep the written procedures required by 40 CFR § 63.8(d)(2) on record for the life of the affected source or until the affected source is no longer subject to the provisions of this part, to be made available for inspection, upon request, by the Department or EPA. If the performance evaluation plan is revised, permittee must keep previous (i.e., superseded) versions of the performance evaluation plan on record to be made available for inspection, upon request, by the Department or EPA, for a period of 5 years after each revision to the plan. The program of corrective action should be included in the plan required under 40 CFR § 63.8(d)(2).

**SECTION D. Source Level Requirements**

(4) Permittee must keep for the life of the collection system an up-to-date, readily accessible plot map showing each existing and planned collector in the system and providing a unique identification location label for each collector.

(a) Permittee must keep up-to-date, readily accessible records of the installation date and location of all newly installed collectors as specified under 40 CFR § 63.1960(b).

(b) Permittee must keep readily accessible documentation of the nature, date of deposition, amount, and location of asbestos-containing or nondegradable waste excluded from collection as provided in 40 CFR § 63.1962(a)(3)(i) as well as any nonproductive areas excluded from collection as provided in 40 CFR § 63.1962(a)(3)(ii).

(5) Permittee must keep for at least 5 years up-to-date, readily accessible records of the following:

(a) All collection and control system exceedances of the operational standards in Conditions #003, #004, and #005 [40 CFR § 63.1958], the reading in the subsequent month whether or not the second reading is an exceedance, and the location of each exceedance.

(b) Records of each wellhead temperature monitoring value of 62.8 degrees Celsius (145 degrees Fahrenheit) or above.

(c) Records of all enhanced monitoring activities required in Condition #004 [40 CFR § 63.1961(a)(5)].

(d) Record of the email transmission for the 24-hour high temperature report required in Condition #010 [40 CFR § 63.1981(k)]

(6) For any root cause analysis for which corrective actions are required in Conditions #003 and #004 [40 CFR § 63.1960(a)(3)(i)(A) or (a)(4)(i)(A)], permittee must keep a record of the root cause analysis conducted, including a description of the recommended corrective action(s) taken, and the date(s) the corrective action(s) were completed.

(7) For any root cause analysis for which corrective actions are required in Conditions #003 and #004 [40 CFR § 63.1960(a)(3)(i)(B) or (a)(4)(i)(B)], permittee must keep a record of the root cause analysis conducted, the corrective action analysis, the date for corrective action(s) already completed following the positive pressure reading or high temperature reading, and, for action(s) not already completed, a schedule for implementation, including proposed commencement and completion dates.

(8) For any root cause analysis for which corrective actions are required in Conditions #003 and #004 [40 CFR § 63.1960(a)(3)(i)(C) or (a)(4)(i)(C)], permittee must keep a record of the root cause analysis conducted, the corrective action analysis, the date for corrective action(s) already completed following the positive pressure reading or high temperature reading, for action(s) not already completed, a schedule for implementation, including proposed commencement and completion dates, and a copy of any comments or final approval on the corrective action analysis or schedule from the Administrator.

(9) Permittee must keep for at least 5 years up-to-date, readily accessible records of all collection and control system monitoring data for parameters measured in Conditions #003, #004, #005 and #006 [40 CFR §§ 63.1961(a)(1) through (6)].

(10) Permittee must keep the following records:

(a) Records of the landfill gas temperature on a monthly basis as monitored in Condition #004 [40 CFR § 63.1960(a)(4)].

(b) Records of enhanced monitoring data at each well with a measurement of landfill gas temperature greater than 62.8 degrees Celsius (145 degrees Fahrenheit) as gathered in Condition #004 [40 CFR §§ 63.1961(a)(5) and (6)].

Any records required to be maintained by this subpart that are submitted electronically via the EPA's CEDRI may be maintained in electronic format. This ability to maintain electronic copies does not affect the requirement for facilities to make records, data, and reports available upon request to a delegated air agency or the EPA as part of an on-site compliance evaluation.

**SECTION D. Source Level Requirements****V. REPORTING REQUIREMENTS.****# 010 [25 Pa. Code §127.441]****Operating permit terms and conditions.**

[Additional authority for this permit condition is also derived from 40 CFR § 63.1981]

## Reporting Requirements

(1) Permittee must submit the reports specified in 40 CFR § 63.1981 and the reports specified in Table 1 to Subpart AAAA. If permittee has previously submitted a design capacity report, amended design capacity report, initial NMOC emission rate report, initial or revised collection and control system design plan, closure report, equipment removal report, or initial performance test under 40 CFR part 60, subpart WWW; 40 CFR part 60, subpart XXX; or a federal plan or EPA-approved and effective state plan or tribal plan that implements either 40 CFR part 60, subpart Cc or 40 CFR part 60, subpart Cf, then that submission constitutes compliance with the requirements in 40 CFR § 63.1981 with respect to submittal of a design capacity report in 63.1981(a), the amended design capacity report in 40 CFR § 63.1981(b), the initial NMOC emission rate report in 63.1981(c), the initial collection and control system design plan in 40 CFR § 63.1981(d), the revised design plan in 40 CFR § 63.1981(e), the closure report in 40 CFR § 63.1981(f), the equipment removal report in 40 CFR § 63.1981(g), and the initial performance test report in 40 CFR § 63.1981(l)(i). Permittee does not need to re-submit the report(s); however, permittee must include a statement certifying prior submission of the respective report(s) and the date of submittal in the first semi-annual report required in this section.

(2) Equipment removal report. Permittee must submit an equipment removal report to the Department and EPA 30 days prior to removal or cessation of operation of the control equipment. The equipment removal report must contain all of the following items, and the Department or EPA may request additional information that may be necessary to verify that all of the conditions for removal in 40 CFR § 63.1957(b) have been met:

(a) A copy of the closure report submitted in accordance with 40 CFR § 63.1981(f);

(b) A copy of the initial performance test report demonstrating that the 15-year minimum control period has expired, or information that demonstrates that the gas collection and control system will be unable to operate for 15 years due to declining gas flows. In the equipment removal report, the process unit(s) tested, the pollutant(s) tested, and the date that such performance test was conducted may be submitted in lieu of the performance test report if the report has been previously submitted to the EPA's Central Data Exchange (CDX); and

(c) Dated copies of three successive NMOC emission rate reports demonstrating that the landfill is no longer producing 50 Mg or greater of NMOC per year. If the NMOC emission rate reports have been previously submitted to the EPA's CDX, a statement that the NMOC emission rate reports have been submitted electronically and the dates that the reports were submitted to the EPA's CDX may be submitted in the equipment removal report in lieu of the NMOC emission rate reports.

(3) Semi-annual report. Permittee must submit semi-annual reports to the Department and EPA in accordance with the procedure specified in paragraph (6) of this condition. The semi-annual reports must contain the information in paragraphs (3)(a) through (i) below:

(a) Number of times that applicable parameters set forth in Condition #002(1) were exceeded and when the gas collection and control system was not operating under Condition #002, including periods of SSM. For each instance, report the date, time, and duration of each exceedance.

(b) Number of times the parameters for the site-specific treatment system in Condition #007(3) [40 CFR § 63.1961(g)] were exceeded.

(c) Description and duration of all periods when the gas stream was diverted from the control device or treatment system through a bypass line, or the indication of bypass flow as specified in Condition #007 [40 CFR § 63.1961].

(d) Description and duration of all periods when the control device or treatment system was not operating and length of time the control device or treatment system was not operating.

(e) All periods when the collection system was not operating.

**SECTION D. Source Level Requirements**

(f) The location of each exceedance of the 500-ppm methane concentration as provided in Condition #005 [40 CFR § 63.1958(d)] and the concentration recorded at each location for which an exceedance was recorded in the previous month. Record the latitude and longitude coordinates of each exceedance using an instrument with an accuracy of at least 4 meters. The coordinates must be in decimal degrees with at least five decimal places.

(g) The date of installation and the location of each well or collection system expansion added pursuant to Conditions #003, 004 and 005 [40 CFR § 63.1960(a)(3) and (4), (b), and (c)(4)].

(h) For any corrective action analysis for which corrective actions are required in Conditions #003 or #004 [40 CFR § 63.1960(a)(3) or (a)(4)] and that take more than 60 days to correct the exceedance, the root cause analysis conducted, including a description of the recommended corrective action(s), the date for corrective action(s) already completed following the positive pressure or high temperature reading, and, for action(s) not already completed, a schedule for implementation, including proposed commencement and completion dates.

(i) If the permittee is required to conduct enhanced monitoring in Condition #004 [40 CFR § 63.1961(a)(5) and (6)], permittee must include the results of all monitoring activities conducted during the period.

(ii) For each monitoring point, report the date, time, and well identifier along with the value and units of measure for oxygen, temperature (wellhead and downwell), methane, and carbon monoxide.

(iii) Include a summary trend analysis for each well subject to the enhanced monitoring requirements to chart the weekly readings over time for oxygen, wellhead temperature, methane, and weekly or monthly readings over time, as applicable for carbon monoxide.

(iv) Include the date, time, staff person name, and description of findings for each visual observation for subsurface oxidation event.

(4) Corrective action and the corresponding timeline. Permittee must submit information regarding corrective actions as follows:

(a) For corrective action that is required according to Conditions #003 or #004 [40 CFR § 63.1960(a)(3) or (4)] and is not completed within 60 days after the initial exceedance, permittee must submit a notification to the Administrator as soon as practicable but no later than 75 days after the first measurement of positive pressure or temperature exceedance.

(b) For corrective action that is required according to Conditions #003 or #004 [40 CFR § 63.1960(a)(3) or (4)] and is expected to take longer than 120 days after the initial exceedance to complete, permittee must submit the root cause analysis, corrective action analysis, and corresponding implementation timeline to the Department and EPA as soon as practicable but no later than 75 days after the first measurement of positive pressure or temperature monitoring value of 62.8 degrees Celsius (145 degrees Fahrenheit) or above unless a higher operating temperature value has been approved by the Department for the well under 40 CFR 63 Subpart AAAA or under 40 CFR part 60, subpart WWW; 40 CFR part 60, subpart XXX; or a Federal plan or EPA approved and effective state plan or tribal plan that implements either 40 CFR part 60, subpart Cc or 40 CFR part 60, subpart Cf. The Department or EPA must approve the plan for corrective action and the corresponding timeline.

(5) 24-hour high temperature report. When a landfill gas temperature measured at either the wellhead or at any point in the well is greater than or equal to 76.7 degrees Celsius (170 degrees Fahrenheit) and the carbon monoxide concentration measured is greater than or equal to 1,000 ppmv, then permittee must report the date, time, well identifier, temperature and carbon monoxide reading via email to the Department and EPA within 24 hours of the measurement unless a higher operating temperature value has been approved by the Department or EPA for the well under this subpart or under 40 CFR part 60, subpart WWW; 40 CFR part 60, subpart XXX; or a Federal plan or EPA approved and effective state plan or tribal plan that implements either 40 CFR part 60, subpart Cc or 40 CFR part 60, subpart Cf.

(6) Electronic reporting. Permittee must submit reports electronically according to paragraphs (6)(a) and (b) of this section.

(a) Within 60 days after the date of completing each performance test required by this subpart, permittee must submit the results of the performance test following the procedures specified in paragraphs (6)(a)(i) through (iii) of this section.

**SECTION D. Source Level Requirements**

(i) Data collected using test methods supported by the EPA's Electronic Reporting Tool (ERT) as listed on the EPA's ERT website (<https://www.epa.gov/electronic-reporting-air-emissions/electronic-reportingtool-ert>) at the time of the test. Submit the results of the performance test to the EPA via the Compliance and Emissions Data Reporting Interface (CEDRI), which can be accessed through the EPA's CDX (<https://cdx.epa.gov/>). The data must be submitted in a file format generated through the use of the EPA's ERT. Alternatively, you may submit an electronic file consistent with the extensible markup language (XML) schema listed on the EPA's ERT website.

(ii) Data collected using test methods that are not supported by the EPA's ERT as listed on the EPA's ERT website at the time of the test. The results of the performance test must be included as an attachment in the ERT or an alternate electronic file consistent with the XML schema listed on the EPA's ERT website. Submit the ERT generated package or alternative file to the EPA via CEDRI.

(iii) Confidential business information (CBI). If permittee claims some of the information submitted under paragraph (a) of this section is CBI, permittee must submit a complete file, including information claimed to be CBI, to the EPA. The file must be generated through the use of the EPA's ERT or an alternate electronic file consistent with the XML schema listed on the EPA's ERT website. Submit the file on a compact disc, flash drive, or other commonly used electronic storage medium and clearly mark the medium as CBI. Mail the electronic medium to U.S. EPA/OAQPS/CORE CBI Office, Attention: Group Leader, Measurement Policy Group, MD C404-02, 4930 Old Page Rd., Durham, NC 27703. The same file with the CBI omitted must be submitted to the EPA via the EPA's CDX as described in paragraph (l)(1)(i) of this section.

(b) If permittee is required to submit reports following the procedure specified in this paragraph, permittee must submit reports to the EPA via CEDRI. CEDRI can be accessed through the EPA's CDX. Permittee must use the appropriate electronic report in CEDRI for this subpart or an alternate electronic file format consistent with the XML schema listed on the CEDRI website (<https://www.epa.gov/electronic-reporting-air-emissions/compliance-and-emissions-data-reporting-interface-cedri>). Once the spreadsheet template upload/forms for the reports have been available in CEDRI for 90 days, permittee must begin submitting all subsequent reports via CEDRI. The reports must be submitted by the deadlines specified in this subpart, regardless of the method in which the reports are submitted. The NMOC emission rate reports, semiannual reports, and bioreactor 40-percent moisture reports should be electronically reported as a spreadsheet template upload/form to CEDRI. If the reporting forms specific to this subpart are not available in CEDRI at the time that the reports are due, permittee must submit the reports to the Administrator at the appropriate address listed in § 63.13 of subpart A.

(7) Claims of EPA system outage. If permittee is required to electronically submit a report through CEDRI in the EPA's CDX, permittee may assert a claim of EPA system outage for failure to comply timely with the reporting requirement. To assert a claim of EPA system outage, permittee must meet the requirements set forth in 40 CFR § 63.1981(m).

(8) Claims of force majeure. Beginning no later than September 27, 2021, If permittee is required to electronically submit a report through CEDRI in the EPA's CDX, permittee may assert a claim of force majeure for failure to comply timely with the reporting requirement. Permittee must meet the following requirements [40 CFR § 63.1981(n)]:

(a) You may submit a claim if a force majeure event is about to occur, occurs, or has occurred or there are lingering effects from such an event within the period of time beginning 5 business days prior to the date the submission is due. For the purposes of this section, a force majeure event is defined as an event that will be or has been caused by circumstances beyond the control of the affected facility, its contractors, or any entity controlled by the affected facility that prevents you from complying with the requirement to submit a report electronically within the time period prescribed. Examples of such events are acts of nature (e.g., hurricanes, earthquakes, or floods), acts of war or terrorism, or equipment failure or safety hazard beyond the control of the affected facility (e.g., large scale power outage).

(b) You must submit notification to the Administrator in writing as soon as possible following the date you first knew, or through due diligence should have known, that the event may cause or has caused a delay in reporting.

(c) You must provide to the Administrator:

(i) A written description of the force majeure event;

(ii) A rationale for attributing the delay in reporting beyond the regulatory deadline to the force majeure event;

**SECTION D. Source Level Requirements**

(iii) Measures taken or to be taken to minimize the delay in reporting; and

(iv) The date by which you propose to report, or if you have already met the reporting requirement at the time of the notification, the date you reported.

(d) The decision to accept the claim of force majeure and allow an extension to the reporting deadline is solely within the discretion of the Administrator.

(e) In any circumstance, the reporting must occur as soon as possible after the force majeure event occurs.

**VI. WORK PRACTICE REQUIREMENTS.****# 011 [25 Pa. Code §127.441]****Operating permit terms and conditions.**

[Additional authority for this permit condition is also derived from 40 CFR §§ 63.1995(c), 63.1960(e) and 63.1964(b)]

## Operational Standards for Collection and Control Systems

(1) At all times, permittee must operate and maintain the affected source, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. The general duty to minimize emissions does not require permittee to make any further efforts to reduce emissions if the requirements of Subpart AAAAA have been achieved. Determination of whether a source is operating in compliance with operation and maintenance requirements will be based on information available to the Department and EPA which may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source.

(2) The Startup Shutdown and Malfunction ("SSM") provisions of 40 CFR 63.6(e) of subpart A no longer apply, and the SSM plan developed under Subpart AAAAA no longer applies. Compliance with the emissions standards and the operating standards of 40 CFR § 63.1958 of Subpart AAAAA is required at all times.

(3) The provisions of Subpart AAAAA apply at all times, including periods of SSM. During periods of SSM, permittee must comply with the work practice requirement set forth in Condition #002 in lieu of the compliance provisions in 40 CFR § 63.1960.

**# 012 [25 Pa. Code §127.441]****Operating permit terms and conditions.**

[Additional authority for this permit condition is also derived from 25 Pa. Code § 63.1958]

## Operational Standards for Collection and Control Systems

(1) Permittee shall operate the collection system with negative pressure at each wellhead except under the following conditions:

(a) A fire or increased well temperature. Permittee must record instances when positive pressure occurs in efforts to avoid a fire. These records must be submitted with the semi-annual reports as provided in Condition #010(3) [40 CFR § 63.1981(h)];

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

(c) A decommissioned well. A well may experience a static positive pressure after shutdown to accommodate for declining flows. All design changes must be approved by the Department or EPA as specified in 40 CFR § 63.1981(d)(2).

(2) Permittee shall operate each interior wellhead in the collection system with a landfill gas temperature less than 62.8 degrees Celsius (145 degrees Fahrenheit).

(a) Permittee may establish a higher operating temperature value at a particular well. A higher operating value

**SECTION D. Source Level Requirements**

demonstration must be submitted to the Department or EPA for approval and must include supporting data demonstrating that the elevated parameter neither causes fires nor significantly inhibits anaerobic decomposition by killing methanogens. The demonstration must satisfy both criteria in order to be approved (i.e., neither causing fires nor killing methanogens is acceptable).

(3) Permittee shall operate the collection system so that the methane concentration is less than 500 parts per million (ppm) above background at the surface of the landfill. To determine if this level is exceeded, permittee must conduct surface testing around the perimeter of the collection area and along a pattern that traverses the landfill at no more than 30-meter intervals and where visual observations indicate elevated concentrations of landfill gas, such as distressed vegetation and cracks or seeps in the cover. Permittee may establish an alternative traversing pattern that ensures equivalent coverage. A surface monitoring design plan must 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.

(a) Permittee must:

(i) Conduct surface testing using an organic vapor analyzer, flame ionization detector, or other portable monitor meeting the specifications provided in Condition #005(1)(d) [40 CFR § 63.1960(d)].

(ii) Conduct surface testing at all cover penetrations. Thus, permittee must monitor any cover penetrations that are within an area of the landfill where waste has been placed and a gas collection system is required.

(iii) Determine the latitude and longitude coordinates of each exceedance using an instrument with an accuracy of at least 4 meters. The coordinates must be in decimal degrees with at least five decimal places.

(4) Permittee shall operate the system such that all collected gases are vented to a control system designed and operated in compliance with 40 CFR 63.1959(b)(2)(iii). In the event the collection or control system is not operating:

(a) The gas mover system must be shut down and all valves in the collection and control system contributing to venting of the gas to the atmosphere must be closed within 1 hour of the collection or control system not operating; and,

(b) Efforts to repair the collection or control system must be initiated and completed in a manner such that downtime is kept to a minimum, and the collection and control system must be returned to operation.

(5) Permittee shall operate the control system at all times when the collected gas is routed to the system.

(6) If monitoring demonstrates that the operational requirements in paragraph (1), (2), or (3) of this section are not met, corrective action must be taken as specified in Conditions #003, #004, and #005 [40 CFR § 63.1960(a)(3) and (4) or (c)]. If corrective actions are taken, the monitored exceedance is not a deviation of the operational requirements in this section.

**VII. ADDITIONAL REQUIREMENTS.**

**# 013 [25 Pa. Code §127.441]**

**Operating permit terms and conditions.**

Tullytown Resource Recovery Facility (TRRF) Landfill is subject to the provisions of 40 CFR Part 63, Subpart AAAA National Emission Standards for Hazardous Air Pollutants: Municipal Solid Waste Landfills. After September 27, 2021, The permittee shall comply with the monitoring, reporting and recordkeeping obligations of Subpart AAAA as set forth herein in order to satisfy the compliance obligations set forth in 40 CFR Part 62, Subpart 000.

**\*\*\* Permit Shield in Effect. \*\*\***



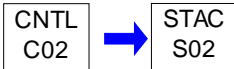
**SECTION D. Source Level Requirements**

Source ID: C02

Source Name: BACK-UP ENCLOSED FLARE 2

Source Capacity/Throughput: 300.000 MCF/HR LANDFILL GAS

Conditions for this source occur in the following groups: GRP 2

**I. RESTRICTIONS.****Emission Restriction(s).****# 001 [25 Pa. Code §127.441]****Operating permit terms and conditions.**

(a) The emissions of criteria pollutants from the flare shall be limited to the following:

- (1) NO<sub>x</sub>: 12.1 lb/hr, and 10.6 tons/yr on a twelve (12) month rolling sum
- (2) SO<sub>x</sub>: 12.5 lb/hr, and 10.9 tons/yr on a twelve (12) month rolling sum
- (3) CO: 30.3 lb/hr, and 26.5 tons/yr on a twelve (12) month rolling sum
- (4) VOC: 1.2 lb/hr, and 1.1 tons/yr on a twelve (12) month rolling sum
- (5) NMOC concentration: 20 ppmv, dry basis as hexane at 3% oxygen or reduction by 98 weight percent, whichever is less stringent.
- (6) PM-10: 1.7 lb/hr, and 1.5 tons/yr on a twelve (12) month rolling sum.

(b) The Department retains the right to evaluate the SO<sub>x</sub> emission limit based on stack tests results, raw gas sampling data and any additional data requested.

[Compliance with the PM-10 limit in this permit condition assures compliance with the 25 Pa. Code § 123.13 and the BAT analysis under 25 Pa. Code § 127.12(a)(5)]

**Fuel Restriction(s).****# 002 [25 Pa. Code §127.441]****Operating permit terms and conditions.**

(a) The enclosed flare, as a back-up flare, shall burn on-site landfill gas only from the existing landfill including the Southern, Western, Eastern and Valley Fill expansions and as otherwise authorized via plan approval, except when auxiliary fuel is used during restart or start-up.

(b) The enclosed flare shall be used as a back-up flare during the periods of start-up, shakedown, scheduled maintenance, malfunction of the ULE flares (Source IDs C03 and C04) or the IC engine (Source ID C110), or when unavoidable due to circumstances beyond the control of the permittee.

**Control Device Efficiency Restriction(s).****# 003 [25 Pa. Code §127.441]****Operating permit terms and conditions.**

[Additional authority for this permit condition is also derived from 40 CFR § 62.16714(c) [40 CFR § 63.1959(b)(2)(iii)(B)]]

(a) The enclosed flare shall be installed and operated to reduce NMOC present in the collected landfill gas by 98 weight percent or reduce the outlet NMOC concentration to less than 20 ppmv on a dry basis as hexane at three percent oxygen, whichever is less stringent.

**SECTION D. Source Level Requirements**

(b) The permittee shall install and operate the flare at a minimum of 1500°F (815.56°C) for a minimum design residence time of 0.7 seconds. The flare shall be allowed an appropriate warm up sequence as per manufacturer's specifications, to attain the minimum operating temperature.

**II. TESTING REQUIREMENTS.****# 004 [25 Pa. Code §127.441]****Operating permit terms and conditions.**

[Additional authority for this permit condition is also derived from 40 CFR § 62.16714(c)(2) {40 CFR § 63.1959(b)(2)(iii)(B)}]

(a) The permittee shall perform a stack test on the enclosed flare using the Department approved procedures, every five (5) years or once within the life of the permit, in order to show compliance with the emission limits set for the enclosed flare for the pollutants tested. Source testing shall be performed at the minimum for the following pollutants: NO<sub>x</sub>, CO, SO<sub>x</sub>, VOC and NMOC. The source testing shall be conducted at least 12 months prior to the expiration of this permit.

(1) Stack testing for NO<sub>x</sub>, CO, SO<sub>x</sub>, VOC and NMOC shall be conducted at a minimum flare operating temperature, not lower than 1500°F. Stack testing shall be conducted in accordance with 25 Pa. Code Chapter 139 and the Source Test Manual to determine compliance with the emissions limitations for NO<sub>x</sub>, CO, SO<sub>x</sub> and VOC. Stack testing shall be conducted in accordance with 40 C.F.R. § 62.16718(e) [40 CFR § 63.1959(d)] to determine the reduction of NMOC by 98 weight-percent or 20 parts per million by volume (ppmv) outlet concentration level of NMOC.

(2) Stack testing shall be conducted at the maximum achievable flowrate, based on landfill gas generation and collection at the time of the compliance demonstration. Should this flow rate be significantly below the maximum design flow rate of the flare, the Department reserves the right to request additional tests at a later date when maximum landfill gas flow is achieved.

(b) At least ninety (90) days prior to the test, the company shall submit to the Department for approval the procedures for the test and a sketch with dimensions indicating the location of sampling ports and other data to ensure the collection of representative samples.

(c) At least thirty (30) days prior to the test, the Regional Air Quality Manager shall be informed of the date and time of the test.

(d) Within sixty (60) days after the source test(s), two copies of the complete test report, including all operating conditions, shall be submitted to the Regional Air Quality Manager for approval.

(e) In the event that any of the above deadlines cannot be met, the permittee may request an extension for the due date(s) in writing and include a justification for the extension. The Department may grant an extension for a reasonable cause.

**III. MONITORING REQUIREMENTS.****# 005 [25 Pa. Code §127.441]****Operating permit terms and conditions.**

(a) The permittee shall monitor the hours of operation when the flare is in operation.

(b) The permittee shall calculate the VOC or NMOC as hexane, CO, SO<sub>x</sub>, PM and NO<sub>x</sub> emissions from the enclosed flare on a monthly basis as well as on a twelve (12) month rolling sum, using Department approved methods.

**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).

**SECTION D. Source Level Requirements****V. REPORTING REQUIREMENTS.****# 006 [25 Pa. Code §127.441]****Operating permit terms and conditions.**

[Additional authority for this permit condition is also derived from 40 CFR § 62.16724 [40 CFR § 63.1981]]

The permittee shall submit an annual report of the flow rate of the landfill gas to the flare to the Department.

**VI. WORK PRACTICE REQUIREMENTS.****# 007 [25 Pa. Code §127.441]****Operating permit terms and conditions.**

The flare shall:

- (a) Be equipped with a pilot;
- (b) Be designed to meet the criteria for automatic system shutoff if a flame-out occurs; and,
- (c) Be operated according to manufacturer's specification for the warm-up sequence.

**# 008 [25 Pa. Code §127.441]****Operating permit terms and conditions.**

Presence of the pilot shall be confirmed visually when the flare is to be ignited.

**VII. ADDITIONAL REQUIREMENTS.****# 009 [25 Pa. Code §127.441]****Operating permit terms and conditions.**

This flare is manufactured by McGill Environmental Systems.

**\*\*\* Permit Shield in Effect. \*\*\***

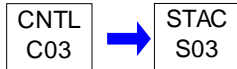
**SECTION D. Source Level Requirements**

Source ID: C03

Source Name: ENCLOSED ULE FLARE 1

Source Capacity/Throughput: 360.000 MCF/HR LANDFILL GAS

Conditions for this source occur in the following groups: GRP 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. \*\*\***

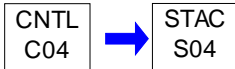
**SECTION D. Source Level Requirements**

Source ID: C04

Source Name: ENCLOSED ULE FLARE 2

Source Capacity/Throughput: 360.000 MCF/HR LANDFILL GAS

Conditions for this source occur in the following groups: GRP 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: C101

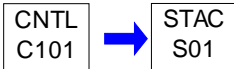
Source Name: BACK-UP ENCLOSED FLARE 1

Source Capacity/Throughput:

300.000 CF/HR

LANDFILL GAS

Conditions for this source occur in the following groups: GRP 2

**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 from this source at any time, in excess of 0.04 gr/dscf, pursuant to 25 Pa. Code § 123.13 (c)(1)(i).

**# 002 [25 Pa. Code §127.441]****Operating permit terms and conditions.**

[Additional authority for this permit condition is also derived from 25 Pa. Code § 127.512]

Emissions of criteria pollutants from the stack of the flare shall be limited to all of the following:

- (a) NOx: 23 ppmv, 10.38 lb/hr, and 9.09 tons/yr
- (b) SOx: 7 ppmv, 3.99 lb/hr, and 3.50 tons/yr
- (c) CO: 106 ppmv, 29.11 lb/hr, and 25.50 tons/yr
- (d) VOC: 1.11 lb/hr and 0.97 tons/yr
- (e) PM: 0.43 lb/hr and 0.38 tons/yr

**Fuel Restriction(s).****# 003 [25 Pa. Code §127.441]****Operating permit terms and conditions.**

[Additional authority for this permit condition is also derived from 25 Pa. Code § 127.512]

(a) The enclosed flare shall burn on-site landfill gas only from the existing landfill, including the Southern, Western, Eastern and Valley Fill Expansions and as otherwise authorized via plan approval, except when auxillary fuel is used during restart or start-up.

(b) The enclosed flare shall be used as a back-up flare during the periods of start-up, shakedown, scheduled maintenance, malfunction of the ULE flares (Source IDs C03 and C04) or the IC engine (Source ID C110), or when unavoidable due to circumstances beyond the control of the permittee.

**Control Device Efficiency Restriction(s).****# 004 [25 Pa. Code §127.441]****Operating permit terms and conditions.**

[Additional authority for this permit condition is also derived from 40 CFR § 62.16714(c)(2) [40 CFR § 63.1959(b)(2)(iii)(B)] and 25 Pa. Code § 129.91]

(a) The enclosed flare shall be operated to reduce NMOC present in the collected landfill gas by 98 weight percent or reduce the outlet NMOC concentration to less than 20 ppmv on a dry basis as hexane at three percent oxygen, whichever is less stringent.

(b) The permittee shall operate the flare at a minimum of 1,500 °F (815.56 °C) for a minimum design residence time of 0.3 seconds. The flare shall be allowed an appropriate warm up sequence as per manufacturer's specifications, to attain the minimum operating temperature.

**SECTION D. Source Level Requirements****II. TESTING REQUIREMENTS.****# 005 [25 Pa. Code §127.441]****Operating permit terms and conditions.**

[Additional authority for this permit condition is also derived from 25 Pa. Code § 127.512]

- (a) The permittee shall perform a stack test on the enclosed flare using the Department approved procedures, every five (5) years or once within the life of the permit, in order to show compliance with the emission limits set for the enclosed flare for the pollutants tested. Source testing shall be performed at the minimum for the following pollutants: NO<sub>x</sub> and VOC. The source testing shall be conducted at least 12 months prior to the expiration of this permit.
- (1) Stack testing for NO<sub>x</sub> and VOC shall be conducted at a minimum flare operating temperature, not lower than 1,500 °F. Stack testing shall be conducted in accordance with 25 Pa. Code Chapter 139 and the Department's Source Test Manual.
- (2) Stack testing shall be conducted at the maximum achievable flowrate, based on landfill gas generation and collection at the time of the compliance demonstration. Should this flow rate be significantly below the maximum design flow rate of the flare, the Department reserves the right to request additional tests at a later date when maximum landfill gas flow is achieved.
- (b) At least sixty (90) days prior to the test, the company shall submit to the Department for approval the procedures for the test and a sketch with dimensions indicating the location of sampling ports and other data to ensure the collection of representative samples.
- (c) At least thirty (30) days prior to the test, the Regional Air Quality Manager shall be informed of the date and time of the test.
- (d) Within sixty (60) days after the source test(s), two copies of the complete test report, including all operating conditions, shall be submitted to the Regional Air Quality Manager for approval.
- (e) In the event that any of the above deadlines cannot be met, the permittee may request an extension for the due date(s) in writing and include a justification for the extension. The Department may grant an extension for a reasonable cause.

**III. MONITORING REQUIREMENTS.****# 006 [25 Pa. Code §127.441]****Operating permit terms and conditions.**

[Additional authority for this permit condition is also derived from 25 Pa. Code § 127.512]

- (a) The permittee shall monitor the hours of operation when the flare is in operation.
- (b) The permittee shall calculate the VOC, CO, SO<sub>x</sub>, PM and NO<sub>x</sub> emissions from the enclosed flare on a monthly basis as well as on a twelve (12) month rolling sum, using Department approved methods.

**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.****# 007 [25 Pa. Code §127.441]****Operating permit terms and conditions.**

[Additional authority for this permit condition is also derived from 25 Pa. Code § 127.512]

The permittee shall submit an annual report of the flow rate of the landfill gas to the flare to the Department.



**SECTION D. Source Level Requirements**

**VI. WORK PRACTICE REQUIREMENTS.**

**# 008 [25 Pa. Code §127.441]**

**Operating permit terms and conditions.**

[Additional authority for this permit condition is also derived from 25 Pa. Code § 127.512]

Presence of the pilot shall be confirmed visually when the flare is to be ignited.

**# 009 [25 Pa. Code §127.441]**

**Operating permit terms and conditions.**

[Additional authority for this permit condition is also derived from 25 Pa. Code § 127.512]

The flare shall:

- (a) Be equipped with a pilot; and,
- (b) Be designed to meet the criteria for automatic system shutoff if a flame-out occurs.

**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**

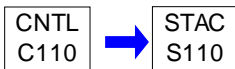
Source ID: C110

Source Name: 2242 BHP, CAT G3520C IC ENGINE, SN GZJ00448

Source Capacity/Throughput:

35.600 MCF/HR

LANDFILL GAS

**I. RESTRICTIONS.****Emission Restriction(s).****# 001 [25 Pa. Code §127.441]****Operating permit terms and conditions.**

Emissions from the engine shall be limited to the following:

- (a) NO<sub>x</sub>: 0.60 g/bhp-hr and 12.9 tons per year, calculated as a 12-month rolling sum;
- (b) CO: 3.50 g/bhp-hr and 75.5 tons per year, calculated as a 12-month rolling sum;
- (c) SO<sub>x</sub>: 1.48 lb/hr and 6.49 tons per year, calculated as a 12-month rolling sum;
- (d) PM<sub>10</sub>/PM<sub>2.5</sub>: 0.86 lb/hr and 3.79 tons per year, calculated as a 12-month rolling sum;  
(limit includes both filterable and condensable particulate matter)
- (e) VOC: 2.9 lb/hr and 12.8 tons per year, calculated as a 12-month rolling sum;  
(the VOC limit above includes formaldehyde)  
  
0.90 lb/hr (excluding formaldehyde)  
  
(VOC shall be expressed as hexane)
- (f) Formaldehyde: 0.41 g/bhp-hr and 8.76 tons per year, calculated as a 12-month rolling sum;
- (g) HAP (non-formaldehyde): 0.110 lb/hr and 0.48 tons per year, calculated as a 12-month rolling sum

[Compliance with this streamlined operating permit condition assures compliance with 40 CFR § 60.4233(e) for NO<sub>x</sub> and CO, 25 Pa. Code § 123.13(c)(1)(i) for PM, and 25 Pa. Code § 123.21(b) for SO<sub>x</sub>]

**# 002 [25 Pa. Code §127.441]****Operating permit terms and conditions.**

- (a) The IC engine shall have a minimum NMOC destruction efficiency of 98% by weight or the concentration of NMOC in the outlet shall be less than 20 ppmv dry basis as hexane at 3% oxygen.
- (b) The above limitation applies excluding formaldehyde from the NMOC.

**Fuel Restriction(s).****# 003 [25 Pa. Code §127.441]****Operating permit terms and conditions.**

The IC engine shall be operated only using landfill gas generated at the Tullytown landfill, including the existing landfill, Southern, Western, Eastern and Valley Fill Expansions and as otherwise authorized via plan approval.

**Operation Hours Restriction(s).****# 004 [25 Pa. Code §127.441]****Operating permit terms and conditions.**

There is no restriction in the operating hours of the IC engine.

**SECTION D. Source Level Requirements****Throughput Restriction(s).****# 005 [25 Pa. Code §127.441]****Operating permit terms and conditions.**

(a) The IC engine shall be limited to a maximum of 593 scfm of landfill gas, based on a landfill gas composition of 50% methane. Maximum flow rates may be higher at lower methane concentrations.

(b) The volume flow and the Btu content of the landfill gas together shall not exceed a heat input rate of 18 MMBtu/hr, calculated with the higher heating value of the landfill gas.

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

[Additional authority for this condition is derived from 25 Pa. Code § 127.12b]

(a) In accordance with 40 CFR § 62.16714(c)(3) [40 CFR § 63.1959(b)(2)(iii)(C)], the landfill gas to be delivered to the engine shall be routed first to a treatment system that processes the collected gas for subsequent use.

(b) The pretreatment system shall be as described to the EPA for the determination dated February 4, 2011, and shall include: a mesh pad scrubber, a blower and heat exchanging cycle that includes de-watering and compression of the gas and filtering through a 0.4 micron coalescing filter.

(c) The owner/operator may use an alternate pre-treatment system after submission of a description of the proposed system in writing to the Department and to the EPA and receiving approval.

**II. TESTING REQUIREMENTS.****# 007 [25 Pa. Code §127.441]****Operating permit terms and conditions.**

(a) The permittee shall perform a stack test on the engine using the Department-approved procedures, every five (5) years or once within the life of the permit, in order to show compliance with the emission limits set for this source for the pollutants tested. Such testing shall be conducted at least 12 months prior to the expiration of this permit. This testing shall be conducted at maximum normal load.

(b) At least ninety (90) days prior to the test, the permittee shall submit to the Department for approval the procedures for the test and a sketch with dimensions indicating the location of sampling ports and other data to ensure the collection of representative samples.

(c) The stack test shall, at a minimum, test for NO<sub>x</sub>, CO, SO<sub>x</sub> (as SO<sub>2</sub>), PM, VOC and formaldehyde. VOC emissions determined shall exclude formaldehyde. Tests shall be conducted in accordance with the provisions of 40 CFR § 60.4244, the Department's Source Testing Manual (274-0300-002) and 25 Pa. Code Chapter 139 as applicable.

(d) At least thirty (30) days prior to the test, the Regional Air Quality Manager, shall be informed of the date and time of the test. Final acceptance of the test date is contingent on approval of the test protocol.

(e) Within sixty (60) days after the source test(s), two copies of the complete test report, including all operating conditions, shall be submitted to the Regional Air Quality Manager for approval.

(f) In the event that any of the above deadlines cannot be met, the permittee may request an extension for the due date(s) in writing and include a justification for the extension. The Department may grant an extension for a reasonable cause.

[Compliance with this streamlined operating permit condition assures compliance with 40 CFR § 60.4245(d) for testing required by 40 CFR Part 60, Subpart JJJJ]

**# 008 [25 Pa. Code §139.53]****Filing monitoring reports.**

(a) Pursuant to 25 Pa. Code §§ 139.53(a)(1) and 139.53(a)(3), all testing submittals, besides notifications, shall be accomplished through PSIMS\* Online through: <http://www.depgreenport.state.pa.us/ecommm/Login.jsp>.

**SECTION D. Source Level Requirements**

(b) If internet submittal cannot be accomplished or is not available, two copies of the submittal shall be mailed to the Department.

**# 009 [25 Pa. Code §139.53]****Filing monitoring reports.**

Pursuant to 25 Pa. Code § 139.53(b), a complete test report shall include a summary of the emission results on the first page of the report indicating if each pollutant measured is within permitted limits and a statement of compliance or noncompliance with all the applicable permit conditions. The summary results will include, at a minimum, the following information:

- (a) A statement that the owner or operator has reviewed the report from the emissions testing body and agrees with the findings;
- (b) Permit number(s) and condition(s) which are the basis for the evaluation;
- (c) Summary of results with respect to each applicable permit condition;
- (d) Statement of compliance or non-compliance with each applicable permit condition.

**# 010 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.4243]****Subpart JJJJ - Standards of Performance for Stationary Spark Ignition Internal Combustion Engines****What are my compliance requirements if I am an owner or operator of a stationary SI internal combustion engine?**

In accordance with 40 CFR § 60.4243 (b)(2)(ii):

- (a) The owner/operator shall conduct performance testing every 8760 hours or 3 years, whichever comes first, after the previous performance test. Testing shall be conducted on NO<sub>x</sub>, CO, and VOC in order to demonstrate compliance with the limitations in Condition #001 and 40 CFR Part 60, Subpart JJJJ. VOC emissions determined shall exclude formaldehyde.
- (b) This testing may be combined, as applicable, with the once in 5-year testing of Condition #007.
- (c) The owner/operator shall follow applicable procedures included in Conditions #007, #008 and #009.

**III. MONITORING REQUIREMENTS.****# 011 [25 Pa. Code §127.441]****Operating permit terms and conditions.**

- (a) The owner/operator shall monitor the flow rate of landfill gas to the engine in standard cubic feet per minute at least once per working day.
- (b) The owner/operator shall monitor the methane content of the landfill gas entering the engine at least once per working day.
- (c) The owner/operator shall calculate the higher heating value of the landfill gas entering the engine at least once per working day.
- (d) The owner/operator shall install the necessary instrumentation for complying with the requirements of sections (a) through (c) of this condition.

**IV. RECORDKEEPING REQUIREMENTS.****# 012 [25 Pa. Code §127.441]****Operating permit terms and conditions.**

- (a) The owner/operator shall record the landfill gas flow to the engine, in standard cubic feet per minute, at least once per working day.

**SECTION D. Source Level Requirements**

(b) The owner/operator shall record the methane content of the landfill gas flow to the engine at least once per working day.

(c) The owner/operator shall record the higher heating value of the landfill gas entering the engine, in MMBtu/hr, at least once per working day.

**# 013 [25 Pa. Code §127.441]**

**Operating permit terms and conditions.**

Emissions of all pollutants for which limitations are given in this operating permit shall be calculated and recorded monthly and on a 12-month rolling basis. Emissions factors shall be derived from the most recent stack test for the respective pollutants, where available.

**# 014 [25 Pa. Code §127.441]**

**Operating permit terms and conditions.**

[Additional authority for this condition is derived from 40 CFR § 60.4243(b)(2)(ii)]

(a) The owner/operator shall keep a maintenance plan and records of maintenance, for the engine and associated landfill gas treatment system, to include the date and maintenance performed.

(b) A record shall be kept of the date and time the engine is not operating and the reason why it is not operating.

**# 015 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.4245]**

**Subpart JJJJ - Standards of Performance for Stationary Spark Ignition Internal Combustion Engines**

**What are my notification, reporting, and recordkeeping requirements if I am an owner or operator of a stationary SI internal combustion engine?**

In accordance with 40 CFR §§ 60.4245(a)(1) and (4):

(a) The owner/operator shall keep documentation that the engine meets the emissions standards in this operating permit.

(b) The owner/operator shall keep records of notifications and any documentation supporting the notifications that are given to the Administrator.

**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.**

**# 016 [25 Pa. Code §127.441]**

**Operating permit terms and conditions.**

[Additional authority for this condition is derived from 40 CFR § 60.4243(b)(2)(ii)]

The owner/operator shall operate and maintain the engine and associated pre-treatment system in accordance with manufacturer's recommendations and in a manner consistent with good air pollution control practices for minimizing emissions.

**VII. ADDITIONAL REQUIREMENTS.**

**# 017 [25 Pa. Code §127.441]**

**Operating permit terms and conditions.**

(a) This engine is a Caterpillar Model G3520C, serial no. GZJ00448, rated at 2242 hp, and was manufactured on 6/28/2010.

(b) The engine is designed for low energy fuel (landfill gas) and employs lean burn technology.

**SECTION D. Source Level Requirements****# 018 [25 Pa. Code §127.441]****Operating permit terms and conditions.**

(a) The owner/operator shall ensure that the stack height meets Good Engineering Practice (GEP). Based on the information provided in the application for the building height and surrounding structures, the stack will have a diameter of 1.33 ft and a height of 32.5 feet, which will meet GEP.

[Note: Compliance with these conditions was demonstrated on 6/24/2014 and 2/5/2016]

(b) Should the emissions of formaldehyde from this engine and any other future engines at this site together seem to increase the chronic risk in excess of 1.00 E-05 or the hazard index (HI) increase above 0.25, the Department reserves the right to require WMPA to mitigate the excess risk by adjusting the stack height in accordance with GEP or any other measures deemed necessary by the Department.

**# 019 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.4230]****Subpart JJJJ - Standards of Performance for Stationary Spark Ignition Internal Combustion Engines****Am I subject to this subpart?**

In accordance with 40 CFR § 60.4230(a)(4)(i), this engine is subject to the requirements of 40 CFR Part 60, Subpart JJJJ, and shall comply with all applicable requirements.

\*\*\* **Permit Shield in Effect.** \*\*\*

**SECTION E. Source Group Restrictions.**

Group Name: GRP 1

Group Description: Source ID(s): C03 and C04

Sources included in this group

ID	Name
C03	ENCLOSED ULE FLARE 1
C04	ENCLOSED ULE FLARE 2

**I. RESTRICTIONS.****Emission Restriction(s).****# 001 [25 Pa. Code §127.441]****Operating permit terms and conditions.**

Each enclosed flare shall comply with the following emissions limits:

- (a) VOC (as hexane): 1.63 lb/hr and 7.14 tpy
- (b) NO<sub>x</sub>: 0.025 lb/MMBtu, 4.54 lb/hr, and 19.90 tpy
- (c) CO: 0.06 lb/MMBtu, 10.9 lb/hr, and 47.76 tpy
- (d) SO<sub>2</sub>: 18.22 lb/hr and 79.81 tpy
- (e) PM, PM-10, PM-2.5: 2.70 lb/hr and 11.83 tpy (filterable and condensable)

**# 002 [25 Pa. Code §127.441]****Operating permit terms and conditions.**

[Additional authority for this permit condition is from 25 Pa. Code § 127.12b(a)(5)]

Particulate matter emissions from this flare shall not exceed 0.02 gr/dscf.

[Compliance with this condition assures compliance with 25 Pa. Code § 123.13]

**Fuel Restriction(s).****# 003 [25 Pa. Code §127.441]****Operating permit terms and conditions.**

(a) Each enclosed flare shall burn on-site landfill gas generated at the Tullytown Resource Recovery Facility only, to include the Southern, Western, Eastern, and Valley Fill expansions, except when auxiliary fuel is used during re-start or start-up.

(b) Each enclosed flare shall be used as the primary control of landfill gas except when the gas is being accepted by an end-user, including the IC engine (Source ID C110). On an interim basis, as in the case of maintenance on the ultra low emissions flares, landfill gas may be sent to the Back-Up Enclosed Flares (Source IDs C02 and C101) subject to the limitations and conditions in TVOP 09-00024.

**Control Device Efficiency Restriction(s).****# 004 [25 Pa. Code §127.441]****Operating permit terms and conditions.**

[Additional authority for this permit condition is from 40 CFR § 62.16714(c)(2) [40 CFR § 63.1959(b)(2)(iii)(B)]

Each enclosed flare shall be designed and operated 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.

**II. TESTING REQUIREMENTS.****# 005 [25 Pa. Code §127.441]****Operating permit terms and conditions.**

[Additional authority for this permit condition is from 40 CFR § 62.16714(c)(2) [40 CFR § 63.1959(b)(2)(iii)(B)] and 60.8 and 25 Pa. § 127.203]

(a) The permittee shall perform a stack test on one of the ULE flares using the Department-approved procedures, every five (5) years or once within the life of the permit, in order to determine emissions of NO<sub>x</sub> and VOC (as hexane). Either NMOC

**SECTION E. Source Group Restrictions.**

destruction efficiency or NMOC outlet concentration in parts per million volume, dry basis shall also be determined. Stack tests shall be alternated between the two (2) ULE flares such that each flare is tested every 10 years. The source testing shall be conducted at least 12 months prior to the expiration of this permit.

(b) Stack testing for NO<sub>x</sub> and VOC shall be conducted at a minimum flare operating temperature, not lower than 1,500 °F. Stack testing shall be conducted in accordance with 25 Pa. Code Chapter 139 and the Department's Source Test Manual.

(c) Stack testing shall be conducted at the maximum achievable flowrate, based on landfill gas generation and collection at the time of the compliance demonstration. Should this flow rate be significantly below the maximum design flow rate of the flare, the Department reserves the right to request additional tests at a later date when maximum landfill gas flow is achieved.

(d) At least ninety (90) days prior to the test, the permittee shall submit to the Department for approval the procedures for the test and a sketch with dimensions indicating the location of sampling ports and other data to ensure the collection of representative samples.

(e) At least thirty (30) days prior to the test, the Regional Air Quality Manager and the Department's Central Office, shall be informed of the date and time of the test.

(f) Within sixty (60) days after the source test(s) (unless a more stringent regulatory requirement applies), the complete test report, including all operating conditions, shall be submitted to the Regional Air Quality Manager and to the Department's Central Office for approval.

(g) In the event that any of the above deadlines cannot be met, the permittee may request an extension for the due date(s) in writing and include a justification for the extension. The Department may grant an extension for a reasonable cause.

**III. MONITORING REQUIREMENTS.****# 006 [25 Pa. Code §127.441]****Operating permit terms and conditions.**

The permittee shall monitor the methane (CH<sub>4</sub>) content of the landfill gas to the flares at the minimum of once daily during operation of either flare.

(a) The monitoring shall be performed with a field test meter, maintained as specified herein this operating permit.

(b) The Department may approve an alternate device or procedure for determining the methane content, upon notice, in case of the unavailability of the field test meter.

(c) The Department reserves the right to re-evaluate these conditions for methane monitoring of landfill gas to the flare and require alternate or additional monitoring conditions.

**# 007 [25 Pa. Code §127.441]****Operating permit terms and conditions.**

(a) The permittee shall monitor the hours of operation when the flare is in operation.

(b) The permittee shall calculate the VOC, NO<sub>x</sub>, CO, SO<sub>2</sub>, and PM emissions from each enclosed flare using emission factors from the most recent stack test. Emissions of PM<sub>10</sub> and PM<sub>2.5</sub> shall be calculated using emissions factors consistent with Plan Approval application No. 09-0024K.

(c) Calculations shall be performed on a monthly and on a 12-month rolling basis.

**IV. RECORDKEEPING REQUIREMENTS.****# 008 [25 Pa. Code §127.441]****Operating permit terms and conditions.**

The permittee shall record the following for each flare when it is operating:

(a) The hours of operation on a daily and monthly basis.

**SECTION E. Source Group Restrictions.**

- (b) The inlet gas flow, every 15 minutes, in scfm.
- (c) CH4 content on a daily basis.
- (d) The field calibration check for the meter used to measure the methane content.
- (e) The emissions of VOC, NOx, CO, SO2, PM, PM10 and PM2.5 on a monthly and 12-month rolling basis.
- (f) The initial temperature set point of each flare and any change afterwards.
- (g) The maintenance performed on the flares.

**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.****# 009 [25 Pa. Code §127.441]****Operating permit terms and conditions.**

Each flare must be operated within the parameter ranges established during the initial or most recent performance test.

**# 010 [25 Pa. Code §127.441]****Operating permit terms and conditions.**

The field meter, used for monitoring methane content of the landfill gas to the flare, shall be re-calibrated either annually or at the minimum frequency specified by the manufacturer, whichever is more frequent, or whenever the error in the midrange calibration check exceeds +/- 10 percent.

**# 011 [25 Pa. Code §127.441]****Operating permit terms and conditions.**

[Additional authority for this permit condition is derived from 40 CFR § 62.16714(c)(2) [40 CFR § 63.1959(b)(2)(iii)(B)] and 25 Pa. Code § 127.12(a)(5)]

- (a) Each enclosed flare shall be designed such that there are no visible flames during normal operations.
- (b) Each enclosed flare shall be operated with no visible emissions, except for periods not to exceed a total of five minutes during any two consecutive hours. Note: Each enclosed flare shall also comply with the visible emissions limitations in the facility's current Operating Permit, under Section C.
- (c) Each enclosed flare shall maintain, for each 3-hour period of operation based on rolling hourly data, an average combustion temperature of no more than 28°C (82°F) below the average combustion temperature during the most recent performance test in which compliance with the destruction efficiency/NMOC removal was demonstrated. If there has been no performance test, then a minimum temperature of 1500°F (815.6°C) will be necessary.
- (d) The enclosed flare may be operated at a lower temperature provided that the company has demonstrated, by a stack test that the flare will achieve the 98% destruction/removal efficiency or 20 ppm<sub>dv</sub>, measured as hexane and corrected to 3% oxygen, at the lower temperature and complies with all the emission limits established in the plan approval. If compliance has been demonstrated at the lower temperature, the owner or operator of the landfill shall obtain the necessary approvals from DEP to make the lower operating temperature enforceable. Operation at the lower temperature cannot occur until approved by DEP. Under no circumstance will DEP approve an operating temperature less than 1,200°F.

**# 012 [25 Pa. Code §127.441]****Operating permit terms and conditions.**

[Additional authority for this permit condition condition is from 40 CFR § 63.1958(e) and (f)]

- (a) The permittee shall operate the flares at all times when the collected gas is routed to the system.
- (b) In the event the collection or control system is inoperable, the gas mover system shall be shut-down and all valves in



**SECTION E. Source Group Restrictions.**

the collection and control system contributing to venting of gas to the atmosphere shall be closed within one hour.

**# 013 [25 Pa. Code §127.441]****Operating permit terms and conditions.**

[Additional authority for this permit condition is from 25 Pa. Code § 127.12 (a)(5)]

- (a) Each flare shall be equipped with an automatic pilot ignition source using an auxiliary fuel (e.g. propane or natural gas);
- (b) Each flare shall be operated with a flame present at all times. The enclosed flare shall be equipped with an automatic shut-off mechanism designed to immediately stop the flow of gases when a flame-out occurs. During the restart or start-up, there should be sufficient flow of auxiliary fuel to the burners such that unburned landfill gases are not emitted to the atmosphere.
- (c) In the event that a flare is operating at less than 1,500 °F, or other minimum temperature established by a stack test, for a 3-hour period of operation based on rolling hourly data taken over the 3-hour period it should be turned off as soon as practical after discovery. The cause shall be investigated and corrected before the flare is restarted.
- (d) The flue gas temperature of each enclosed flare shall be measured and recorded in the combustion zone as per the manufacturer's specifications based on the flow into the flare. The temperature in the combustion zone shall be used to determine compliance with the minimum temperature requirement. The temperature monitoring device should meet the 40 CFR § 62.16722(b) and 40 CFR § 63.1961(b) requirements.
- (e) The flare shall be operated according to the manufacturer's specification for a warm-up sequence.
- (f) The permittee shall follow the manufacturer's recommendations for maintenance on the flares.

**VII. ADDITIONAL REQUIREMENTS.****# 014 [25 Pa. Code §127.441]****Operating permit terms and conditions.**

These flares are subject to 40 CFR Part 63, Subpart AAAAA, and shall comply with all applicable requirements.

**# 015 [25 Pa. Code §127.441]****Operating permit terms and conditions.**

Each flare shall be a Zink Ultra Low Emission (ZULE) enclosed ground flare manufactured by John Zink Hamworthy Combustion, LLC, rated at 6,000 scfm and having a minimum residence time of 0.7 seconds, or equivalent.

**\*\*\* Permit Shield in Effect. \*\*\***

**SECTION E. Source Group Restrictions.**

Group Name: GRP 2

Group Description: Source ID(s): C101 and C02

Sources included in this group

ID	Name
C02	BACK-UP ENCLOSED FLARE 2
C101	BACK-UP ENCLOSED FLARE 1

**I. RESTRICTIONS.****Throughput Restriction(s).****# 001 [25 Pa. Code §127.441]****Operating permit terms and conditions.**

- (a) Operation of the flares shall be limited to a maximum of 150 MMBtu/hr, averaged hourly, and 5,000 scfm (at 50% methane) of landfill gas.
- (b) The permittee shall limit the operation of the flares to a heat input of 262,800 MMBtu per 12 months, calculated on a 12-month rolling sum basis.

**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.****# 002 [25 Pa. Code §127.441]****Operating permit terms and conditions.**

- (a) The permittee shall monitor the methane (CH<sub>4</sub>) content of the landfill gas to the flares at the minimum once every hour during the operation of the flares.
- (b) The monitoring shall be performed with a gas chromatograph.
- (c) The gas chromatograph shall be checked with a known sample at least once daily.
- (d) If the gas chromatograph is unavailable due to its maintenance or repair or is unavailable on-line, a field test meter may be used at a minimum of once per day for the CH<sub>4</sub> analysis.
- (1) When a field test meter is used due to the unavailability of the gas chromatograph on-line for an uninterrupted period of three (3) days or more, the permittee shall perform the following additional testing:
- (i) Collect bag samples of the landfill gas to the flares at the minimum of once daily during operation of the flares.
  - (ii) Use the gas chromatograph to analyze the bag sample for CH<sub>4</sub> content.
- (2) When the field test meter is used due to unavailability of the gas chromatograph because of maintenance or repair, the permittee shall:
- (i) Within three (3) business days, provide the Department with the schedule for servicing the gas chromatograph in an expedited manner
  - (ii) Provide service updates to the Department every three business days
  - (iii) The Department may approve use of the field test meter for a uninterrupted period of up to fourteen (14) days.
- (e) The Department may revise this condition based on the frequency of the unavailability of the gas chromatograph.
- (f) The Department reserves the right to re-evaluate the conditions, specified in this condition, for CH<sub>4</sub> monitoring of landfill

**SECTION E. Source Group Restrictions.**

gas to the flares and require alternate or additional monitoring conditions.

**IV. RECORDKEEPING REQUIREMENTS.****# 003 [25 Pa. Code §127.441]****Operating permit terms and conditions.**

The permittee shall record the following on a monthly and 12-month rolling sum basis:

- (a) The heat input (MMBtu) to the flares.
- (b) The hours of operation.
- (c) The percentage of landfill gas collected that is flared.

**# 004 [25 Pa. Code §127.441]****Operating permit terms and conditions.**

The permittee shall record the following when the flares are operating:

- (a) The hours of operation.
- (b) The gas flow rate, every 15 minutes, in scfm.
- (c) The CH<sub>4</sub> content and the device used for measurement.
- (d) If a gas chromatograph is used for the measurement, the CH<sub>4</sub> content of the known sample and the measured value.
- (e) A detailed explanation for flare operation, including the equipment that was off-line and the reason for its unavailability.

**# 005 [25 Pa. Code §127.441]****Operating permit terms and conditions.**

(a) The permittee shall use the landfill gas flow in scfm to the flares, the percent methane concentration and the higher heating value of methane (1000 Btu/cf) to calculate the heat input to the flares in order to demonstrate compliance with applicable limits associated with Sources C02 and C101.

(b) When the CH<sub>4</sub> content data is available from the gas chromatograph, the permittee shall use this data to calculate the heat input to the flares.

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

[Additional authority for this permit condition is also derived from 25 Pa. Code § 127.512]

The permittee shall maintain on-site records of the twelve (12) month rolling summation of VOC, SO<sub>x</sub>, CO, PM and NO<sub>x</sub> emissions for a minimum of five (5) years.

**V. REPORTING REQUIREMENTS.**

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

**VI. WORK PRACTICE REQUIREMENTS.**

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).



**SECTION E. Source Group Restrictions.**

**\*\*\* 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	MSW LANDFILL (EXIST LF, SOUTH, WEST, EAST, VALLEY F EXP)		
Emission Limit		Pollutant	
6.100	Tons/Yr	From Eastern Expansion, calculated after closure in accordance with the definitions of "closed landfill" and "closure" in 40 CFR § 62.16730 and 40 CFR § 63.1990.	VOC
10.500	Tons/Yr	From Valley Fill Expansion, calculated after closure in accordance with the definitions of "closed landfill" and "closure" in 40 CFR § 62.16730 and 40 CFR § 63.1990.	VOC
13.100	Tons/Yr	From Western Expansion, calculated after closure in accordance with the definitions of "closed landfill" and "closure" in 40 CFR § 62.16730 and 40 CFR § 63.1990.	VOC
19.800	Tons/Yr	From existing landfill, calculated after closure in accordance with the definitions of "closed landfill" and "closure" in 40 CFR § 62.16730 and 40 CFR § 63.1990.	VOC
19.890	Tons/Yr	From Southern Expansion, calculated after closure in accordance with the definitions of "closed landfill" and "closure" in 40 CFR § 62.16730 and 40 CFR § 63.1990.	VOC
C02	BACK-UP ENCLOSED FLARE 2		
Emission Limit		Pollutant	
26.500	Tons/Yr	12 month rolling sum	CO
30.300	Lbs/Hr		CO
20.000	PPMV	NMOC conc. as hexane at 3% O2 or 98% destruction eff. whichever is less stringent	NMOC
10.600	Tons/Yr	12 month rolling sum	NOX
12.100	Lbs/Hr		NOX
1.500	Tons/Yr	12 month rolling sum	PM10
1.700	Lbs/Hr		PM10
10.900	Tons/Yr	12 month rolling sum	SOX
12.500	Lbs/Hr		SOX
1.100	Tons/Yr	12 month rolling sum	VOC
1.200	Lbs/Hr		VOC
C03	ENCLOSED ULE FLARE 1		
Emission Limit		Pollutant	
0.060	Lbs/MMBTU		CO
10.900	Lbs/Hr		CO
47.760	Tons/Yr	12-month rolling basis	CO
0.025	Lbs/MMBTU		NOX
4.540	Lbs/Hr		NOX
19.900	Tons/Yr	12-month rolling basis	NOX
2.700	Lbs/Hr	condensable and filterable	PM10
11.830	Tons/Yr	condensable & filterable	PM10
18.220	Lbs/Hr		SO2
79.810	Tons/Yr	12-month rolling basis	SO2

**SECTION G. Emission Restriction Summary.**

Source Id	Source Description		
	1.630 Lbs/Hr		VOC
	7.140 Tons/Yr	12-month rolling basis	VOC
C04	ENCLOSED ULE FLARE 2		
	<b>Emission Limit</b>		<b>Pollutant</b>
	0.060 Lbs/MMBTU		CO
	10.900 Lbs/Hr		CO
	47.760 Tons/Yr	12-month rolling basis	CO
	0.025 Lbs/MMBTU		NOX
	4.540 Lbs/Hr		NOX
	19.900 Tons/Yr	12-month rolling basis	NOX
	2.700 Lbs/Hr	condensable and filterable	PM10
	11.830 Tons/Yr	condensable & filterable	PM10
	18.220 Lbs/Hr		SO2
	79.810 Tons/Yr	12-month rolling basis	SO2
	1.630 Lbs/Hr		VOC
	7.140 Tons/Yr	12-month rolling basis	VOC
C101	BACK-UP ENCLOSED FLARE 1		
	<b>Emission Limit</b>		<b>Pollutant</b>
	25.500 Tons/Yr	12-month rolling sum	CO
	29.110 Lbs/Hr		CO
	106.000 PPMV		CO
	20.000 PPMV	NMOC conc. as hexane at 3% O2 or 98% destruction eff. whichever is less stringent	NMOC
	9.090 Tons/Yr	12-month rolling sum	NOX
	10.380 Lbs/Hr		NOX
	23.000 PPMV		NOX
	3.500 Tons/Yr	12-month rolling sum	SOX
	3.990 Lbs/Hr		SOX
	7.000 PPMV		SOX
	0.040 gr/DRY FT3		TSP
	0.380 Tons/Yr	12-month rolling sum	TSP
	0.430 Lbs/Hr		TSP
	0.970 Tons/Yr	12-month rolling sum	VOC
	1.110 Lbs/Hr		VOC
C110	2242 BHP, CAT G3520C IC ENGINE, SN GZJ00448		
	<b>Emission Limit</b>		<b>Pollutant</b>
	3.500 GRAMS/HP-Hr	g/bhp-hr	CO
	75.500 Tons/Yr	as a 12-month rolling sum	CO
	0.410 GRAMS/HP-Hr	g/bhp-hr	Formaldehyde
	8.760 Tons/Yr	as a 12-month rolling sum	Formaldehyde
	0.110 Lbs/Hr	excludes formaldehyde	Hazardous Air Pollutants

**SECTION G. Emission Restriction Summary.**

Source Id	Source Description		
0.480	Tons/Yr	as a 12-month rolling sum (excludes formaldehyde)	Hazardous Air Pollutants
20.000	PPMV	dry volume at 3% oxygen (excludes formaldehyde)	NMOC
0.600	GRAMS/HP-Hr	g/bhp-hr	NOX
12.900	Tons/Yr	as a 12-month rolling sum	NOX
0.860	Lbs/Hr	PM,PM10,PM2.5	PM10
3.790	Tons/Yr	PM,PM10,PM2.5 as a 12-month rolling sum	PM10
1.480	Lbs/Hr		SOX
6.490	Tons/Hr	as a 12-month rolling sum	SOX
0.900	Lbs/Hr	(excludes formaldehyde)	VOC
2.900	Lbs/Hr	(includes formaldehyde)	VOC
12.800	Tons/Yr	as a 12-month rolling sum (includes formaldehyde)	VOC

**Site Emission Restriction Summary**

Emission Limit		Pollutant
99.900 Tons/Yr	12-month rolling basis for the facility	PM10
99.900 Tons/Yr	12-month rolling basis	PM2.5



**SECTION H. Miscellaneous.**

(a) The Department has determined that the emissions from the following activities, excluding those indicated as site level requirements, in Section C, of this permit, do not require additional limitations, monitoring, or recordkeeping:

- (1) LFG Specialties Temporary Flare and Caterpillar Emergency Generator, operating in accordance with RFD No. 7217
- (2) Maintenance Shop, consisting of the following:
  - (i) Waste oil tank (1,000 gallons)
  - (ii) Antifreeze Tank (200 gallons)
  - (iii) Waste Antifreeze Tank (1 gallon)
  - (iv) Diesel tank (85 gallons)
  - (v) Fuel truck
  - (vi) Cold Degreaser (opening less 10 sq. feet)
- (3) Leachate Storage Tanks: T-3 (500,000 gal), T-4 (900,000 gal), and T-5 (500,000 gal)
- (4) LFGTE Plant:
  - (i) Tank REP-1: 600-gallon double-walled tank for coolant;
  - (ii) Tank REP-2: 300-gallon double-walled tank for motor oil; and,
  - (iii) Tank REP-3: 300-gallon double-walled tank for used oil.

(b) The following previously issued Operating Permit, OP-09-0024, serves as a basis for certain terms and conditions in this Title V Operating permit.

(c) The purpose of Section F, Emissions Restriction Summary, is to summarize the emission limitations in Section C and Section D of this permit. The emission limitations specified in Section C and Section D of the Permit will be used for enforcement, not those listed in Section F.

(d) APS ID 346712

(e) The following Plan Approvals are incorporated in this renewal issuance:

PA-09-0024C  
09-0024E  
09-0024G

and the following RFD :  
09-A01-1032

(f) Source 101 includes the initial landfill, the Southern Expansion, known in Plan Approval PA-09-0024A as Source ID 102 and the Western Expansion, known in Plan Approval PA-09-0024C as Source ID 103.

(g) APS: 346712 AUTH ID: 993117 November 2013

Plan Approval 09-0024F for the Eastern expansion is incorporated. Source ID 101 includes the existing landfill, the Southern expansion (known in Plan Approval PA- 09-0024A as Source ID 102), the Western expansion (known in Plan Approval PA-09-0024C as Source ID 103) and the Eastern Expansion (known in Plan Approval 09-0024F as Source ID 104).

(h) APS: 346712 AUTH ID: 999605 June 2015

\*The Operating Permit is renewed and amended to remove an additional testing condition for flare CO<sub>2</sub> at 1800F.

\*Plan approval 09-0024H (landfill gas fired engine) is incorporated by reference. Plan Approval 09-0024J (Valley Fill expansion) is incorporated except for certain conditions noted in Section C, Condition #027.

(i) APS: 346712 AUTH ID: 1110006 April 2016. Plan Approval 09-0024H is incorporated.

(j) APS: 346712 AUTH ID: 1292022 May 2021 Permit renewal. Plan Approvals 09-0024J and 09-0024K are incorporated. Request for Determination (RFD) No. 7217 has also been incorporated.

(k) TVOP 09-00024 (APS No. 422907, AUTH ID: 1421285) has been administratively amended to incorporate the applicable requirements of Subpart 000 and the revised Subpart AAAA regulations.



**SECTION H. Miscellaneous.**



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

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