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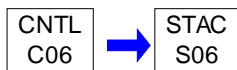
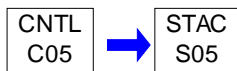
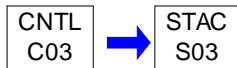
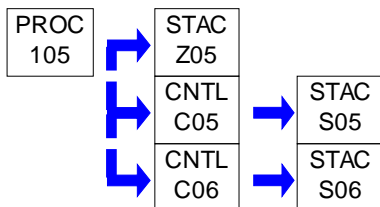
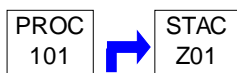
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**SECTION A. Site Inventory List**

Source ID	Source Name	Capacity/Throughput	Fuel/Material
101	MSW LANDFILL - OLD GROWS	833.000 Tons/HR	SOLID WASTE
105	MSW LANDFILL - GROWS NORTH	628.000 Cu Yd/HR	MUNICIPAL SOLID WASTE
999	40 CFR 63, SUBPART AAAAA		
C03	BACK-UP ENCLOSED FLARE	N/A	LANDFILL GAS
C05	BACKUP ENCLOSED FLARE	300.000 MCF/HR	LANDFILL GAS
C06	BACKUP ENCLOSED FLARE	300.000 MCF/HR	LANDFILL GAS
S03	BACK-UP ENCLOSED FLARE (C03) STACK		
S05	BACKUP ENCLOSED FLARE (C05) STACK		
S06	BACKUP ENCLOSED FLARE (C06) STACK		
Z01	FACILITY FUGITIVES		
Z05	FACILITY FUGITIVES		

**PERMIT MAPS**

**SECTION B. General Title V Requirements****#001 [25 Pa. Code § 121.1]****Definitions**

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

**#002 [25 Pa. Code § 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 § 127.513]****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

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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.

**#025 [25 Pa. Code §§ 127.511 & Chapter 135]****Recordkeeping Requirements**

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

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

(b) The permittee shall retain records of the required monitoring data and supporting information for at least five (5) years from the date of the monitoring sample, measurement, report or application. Supporting information includes the calibration data and maintenance records and original strip-chart recordings for continuous monitoring instrumentation, and copies of reports required by the permit.

(c) The permittee shall maintain and make available to the Department upon request, records including computerized records that may be necessary to comply with the reporting, recordkeeping and emission statement requirements in 25 Pa. Code Chapter 135 (relating to reporting of sources). In accordance with 25 Pa. Code Chapter 135, § 135.5, such records may include records of production, fuel usage, maintenance of production or pollution control equipment or other information determined by the Department to be necessary for identification and quantification of potential and actual air contaminant emissions. If direct recordkeeping is not possible or practical, sufficient records shall be kept to provide the needed information by indirect means.

**#026 [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.

**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).
- (i) sources and classes of sources other than those identified in (a)-(h), above, for which the operator has obtained a determination from the Department that fugitive emissions from the source, after appropriate control, meet the following requirements:
  - (1) the emissions are of minor significance with respect to causing air pollution; and
  - (2) the emissions are not preventing or interfering with the attainment or maintenance of any ambient air quality standard.

**# 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 (3) minutes in any one (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 emissions results sources specified in 25 Pa. Code § 123.1(a)(1)-(9) (relating to prohibition of certain fugitive emissions).

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

The permittee shall ensure that total emissions (stack and fugitive) of particulate matter less than 10 micron in diameter (PM-10) from the entire GROWS Landfill, including the GROWS North expansion, shall be less than 100 tons per year, based on a 12-month rolling sum.

**# 008 [25 Pa. Code §129.14]****Open burning operations**

No person may permit the open burning of material in the Southeast Air Basin except when the open burning results 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.
- (g) A fire set solely for cooking food.

**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 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 shall 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 and the most current version of the DEP Source Testing Manual, 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.



**SECTION C. Site Level Requirements****# 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)

a. For protocols, provide the proposed date on which testing will commence or "TBD"

b. 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)

a. Plan approval number(s)

b. Operating permit number

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

d. 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 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

**SECTION C. Site Level Requirements**

(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, once per operating day, for the following:
  - (1) odors which may be objectionable (as per 25 Pa. Code §123.31);
  - (2) visible emissions (as per 25 Pa. Code §§123.41 and 123.42); and
  - (3) fugitive particulate matter (as per 25 Pa. Code §§ 123.1 and 123.2).
- (b) Objectionable odors, fugitive particulate emissions, and visible emissions that are caused or may be caused by operations at the site shall:
  - (1) be investigated;
  - (2) be reported to the facility management, or individual(s) designated by the permittee;
  - (3) have appropriate corrective action taken (for emissions that originate on-site); and
  - (4) be recorded in a permanent written log.
- (c) After six (6) months of daily monitoring, and upon the permittee's request, the Department will determine the feasibility of decreasing the monitoring frequency to weekly for the next six month period.
- (d) After six (6) months of weekly monitoring, and upon the permittee's request, the Department will determine the feasibility of decreasing the frequency of monitoring to monthly.
- (e) The Department reserves the right to change the above monitoring requirements at any time, based on but not limited to: the review of the compliance certification, complaints, monitoring results, and/or Department findings.

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

The permittee shall calculate and monitor the PM-10 emissions, on a monthly basis, in order to ensure compliance with the facility emission limitations of this Title V Operating Permit.

**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]

The permittee shall maintain a record of all monitoring of fugitive emissions, visible emissions and odors, including those

**SECTION C. Site Level Requirements**

that deviate from the conditions found in this permit. The record of deviations shall contain 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.

**# 015 [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.

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

The permittee shall keep records, on a monthly basis calculated as 12-month rolling sum, of the PM-10 emissions from the facility in order to ensure compliance with the facility emissions limitations of this Title V Operating Permit.

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

The permittee shall maintain a logbook to verify compliance with the Work Practice requirement for the permittee to take all reasonable actions to minimize airborne particulate matter and fugitive emissions from roads in the Landfill, material stockpiles and other surfaces through the application of water.

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

(a) The permittee shall report malfunctions or emergencies causing excess emissions to the Department. 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,
- (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

**SECTION C. Site Level Requirements**

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.

**# 019 [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(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 #24 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

(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).

**# 020 [25 Pa. Code §135.21]****Emission statements**

The permittee shall submit by March 1, of each year, an annual emission statement for NO<sub>x</sub> and VOC emissions for the preceding calendar year. Additionally, a description of the method used to calculate the emissions shall be included. The statement shall contain a certification by a company official or plant manager that the information contained in the statement is true and accurate.

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

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, 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 water, or other suitable chemicals, on dirt roads, material stockpiles and other surfaces which may give rise to airborne dusts.

(c) Paving and maintenance of roadways.

(d) Prompt removal of earth or other material from paved streets onto which earth or other material has been transported by trucking or earth moving equipment, erosion by water, or by other means.

**SECTION C. Site Level Requirements****# 022 [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) [40 CFR § 63.1981(e)], and upon written Department approval implementing, any regulatory permitted 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.

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

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.**

[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 Section A, of this permit, prior to obtaining Department approval, except those modifications authorized by Condition #019(g), of Section B, of this permit.

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

The permittee shall ensure that the sources and air pollution control devices, listed 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.**

(a) It is the Department's determination, with the issuance of this Title V Operating Permit, that the GROWS Landfill is a separate facility from the Fairless Landfill.

(b) As specified within Section D of this permit, the GROWS Landfill is subject to the provisions of 40 C.F.R. Part 62, Subpart OOO of the Standards of Performance for New Stationary Sources and 40 C.F.R. Part 63, Subpart AAAA of the National Emission Standards for Hazardous Air Pollutants. The permittee shall comply with the major compliance provisions of 40 CFR Part 63, Subpart AAAA as set forth in Section D, Source ID: 999 of this permit, in lieu of complying with the analogous provisions in 40 CFR Part 62, Subpart OOO.

(c) The permittee shall comply with all the existing requirements of the renewed Title V Operating Permit No. 09-00007, the modified Solid Waste Disposal and/or Processing Permit No. 101680 and Plan Approval No. 09-0210B.

[NOTE: The Title V compliance certification is not extended to include the individual conditions within the referenced solid waste permit.]

**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.**

#027 15-OCT-20

On or before the date above, the permittee shall submit a complete plan approval application to address the sulfur emissions from C03.



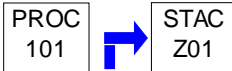
**\*\*\* Permit Shield In Effect \*\*\***

**SECTION D. Source Level Requirements**

Source ID: 101

Source Name: MSW LANDFILL - OLD GROWS

Source Capacity/Throughput: 833.000 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(h)]

Fugitive emissions of VOC from the MSW Landfill - OLD GROWS (Source ID: 101) shall not exceed 56.8 tons per year, on a twelve (12) month rolling sum, calculated after closure in accordance with the definitions of "closed landfill" and "closure" in 40 C.F.R. § 62.16730 [40 CFR § 63.1990].

**# 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 and 127.12(a)(5), and 129.91, and 40 C.F.R. §§ 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)], 63.1958(a), 63.1958(a)(1)-(2), 63.1960(b), 63.1960(b)(1)-(2)]

(1) The permittee shall 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. The Department reserves the right to reevaluate the adequacy of the gas collection and control system design plan.

(2) The gas collection system shall be designed to:

(a) Handle the maximum expected gas flow rate from the entire area of the landfill;

(b) 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 24 months or more.

(c) Collect gas at a sufficient extraction rate as required in paragraph (3) of this condition; and

(d) Minimize off-site migration of subsurface gas.

(3) The collection efficiency of the gas management system for the final design of the landfill at closure shall be not less than a minimum of 90%.

**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 derived from 25 Pa. Code § 127.512(h)]

The permittee shall demonstrate annually the site-specific NMOC concentration and VOC concentrations. Except as provided below in paragraphs (a)(i)-(iii), the permittee shall use the following parameters in calculating VOC emission rate:

**SECTION D. Source Level Requirements**

methane generation rate constant,  $k$ , equal to 0.023/year for the existing GROWS landfill and 0.041/year for the GROWS North Expansion; and methane generation potential  $L_0$ , equal to 6004 ft<sup>3</sup>/Mg (cubic feet per megagram) of solid waste.

(i) The permittee shall annually reevaluate the  $k$  value listed in paragraph (a). The permittee shall submit the results of the reevaluation to 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.

(ii) 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 basis 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.

(iii) 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)(i) or (ii), the Department reserves the right to reevaluate such parameters and to reject the permittee's continued use of such alternative parameter.

**# 004 [25 Pa. Code §127.441]**

**Operating permit terms and conditions.**

[Additional authority for this condition is also derived from 40 C.F.R. § 63.1959(b)(2)(ii)(B)(4)]

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

**IV. RECORDKEEPING 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(h)]

The permittee shall keep records of the annual and the 12-month rolling calculations of the fugitive emissions of volatile organic compounds (VOCs) for the MSW Landfill - OLD GROWS (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.**

**# 006 [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 all the conditions of paragraph (1), (2) (and (3) below are met:

1. The landfill shall no longer accept solid waste and be permanently closed under the requirements of 40 C.F.R. § 258.60. A closure report shall be submitted to the Department as provided in 40 C.F.R. § 62.16724(f) [40 CFR § 63.1981(f)].

2. The gas collection and control system shall have been in operation a minimum of 15 years; and



**SECTION D. Source Level Requirements**

3. Following the procedures specified in Condition #024, the calculated NMOC produced by the landfill shall be less than 50 Megagrams per year on three successive test dates. Each test date shall be no less than 90 days and no more than 180 days apart from the test directly before and/or after it.

(b) 1. Nothing in this Condition shall be construed to limit or impair any obligation of the permittee to maintain and/or operate the gas collection/destruction system under then-applicable law other than the Pennsylvania Air Pollution Control Act.

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

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

In accordance with 40 C.F.R. § 60.4, copies of all requests, reports, applications, submittals, and other communications are required to be submitted to both the EPA and/or the Department.

The Department copies shall be forwarded to:

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

The USEPA copies shall be forwarded to:

Director  
Air Protection Division  
U.S. EPA, Region III  
1650 Arch Street  
Philadelphia, PA 19103

**# 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. § 62.16718(b) [40 CFR § 63.1959(c)]]

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:

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

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

(a) The flow rate of landfill gas, QLFG, must 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.

(b) 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 EPA 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 25C of appendix A-7 to part 60 by six to convert from CNMOC as carbon to CNMOC as hexane.

(c) The permittee may use another method to determine landfill gas flow rate and NMOC concentration if the method

**SECTION D. Source Level Requirements**

has been approved by the EPA.

**# 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. § 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 C.F.R. § 63.1960(a)(1)(ii) shall be used, unless another method has been approved by the EPA and the Department. The k and Lo factors should be those referenced in Condition #007. 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 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 in paragraph (a) 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.

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

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

(a) The permittee shall construct the gas collection devices using the following equipment and procedures, or in accordance with alternative parameters approved by EPA pursuant to 40 C.F.R. §§ 62.16724(d) and (e) [40 C.F.R. §§ 63.1981(d) and (e)]:

(i) 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.

(ii) 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.

(iii) Collection devices may be connected to the collection header pipe 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.



## SECTION D. Source Level Requirements

### VII. ADDITIONAL REQUIREMENTS.

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

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

**SECTION D. Source Level Requirements**

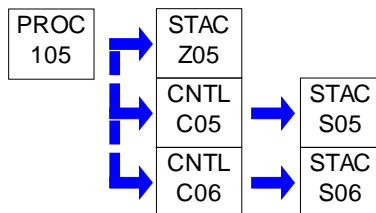
Source ID: 105

Source Name: MSW LANDFILL - GROWS NORTH

Source Capacity/Throughput:

628.000 Cu Yd/HR

MUNICIPAL SOLID WASTE

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

Fugitive emissions of volatile organic compounds (VOC) from the MSW Landfill - GROWS North (Source ID: 105) shall be limited to a maximum of 20.62 tons per year (as a 12-month rolling sum) measured as hexane, calculated after closure in accordance with the definitions of "closed landfill" and "closure" in 40 C.F.R. § 62.16730 [40 C.F.R. § 1990].

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

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

(a) The permittee shall operate and maintain the permanent gas collection and control system, as designed and approved, to capture the gas generated within the landfill, in accordance with the landfill's GCCS plan. The Department reserves the right to reevaluate the adequacy of the GCCS design plan.

(b) The permanent landfill gas collection system shall be designed to:

(i) Handle the maximum expected gas flow rate from the entire area of the landfill;

(ii) Collect gas from each area, cell, or group of cells in the landfill in which the initial solid waste has been placed for a period of 5 years or more if active; or 2 years or more if closed or at final grade;

(iii) Collect gas at a sufficient extraction rate; and

(iv) Minimize off-site migration of subsurface gas.

(c) The collection efficiency of the gas management system for the final design of GROWS North at closure shall not be less than 92%.

**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.**

(a) The permittee shall demonstrate annually the site-specific NMOC concentration and VOC concentrations, and shall

**SECTION D. Source Level Requirements**

annually calculate the VOC emission rate. Except as provided below in paragraphs #003(b) through #003(d), the permittee shall use the following parameters in calculating VOC emission rate: methane generation rate constant, k, equal to 0.041/year; and methane generation potential  $L_0$ , equal to 169.9 cubic meter per megagram.

(b) The permittee shall annually reevaluate the k value listed in paragraph (a) based upon site-specific measured information. 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.

(c) 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 of 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 basis 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.

(d) 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)(i) or (ii), the Department reserves the right to reevaluate such parameters and to reject the permittee's continued use of such alternative parameter.

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

[Additional authority for this condition is derived from 40 C.F.R. 63.1959(b)(2)(ii)(B)(4)]

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

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

The permittee shall keep records of the annual and the 12-month rolling calculations of the fugitive emissions of volatile organic compounds (VOC) for the MSW Landfill - GROWS North (Source ID: 105).

**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.****# 006 [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 C.F.R. § 63.1957(b)]

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

(i) The landfill shall no longer accept solid waste and be permanently closed under the requirements of 40 C.F.R. § 258.60. A closure report shall be submitted to the Department as provided in 40 C.F.R. § 16724(f) [40 C.F.R. § 63.1981(f)]

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

**SECTION D. Source Level Requirements**

(iii) Following the procedures specified in 40 C.F.R. Section 60.754, the calculated NMOC produced by the landfill shall be less than 50 Megagrams per year on three successive test dates. The test dates shall be no less than 90 days apart, and no more than 180 days apart from the test directly before and/or after it.

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

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

**# 007 [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 C.F.R. § 63.1959(c)]

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:

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

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

(a) The flow rate of landfill gas, QLFG, must 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.

(b) 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 EPA 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 25C by six to convert from CNMOC as carbon to CNMOC as hexane.

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

**# 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. § 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 C.F.R. § 63.1960(a)(1)(ii) shall be used, unless another method has been approved by the EPA and the Department. The k and Lo factors should be those referenced in this Title V Operating Permit. 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 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 in paragraph (a) 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.

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

**SECTION D. Source Level Requirements**

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

(a) The permittee shall construct the gas collection devices using the following equipment and procedures, or in accordance with alternative parameters approved by EPA pursuant to 40 C.F.R. § 62.16724(d) and (e) [40 C.F.R. § 63.1981(d) and (e)]:

(i) 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.

(ii) 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.

(iii) 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.

**VII. ADDITIONAL REQUIREMENTS.**

**# 010 [25 Pa. Code §127.441]**

**Operating permit terms and conditions.**

(a) In accordance to 40 C.F.R. Section 60.4, copies of all requests, reports, applications, submittals, and other communications are required to be submitted to both the EPA and the Department. The EPA copies shall be forwarded to:

Director  
Air Protection Division  
U.S. EPA, Region III  
1650 Arch Street  
Philadelphia, PA 19103-2029

(b) The Department copies shall be forwarded to:

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

**\*\*\* 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 § 63.1958(e)]

Operational Standards for Collection and Control Systems.

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 below in lieu of the compliance provisions in 40 CFR § 63.1960. 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.****# 002 [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.

(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 #011(1) [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 #008(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 #009(4) [40 CFR § 63.1981(h)(7)] as part of the next semi-annual report. Permittee must keep records according to Condition #008(8) [40 CFR § 63.1983(e)(5)].



**SECTION D. Source Level Requirements**

(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 #009(4) [40 CFR § 63.1981(j)]. Permittee must keep records according to Condition #008(8) [40 CFR § 63.1983(e)(5)].

**# 003 [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 #008(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 #009(4) [40 CFR § 63.1981(h)(7)] as part of the next semi-annual report. Permittee must keep records according to Condition #008(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 #009(4) [40 CFR § 63.1981(h)(7) and (j)]. Permittee must keep records according to Condition #008(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 #003(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.

(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 #005 of this section.;

(c) Monitor temperature of the landfill gas at the wellhead as provided in Condition #003(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

**SECTION D. Source Level Requirements**

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 #003(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 #003(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 #003(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.

**# 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 – 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

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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 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.

**# 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]

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

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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).

**# 006 [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 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

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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.

**# 007 [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 #008(2)(b)(i) for average combustion temperature and Condition #008(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 the 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

**IV. RECORDKEEPING REQUIREMENTS.****# 008 [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

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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 § 63.11.

(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 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 #009(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

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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 #006 [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 #006 [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 the permittee seeks to demonstrate compliance with the operational standard in Condition #001 [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 the permittee seeks to demonstrate compliance with the operational standard in Condition #001 [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).

(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 #002, #003, and #004 [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.

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- (c) Records of all enhanced monitoring activities required in Condition #003 [40 CFR § 63.1961(a)(5)].
- (d) Record of the email transmission for the 24-hour high temperature report required in Condition #009 [40 CFR § 63.1981(k)]
- (6) For any root cause analysis for which corrective actions are required in Conditions #002 and #003 [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 #002 and #003 [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 #002 and #003 [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 #002, #003, #004 and #005 [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 #003 [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 #003 [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.

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

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

**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 63.1981(e), the closure report in 63.1981(f), the equipment removal report in 40 CFR § 63.1981(g), and the initial performance test report in 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



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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 #011(1), (2) and (3) were exceeded and when the gas collection and control system was not operating under Condition #001, 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 #006(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 #006 [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.

(f) The location of each exceedance of the 500-ppm methane concentration as provided in Condition #004 [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 #002, #003 and #004 [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 #002 or #003 [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 #003 [40 CFR § 63.1961(a)(5) and (6)], permittee must include the results of all monitoring activities conducted during the period.

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- (i) 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.
- (ii) 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.
- (iii) 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 #002 or #003 [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 #002 or #003 [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.
- (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-reporting-tool-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

**SECTION D. Source Level Requirements**

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, semi-annual 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, the permittee may assert a claim of force majeure for failure to comply timely with the reporting requirements. 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;

(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.

**SECTION D. Source Level Requirements****VI. WORK PRACTICE REQUIREMENTS.****# 010 [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 #009(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 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 #004(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.

**SECTION D. Source Level Requirements**

(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 #002, #003, and #004 [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.**

**# 011 [25 Pa. Code §127.441]**

**Operating permit terms and conditions.**

GROWS 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 OOO.

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

**SECTION D. Source Level Requirements**

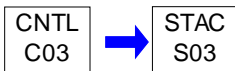
Source ID: C03

Source Name: BACK-UP ENCLOSED FLARE

Source Capacity/Throughput:

N/A

LANDFILL GAS

**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(h)]

The permittee shall ensure that criteria pollutants emissions from the stack of the flare (Source ID: C03) shall not exceed the following:

NO<sub>x</sub>: 23 ppmv; 9.94 lbs/hr and 21.77 tons/year, on a twelve (12) month rolling sum

SO<sub>x</sub>: 7 ppmv; 3.99 lbs/hr and 8.74 tons/year, on a twelve (12) month rolling sum

CO: 105 ppmv; 28.36 lbs/hr and 62.11 tons/year, on a twelve (12) month rolling sum

VOC: 1.37 lbs/hr and 3.00 tons/year, on a twelve (12) month rolling sum

PM: 0.43 lbs/hr\* and 0.94 tons/year, on a twelve (12) month rolling sum

[\*Compliance with this PM limit assures compliance with the PM standard of 25 Pa. Code § 123.13 in Condition #001.]

**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 (Source ID: C03), manufactured by LFG Specialties, Model No. EF1150112, shall burn on-site landfill gas only from the existing GROWS landfill, including the Northeast and Southwest Expansions, except when auxiliary fuel is used during restart or start-up, and as otherwise authorized via plan approval.

(b) The enclosed flare (Source ID: C03) shall be used as a back-up flare "as needed" during the periods when the ULE flares installed and operated under Plan Approval 09-0210B are not available.

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

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

The permittee shall limit the operation of the back-up enclosed flare to a heat input of 657,000 MMBtu, calculated on a 12-

**SECTION D. Source Level Requirements**

month rolling sum basis.

**# 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 and 129.91]

The permittee shall burn a maximum of 5,000 (at a methane content of 50%) standard cubic feet per minute (scfm) of landfill gas in the flare.

**Control Device Efficiency Restriction(s).****# 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 and 129.91 and 40 CFR § 62.16714(c) [40 CFR § 63.1959(b)(2)(iii)(B)]

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.

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

(a) The permittee shall perform a stack test using the Department-approved procedures once every five (5) calendar years, where five calendar years is defined as beginning with the calendar year the latest stack test was performed and ending on December 31, five years later. Performance tests shall be conducted while the source is operating at maximum routine operating conditions or under such other conditions, within the capacity of the equipment, as may be requested by the Department. When testing of a source is required on a recurring basis, a single procedural protocol may be submitted for approval; thereafter, a letter referencing the previously approved procedural protocol is sufficient. However, if modifications are made to the process(es), if a different stack testing company is used, or if an applicable section of the stack testing manual has been revised since approval, a new protocol must be submitted for approval.

(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. In the event that the permittee intends to conduct testing per a previously approved protocol, a letter referencing the approved protocol shall be submitted 90 days prior to the test in lieu of a new test protocol.

(c) The stack test shall, at a minimum, test for the Volatile Organic Compounds (VOCs), NonMethane Organic Compounds (NMOC), Carbon Monoxide (CO) and Nitrogen Oxides (NOx). Tests shall be conducted in accordance with the provisions of 40 C.F.R § 63.1959(f) for NMOC and 25 Pa. Code Chapter 139 for the other criteria pollutants.

(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.

(e) Within sixty (60) days after the source test(s) (unless a more stringent regulatory requirement applies), one paper copy plus one electronic copy 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.

**SECTION D. Source Level Requirements****III. MONITORING 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]

- (a) The permittee shall monitor the dates and hours when the flare is in operation.
- (b) The permittee shall monitor the gas flow rate, every 15 minutes, in scfm, when the flare is in operation.
- (c) 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.

**# 009 [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 back-up flare at a minimum of once daily during the operation of the back-up flare.

- (a) The monitoring shall be performed with a field meter, maintained as specified in the Work Practice Condition #017.
- (b) The Department may approve an alternate device or procedure for determining methane content, upon notice, in case of unavailability of a 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.

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

The permittee shall record the following when the flare is operating.

- (a) The methane (CH<sub>4</sub>) content of the landfill gas to the flare on a percentage by volume basis a minimum of once daily
- (b) The metering device ID used to determine the methane content in (a)
- (c) The field calibration check of the meter used to measure the methane content prior to the field measurement.
- (d) Dates and hours of operation.
- (e) The gas flow rate, every 15 minutes, in scfm.

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

- (a) The permittee shall use the landfill gas flow in scfm to the flare, the percent methane concentration and the higher heating value of methane to calculate the heat input to the flare in order to demonstrate compliance with the heat input limits.
- (b) The permittee shall record the heat rate calculated in part (a) in terms of MMBtu on a monthly and on a 12-month rolling sum basis.

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

[Additional authority for this permit condition is also derived from 25 Pa. Code §§ 127.512 and 129.95]

The permittee shall maintain on-site records of the following information for a minimum of five (5) years:



**SECTION D. Source Level Requirements**

- (a) The operating time and dates of the enclosed flare,
- (b) Performance tests of the enclosed flare,
- (c) Visual inspection of the pilot,
- (d) Twelve (12) month rolling summation of the VOC, SO<sub>x</sub>, CO, PM and NO<sub>x</sub> emissions.

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

The permittee shall submit an annual report of the flow rate of the landfill gas to the flare to the Department. The report shall be submitted by no later than March 1st of each year.

**VI. WORK PRACTICE 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 § 127.512]

The flare shall be equipped with a pilot and shall be designed to meet the criteria for automatic system shutoff if a flameout occurs. Presence of the pilot shall be confirmed visually when the flare is to be ignited.

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

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

(a) The permittee shall set the operating temperature of the enclosed flare within the range of 1550°F(843.3°C ) to 1700°F(926.7°C), inclusive. The actual operating temperature for the flare must be within this range, measured as a 24 hour average. In addition, the flare may not be operated outside this temperature range for more than 15 consecutive minutes at any one time. The flare will be allowed an appropriate warm-up sequence in accordance with the manufacturer's specifications to attain this operating temperature.

(b) The flare shall be designed and maintained for a retention time of 0.8 seconds at the maximum flow as documented by design standards.

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

The field meter, used for monitoring methane content of the landfill gas to the back-up 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.

**VII. ADDITIONAL REQUIREMENTS.**

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

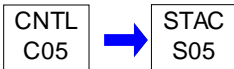
**\*\*\* Permit Shield in Effect. \*\*\***

**SECTION D. Source Level Requirements**

Source ID: C05

Source Name: BACKUP ENCLOSED FLARE

Source Capacity/Throughput: 300.000 MCF/HR LANDFILL GAS

**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 condition is also derived from 40 C.F.R. § 62.16714(c) [40 C.F.R. § 63.1959(b)(2)(iii)(B)]]

The enclosed flare (Source ID: C05) shall comply with the following emission limits:

NO<sub>x</sub>: 107 PPMV; 0.08 lb/MMBtu; 12.00 lb/hr and 6.90 tons/yr, on a twelve (12) month rolling sum

CO: 418.4 PPMV; 30.12 lb/hr\* and 17.31 tons/yr, on a twelve (12) month rolling sum

PM<sub>10</sub>: 1.7 lb/hr and 1.0 ton/yr, on a twelve (12) month rolling sum

SO<sub>x</sub>: 151 PPMV; 24.84 lb/hr and 14.29 tons/yr, on a twelve (12) month rolling sum

VOC (as hexane): 3.37 lb/hr and 1.94 tons/yr, on a twelve (12) month rolling sum

NMOC (as hexane, at 3% oxygen, dry basis) : 20 PPMV or 98% destruction efficiency, whichever is less stringent.

[\*Compliance with this PM limit assures compliance with the PM standard of 25 Pa. Code § 123.13 in Condition #001.]

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

The enclosed flare (Source ID: C05), manufactured by John Zink, Model No. ZTOF, shall only burn landfill gas generated on-site at GROWS North Landfill, except when auxiliary fuel is used during restart or start-up.

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

(a) The enclosed flare shall be rated at a maximum of 150 MMBtu/hr and a flow rate of 5,000 standard cubic feet per minute (scfm) of landfill gas at 50% methane.

(b) The flow rate of the landfill gas to the enclosed flare shall not exceed 8,235 scfm at 30% methane and a maximum of 4,117 scfm at 60% methane.

(c) The permittee shall limit the operation of the flare to a heat input of 172,500 MMBtu calculated on a 12-month rolling sum

**SECTION D. Source Level Requirements**

basis.

**II. TESTING REQUIREMENTS.****# 005 [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 permittee shall perform a stack test using the Department-approved procedures once every five (5) calendar years, where five calendar years is defined as beginning with the calendar year the latest stack test was performed and ending on December 31, five years later. Performance tests shall be conducted while the source is operating at maximum routine operating conditions or under such other conditions, within the capacity of the equipment, as may be requested by the Department. When testing of a source is required on a recurring basis, a single procedural protocol may be submitted for approval; thereafter, a letter referencing the previously approved procedural protocol is sufficient. However, if modifications are made to the process(es), if a different stack testing company is used, or if an applicable section of the stack testing manual has been revised since approval, a new protocol must be submitted for approval.

(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. In the event that the permittee intends to conduct testing per a previously approved protocol, a letter referencing the approved protocol shall be submitted 90 days prior to the test in lieu of a new test protocol.

(c) The stack test shall be conducted at a minimum flare operating temperature, not lower than 1500°F. The stack test shall, at a minimum, determine compliance with the emissions limitations for CO, SO<sub>x</sub> and VOC in accordance with 25 Pa. Code Chapter 139 to determine compliance with the reduction requirement of 98 weight-percent or 20 parts per million by volume (ppmv) outlet concentration level of NMOC in accordance with 40 C.F.R. § 63.1959(f)

(1) The stack test 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 thirty (30) days prior to the test, the Regional Air Quality Manager, shall be informed of the date and time of the test.

(e) Within sixty (60) days after the source test(s) (unless a more stringent regulatory requirement applies), one paper copy plus one electronic copy 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.

**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 dates and hours when the flare is in operation.

**SECTION D. Source Level Requirements**

(b) The permittee shall monitor the gas flow rate, every 15 minutes, in scfm, when the flare is in operation.

(c) 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.

**# 007 [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 back-up flare at a minimum of once daily during the operation of the back-up flare.

(a) The monitoring shall be performed with a field meter, maintained as specified in the Work Practice Condition #013.

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

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

The permittee shall record the following when the flare is operating.

(a) The methane (CH<sub>4</sub>) content of the landfill gas to the flare on a percentage by volume basis a minimum of once daily.

(b) The metering device ID used to determine the methane content in (a).

(c) The field calibration check of the meter used to measure the methane content prior to the field measurement.

(d) Dates and hours of operation.

(e) The gas flow rate, every 15 minutes, in scfm.

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

(a) The permittee shall use the landfill gas flow in scfm to the flare, the percent methane concentration and the higher heating value of methane to calculate the heat input to the flare in order to demonstrate compliance with the heat input limits.

(b) The permittee shall record the heat rate calculated in part (a) in terms of MMBtu on a monthly and on a 12-month rolling sum basis.

**# 010 [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 maintain on-site records of the following information for a minimum of five (5) years:

(a) The operating time and dates of the enclosed backup flare,

(b) Performance tests of the enclosed flare,

(c) Twelve (12) month rolling summation of the VOC and NMOC (both as hexane at 3% oxygen), SO<sub>x</sub>, CO, PM (including PM<sub>10</sub> and PM<sub>2.5</sub>) and NO<sub>x</sub> emissions.

**SECTION D. Source Level Requirements****V. REPORTING REQUIREMENTS.****# 011 [25 Pa. Code §127.441]****Operating permit terms and conditions.**

[Additional authority for this permit condition is also derived from 40 C.F.R. § 62.16724 [40 C.F.R. § 63.1981]]

- (a) The owner or operator shall submit an annual report of the total flow rate of the landfill gas to the flare with hours of operation to the Department.
- (b) The owner or operator shall submit an annual report of emissions of NO<sub>x</sub>, SO<sub>x</sub>, CO, PM, and VOC from the flare to the atmosphere to show compliance with the emission limits given in this operating permit.

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

The field meter, used for monitoring methane content of the landfill gas to the back-up 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.

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

- (a) The flare shall be equipped with an automatic pilot ignition source and shall be designed to meet the criteria for automatic system shutoff if a flameout occurs.
- (b) The enclosed flare (Source ID: C05) shall be used as a back-up flare "as needed" during the periods when the ULE flares installed and operated under Plan Approval 09-0210B are not available.
- (c) The permittee shall set the operating temperature of the enclosed flare within the range of 1500°F to 1800°F based on the results of the stack tests required in this operating permit. The actual operating temperature for the flare must be within this range, measured as a 24 hour average. In addition, the flare may not be operated outside this temperature range for more than 15 consecutive minutes at any one time. The flare will be allowed an appropriate warm-up sequence in accordance with the manufacturers specifications to attain this operating temperature.
- (d) The flare shall be designed such that the retention time shall be 0.7 seconds at the maximum flow as documented by design standards.

**VII. ADDITIONAL REQUIREMENTS.**

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

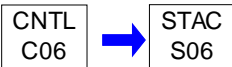
**\*\*\* Permit Shield in Effect. \*\*\***

**SECTION D. Source Level Requirements**

Source ID: C06

Source Name: BACKUP ENCLOSED FLARE

Source Capacity/Throughput: 300.000 MCF/HR LANDFILL GAS

**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 40 C.F.R. § 62.16714(c) [40 C.F.R. § 63.1959(b)(2)(iii)(B)]

The enclosed flare shall comply with the following emission limits:

NOx: 107 PPMV; 0.08 lb/MMBtu; 12.00 lb/hr and 6.90 tons/yr, on a twelve (12) month rolling sum

CO: 418.4 PPMV; 30.12 lb/hr; 17.31 tons/yr, on a twelve (12) month rolling sum

PM10: 1.7 lb/hr; 1.0 ton/yr, on a twelve (12) month rolling sum

SOx: 151 PPMV; 24.84 lb/hr; 14.29 tons/yr, on a twelve (12) month rolling sum

VOC (as hexane at 3% oxygen): 3.37 lb/hr; 1.94 tons/yr, on a twelve (12) month rolling sum

NMOC (as hexane, at 3% oxygen, dry basis): 20 PPMV or 98% destruction efficiency, whichever is less stringent

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

The enclosed flare (Source ID: C06), manufactured by John Zink, Model No. ZTOF or equivalent, shall only burn landfill gas generated on-site at GROWS North Landfill, as approved in this operating permit, except when auxiliary fuel is used during restart or start-up.

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

(a) The enclosed flare is rated at a maximum of 150 MMBtu/hr and a flow rate of 5,000 standard cubic feet per minute (scfm) of landfill gas at 50% methane.

(b) The flow rate of the landfill gas to the enclosed flare shall not exceed 8,235 scfm at 30% methane and a maximum of 4,117 scfm at 60% methane.

(c) The permittee shall limit the operation of the flare to a heat input of 172,500 MMBtu calculated on a 12-month rolling sum basis.

**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) [40 CFR § 63.1959(b)(2)(iii)(B)]]

(a) The permittee shall perform a stack test using the Department-approved procedures once every five (5) calendar years,

**SECTION D. Source Level Requirements**

where five calendar years is defined as beginning with the calendar year the latest stack test was performed and ending on December 31, five years later. Performance tests shall be conducted while the source is operating at maximum routine operating conditions or under such other conditions, within the capacity of the equipment, as may be requested by the Department. When testing of a source is required on a recurring basis, a single procedural protocol may be submitted for approval; thereafter, a letter referencing the previously approved procedural protocol is sufficient. However, if modifications are made to the process(es), if a different stack testing company is used, or if an applicable section of the stack testing manual has been revised since approval, a new protocol must be submitted for approval.

(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. In the event that the permittee intends to conduct testing per a previously approved protocol, a letter referencing the approved protocol shall be submitted 90 days prior to the test in lieu of a new test protocol.

(c) The stack test shall be conducted at a minimum flare operating temperature, not lower than 1500°F. The stack test shall, at a minimum, determine compliance with the emissions limitations for CO, SO<sub>x</sub>, VOC, NMOC and VOC in accordance with 25 Pa. Code Chapter 139 to determine compliance with the reduction requirement of 98 weight-percent or 20 parts per million by volume (ppmv) outlet concentration level of NMOC in accordance with 40 C.F.R. § 63.1959(f).

(1) The stack test 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 thirty (30) days prior to the test, the Regional Air Quality Manager shall be informed of the date and time of the test.

(e) Within sixty (60) days after the source test(s) (unless a more stringent regulatory requirement applies), one paper copy plus one electronic copy 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.

**III. MONITORING REQUIREMENTS.**

**# 005 [25 Pa. Code §127.441]**

**Operating permit terms and conditions.**

The owner or operator shall monitor the following, when the enclosed flare is in operation:

- (a) hours of operation,
- (b) landfill gas flowrate on a continuous basis.

**IV. RECORDKEEPING REQUIREMENTS.**

**# 006 [25 Pa. Code §127.441]**

**Operating permit terms and conditions.**

The permittee shall maintain records of the hours of operation and landfill gas flow rate to the flare, when this back-up flare is used.

**# 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(h)]

The permittee shall maintain on-site records of the following information for a minimum of five (5) years:

**SECTION D. Source Level Requirements**

- (a) The operating time and dates of the enclosed backup flare;
- (b) Performance tests of the enclosed flare;
- (c) Twelve (12) month rolling summation of the VOC and NMOC (both as hexane at 3% oxygen), SO<sub>x</sub>, CO, PM (including PM<sub>10</sub> and PM<sub>2.5</sub>) and NO<sub>x</sub> emissions.

**V. REPORTING 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. § 62.16724 [40 C.F.R. § 63.1981]]

- (a) The owner or operator shall submit an annual report of the total flow rate of the landfill gas to the flare with hours of operation, to the Department.
- (b) The owner or operator shall submit an annual report of emissions of NO<sub>x</sub>, SO<sub>x</sub>, CO, PM, and VOC from the flare to the atmosphere to show compliance with the emission limits given in this operating permit.

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

- (a) The flare shall be equipped with an automatic pilot ignition source and shall be designed to meet the criteria for automatic system shutoff if a flameout occurs.
- (b) The enclosed flare (Source ID: C06) shall be used as a back-up flare "as needed" during the periods when the ULE flares installed and operated under Plan Approval 09-0210B are not available.
- (c) The permittee shall set the operating temperature of the enclosed flare within the range of 1500°F to 1800°F based on the results of the stack tests required in this operating permit. The actual operating temperature for the flare must be within this range, measured as a 24-hour average. In addition, the flare may not be operated outside this temperature range for more than 15 consecutive minutes at any one time. The flare will be allowed an appropriate warm-up sequence in accordance with the manufacturers specifications to attain this operating temperature.
- (d) The flare shall be designed such that the retention time shall be 0.7 seconds at the maximum flow as documented by design standards.

**VII. ADDITIONAL REQUIREMENTS.**

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

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





**SECTION E. Source Group Restrictions.**



**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 - OLD GROWS		
<b>Emission Limit</b>			<b>Pollutant</b>
56.800	Tons/Yr	12-month rolling sum	VOC
105	MSW LANDFILL - GROWS NORTH		
<b>Emission Limit</b>			<b>Pollutant</b>
20.620	Tons/Yr	12-month rolling sum	VOC
C03	BACK-UP ENCLOSED FLARE		
<b>Emission Limit</b>			<b>Pollutant</b>
28.360	Lbs/Hr		CO
62.110	Tons/Yr		CO
105.000	PPMV		CO
9.940	Lbs/Hr		NOX
21.770	Tons/Yr		NOX
23.000	PPMV		NOX
3.990	Lbs/Hr		SOX
7.000	PPMV		SOX
8.740	Tons/Yr		SOX
0.040	gr/DRY FT3	particulate matter	TSP
0.430	Lbs/Hr		TSP
0.940	Tons/Yr		TSP
1.370	Lbs/Hr		VOC
3.000	Tons/Yr		VOC
C05	BACKUP ENCLOSED FLARE		
<b>Emission Limit</b>			<b>Pollutant</b>
17.310	Tons/Yr		CO
30.120	Lbs/Hr		CO
418.400	PPMV		CO
20.000	PPMV	as hexane @ 3% oxygen, dry basis	NMOC
0.080	Lbs/MMBTU		NOX
6.900	Tons/Yr		NOX
12.000	Lbs/Hr		NOX
107.000	PPMV		NOX
0.040	gr/DRY FT3		PM10
1.000	Tons/Yr		PM10
1.700	Lbs/Hr		PM10
14.290	Tons/Yr		SOX
24.840	Lbs/Hr		SOX
151.000	PPMV		SOX
1.940	Tons/Yr	as hexane	VOC
3.370	Lbs/Hr	as hexane	VOC

**SECTION G. Emission Restriction Summary.**

Source Id	Source Description		
C06	BACKUP ENCLOSED FLARE		
Emission Limit			Pollutant
17.310	Tons/Yr	12-month rolling sum	CO
30.120	Lbs/Hr		CO
418.400	PPMV		CO
20.000	PPMV	as hexane @ 3% oxygen	NMOC
0.080	Lbs/MMBTU		NOX
6.900	Tons/Yr	12-month rolling sum	NOX
12.000	Lbs/Hr		NOX
107.000	PPMV		NOX
1.000	Tons/Yr	12-month rolling sum	PM10
1.700	Lbs/Hr		PM10
14.290	Tons/Yr	12-month rolling sum	SOX
24.840	Lbs/Hr		SOX
151.000	PPMV		SOX
1.940	Tons/Yr	as hexane @ 3% oxygen	VOC
3.370	Lbs/Hr	as hexane @ 3% oxygen	VOC

**Site Emission Restriction Summary**

Emission Limit			Pollutant
100.000	Tons/Yr	12-month rolling basis	PM10

**SECTION H. Miscellaneous.**

(1) The following previously issued operating permit serve as the basis for certain terms and conditions set forth in this Title V Permit:

- (a) RACT Operating Permit: OP 09-0007
- (b) TVOP 09-00007 amended/issued May 5, 2005 (APS No.:345462, AUTH ID: 544590)

(2) 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 limitations, monitoring, or recordkeeping:

A. Leachate Treatment Plant consisting of:

Leachate Treatment System

- Reactors, Clarifier, Evaporator, Centrifuge, and Filter Presses
- Treatment Process Tanks
- Leachate Storage Tanks

Kerosene Heaters (600,000Btu/hr)

Waste Oil Space Heater (225,000 Btu/hr)

Forced Air Heaters (340,000 Btu/hr)

Diesel Storage tanks (1-1,000 gal and 1-275 gal)

No. 2 Heating Oil Tanks (100,000 gal ASTs)

Effluent Storage Tank (100,000 gal AST)

Waste oil Storage Tank (550 gal AST)

Propane powdered Washer (657,000 Btu/hr)

Kerosene Storage Tank (2000 gal. AST)

B. Maintenance Shop consisting of:

Diesel Powered pumps (50 Hp each)

Diesel Powered Compressor (50 Hp)

Waste Oil Space Heater (350,000 Btu/hr) Model 3500 (mfg Clean Burn)

Unheated washer

Four Diesel Heaters (231,000 BTU/Hr)

Cold Degreaser (30 Gal) Model 30.3R Safety Kleen No. 30135996

Waste Oil Storage Tank (500 gal AST)

Gasoline Storage Tank (4,000 gal UST)

Diesel Storage Tank (10,000 gal UST)

Diesel Welder (50Hp)

Four (4) Diesel Light Plants (150 Hp each)

Gear Oil Storage Tank (275 gal AST)

Hydraulic fluid tank (750 gal AST)

Transmission fluid tank (750 gal AST)

Motor Oil Storage Tank (750 gal AST)

Diesel Storage Tank (250 gal)

C. Laboratory by scale house - two (2) fume hoods for reagent safety

(3) 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.

(4) The source capacities/throughputs listed in Sections A and D of the permit are informational purposes only. The emission limitations specified in Section D of the permit will be used for enforcement.

(5) The Title V Operating Permit 09-00007 (APS No. : 345462, AUTH ID: 54490) has been revised for the following:

- (a) The incorporation of Plan Approval 09-0007A
- (b) The incorporation of 40 CFR 63, Subpart AAAA
- (c) The resolution of an appeal.

**SECTION H. Miscellaneous.**

(6) The Title V Operating Permit 09-00007 (APS No.: 345462, AUTH ID: 644711) has been renewed.

(7) The minor modification Title V Operating Permit 09-00007 (APS No.: 345462, AUTH ID: 868821) removes Back-up Enclosed Flare (Source ID: C04) and all references and conditions.

(a) The minor modification to Title V Operating Permit 09-00007 removes Back-up Enclosed Flare, Source ID C04, all references and conditions.

(8) Title V Operating Permit 09-0007 (APS No.: 854253; AUTH ID: 1045000) has been renewed. With the renewal, the operating permit is amended to include a minor modification (APS No.: 345462; AUTH ID: 1041479) to replace the hours of operation limitation for Back-up Flare (Source ID: C03) with an equivalent heat input limitation. However, the operation of the enclosed flare shall continue to be limited by hours of operation since it was established as part of reasonably available control technology (RACT) and entered into the State Implementation Plan (SIP) on September 11, 2001. The permittee shall comply with operating hour restriction and the equivalent heat input limitation.

(a) The authority of 25 Pa. Code Sections 129.91 and 129.95 are noted to select conditions of Source ID(s): 101 and C03 that were part of the facility's RACT requirements from Operating Permit OP-09-0007.

(i) Source ID: 011 has been created for the Sequential Batch Reactor TK-6 including applicable requirements.

(ii) Source ID: 500 has been created to identify all exempt emergency stationary generator engines on site, including all applicable requirements.

(iii) Plan Approvals Incorporated by Reference -- As a result of EPA responses to the Sierra Club petitions on the Homer City and Mansfield Title V Operating Permits, the Department has incorporated certain applicable terms and conditions from Plan Approvals 09-0007C and 09-0007E under this permit renewal issuance. The conditions selected are those that will not be changing or are not likely to change significantly once the plan approvals are fully incorporated into the Title V Operating Permit via administrative amendment. Specific conditions omitted from incorporation are listed in Section C, Additional Requirements. Back-up enclosed flare C06, under Plan Approval 09-0007C, is not being incorporated by reference at this time.

(iv) A monitoring and record keeping requirement are added to Source ID: C03 (Back-Up Enclosed Flare), Condition #011(d) for tracking of dates and hours when the flare is operated.

(v) In order to demonstrate compliance with the heat input limitation for Source ID: C05 (Back-Up Enclosed Flare), the monitoring and record keeping requirements that were under Plan Approval 09-0007C have been revised to be made similar to the monitoring and recordkeeping requirements of existing Back-Up Enclosed Flare C03 under TVOP 09-00007.

(b) The following changes are made with the minor modification. Condition numbers refer to the March 31, 2011 issuance of the Operating Permit:

(i) Section D, Source ID: C03, Condition #004. The condition is revised to: "The permittee shall limit the operation of the back-up enclosed flare to 4,380 hours per year, on a 12-month rolling sum basis, and to an equivalent heat input limit of 657,000 MMBtu, calculated on a 12-month rolling sum basis.

The operation of the enclosed flare shall continue to be limited by hours of operation as established by reasonably available control technology (RACT) and entered into the State Implementation Plan (SIP) on September 11, 2001."

(ii) Section D, Source ID: C03, Condition #005. The condition is clarified by adding "at 50% methane content" to the flow rate limit.

(iii) Section D, Source ID: C03, Condition #009. The permittee shall monitor the methane (CH<sub>4</sub>) content of the landfill gas to the back-up flare at a minimum of once daily during the operation of the back-up flare.

(a) The monitoring shall be performed with a field meter, maintained as specified in the Work Practice Condition #017.

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

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

**SECTION H. Miscellaneous.**

require alternate or additional monitoring conditions.

(iv) Section D, Source ID: C03, Condition #011. The permittee shall record the following when the flare is operating.

- (a) The methane (CH<sub>4</sub>) content of the landfill gas to the flare on a percentage by volume basis a minimum of once daily
- (b) The metering device ID used to determine the methane content in (a)
- (c) The field calibration check of the meter used to measure the methane content prior to the field measurement
- (d) Hours of operation

(v) Section D, Source ID: C03, Condition #012. (a) The permittee shall use the landfill gas flow in scfm to the flare, the percent methane concentration and the higher heating value of methane to calculate the heat input to the flare in order to demonstrate compliance with the heat input limits.

(b) The permittee shall record the heat rate calculated in part (a) in terms of MMBtu on a monthly and on a 12-month rolling sum basis.

(vi) Section D, Source ID: C03, Condition #017: The field meter, used for monitoring methane content of the landfill gas to the back-up 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.

(9) TVOP 09-00007 (APS No.: 345462, AUTH ID: 1106123). A DEP initiated administrative amendment is being processed to remove and replace an existing operating hour limit for Back-Up Enclosed Flare (Source ID: C03) with an equivalent heat input limit. This condition is found in Section D for Source ID: C03, Condition #004.

The minor modification referenced in paragraph (7) above (APS No. 854253; AUTH ID: 1045000) did not remove the operating hour limit, but its equivalent heat input limit was included as an additional limit. This administrative amendment removes the operating hour limit entirely only leaving the equivalent heat input limit.

This administrative amendment is being processed as part of a RACT SIP revision.

(10) TVOP 09-00007 (APS No.: 345462; AUTH ID: 1187022). A minor modification is being processed to reflect the increased throughput capacity of the two sequential batch reactors (Source ID(s): 007 & 011), located at the leachate treatment plant. The throughput increase will be 300,000 GPD for each of the two units and the ammonia emission limit will be 10.7 TPY for each of the two units, on a 12-month rolling sum basis.

(11) TVOP 09-00007 (APS No.: 854253, AUTH ID: 1302170) has been renewed.

(12) TVOP 09-00007 (APS No.: 854253, AUTH ID: 1421283) has been administratively amended to incorporate the applicable requirements of Subpart OOO and the revised Subpart AAAA regulations.



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

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