



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

TITLE V/STATE OPERATING PERMIT

Issue Date: June 9, 2026

Effective Date: June 9, 2026

Expiration Date: June 8, 2031

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

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

TITLE V Permit No: 09-00210

Federal Tax Id - Plant Code: 26-3468180-1

Owner Information

Name: WASTE MANAGEMENT OF FAIRLESS HILLS L.L.C.

Mailing Address: 1000 NEW FORD MILL RD
MORRISVILLE, PA 19067-3704

Plant Information

Plant: WASTE MGMT OF FAIRLESS/FAIRLESS LDFL

Location: 09 Bucks County 09002 Falls Township

SIC Code: 4953 Trans. & Utilities - Refuse Systems

Responsible Official

Name: ROBERT C JONES

Title: DIST MGR II

Phone: (215) 428 - 4390

Email: bjones5@wm.com

Permit Contact Person

Name: ED P KUCOWSKI

Title: SITE ENGR

Phone: (215) 428 - 4350

Email: ekurowsk@wm.com

[Signature] _____

JILLIAN A. GALLAGHER, SOUTHEAST REGION AIR PROGRAM MANAGER



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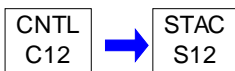
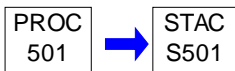
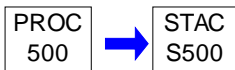
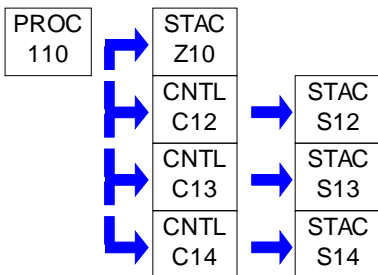
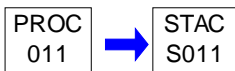
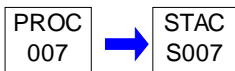
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**SECTION A. Site Inventory List**

Source ID	Source Name	Capacity/Throughput	Fuel/Material
007	SEQUENTIAL BATCH REACTOR (TK-5)	12,500.000 Gal/HR	LEACHATE
011	SEQUENTIAL BATCH REACTOR (TK-6)	12,500.000 Gal/HR	LEACHATE
110	MSW LANDFILL - FAIRLESS		
500	EXEMPT EMER GENERATOR PRE-2006 ENGINES	N/A	Diesel Fuel
501	EMER GENERATORS POST-2006 (PRIOR ID 500 IN 09-0210B)	100.000 Gal/HR	DIESEL
C12	ENCLOSED ULE FLARE 1	360.000 MCF/HR	LANDFILL GAS
C13	ENCLOSED ULE FLARE 2	360.000 MCF/HR	LANDFILL GAS
C14	ENCLOSED ULE FLARE 3	360.000 MCF/HR	LANDFILL GAS
S007	SBR (TK-5) STACK		
S011	SBR (TK-6) STACK		
S12	ENCLOSED ULE FLARE STACK 1 (C100)		
S13	ENCLOSED ULE FLARE STACK 2 (C120)		
S14	ENCLOSED ULE FLARE STACK 3 (C140)		
S500	EXEMPT EMERGENCY GENERATOR STACKS		
S501	EMERGENCY GENERATORS (POST 2006) STACK		
Z10	FACILITY FUGITIVES - FAIRLESS		

PERMIT MAPS



PERMIT MAPS

CNTL
C13 → STAC
S13

CNTL
C14 → STAC
S14

**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 Air Pollution Control Act (35 P.S. §§ 4001-4015).

#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

**SECTION B. General Title V Requirements**

responsibility, coverage and liability between the current and the new permittee; and,

(3) A compliance review form has been submitted to the Department and the permit transfer has been approved by the Department.

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

#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.

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

#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.

**SECTION B. General Title V Requirements****#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].

#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.

**SECTION B. General Title V Requirements****#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.
- (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_x from a single source during the term of the permit and 5 tons of NO_x at the facility during the term of the permit.
- (3) One and six-tenths tons of the oxides of sulfur from a single source during the term of the permit and 8.0 tons of

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oxides of sulfur at the facility during the term of the permit.

(4) Six-tenths of a ton of PM₁₀ from a single source during the term of the permit and 3.0 tons of PM₁₀ at the facility during the term of the permit. This shall include emissions of a pollutant regulated under Section 112 of the Clean Air Act unless precluded by the Clean Air Act or 25 Pa. Code Article III.

(5) One ton of VOCs from a single source during the term of the permit and 5.0 tons of VOCs at the facility during the term of the permit. This shall include emissions of a pollutant regulated under Section 112 of the Clean Air Act unless precluded by the Clean Air Act or 25 Pa. Code Article III.

(c) In accordance with § 127.14, the permittee may install the following minor sources without the need for a plan approval:

(1) Air conditioning or ventilation systems not designed to remove pollutants generated or released from other sources.

(2) Combustion units rated at 2,500,000 or less Btu per hour of heat input.

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

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

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

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

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

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

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

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

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

(e) Unless precluded by the Clean Air Act or the regulations thereunder, the permit shield described in 25 Pa. Code § 127.516 (relating to permit shield) 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.

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(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 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

**SECTION B. General Title V Requirements**

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 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.

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

#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:

**SECTION B. General Title V Requirements**

- (i) Three years after the date on which a regulated substance is first listed under § 68.130; or,
 - (ii) The date on which a regulated substance is first present above a threshold quantity in a process.
- (2) The permittee shall submit any additional relevant information requested by the Department or EPA concerning the RMP and shall make subsequent submissions of RMPs in accordance with 40 CFR § 68.190.
- (3) The permittee shall certify that the RMP is accurate and complete in accordance with the requirements of 40 CFR Part 68, including a checklist addressing the required elements of a complete RMP.
- (c) As used in this permit condition, the term "process" shall be as defined in 40 CFR § 68.3. The term "process" means any activity involving a regulated substance including any use, storage, manufacturing, handling, or on-site movement of such substances or any combination of these activities. For purposes of this definition, any group of vessels that are interconnected, or separate vessels that are located such that a regulated substance could be involved in a potential release, shall be considered a single process.
- (d) If the Title V facility is subject to 40 CFR Part 68, as part of the certification required under this permit, the permittee shall:
- (1) Submit a compliance schedule for satisfying the requirements of 40 CFR Part 68 by the date specified in 40 CFR § 68.10(a); or,
 - (2) Certify that the Title V facility is in compliance with all requirements of 40 CFR Part 68 including the registration and submission of the RMP.
- (e) If the Title V facility is subject to 40 CFR Part 68, the permittee shall maintain records supporting the implementation of an accidental release program for five (5) years in accordance with 40 CFR § 68.200.
- (f) When the Title V facility is subject to the accidental release program requirements of Section 112(r) of the Clean Air Act and 40 CFR Part 68, appropriate enforcement action will be taken by the Department if:
- (1) The permittee fails to register and submit the RMP or a revised plan pursuant to 40 CFR Part 68.
 - (2) The permittee fails to submit a compliance schedule or include a statement in the compliance certification required under 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.

**SECTION B. General Title V Requirements**

(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 §123.1]****Prohibition of certain fugitive emissions**

(a) No person may permit the emission into the outdoor atmosphere of a fugitive air contaminant from a source other than the following:

- (1) Construction or demolition of buildings or structures.
- (2) Grading, paving and maintenance of roads and streets.
- (3) Use of roads and streets. Emissions from material in or on trucks, railroad cars and other vehicular equipment are not considered as emissions from use of roads and streets.
- (4) Clearing of land.
- (5) Stockpiling of materials.
- (6) Open burning operations, as specified in 25 Pa. Code § 129.14.
- (7) N/A
- (8) N/A
- (9) Sources and classes of sources other than those identified in (1)-(8) of this condition, for which the permittee has obtained a determination from the Department that fugitive emissions from the source, after appropriate control, meet the following requirements:
 - (i) The emissions are of minor significance with respect to causing air pollution; and
 - (ii) The emissions are not preventing or interfering with the attainment or maintenance of any ambient air quality standard.

002 [25 Pa. Code §123.2]**Fugitive particulate matter**

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

003 [25 Pa. Code §123.31]**Limitations**

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

004 [25 Pa. Code §123.41]**Limitations**

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

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

005 [25 Pa. Code §123.42]**Exceptions**

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

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

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

Total particulate matter emissions, including both point source and fugitive emissions, from the Fairless Landfill, the GROWS Landfill and the GROWS North Landfill (TVOP 09-00007) shall be limited as follows:

**SECTION C. Site Level Requirements**

PM10 – less than 100 tons per year on a 12-month rolling basis
 PM2.5 – less than 100 tons per year on a 12-month rolling basis

Emissions shall be calculated in accordance with the methods and emission factors used in the application for plan approval for the Fairless landfill (09-0210A), unless otherwise approved by the Department in writing.

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

007 [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.

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

The permittee may not 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, the most current version of the DEP Source Testing Manual, and the EPA Clean Air Act National Stack Testing Guidance, 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.
- (c) The Department reserves the right to require exhaust stack testing of sources and control devices as necessary to verify emissions for purposes including determining the correct emission fee, malfunctions, or determining compliance with applicable requirements.

**SECTION C. Site Level Requirements****# 010 [25 Pa. Code §139.1]****Sampling facilities.**

Upon the request of the Department, the person responsible for a source shall provide adequate sampling ports, safe sampling platforms, and adequate utilities for the performance by the Department of tests on a source. The Department will set forth, in the request, the time period in which the facilities shall be provided as well as the specifications for such facilities.

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; or
- (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.**

(a) The permittee shall calculate emissions of the following pollutants from each of the 3 landfills (Fairless TVOP 09-00210; GROWS and GROWS North TVOP 09-00007) on a monthly and on a 12-month rolling basis:

PM10
PM2.5

Emissions shall be calculated in accordance with the methods and emission factors used in the application for plan approval for the Fairless landfill (09-0210A), unless otherwise approved by the Department in writing.

(b) The permittee shall calculate the sum of the emissions of the following pollutants from the three landfills (Fairless, GROWS and GROWS North) on a monthly and on a 12-month rolling basis:

PM10
PM2.5

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

[Additional authority for this 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.

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

(a) The permittee shall maintain records of the emissions of the following pollutants from each of the 3 landfill areas

**SECTION C. Site Level Requirements**

(GROWS, GROWS North, and Fairless), on a monthly, and 12-month rolling basis:

- PM-10
- PM-2.5

Emissions shall be calculated in accordance with the methods and emission factors used in the application for plan approval for the Fairless landfill (09-0210A), unless otherwise approved by the Department in writing.

(b) The permittee shall maintain records of the sum of emissions of the following pollutants from each of the 3 landfill areas (GROWS, GROWS North, and Fairless), on a monthly, and 12-month rolling basis:

- PM-10
- PM-2.5

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

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

- (a) The name and title of the company representative monitoring these instances.
- (b) The date and time of the observation.
- (c) A description of any emissions or malodors observed. If none are observed, record "NONE."
- (d) The possible cause(s) of the emissions or malodors.
- (e) Corrective action(s) taken to abate or mitigate each recorded deviation and to prevent future occurrences.

016 [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.

017 [25 Pa. Code §127.511]**Monitoring and related recordkeeping and reporting requirements.**

The permittee shall record greenhouse gas emissions (CO₂, CH₄, N₂O), including any relevant emissions data, from all stationary fuel combustion sources at the facility as part of compliance with the GHG Mandatory Reporting Rule.

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

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

The permittee shall submit the following:

- (a) An annual certificate of compliance, due by April 1st of each year, for the period covering January 1 through December 31 of the previous year. This certificate of compliance shall document compliance with all permit terms and conditions set forth in this Title V permit as required under condition #26 of section B of this permit. The annual certificate of compliance shall be submitted to DEP electronically, and to EPA Region III in electronic form at the following email address: R3_APD_Permits@epa.gov. The subject line shall read: "TVOP No. 09-00210, Facility Name Waste Management Fairless Landfill."

**SECTION C. Site Level Requirements**

(b) A semi-annual deviation report to DEP, 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).

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

(a) The permittee shall report malfunctions, emergencies or incidents of excess emissions to DEP's 24-hour Emergency Hotline at 800.541.2050. 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, emergency or incident of 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, emergency or incident of excess emissions. The owner or operator shall electronically submit any report of instances of such malfunctions, emergencies or incidents 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, emergency or incident;
- (3) Date and time when the malfunction, emergency or incident was first observed;
- (4) Expected duration of excess emissions;
- (5) Estimated rate of emissions; and
- (6) Corrective actions or preventative measures taken.

(d) Any malfunction, emergency or incident of excess 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 electronically within five (5) business days of discovery. The report shall contain the same information required by paragraph (c), and any permit specific malfunction reporting requirements.

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

(f) Reports regarding malfunctions, emergencies or incidents of excess 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.

020 [25 Pa. Code §127.441]**Operating permit terms and conditions.**

(a). Reports, test data, monitoring data, and notifications required by this Operating Permit shall be submitted electronically through DEP's Public Submission Page (<https://greenport.pa.gov/ePermitPublicAccess/PublicSubmission/ValidatePublicSubmission>).

(b). In general, reports that are required to be submitted to the Administrator under 40 C.F.R. Parts 60 and 63, with the exception of reports required under the MATS rule, are submitted through the CEDRI portal of the Central Data Exchange

**SECTION C. Site Level Requirements**

(CDX): <https://cdx.epa.gov/>

(c) If the appropriate electronic report is not available in CEDRI at the time the report is due or if performance test data collected that needs to be reported use test methods that are not supported by EPA's ERT as listed on the EPA's ERT website (https://www3.epa.gov/ttn/chief/ert/ert_info.html.) at the time of the test, the permittee shall mail them to:

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

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

[Additional Authority for this permit condition is also derived from 25 Pa. Code Sections 123.1(c) and 127.441.]

A person responsible for any source specified in 25 Pa. Code Section 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 asphalt, water, or other suitable chemicals, as approved by the Department, on dirt roads, material stockpiles and other surfaces which may give rise to airborne dusts.

A logbook shall be maintained to demonstrate compliance with this condition.

- (c) Paving and maintenance of roadways.

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

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

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

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

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

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

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

- (a) The aggregate of all pollutant emissions from both the Fairless Landfill (Title V Operating Permit No. 09-00210; Tax ID- Plant Code 26-3468180-1); and the GROWS / GROWS North Landfills, (Title V Operating Permit No. 09-00007; Tax ID -

**SECTION C. Site Level Requirements**

Plant Code 23-1655318-4) shall be considered in the Department's and EPA's determinations of applicability for air programs including, but not limited to, the following:

- (1) Prevention of Significant Deterioration (PSD).
- (2) Non-attainment New Source Review (NNSR).
- (3) Maximum Achievable Control Technology (MACT) standards.
- (4) Accidental release prevention program requirements.

(b) Any increase in emissions from pollutant-emitting activities at either facility, listed in paragraph (a) above, shall be combined and aggregated to determine whether an applicable requirement is triggered at the site.

(c) It is the Department's determination, with this Operating Permit, that the Fairless landfill constitutes a separate facility from GROWS and GROWS North for purposes of determining applicability of the Standards of Performance for Municipal Solid Waste Landfills, 40 C.F.R. Part 60, Subpart XXX and the National Emission Standards for Hazardous Air Pollutants:

Municipal Solid Waste Landfills, 40 C.F.R. Part 63, Subpart AAAA.

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

The Landfill is subject to the provisions of 40 C.F.R. Part 60 Subpart XXX of the Standards of Performance for New Stationary Sources (NSPS), 40 C.F.R. Part 61 Subpart M of the National Emission Standard for Asbestos and 40 C.F.R. Part 63 Subpart AAAA of the National Emission Standards for Hazardous Air Pollutants (NESHAPs).

VIII. COMPLIANCE CERTIFICATION.

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

IX. COMPLIANCE SCHEDULE.

No compliance milestones exist.

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

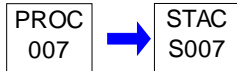
**SECTION D. Source Level Requirements**

Source ID: 007

Source Name: SEQUENTIAL BATCH REACTOR (TK-5)

Source Capacity/Throughput: 12,500.000 Gal/HR LEACHATE

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

**I. RESTRICTIONS.**

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

II. TESTING REQUIREMENTS.

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

III. MONITORING REQUIREMENTS.

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

IV. RECORDKEEPING REQUIREMENTS.

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

V. REPORTING REQUIREMENTS.

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

VI. WORK PRACTICE REQUIREMENTS.

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

VII. ADDITIONAL REQUIREMENTS.

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

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

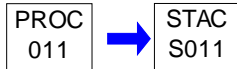
**SECTION D. Source Level Requirements**

Source ID: 011

Source Name: SEQUENTIAL BATCH REACTOR (TK-6)

Source Capacity/Throughput: 12,500.000 Gal/HR LEACHATE

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

**I. RESTRICTIONS.**

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

II. TESTING REQUIREMENTS.

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

III. MONITORING REQUIREMENTS.

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

IV. RECORDKEEPING REQUIREMENTS.

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

V. REPORTING REQUIREMENTS.

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

VI. WORK PRACTICE REQUIREMENTS.

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

VII. ADDITIONAL REQUIREMENTS.

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

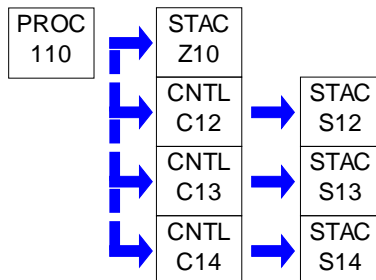
***** Permit Shield in Effect. *****

**SECTION D. Source Level Requirements**

Source ID: 110

Source Name: MSW LANDFILL - FAIRLESS

Source Capacity/Throughput:

**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 Fairless Landfill shall not exceed 39.6 tons per year, calculated after closure in accordance with the definitions of "closed landfill" and "closure" in 40 C.F.R. §§ 60.761 and 63.1990 measured as hexane. (Point sources are not included in this total.)

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 40 C.F.R. §§ 60.762(b); 60.763(a); 60.767(c); 60.767(d), 63.1958(a), 63.1959(b), and 63.1981]

1) The permittee shall submit a revised gas collection and control plan for the Fairless Landfill prior to any installation or expansion of the permanent gas collection and control system in a way that was not previously described by the initial gas collection and control plan (submitted February 14, 2017) or any subsequent revisions. The plan shall be prepared by a professional engineer in the manner expressed in paragraphs (A) through (C).

Pursuant to 40 C.F.R. §§ 60.767(d)(1) and 63.1981(e), a revised GCCS plan must be submitted 90 days in advance of any expansions into areas not approved by the previous GCCS plan.

Note: A Plan Approval or approved Request for Determination may first be required.

(A) The collection and control system as described in the plan shall meet the design requirements of paragraph 40 C.F.R. §§ 60.762(b)(2)(ii)(C)(1) - (4) and 63.1959(b)(2)(ii)(B) (1) -(4) as described in (a) through (d) below.

(a) Handle the maximum expected gas flow rate from the entire area of the landfill that warrants control over the intended use period of the gas control or treatment system equipment;

(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 5 years or more if active or 2 or more years if closed or at final grade.

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

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

(B) The collection and control system design plan shall include any alternatives to the operational standards, test methods, procedures, compliance measures, monitoring, recordkeeping or reporting provisions of 40 C.F.R. §§ 60.763 through 60.768, and 63.1958 through 63.1983 proposed by the permittee.

(C) The collection and control system design plan shall either conform with specifications for active collection systems

**SECTION D. Source Level Requirements**

in 40 C.F.R. §§ 60.769 and 63.1962 or include a demonstration to the Department's satisfaction of the sufficiency of the alternative provisions to 40 C.F.R. §§ 60.769 and 63.1962.

(D) The Department shall review the information submitted under paragraphs (A), (B), and (C) above and either approve it, disapprove it, or request that additional information be submitted. Because of the many site-specific factors involved with landfill gas system design, alternative systems may be necessary. A wide variety of system designs are possible, such as vertical wells, combination horizontal and vertical collection systems, or horizontal trenches only, leachate collection components, and passive systems.

Pursuant to 40 C.F.R. §§ 60.767(c)(6) and 63.1981(d)(6), if the Administrator does not approve or disapprove the design plan or request additional information within 90 days of receipt, then the permittee may continue with the implementation of the design plan, recognizing that they are proceeding at their own risk.

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

(3) The collection efficiency of the gas management system for the final design of the Fairless Landfill at closure shall be not less than 92%.

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

[Additional authority for this permit condition is also derived from 40 C.F.R. §§ 63.1958(c); 63.1960(a); 63.1981(h); and 63.1983(e)(1)-(5).]

(a) The permittee shall operate the collection system such that each interior wellhead in the collection system has a landfill gas temperature less than 62.8°C (145 °F). However, the permittee may establish a higher operating temperature at a particular well. A higher operating value demonstration shall be submitted to the Administrator 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.).

(b) If monitoring performed pursuant to Condition #014 [40 C.F.R. § 63.1960(a)(4)(i)] demonstrates that a well exceeds the temperature standard set forth in paragraph (a) of this condition, action shall be initiated to correct the exceedance within 5 calendar days, in accordance with 40 C.F.R. § 63.1960(a)(4)(i), as stated below. Any attempted corrective measure shall not cause exceedances of other operational or performance standards.

(i) If a landfill gas temperature less than 62.8°C (145 °F) cannot be achieved within 15 calendar days of the first measurement of landfill gas temperature greater than 62.8°C (145 °F), the owner or operator 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°C (145 °F) was first measured. The owner or operator must keep records according to 40 C.F.R. § 63.1983(e)(3) [Condition #016(f)].

(ii) If corrective actions cannot be fully implemented within 60 days following the temperature measurement for which the root cause analysis was required, the owner or operator 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°C (145 °F). The owner or operator must submit the items listed in 40 C.F.R. § 63.1981(h)[Condition #020(g)] as part of the next annual report. The owner or operator must keep records according to 40 C.F.R. § 63.1983(e)(4) [Condition #016(f)(ii)].

(iii) If corrective action is expected to take longer than 120 days to complete after the initial exceedance, the owner or operator must submit the root cause analysis, corrective action analysis, and corresponding implementation timeline to the Administrator, according to 40 C.F.R. §§ 63.1981(h)(7) and 63.1981(l). The owner or operator must keep records according to 40 C.F.R. § 63.1981(f) [Condition #016(f)(iii)].

**SECTION D. Source Level Requirements**

(iv) 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°C (170 °F) and the carbon monoxide concentration measured, according to the procedures in 40 C.F.R. § 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°C, 145 °F) must be completed within 15 days.

(c) If corrective actions are taken pursuant to paragraph (b) of this condition [40 C.F.R. § 63.1960], the monitored exceedance is not a violation of the operational requirements in 40 C.F.R. § 63.1958 or paragraph (a) of this condition.

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

[Additional authority for this permit condition is also derived from 40 C.F.R. §§ 63.1958(d); 63.1960(c) and (d).]

(a) The permittee shall operate the collection system such that the methane concentration at the surface of the landfill is less than 500 parts per million above background at the surface of the landfill.

(b) To determine if this level is exceeded, the permittee shall conduct monitoring pursuant to Condition #012 [40 C.F.R. §§ 63.1958(d) and 63.1960(c) and (d)].

(c) Any reading of 500 parts per million or more above background at any location shall be recorded as a monitored exceedance and the actions specified in paragraphs 40 C.F.R. § 63.1960(c)(4) (i)-(v) or listed below shall be taken. As long as the specified actions are taken, the exceedance is not a violation of the operational requirements of 40 C.F.R. § 63.1958(d) or paragraph (a) above.

(i) The location of each monitored exceedance shall be marked and the location and concentration recorded. Location must be determined and 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 shall be made and the location shall be re-monitored within 10 calendar days of detecting the exceedance.

(iii) If the re-monitoring of the location shows a second exceedance, additional corrective action shall be taken and the location shall be monitored again within 10 days of the second exceedance. If the re-monitoring shows a third exceedance for the same location, the action specified in paragraph 40 C.F.R. § 63.1960 (c)(4)(v) (Condition #004(v)) shall be taken, and no further monitoring of that location is required until the action specified in paragraph 40 C.F.R. § 63.1960(c)(4)(v) (Condition #004 (c) (v)) has been taken.

(iv) Any location that initially showed an exceedance but has a methane concentration less than 500 ppm methane above background at the 10-day re-monitoring specified in paragraph 40 C.F.R. § 63.1960(c)(4) (ii) or (iii) (Condition #004(c)(ii) or (iii)) shall be re-monitored 1 month from the initial exceedance. If the 1-month re-monitoring shows a concentration less than 500 parts per million above background, no further monitoring of that location is required until the next quarterly monitoring period. If the 1-month re-monitoring shows an exceedance, the actions specified in paragraph 40 C.F.R. § 63.1960 (c)(4) (iii) or (v) (Condition #004(c)(iii) or (v)) shall be taken.

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

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

Additional authority for this permit condition is also derived from 40 C.F.R. §§ 60.767 (c); 60.767(g); 60.768(e); 63.1958(b); 63.1960(a)(3); 63.1960(a)(5); 63.1961(a)(1); 63.1981(h); and 63.1983(e)(4).]

(a) The gas collection system shall be operated with negative pressure at each wellhead, except under the following conditions.

**SECTION D. Source Level Requirements**

- (i) When a fire or increased well temperature is detected. The permittee shall record instances when positive pressure occurs in efforts to avoid fire.
- (ii) When a geomembrane or synthetic cover is used. The permittee shall develop acceptable pressure limits in the design plan
- (iii) When a well is decommissioned. A well may experience a static positive pressure after shut down to accommodate for declining flows. All design changes shall be approved by the Administrator, as specified in 40 C.F.R. §§ 60.767(c) and 63.1981(d).
- (iv) When the collection or control systems are experiencing down times due to routine equipment maintenance including gas collection header repairs, wellhead and valve repairs, replacement or modifications, and other similar activities.
- (b) If the monitoring performed pursuant to Condition #013 [40 C.F.R. § 63.1961(a)(1)] demonstrates that a positive pressure exists and none of the exceptions provided by paragraph a(i)-(iv), above, applies, action shall be initiated to correct the exceedance within five calendar days. Any attempted corrective measure shall not cause exceedances of other operational or performance standards.
- (i) In accordance with 40 C.F.R. § 63.1960(a)(3)(i)(A), if a negative pressure cannot be achieved without excess air infiltration within 15 calendar days of the first measurement of positive pressure, the owner or operator 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. The owner or operator must keep records according to 40 C.F.R. § 63.1983(e)(3)[Condition #016 (f)(i)].
- (ii) In accordance with 40 C.F.R. § 63.1960(a)(3)(i)(B), if corrective actions cannot be fully implemented within 60 days following the positive pressure measurement for which the root cause analysis was required, the owner or operator 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. The owner or operator must submit the items listed in 40 C.F.R. § 63.1981(h)(7) [Condition #020(g)] as part of the next semi-annual report. The owner or operator must keep records according to 40 C.F.R. § 63.1983(e)(4) [Condition #016(f)(ii)].
- (iii) In accordance with 40 C.F.R. § 63.1960(a)(3)(i)(C), if corrective action is expected to take longer than 120 days to complete after the initial exceedance, the owner or operator must submit the root cause analysis, corrective action analysis, and corresponding implementation timeline to the Administrator, according to 40 C.F.R. §§ 63.1981(h)(7) [Condition #020(g)] and 63.1981(j)[Condition #022]. The owner or operator must keep records according to 40 C.F.R. §63.1983(e)(5) [Condition #016(f)(iii)].
- (c) If corrective actions are taken pursuant to paragraph (b) of this condition [40 C.F.R. § 63.1960(a)(3)(i)], the monitored exceedance is not a violation of the operational requirements in 40 C.F.R. § 63.1958 or paragraph (a) of this condition.

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

(a) There shall be no landfill gas leaks which result in concentrations of 500 ppmv or more, measured as propane (or 1375 ppmv, or more, measured as methane), at a distance of 0.5 inches from any equipment. Non-repeatable and momentary readings shall not be considered to be leaks, nor should measurements taken during routine equipment maintenance. The landfill equipment subject to this requirement includes gas extraction equipment designed to operate under positive pressure. This includes the blower, the control device or treatment system, above ground piping connecting these components and applicable fittings and valves.

- (i) Routine equipment maintenance includes, but is not limited to, the following:
- (1) Gas piping repair;
 - (2) Flare station blower repair or replacement;
 - (3) Flare relight system testing or repair;
 - (4) Flare thermocouple or temperature switch repair or replacement;
 - (5) Flare liner inspection, repair, or replacement;
 - (6) Flare actuator valve repair or replacement;

**SECTION D. Source Level Requirements**

- (7) Flare flame arrestor basket cleaning;
- (8) Flare control panel timer adjustment or replacement;
- (9) Condensate trap pump repair or replacement;
- (10) Condensate pump pump-outs;
- (11) Electrical service repairs; and
- (12) Other repairs as determined by DEP.

(b) Equipment fully contained within the cap and sections of equipment below the landfill cap are not subject to this requirement.

(c) Equipment fully enclosed in a building using methane monitors is not subject to this requirement.

(d) The landfill equipment subject to this requirement includes gas extraction equipment designed to operate under positive pressure. This includes the blower, the control device or treatment system, above ground piping connecting these components and applicable fittings and valves.

(e) Equipment subject to this conditions found to have LFG leaks exceeding the 500 ppmv as propane (or 1375 ppmv, or more, measured as methane) shall be repaired in a timely manner but no later than 15 days after detection. If a repair cannot be made within 15 days of detection, the permittee shall report the inability to repair in 15 days to the Department. The report shall contain the following:

- (i) Location and description of leaking equipment
- (ii) Reason for delay in repair
- (iii) An estimated date the repair should be completed by

Throughput Restriction(s).

007 [25 Pa. Code §127.441]

Operating permit terms and conditions.

(a) The maximum amount of solid waste disposal at the Fairless Landfill shall be limited to 18,333 tons per day of municipal solid as a quarterly average over the calendar year.

(b) The Fairless Landfill shall be limited to a maximum disposal volume of 74.58 million bank cubic yards or other amount in compliance with the Solid Waste Permit and approved by the Department. Waste disposal at the Fairless Landfill shall be limited to a maximum of 48.41 million tons of MSW excluding municipal incinerator ash, asbestos waste and inert construction and demolition materials. The permittee shall not dispose of MSW in excess of this tonnage without obtaining approval from the Department.

Control Device Efficiency Restriction(s).

008 [25 Pa. Code §127.441]

Operating permit terms and conditions.

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

(a) The permittee shall install an interim landfill gas collection system, as submitted to the Department with Plan Approvals 09-0210A and 09-0210C or as stated in the GCCS Plan (November 2018 or subsequent revisions made in accordance with 40 C.F.R. §§ 60.767(d) and 63.1981(e)), for the Fairless Landfill. The interim gas collection system may include components of the leachate collection system, such as the leachate cell floor piping system, leachate cleanout risers and leachate stone media. Landfill gas collection wells, identified in the GCCS plan may be installed in interim phases of landfilling and the well casings extended upwards as landfilling progresses.

The permittee may use other temporary measures such as horizontal collectors, temporary vertical gas wells and slip wells. The slip well feature may be utilized from the bottom up of a well or to extend conventionally drilled wells vertically, through the upward progression of interim landfill grade development.

This interim gas collection system shall effectively capture the landfill gas generated within the landfill expansion within 24 months from the start of the placement of waste in a particular cell. The landfill gas collected during the interim period shall

**SECTION D. Source Level Requirements**

be treated and delivered to a third party through a pipeline or managed in accordance with Condition #009 of this section.

(b) The interim landfill gas collection system shall collect gas from each area, cell, or group of cells in the landfill in which the initial waste in the Fairless Landfill has been placed for a period of up to 24 months.

(c) The landfill gas collection system shall meet the requirements of 40 C.F.R. Part 60, Subpart XXX and Part 63, Subpart AAAA no later than 5 years after initial solid waste placement in the Fairless Landfill. The final gas collection system design is not required to incorporate components of the interim gas collection system unless otherwise required under 40 C.F.R. Part 60 Subpart XXX. and Part 63, Subpart AAAA

(d) The permittee has chosen to opt-in under 40 C.F.R. § 60.762(b)(2)(iv) to comply with the requirements of 40 C.F.R. §§ 63.1958, 63.1960, and 63.1961 instead of the requirements under 40 C.F.R. §§ 60.763, 60.765, and 60.766. This opt-in includes any referral under additional sections of 40 C.F.R. Part 60, Subpart XXX to use specific sections of 40 C.F.R. Part 63, Subpart AAAA. The permittee is prohibited from returning to the provisions of 40 C.F.R. §§ 60.763, 60.765, and 60.766.

(e) Both interim and permanent landfill gas collection systems shall include the gas collection system, cell or group of cells and shall be sized such that it can handle the maximum expected gas flow rate from the entire Fairless Landfill.

(f) Both interim and permanent landfill gas collection systems shall be designed to minimize off-site migration of the landfill gas.

(g) The final landfill gas management system shall have a minimum collection efficiency of 92% at closure.

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

[Additional authority for this permit condition is derived from 25 Pa. Code § 127.12(a)(5), and 40 C.F.R. §§ 60.762(b)(2)(iii); 63.1958(e) & (f); and 63.1959(b)(2)(iii)]

(a) The permittee shall route all the collected landfill gas to treatment or control systems that comply with the requirements in either paragraphs (i), (ii) or (iii) of this condition, unless modified by a Plan Approval.

(i) A treatment system that processes the collected gas for subsequent sale or beneficial use such as fuel for combustion, production of vehicle fuel, production of high- Btu gas for pipeline injection, or use as a raw material in a chemical manufacturing process. This requirement includes the transfer of landfill gas to the Renewable Natural Gas Plant permitted under 09-0252A. All emissions from any atmospheric vent from such gas treatment system shall be subject to the requirements of paragraph (a)(i) or (a)(iii).

(ii) a low emissions flare, C12, C13 or C14, designed and operated as required by Plan Approval 09-0210B.

(b) In the event the collection or control system is inoperable, the gas mover system shall be shut down and all valves in the collection and control system contributing to venting of the gas to the atmosphere shall be closed within 1 hour of the collection or control system not operating.

(c) 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.

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

**SECTION D. Source Level Requirements****II. TESTING REQUIREMENTS.**

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

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

(a) The permittee shall demonstrate annually the site-specific NMOC concentration and VOC concentration. Except as provided below in paragraphs (a)(i)-(iii), the permittee shall use the following parameters in calculating VOC emission rate: methane generation rate constant, k, equal to 0.023/year; and methane generation potential Lo, equal to 169.9 m³/Mg (Mega gram) 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 basis 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.

(b) The permittee shall calculate the NMOC emission rate for the purpose of determining when the collection and control system can be removed by using the equation given in 40 C.F.R. § § 60.764(b) and 63.1959(c).

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

[Additional authority for this condition is derived from 40 C.F.R. § 63.1960(c)(5).]

(a) On a monthly basis, the permittee shall implement a program to monitor for cover integrity and implement cover repairs as necessary.

(b) The permittee shall monitor off-site migration of landfill gas by methods 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 40 C.F.R. § § 63.1960(a)(3) and 63.1961(a)(1)]

On a monthly basis, the permittee shall measure gauge pressure in the gas collection header at each well.

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

[Additional authority for this permit condition is also derived from 40 C.F.R. § § 63.1958(d); 63.1960(c); 63.1960(d)(1)-(4); and 63.1961(f).]

**SECTION D. Source Level Requirements**

The permittee shall perform surface monitoring in accordance with the following, or in accordance with an alternative surface monitoring plan approved by the Department.

(a) On a quarterly basis, the permittee shall monitor surface concentrations of methane along the entire perimeter of the collection area and along a pattern that traverses the landfill at 30 meter intervals and where visual observations indicate elevated concentrations of landfill gas, such as distressed vegetation and cracks or seeps in the cover and all cover penetrations. The owner or operator must monitor any openings that are within an area of the landfill where waste has been placed and a gas collection system is required. The permittee may establish an alternative traversing pattern that ensures equivalent coverage. The permittee shall maintain a surface monitoring design plan that includes a topographic 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.

(b) In performing the surface monitoring, the permittee shall use an organic vapor analyzer, flame ionization detector, or other portable monitor meeting the following specifications and procedures:

(i) The portable analyzer shall meet the instrument specification provided in section 6 of Method 21 of appendix A of 40 C.F.R. Part 60, except that "methane" shall replace all references to VOC.

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

(iii) To meet the performance evaluation procedures in Section 8.1 of Method 21 of Appendix A of 40 C.F.R. Part 60 the instrument evaluation procedures of Section 8.1 of Method 21 of Appendix A of 40 C.F.R. Part 60 must be used.

(iv) The calibration procedures provided in Sections 8 and 10 of Method 21 of appendix A of 40 C.F.R. Part 60 must be followed immediately before commencing a surface monitoring scan.

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

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

(e) Surface emission monitoring shall be performed in accordance with section 8.3.1 of Method 21 of appendix A of 40 C.F.R. Part 60, except that the probe inlet shall be placed within 5 to 10 centimeters of the ground. Monitoring shall be performed during typical meteorological conditions.

(f) Any closed landfill that has no monitored exceedances of the operational standard in three consecutive quarterly monitoring periods may go 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 until the landfill has no monitored exceedance of 500 ppm standard for three consecutive quarterly monitoring periods.

014 [25 Pa. Code §127.441]**Operating permit terms and conditions.**

[Additional authority is also derived from 40 C.F.R. § § 63.1958(c), 63.1960(a)(4), and 63.1961(a)(2).]

(a) Pursuant to 40 C.F.R. § 63.1961(a)(2),

The permittee shall monitor the temperature of the wellhead, monthly, using a sampling port and a thermometer, other temperature measuring device, or an access port for temperature measurements installed at each wellhead to determine compliance with the operating parameters pursuant to Condition #003 (a) [40 C.F.R. § 63.1958(c)].

The temperature measuring device must be calibrated annually using the procedure in 40 C.F.R. Part 60, Appendix A-1, Method 2, Section 10.3.

(b) Pursuant to 40 C.F.R. § 63.1961(a)(2),

On a monthly basis, the permittee shall monitor each well for nitrogen or oxygen. The nitrogen and oxygen content are only

**SECTION D. Source Level Requirements**

monitored and recorded. Wells do not need to be adjusted to meet nitrogen or oxygen standards.

(i) The nitrogen level, if monitored, shall be determined by using Method 3C or other Department approved method or an alternative method that was established and approved by the Department pursuant to 40 C.F.R. § 63.1981(d)(2).

(ii) Unless an alternative test method is established as allowed by 40 C.F.R. § 63.1981(d)(2), the oxygen level must be determined by an oxygen meter using Method 3A, 3C, or ASTM D6522-11 (incorporated by reference, see 40 C.F.R. §63.14).

The oxygen level shall be determined by an oxygen meter using Method 3A, 3C, or ASTM D6522-11 (if sample location is prior to combustion) except that:

- (A) The span must be set between 10 and 12 percent oxygen;
- (B) A data recorder is not required;
- (C) Only two calibration gases are required, a zero and span;
- (D) A calibration error check is not required;
- (E) The allowable sample bias, zero drift, and calibration drift are ± 10 percent.

(iii) A portable gas composition analyzer may be used to monitor the oxygen levels provided:

- (A) The analyzer is calibrated; and
- (B) The analyzer meets all quality assurance and quality control requirements for Method 3A or ASTM D6522-11 (incorporated by reference, see 40 C.F.R. §63.14).

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

(a) The permittee shall annually calculate and record the VOC emissions from the Fairless Landfill, using Department approved methods.

(b) The permittee shall monitor and record the average and maximum flow rate of landfill gas (scfm) collected from the Fairless landfill on a monthly basis.

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

[Additional authority for this permit condition is also derived from 40 C.F.R. §§ 60.768(a); 60.768(b)(1); 60.768(d), 60.768(e), 63.1983(a), 63.1983(b)(1), 63.1983(d) and 63.1983(e)]

(a) Pursuant to 40 C.F.R. §§ 60.768(a) and 63.1983(a), The permittee shall keep for at least 5 years, up-to-date, readily accessible, on-site records of the design report that triggered 40 C.F.R. §§ 60.762(b) and 63.1959(a), the current amount of solid waste in-place, and the year-by-year waste acceptance rate. Off-site records may be maintained if they are retrievable within 4 hours. Either paper copy or electronic formats are acceptable.

(b) Pursuant to 40 C.F.R. §§ 60.768(b) and 63.1983(b) The permittee shall keep up-to-date, readily accessible records for the life of the control equipment of the data listed below, as measured during the initial compliance determination. Records of subsequent monitoring shall be maintained for a minimum of 5 years. Records of the control device vendor specifications shall be maintained until removal.

- (i) maximum expected gas generation flow rate calculated in accordance with 40 C.F.R. § 63.1960 (a)(1) [Condition

**SECTION D. Source Level Requirements**

#025], unless another method is approved by the Department; and

(ii) density of wells, horizontal collectors, surface collectors, or other gas extraction devices determined using the procedures specified in 40 C.F.R. §§ 60.769(a)(1) and 63.1962(a)(1)

(c) Pursuant to 40 C.F.R. §§ 60.768(d) and 63.1983(d),

The permittee shall keep for the life of the collection system an up-to-date, readily accessible plot map showing each existing and planned collector in the system and providing a unique identification location label for each collector. The permittee shall also keep:

(i) up-to-date, readily accessible records of the installation date and location of all newly installed collectors; and

(ii) readily accessible documentation of the nature, date of deposition, amount and location of asbestos-containing or nondegradable waste excluded from collection, as well as any nonproductive areas excluded from production.

(d) Pursuant to 40 C.F.R. §§ 60.768(e)(1) and 63.1983(e)(3),

The permittee shall keep, for at least 5 years, up-to-date, readily accessible records of all collection and control system exceedances of the operational standards in Conditions #003 through #005 for the landfill, the reading in the subsequent month, whether or not the second reading is an exceedance, and the location of each exceedance.

(e) Pursuant to 40 C.F.R. §§ 60.768 (e)(2) and 63.1983(e)(2),

The permittee shall also keep records of each wellhead temperature monitoring value above 145°F; each instance of temperature greater than or equal to 170°F measured at any point in a well combined with CO concentrations equal to or greater than 1,000 ppmv; each wellhead nitrogen level of 20 percent or higher; and each wellhead oxygen level at or above 5 percent, pursuant to the monitoring in Condition #014.

(f) Pursuant to 40 C.F.R. § 63.1983(e)(3)-(5),

The permittee shall keep:

(i) For any root cause analysis for which corrective actions are required in 40 C.F.R. §§ 63.1960(a)(3)(i) or 63.1960(a)(4)(i)(A) [Conditions #003(b)(i) and #005(b)(i)], 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.

(ii) For any root cause analysis for which corrective actions are required in 40 C.F.R. §§ 63.1960(a)(3)(i)(B) or 63.1960(a)(4)(i)(B) [Conditions #03(b)(ii) and #005(b)(ii)], 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.

(iii) For any root cause analysis for which corrective actions are required in 40 C.F.R. §§ 63.1960(a)(3)(i)(C) or 63.1960(a)(4)(i)(C) [Conditions #003(b)(iii) and #005(b)(iii)], 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 regulatory agency.

017 [25 Pa. Code §127.441]

Operating permit terms and conditions.

[Authority for this permit condition is also from 40 C.F.R. §§ 60.678(b)(5) and 63.1983(b)(5)]

Where an owner or operator subject to the provisions of 40 C.F.R. Part 60 Subpart XXX seeks to demonstrate compliance with 40 C.F.R. §§ 60.762(b)(2)(iii) and 63.1959(b)(2)(ii) through use of a landfill gas treatment system, the owner or operator shall keep the following records for 5 years:

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

(ii) Site-specific treatment monitoring plan, to include:

**SECTION D. Source Level Requirements**

(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) Identification of whom is responsible (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.

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

[Additional authority for this permit condition is also derived from 40 C.F.R. §§ 60.767(e) and 63.1981(f).]

The permittee shall submit a closure report to the Department within 30 days of waste acceptance cessation. The Department may request additional information as may be necessary to verify that permanent closure has taken place in accordance with the requirements of 40 C.F.R. § 258.60. If a closure report has been submitted to the Department, no additional wastes may be placed into the landfill without filing a notification of modification as described in 40 C.F.R. §§ 60.7(a)(4) and 63.12(a)(2).

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

[Additional authority for this permit condition is also derived from 40 C.F.R. §§ 60.767(f) and 63.1981(g).]

The permittee shall submit an equipment removal report to the Department 30 days prior to removal or cessation of operation of the control equipment. The equipment removal report shall contain all of the following items:

- (a) a copy of the closure report submitted pursuant to Condition #018 [40 C.F.R. §§ 60.767(e) and 63.1981(f)].
- (b) a copy of the initial performance test report demonstrating that the 15 year minimum control period has expired, unless a report of the performance test has been submitted to the EPA via the EPA's CDX, or information that demonstrates that the GCCS will be unable to operate for 15 years due to declining gas flows. In the equipment removal report, the process units(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 EPA's CDX; and
- (c) dated copies of three successive NMOC emission rate reports demonstrating that the landfill is no longer producing 34 Megagrams per year or greater of NMOC per year, unless the NMOC emission rate reports have been submitted to the EPA via the EPA's CDX. 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.
- (d) The Administrator may request such additional information as may be necessary to verify that all of the conditions for removal in 40 C.F.R. §§ 60.762(b)(2)(v) and 63.1957(b) have been met.

020 [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. § 63.1981(h).]

The owner or operator of a landfill seeking to comply with 40 C.F.R. §§ 60.762(b)(2) and 63.1959(b)(2) using an active collection system designed in accordance with §60.762(b)(2)(ii) must submit to the Administrator, following the procedure specified in 40 C.F.R. §§ 60.767(i)(2) and 63.1959(b)(2)(ii) [Condition #021], Semi-annual reports of the recorded information in paragraphs (a) through (h).

(a) value and length of time for exceedance of applicable parameters monitored, that is the gauge pressure in the gas collection header pursuant to Condition #012 and the temperature of the landfill gas pursuant to Condition #014;

Note: Monitored nitrogen or oxygen concentrations must be maintained and made available to the Department upon request. There are no deviations from operational standards or corrective actions for nitrogen or oxygen.

(b) description and duration of all periods when landfill gas was diverted from the control device or treatment system through a bypass line or the indication of bypass flow;

(c) description and duration of all periods when the control device or treatment system was not operating and the length of time the control device or treatment system was not operating;

(d) all periods when the landfill gas collection system was not operating;

(e) the location of each exceedance of the 500 ppm methane concentration at the surface of the landfill and the concentration recorded at each location for which an exceedance was recorded in the previous month. For location an instrument with latitude and longitude coordinates with an accuracy of at least 4 meters must be used. The coordinates must be in decimal degrees with at least five decimal places;

(f) the date of installation and the location of each well or collection system expansion added in response to an exceedance or included as part of the gas collection and control system plan;

(g) For any corrective action analysis for which corrective actions are required for exceedances of wellhead pressure or temperature and that take more than 60 days to correct, 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 temperature exceedance and for action(s) not already completed, a schedule for implementation, including proposed commencement and completion dates;

(h) exceedances of enclosed flare operational parameters, recorded pursuant to Section E. Group Name:Flares Condition #013.

021 [25 Pa. Code §127.441]

Operating permit terms and conditions.

[Additional authority for this permit condition is from 40 C.F.R. §§ 60.767(i)(2) and 63.1981(l)(2)].

Each owner or operator required to submit reports pursuant to 40 C.F.R. Part 60, Subpart XXX and Part 63, Subpart AAAA must submit reports to the EPA via the CEDRI. (CEDRI can be accessed through the EPA's CDX.) The owner or operator 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 Web site (<https://www3.epa.gov/ttn/chief/cedri/index.html>). If the reporting form specific to this subpart is not available in CEDRI at the time that the report is due, the owner or operator must submit the report to the Administrator at the appropriate address listed in 40 C.F.R. §60.4 [Section C Condition #019]. Once the form has been available in CEDRI for 90 calendar days, the owner or operator 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.

022 [25 Pa. Code §127.441]

Operating permit terms and conditions.

**SECTION D. Source Level Requirements**

[Authority for this permit condition is from 40 C.F.R. §§ 60.767(j).and 63.1981(j)]

The permittee must submit the following reports to the Administrator

(1) For corrective action that is required according to C.F.R. §§ 63.1960(a)(3)(i) or 63.1960(a)(4)(i)(C) [Conditions #003 (b) and #005 (b)] and is expected to take longer than 120 days after the initial exceedance to complete, the root cause analysis, corrective action analysis, and corresponding implementation timeline as soon as practicable but no later than 75 days after the first measurement of positive pressure or temperature monitoring value of in excess of 62.8° C (145° F). The Administrator must approve the plan for corrective action and the corresponding timeline.

(2) For corrective action that is required according to C.F.R. §§ 63.1960(a)(3)(i) or 63.1960(a)(4)(i)(C) [Conditions #003 (b)and #005 (b)] and is not completed within 60 days after the initial exceedance, a notification as soon as practicable but no later than 75 days after the first measurement of positive pressure or temperature exceedance.

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

[Additional authority for this permit condition is also derived from 40 C.F.R. §§ 60.762(b)(2)(v) and 63.1957(b).]

(a) Consistent with the authority of 40 C.F.R. §§ 60.762(b)(2)(v) and 1957(b), the permittee may cap, remove or decommission the collection and control system provided that all the conditions of the subparts are met:

(i) The landfill (to include all landfill areas and expansions) shall be a closed landfill, which is defined as a landfill in which solid waste is no longer being placed, and in which no additional solid wastes will be placed without first filing a notification of modification as prescribed under 40 C.F.R. §§ 60.7(a)(4) and 63.9(b) A closure report must be submitted to the Administrator as provided in 40 C.F.R. §§ 60.767(e) and 63.1981(f).

(ii) The collection and control system shall have been in operation a minimum of 15 years or the landfill owner or operator demonstrates that the GCCS will be unable to operate for 15 years due to declining gas flow.

(iii) Following the procedures specified in Condition #024 [40 C.F.R. §§ 60.764(b) and 63.1957(b)(3)], the calculated NMOC gas produced by the landfill shall be less than 34 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.

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

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

[Additional authority for this permit condition is also derived from 40 C.F.R. §§ 60.764(b) and 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:

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

MNMOC = mass emission rate of NMOC, megagrams per year

QFLG = 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, QFLG, shall be determined by measuring the total landfill gas flow rate at the common header pipe that leads to the control device using a gas flow measuring device calibrated according to the provision of section 4 of Method 2E of appendix A of 40 C.F.R. Part 60.

**SECTION D. Source Level Requirements**

(b) The average NMOC concentration, CNMOC, shall be determined by collecting and analyzing landfill gas sampled from the common header pipe before the gas moving or condensate removal equipment using the procedures in Method 25 or Method 25C. The sample location on the common header pipe shall be before any condensate removal or other gas refining units. The permittee shall divide the NMOC concentration from Method 25 or Method 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 Department.

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

[Additional authority for this permit condition is also derived from 40 C.F.R. §§ 60.765(a)(1) and 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. §§ 60.765(a)(1)(ii) and 63.1960(a)(1)(ii) shall be used, unless another method has been approved by the Department. The k and Lo kinetic factors should be those referenced in Condition #010. A value of no more than 15 years shall be used for the intended use period of the gas mover equipment. The active life of the landfill is the age of the landfill plus the estimated number of years until closure.

(b) If a collection and control system has been installed at the facility, actual flow data may be used to project the maximum expected gas generation flow rate instead of, or in conjunction with, the equation referenced in paragraph (a) above. If the landfill is still accepting waste, the actual measured flow data will not equal the maximum expected gas generation rate, so calculations using the equation referenced in paragraph (a) 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.

026 [25 Pa. Code §127.441]**Operating permit terms and conditions.**

[Additional authority for this permit condition is also derived from 40 C.F.R. §§ 60.769(b) and (c)(1); and 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 the Department pursuant to 40 C.F.R. §§ 60.767(c)(2)-(3) and 63.1981(d)(2)-(3)

(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.



SECTION D. Source Level Requirements

(b) The 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. The maximum flow rate for new systems must be in accordance with 40 C.F.R. §§ 60.765(a)(1) and 63.1960(a)(1).[Condition #024].

**# 027 [40 CFR Part 61 NESHAPs §40 CFR 61.154]
Subpart M--National Emission Standard for Asbestos
Standard for active waste disposal sites.**

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

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

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

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

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

(ii) Conform to the requirements of 51 cm 36 cm (20"X14") upright format signs specified in 29 C.F.R. 1910.145(d)(4) and this paragraph; and

(iii) Display the following legend in the lower panel with letter sizes and styles of a visibility at least equal to those specified in this paragraph.

LEGEND

NOTATION

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

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

Breathing Asbestos is Hazardous to14 Point Gothic
Your Health

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

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

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

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

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

**SECTION D. Source Level Requirements**

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

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

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

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

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

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

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

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

(v) The date of the receipt.

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

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

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

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

(g) Upon closure, comply with all the provisions of 40 C.F.R. §.151.

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

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

(j) Notify the Administrator in writing at least 45 days prior to excavating or otherwise disturbing any asbestos-containing waste material that has been deposited at a waste disposal site and is covered. If the excavation will begin on a date other

**SECTION D. Source Level Requirements**

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

(1) Scheduled starting and completion dates.

(2) Reason for disturbing the waste.

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

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

(Sections 112 and 301(a) of the Clean Air Act as amended (42 USC 7412, 7601(a))

028 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.1955]

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

What requirements must I meet?

(a) During a period of startup, shutdown, or malfunction, the general duty to minimize emissions requires that the permittee reduce emissions from the affected source to the greatest extent which is consistent with safety and good air pollution control practices. The general duty to minimize emissions during a period of startup, shutdown, or malfunction does not require the permittee to achieve emission levels that would be required by the applicable standard at other times if this is not consistent with safety and good air pollution control practices, nor does it require the owner or operator to make any further efforts to reduce emissions if levels required by the applicable standard have been achieved.

(b) Malfunctions must be corrected as soon as practicable after their occurrence. To the extent that an unexpected event arises during a startup, shutdown, or malfunction, a permittee must comply by minimizing emissions during such a startup, shutdown, and malfunction event consistent with safety and good air pollution control practices.

VII. ADDITIONAL REQUIREMENTS.

029 [25 Pa. Code §127.441]

Operating permit terms and conditions.

[Authority for this condition is derived from 40 C.F.R. §§ 63.1958(e) and 63.1960(e).]

The provisions of 40 C.F.R. Part 63, Subpart AAAA set forth in this permit shall apply at all times including during periods of start-up, shutdown, or malfunction. During periods of startup, shutdown or malfunction, the permittee must comply with the work practice standard in 40 C.F.R. § 63.1958(e) [Condition #009(b)] rather than the operational standards of 40 C.F.R. § 63.1960 [Conditions #003 and #005].

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

**SECTION D. Source Level Requirements**

Source ID: 500

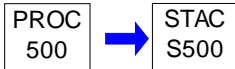
Source Name: EXEMPT EMER GENERATOR PRE-2006 ENGINES

Source Capacity/Throughput:

N/A

Diesel Fuel

Conditions for this source occur in the following groups: ALL ENGINES

**I. RESTRICTIONS.**

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

II. TESTING REQUIREMENTS.

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

III. MONITORING REQUIREMENTS.

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

IV. RECORDKEEPING REQUIREMENTS.**# 001 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.6655]****Subpart ZZZZ - National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines****What records must I keep?**

For all engines, the permittee shall maintain records of:

- (a) The occurrence and duration of each malfunction of operation and the corrective actions taken during periods of malfunction to minimize emissions.
- (b) Any performance tests and performance evaluations
- (c) All maintenance that is performed, including oil changes, filter changes, hose and belt replacements. Maintenance records shall include the engine hour meter reading at the time the maintenance is conducted.

V. REPORTING REQUIREMENTS.

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

VI. WORK PRACTICE REQUIREMENTS.**# 002 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.6603]****Subpart ZZZZ - National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines****What emission limitations, operating limitations, and other requirements must I meet if I own or operate an existing stationary RICE located at an area source of HAP emissions?**

As specified in Table 2d of the RICE MACT Subpart ZZZZ, for each existing stationary CI RICE located at an area source of HAP emissions, the permittee shall:

**SECTION D. Source Level Requirements**

- (a) Change oil and filter every 500 hours of operation or annually, whichever comes first;
- (b) Inspect air cleaner every 1,000 hours of operation or annually, whichever comes first; and
- (c) Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary.

003 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.6625]**Subpart ZZZZ - National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines****What are my monitoring, installation, operation, and maintenance requirements?**

The permittee shall minimize each engine's time spent at idle and minimize each engine's startup time at startup to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes.

004 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.6640]**Subpart ZZZZ - National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines****How do I demonstrate continuous compliance with the emission limitations, operating limitations, and other requirements?**

The permittee has the option of using an oil analysis program, in order to extend the oil change requirement in Condition #002 of this section.

(a) The oil analysis must be performed at the same frequency specified in 40 C.F.R. Part 63 Subpart ZZZZ Table 2d Item 4 (Condition #015 of this section). The analysis program must at a minimum analyze the following three parameters: Total Base Number, viscosity, and percent water content. The condemning limits for these parameters are as follows: Total Base Number is less than 30 percent of the Total Base Number of the oil when new; viscosity of the oil has changed by more than 20 percent from the viscosity of the oil when new; or percent water content (by volume) is greater than 0.5. If all of these condemning limits are not exceeded, the engine owner or operator is not required to change the oil. If any of the limits are exceeded, the engine owner or operator must change the oil within 2 business days of receiving the results of the analysis.

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

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

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

This source consists of the following:

- (1) New Leachate Treatment Plant emergency generator
- Caterpillar 3456, 500 kW
 - Model No. 235-4664
 - 764 hp
 - 2003 model year engine, installed February 1, 2003

- (2) SBR Area emergency generator
- Cummins
 - Serial no. 30372305 & 308128
 - 605 hp
 - 2005 model year engine, installed August 15, 2005

- (3) Scale House emergency generator
- Power Tech 8.1 liter by John Deere, 225 kW

**SECTION D. Source Level Requirements**

- Serial no. RG6081A122825
- 302 hp
- 2000 model year engine, installed in 2001

(4) Old Leachate Treatment Plant emergency generator

- Caterpillar 3406
- Serial No. 4ZR02709
- 536 hp
- 1997 model year engine, installed in 1998

006 [25 Pa. Code §127.441]

Operating permit terms and conditions.

(a) The permittee shall operate these emergency stationary reciprocating internal combustion engines according to the requirements in the most recent version of 40 C.F.R. Section 63.6640(f).

(b) If the permittee does not operate these engines according to the requirements of 40 C.F.R. Section 63.6640(f), the engines will not be considered emergency engines under 40 C.F.R. Part 63 Subpart ZZZZ and must meet all requirements for non-emergency engines.

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

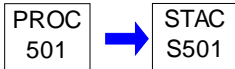
**SECTION D. Source Level Requirements**

Source ID: 501

Source Name: EMER GENERATORS POST-2006 (PRIOR ID 500 IN 09-0210B)

Source Capacity/Throughput: 100.000 Gal/HR DIESEL

Conditions for this source occur in the following groups: ALL ENGINES

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

001 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.4202]
Subpart IIII - Standards of Performance for Stationary Compression Ignition Internal Combustion Engines
What emission standards must I meet for emergency engines if I am a stationary CI internal combustion engine manufa

In accordance with 40 C.F.R. § 60.4202(a)(2) the engines shall comply with exhaust opacity from 40 C.F.R. § 1039.105 for compression-ignition nonroad engines. Opacity shall not exceed the following:

- (1) 20 percent during the acceleration mode;
- (2) 15 percent during the lugging mode; and
- (3) 50 percent during the peaks in either acceleration or lugging modes.

Operation Hours Restriction(s).

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

The permittee shall limit the hours of operation for each engine to 500 hours per year, based on a 12-month rolling sum.

II. TESTING REQUIREMENTS.

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

III. MONITORING REQUIREMENTS.

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

IV. RECORDKEEPING REQUIREMENTS.

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

V. REPORTING REQUIREMENTS.

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

**SECTION D. Source Level Requirements****VI. WORK PRACTICE REQUIREMENTS.****# 003 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.4202]****Subpart IIII - Standards of Performance for Stationary Compression Ignition Internal Combustion Engines****What emission standards must I meet for emergency engines if I am a stationary CI internal combustion engine manufacturer?**

In accordance with 40 C.F.R. §§ 60.4202(a)(2) and 60.4205(b), the 500 kW and 750 kW engines shall comply with the following emergency engine certification emission standards of 40 C.F.R. § 1039 Appendix I (b):

- (1) NMHC + NO_x = 6.4 g/kW-hr
- (2) CO = 3.5 g/kW-hr
- (3) PM = 0.20 g/kW-hr

[500 kW engine complies by being certified to Tier 2; Certificate KCEXL015.AAJ-024; Test Result: NO_x+NMHC- 5.7 g/kW-hr, CO- 0.6 g/kW-hr, PM- 0.13 g/kW-hr]

[750 kW engine complies by being certified to Tier 2; Certificate KCEXL023.AAB-044; Test Result: NO_x+NMHC- 6.0 g/kW-hr, CO- 0.8 g/kW-hr, PM- 0.14 g/kW-hr]

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

This source consists of the following:

- (a) Fairless Compressor Emergency Generator 1 and Emergency Generator 2 - both engines were manufactured by Cummins, Model QSK23-G7 NR2 with a rating of 750 kW generator, 1135 bhp engine, Tier 2 certificate KCEXL023.AAB-044
- (b) GROWS North Compressor Emergency Generator - manufactured by Cummins, Model QSK15-G9 NR2 with a rating of 500 kW generator, 732 bhp engine, Tier 2 certificate KCEXL015.AAJ-024

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

(a) The permittee shall operate these emergency stationary reciprocating internal combustion engines according to the requirements in the most recent version of 40 C.F.R. Section 60.4211(f).

(b) If the permittee does not operate these engines according to the requirements of 40 C.F.R. Section 60.4211(f), the engines will not be considered emergency engines under 40 C.F.R. Part 60 Subpart IIII and must meet all requirements for non-emergency engines.

006 [25 Pa. Code §129.203]**Stationary internal combustion engines.**

The following applies to the 750kW (1135 HP) Fairless Compressor Emergency Generator:

The owner or operator of a stationary internal combustion engine rated at greater than 1,000 horsepower and located in Bucks, Chester, Delaware, Montgomery or Philadelphia County shall comply with this section and 25 Pa. Code § 129.204 (relating to emission accountability).

(a) By October 31 of each year, the permittee shall calculate the difference between the actual emissions from each unit during the period from May 1 through September 30, and the allowable emissions for the same period.

(b) The permittee shall calculate allowable emissions by multiplying the cumulative hours of operations for each unit for the period by the horsepower rating of the unit and by 2.3 grams of NO_x per brake horsepower-hour for diesel fueled engines.

**SECTION D. Source Level Requirements****# 007 [25 Pa. Code §129.204]****Emission accountability.**

The following applies to the 750kW (1135 HP) Fairless Compressor Emergency Generator:

The following is applicable to stationary internal combustion engines greater than 1,000 HP and located in Bucks, Chester, Delaware, Montgomery or Philadelphia County:

- (a) If the affected source(s) has NO_x CEMS, the permittee shall determine actual emissions in accordance with the CEMS data reported to the Department. Any data invalidated under Chapter 139 (relating to sampling and testing) shall be substituted with data calculated using the potential emission rate for the unit or, if approved by the Department in writing, an alternative amount of emissions that is more representative of actual emissions that occurred during the period of invalid data.
- (b) If the permittee is not required to monitor NO_x emissions with a CEMS, one of the following shall be used to determine actual emissions of NO_x:
- (1) The 1-year average emission rate calculated from the most recent permit emission limit compliance demonstration test data for NO_x.
 - (2) The maximum hourly allowable NO_x emission rate contained in the permit or the higher of the following:
 - (i) The highest rate determined by use of the emission factor for the unit class contained in the most up-to-date version of the EPA publication, "AP-42 Compilation of Air Pollution Emission Factors."
 - (ii) The highest rate determined by use of the emission factor for the unit class contained in the most up-to-date version of EPA's "Factor Information Retrieval (FIRE)" data system.
 - (3) CEMS data, if the permittee elects to monitor NO_x emissions with a CEMS. The permittee shall monitor emissions and report the data from the CEMS in accordance with Chapter 139 or Chapter 145 (relating to interstate pollution transport reduction). Any data invalidated under Chapter 139 shall be substituted with data calculated using the potential emission rate for the unit or, if approved by the Department in writing, an alternative amount of emissions that is more representative of actual emissions that occurred during the period of invalid data.
 - (4) An alternate calculation and recordkeeping procedure based upon emissions testing and correlations with operating parameters. The permittee shall demonstrate that the alternate procedure does not underestimate actual emissions throughout the allowable range of operating conditions. In regard to obtaining the Department's approval for an alternate calculation method and recordkeeping procedure for actual emissions, the permittee may request an adjustment to the allowable emissions calculations set forth in §§ 129.201—129.203. An allowable emission adjustment may not overestimate a unit's allowable emissions and must be based upon the parameters and procedures proposed in the alternate calculation method for actual emissions. The alternate calculation and recordkeeping procedures must be approved by the Department, in writing, prior to implementation.

008 [25 Pa. Code §129.204]**Emission accountability.**

The following applies to the total excessive emissions, as calculated for the 750kW (1135 HP) Fairless Compressor Emergency Generator engine by the methods stated in Condition #007:

- (a) The permittee shall surrender to the Department one CAIR NO_x allowance and one CAIR NO_x Ozone Season allowance, as defined in 40 C.F.R. 96.102 and 96.302 (relating to definitions), for each ton of NO_x by which the combined actual emissions exceed the allowable emissions of the units subject to this section at a facility from May 1 through September 30. The surrendered allowances shall be of current year vintage. For the purpose of determining the amount of allowances to surrender, any remaining fraction of a ton equal to or greater than 0.50 ton is deemed to equal 1 ton and any fraction of a ton less than 0.50 ton is deemed to equal zero tons.
- (b) If the combined allowable emissions from units subject to this section at a facility from May 1 through September 30

**SECTION D. Source Level Requirements**

exceed the combined actual emissions from units subject to this section at the facility during the same period, the permittee may deduct the difference or any portion of the difference from the amount of actual emissions from units subject to this section at the permittee's other facilities.

(c) By November of each year, the permittee shall surrender the required NOx allowances to the Department's designated NOx allowance tracking system account and provide to the Department, in writing, the following:

- (1) The serial number of each NOx allowance surrendered.
- (2) The calculations used to determine the quantity of NOx allowances required to be surrendered.

(d) If the permittee fails to comply with subsection (c), the permittee shall by December 31 surrender three NOx allowances of the current or later year vintage for each NOx allowance that was required to be surrendered by November 1 of that year.

(e) The surrender of NOx allowances under subsection (d) does not affect the liability of the permittee for any fine, penalty or assessment, or an obligation to comply with any other remedy for the same violation, under the CAA or the act.

(1) For purposes of determining the number of days of violation, if a facility has excess emissions for the period May 1 through September 30, each day in that period (153 days) constitutes a day in violation unless the permittee demonstrates that a lesser number of days should be considered.

(2) Each ton of excess emissions is a separate violation.

[Note: On July 6, 2011, EPA promulgated the Cross-State Air Pollution Rule (CSAPR) to replace CAIR. The CSAPR provisions of 40 C.F.R. Part 97, Subpart AAAAA (relating to CSAPR NOx Annual Trading Program), replaced the provisions of 40 C.F.R. Part 96, Subpart AA (relating to CAIR NOx Annual Trading Program General Provisions), and remain in effect. On October 26, 2016, EPA promulgated the CSAPR Update to establish the provisions of 40 C.F.R. Part 97, Subpart EEEEE (relating to CSAPR NOx Ozone Season Group 2 Trading Program), to replace the previously-established CAIR NOx Ozone Season Trading Program and CSAPR NOx Ozone Season Group 1 Trading Program for certain states, including Pennsylvania, beginning with the 2017 ozone season. On April 30, 2021, EPA promulgated the Revised CSAPR Update to establish the provisions of 40 C.F.R. Part 97, Subpart GGGGG (relating to CSAPR NOx Ozone Season Group 3 Trading Program), to replace the provisions of 40 C.F.R. Part 97, Subpart EEEEE, for certain states, including Pennsylvania, beginning with the 2021 ozone season (though DEP will accept CSAPR NOx Ozone Season Group 2 allowances of current year vintage from other states, if available). Accordingly, the permittee shall surrender CSAPR NOx Annual allowances and either CSAPR NOx Ozone Season Group 2 allowances or CSAPR NOx Ozone Season Group 3 allowances, as defined in 40 C.F.R. §§ 97.402, 97.802, and 97.1002, respectively, instead of the CAIR NOx allowances and CAIR NOx Ozone Season allowances indicated in 25 Pa. Code § 129.204(c), as the latter are no longer available.]

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

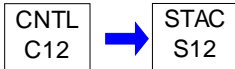
**SECTION D. Source Level Requirements**

Source ID: C12

Source Name: ENCLOSED ULE FLARE 1

Source Capacity/Throughput: 360.000 MCF/HR LANDFILL GAS

Conditions for this source occur in the following groups: ENCLOSED FLARES

**I. RESTRICTIONS.**

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

II. TESTING REQUIREMENTS.

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

III. MONITORING REQUIREMENTS.

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

IV. RECORDKEEPING REQUIREMENTS.

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

V. REPORTING REQUIREMENTS.

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

VI. WORK PRACTICE REQUIREMENTS.

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

VII. ADDITIONAL REQUIREMENTS.

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

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

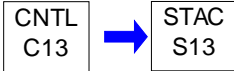
**SECTION D. Source Level Requirements**

Source ID: C13

Source Name: ENCLOSED ULE FLARE 2

Source Capacity/Throughput: 360.000 MCF/HR LANDFILL GAS

Conditions for this source occur in the following groups: ENCLOSED FLARES

**I. RESTRICTIONS.**

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

II. TESTING REQUIREMENTS.

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

III. MONITORING REQUIREMENTS.

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

IV. RECORDKEEPING REQUIREMENTS.

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

V. REPORTING REQUIREMENTS.

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

VI. WORK PRACTICE REQUIREMENTS.

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

VII. ADDITIONAL REQUIREMENTS.

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

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

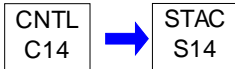
**SECTION D. Source Level Requirements**

Source ID: C14

Source Name: ENCLOSED ULE FLARE 3

Source Capacity/Throughput: 360.000 MCF/HR LANDFILL GAS

Conditions for this source occur in the following groups: ENCLOSED FLARES

**I. RESTRICTIONS.**

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

II. TESTING REQUIREMENTS.

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

III. MONITORING REQUIREMENTS.

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

IV. RECORDKEEPING REQUIREMENTS.

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

V. REPORTING REQUIREMENTS.

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

VI. WORK PRACTICE REQUIREMENTS.

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

VII. ADDITIONAL REQUIREMENTS.

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

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

**SECTION E. Source Group Restrictions.**

Group Name: ALL ENGINES

Group Description: Conditions common to all engines in permit

Sources included in this group

ID	Name
500	EXEMPT EMER GENERATOR PRE-2006 ENGINES
501	EMER GENERATORS POST-2006 (PRIOR ID 500 IN 09-0210B)

I. RESTRICTIONS.**Emission Restriction(s).****# 001 [25 Pa. Code §123.21]****General**

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

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

All exempt emergency engines in this shall not exceed the following combined NO_x emission limits:

- a. 100 lbs per hour,
- b. 1000 lbs per day,
- c. 2.75 tons per ozone season (May 1 through September 30), and
- d. 6.6 tons per year, on a 12-month rolling basis.

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

[Additional authority for this permit condition is from 40 C.F.R. §§ 60.4207(b), 63.6604 and 1090.305]

(a) Only diesel fuel oil shall be used in the operation of any of these generator engines. Diesel shall meet the following:

- (1) Maximum sulfur content = 15 ppm; and
- (2) Minimum cetane index = 40 or Maximum aromatic content = 35 % by volume

[Fuel supplier certifications may be used to demonstrate compliance with these standards.]

II. TESTING REQUIREMENTS.

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

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

The permittee shall monitor:

- (a) The hours of operation per generator, on a monthly and 12-month rolling basis for the following:
 - (1) Emergency operation including the nature of the emergency; and
 - (2) Non-emergency operation as allowed under Condition #008, including reason for operation.
- (b) The permittee shall maintain records of total combined NO_x emissions in units of:
 - (1) lbs/hr
 - (2) lbs/day, when operating,
 - (3) tons per ozone season, and

**SECTION E. Source Group Restrictions.**

(4) tons per year, on a monthly and 12-month rolling basis

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

The permittee shall maintain the following records:

- (a) The hours of operation per generator, on a monthly and 12-month rolling basis for the following:
 - (1) Emergency operation including the nature of the emergency; and
 - (2) Non-emergency operation as allowed under Condition #008, including reason for operation.
- (b) The permittee shall maintain records of total combined NOx emissions in units of:
 - (1) lbs/hr
 - (2) lbs/day, when operating,
 - (3) tons per ozone season, and
 - (4) tons per year, on a monthly and 12-month rolling basis

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.**

(a) All engines shall be operated and maintained in a manner consistent with good operating and maintenance practices, and in accordance with manufacturer's specifications.

(b) The permittee shall not modify or change the emission-related settings on these engines in a way that is not permitted by the manufacturer.

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

All engines in this group shall be equipped with a non-resettable hour meter.

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

[Additional authority from 40 C.F.R. §§ 60.4211(f) and 63.6640(f)]

For an engine to be classified as an emergency, it may be operated only according to the following:

- (a) The engine may be operated for an unlimited time during an emergency.
- (b) The engine may be operated for up to 100 hr/yr for recommended maintenance and readiness checks.
- (c) The engine may operate for 50 hr/yr for non-emergency use as long as the following conditions are met:
 - (1) The operation is counted toward the 100 hr/yr limit in paragraph (b).
 - (2) The engine is not operated for peak shaving or other revenue generating financial arrangement except when all the following conditions are met:
 - (i) The engine is dispatched by the local transmission and distribution authority.
 - (ii) The dispatched operation is intended to prevent voltage collapse or line overload that could lead to interruption of the local or regional electrical supply.
 - (iii) The dispatch follows the reliability, emergency or similar protocols that follow specific NERC, utility commission, state or regional standards or guidelines

**SECTION E. Source Group Restrictions.**

(iv) The engine is operated to power only the facility itself or support the local transmissions and distribution system.

(v) The facility shall identify and record entity that dispatched the engine and under what standard or guidelines was it dispatched. The local transmission and distribution authority may maintain these records on the behalf of the facility.

VII. ADDITIONAL REQUIREMENTS.

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

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

**SECTION E. Source Group Restrictions.**

Group Name: ENCLOSED FLARES

Group Description: Enclosed ULE flares

Sources included in this group

ID	Name
C12	ENCLOSED ULE FLARE 1
C13	ENCLOSED ULE FLARE 2
C14	ENCLOSED ULE FLARE 3

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. §§ 60.762(b)(2)(iii)(B) and 63.1959(b)(2)(iii)(B)]

Each flare shall be designed and operated to either reduce nonmethane organic compounds (NMOC) as hexane by 98 weight percent or reduce the outlet NMOC concentration to less than 20 ppmv, dry basis has hexane @ 3% oxygen.

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

The particulate matter (PM) emissions from each flare shall not exceed 0.02 gr/dscf.

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

Each enclosed flare shall comply with the following emissions limits:

VOC (as hexane):	1.63 lb/hr	7.14 tpy
NOx, 0.025 lb/MMBtu:	4.54 lb/hr	19.90 tpy
CO, 0.06 lb/MMBtu:	10.9 lb/hr	47.76 tpy
SO ₂ :	18.22 lb/hr	79.81 tpy
PM, PM-10, PM-2.5:	2.70 lb/hr	11.83 tpy (filterable and condensable)

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

(a) Each enclosed flare shall burn on-site landfill gas generated from GROWS, GROWS North, and Fairless Landfills only, except when auxiliary fuel is used during startup, restart or for augmentation as permitted in Condition #005.

(b) The enclosed flares shall be used as the primary control of landfill gas from the three landfill areas at all times, except when the gas is being accepted by an end user. On an interim basis, as in the case of maintenance on the ultra-low emissions flares, landfill gas may be sent to the Back-Up Enclosed Flare (Source ID C05) subject to the limitations and conditions in TVOP 09-00007.

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

The facility shall only use propane to augment the landfill gas to these flares.

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

When the flares are combusting LFG of insufficient heat content to operate the flares properly, up to 275 standard cubic feet per minute of propane per flare as averaged daily, may be added to the feed upstream of the static mixer to augment the Btu content of the GROWS LFG. The augmentation of the gas to the flares may be done when any one of the following conditions are present:

**SECTION E. Source Group Restrictions.**

- (a) The methane content of the GROWS LFG is less than 48%
- (b) The net heating value of the LFG is less than 460 Btu/cf
- (c) The flare(s), not due to any maintenance or repairable condition, cannot maintain a proper flame and repeatedly shutdown.

Throughput Restriction(s).**# 007 [25 Pa. Code §127.441]****Operating permit terms and conditions.**

The landfill gas flow through each flare shall be limited to less than 5,000 scfm.

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

(a) The permittee shall perform stack tests on ULE flares in this group according to the following:

(1) The permittee shall follow one of these options:

(A) All ULE flares in this group shall be tested every five (5) years, where five (5) calendar years is defined as beginning with the calendar year the latest stack test was performed and ending on December 31, five (5) years later; or

(B) One ULE shall be tested every five (5) years, where five (5) calendar years is defined as beginning with the calendar year the latest stack test was performed and ending on December 31, five (5) years later.

(2) No one ULE flare shall be tested repeatedly for each consecutive five (5) year period. The permittee must alternate between ULE flares for stack tests.

(3) Each ULE flare must be tested at least once in the 15-year period (three 5-year periods).

(4) If the permittee fails to comply with the requirements of 40 C.F.R. §§ 60.766(b) and 63.1961(b) or any conditions for the flares in this source group, all ULE flares (Source IDs C13, C14, C15) shall be subject to stack testing and for all subsequent stack tests, all ULE flares will need to be tested in the same 5-year period. DEP reserves the right to require testing of all flares in this source group every five (5) years, where five (5) calendar years is defined as beginning with the calendar year the latest stack test was performed and ending on December 31, five (5) years later.

(b) In accordance with 25 Pa. Code § 139.11(1), 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. Refer to PA DEP Source Testing Program website online for further information related to source testing including Source Testing FAQ and the PA DEP Source Testing Manual.

(c) Source testing shall be performed for the following pollutants: NO_x, CO, VOC (as hexane), SO₂, and PM (filterable and condensable), and expressed in units of lb/MMBtu and lb/hr for NO_x and CO, and lb/hr for all other pollutants. Tests shall be conducted in accordance with the provisions of provisions of 40 C.F.R. § 60.764, Method 7E, Method 10, Method 6C, Method 25 or 25A in conjunction with Method 18, Method 5 or 202 and 25 Pa. Code Chapter 139. Tests shall also be conducted in accordance with the provisions of the current version of the DEP Source Testing Manual and the EPA Clean Air Act National Stack Testing Guidance.

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

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

**SECTION E. Source Group Restrictions.**

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

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

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

(a) The permittee shall email 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 (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.

Southeast Region
RA-EPSEstacktesting@pa.gov

Central Office
RA-EPstacktesting@pa.gov

(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 (PF ID): 721611. 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. Permit Number 09-00210
- b. Applicable federal subpart(s): 40 C.F.R. Part 63 Subpart AAAAA
- c. Special purpose(s) (Consent Order, RFD, RACT, Tier II, etc.)

(c) 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".

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

(a) The permittee shall calculate the NMOC destruction efficiency of each flare or show compliance with the 20 ppm_v as hexane emissions limit using the results of the most recent acceptable performance test according to the requirements in 40 C.F.R. 60.764(d) including:

- (1) Using EPA Test Methods 25 or 25C (inlet only) for VOC;
- (2) using EPA Test Methods 3,3A, or 3C for the oxygen concentration to correct the NMOC to hexane to 3%; and
- (4) use Equation 4 from 40 C.F.R. § 60.764(d):

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

Where :

NMOC_{in} = Mass of NMOC entering flare

**SECTION E. Source Group Restrictions.**

NMOCout = Mass of NMOC exiting flare

(b) In cases where the outlet concentration is less than 50 ppm NMOC as carbon (8 ppm NMOC as hexane), Method 25A should be used in place of Method 25. Method 18 may be used in conjunction with Method 25A on a limited basis (compound specific, e.g., methane) or Method 3C may be used to determine methane. The methane as carbon should be subtracted from the Method 25A total hydrocarbon value as carbon to give NMOC concentration as carbon. The permittee must divide the NMOC as carbon concentration by 6 to convert to NMOC as hexane.

(c) Alternative methods of compliance approved by the Administrator may be used as allowed under 40 C.F.R. § 60.767(c)(2).

[Compliance with this condition assures compliance with 40 C.F.R. § 63.1959(d).]

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

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

(b) The permittee shall calculate the VOC, NO_x, CO, SO₂, PM, PM₁₀, and PM_{2.5} emissions from each enclosed flare on a monthly and 12-month rolling basis. Emission factors from the plan approval application shall be used for calculation purposes until factors have been established from performance testing.

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

The permittee shall monitor the methane (CH₄) content of the landfill gas to each flare at the minimum of once daily during the operation of the flare.

(a) The monitoring shall be performed with a field meter, maintained as specified in Condition #021 of this section.

(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.

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

(a) The permittee shall monitor the flowrate of the propane for augmentation at each flare once every hour when augmentation is used.

(b) The permittee shall monitor the amount of propane used on a daily basis when augmentation is used.

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

[Additional authority from 40 C.F.R. § 63.1961(b)]

The permittee shall record the following for each enclosed flare:

(a) Hours of operation, on a monthly and 12-month rolling basis.

(b) Gas flow rate, every 15 minutes, in scfm.

**SECTION E. Source Group Restrictions.**

- (c) Average CH₄ content on a monthly basis.
- (d) The field calibration check for the meter used to measure the methane content
- (e) The initial temperature set point of the flare and any change afterwards.
- (f) Maintenance performed on the flares.

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

[Additional authority for this permit condition is also derived from 40 C.F.R. §§ 60.768(b)(2), (b)(5), (c)(1)(i), (c)(2), (c)(5), and (i); and 63.1983(b)(2), (b)(5), (c)(1)(i), (c)(2), (c)(5), and (h)(2)(i)]

The permittee shall maintain records of the following:

- (a) The average temperature measured at least every 15 minutes and averaged over the same time period of the performance test.
- (b) The percent reduction of NMOC, determined as specified in 40 C.F.R. §§ 60.762(b)(2)(iii)(B) and 63.1959(b)(2)(iii)(B), achieved by the control device.
- (c) Bypass records. Records of the flow of landfill gas to, and bypass of, the treatment system.
- (d) Except as provided in 40 C.F.R. §§ 60.767(c)(2) and 63.1983(c)(2), each owner or operator of a controlled landfill subject to the provisions of this subpart must keep for 5 years up-to-date, readily accessible continuous records of the equipment operating parameters specified to be monitored in 40 C.F.R. § 63.1961 as well as up-to-date, readily accessible records for periods of operation during which the parameter boundaries established during the most recent performance test are exceeded.
 - (1) The following constitute exceedances that must be recorded and reported under 40 C.F.R. § 60.767(g):
 - (i) For enclosed combustors, all 3-hour periods of operation during which the average temperature was more than 28 degrees Celsius (82 degrees Fahrenheit) below the average combustion temperature during the most recent performance test at which compliance with 40 C.F.R. § 60.762(b)(2)(iii) was determined.
 - (2) Each owner or operator subject to the provisions of this subpart 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 40 C.F.R. § 60.766.
 - (3) Each owner or operator of a landfill seeking to comply with 40 C.F.R. § 60.762(b)(2) using an active collection system designed in accordance with 40 C.F.R. § 60.762(b)(2)(ii) must keep records of periods when the collection system or control device is not operating.
 - (e) Any records required to be maintained by this subpart that are submitted electronically via the EPA's CDX may be maintained in electronic format.

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

The facility shall monitor and record the landfill gas flow rate through each ULE flare as follows:

- (a) Hourly- average of all 15-minute readings within a given hour
- (b) Daily - average of all hourly readings within a 24 hour day as defined in 25 Pa Code § 121.1

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

**SECTION E. Source Group Restrictions.**

The permittee shall keep the following records for propane augmentation of GROWS landfill gas for each flare:

- (a) dates propane is used;
- (b) flowrate, in scfm, of propane averaged daily; and
- (c) total amount of propane used on a daily, monthly, and 12-month rolling sum basis.

018 [25 Pa. Code §127.441]**Operating permit terms and conditions.**

The facility shall calculate and record the emissions from each flare when using propane augmentation on a monthly and 12-month rolling basis using the following:

a. The LFG flow emissions shall be calculated using the emissions factors from the most recent stack test or, if no stack test results are available, the emissions factors from the plan approval application;

b. The emissions from the propane shall be calculated using the following emissions factors from EPA AP-42 Chapter 13.5 for industrial flares and the EPA's A National Methodology and Emission Inventory for Residential Fuel for SO_x emissions factor, which have been apportioned for propane:

- 1. NO_x- 0.0136 lb/MMBtu
- 2. SO_x - 0.0011 lb/MMBtu
- 3. CO - 0.0740 lb/MMBtu
- 4. VOC - 0.0006 lb/MMBtu

c. The LFG flow emissions and the propane emissions shall be combined for the total emissions from each flare.

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

[Additional authority for this permit condition is also derived from 40 C.F.R. § 60.767(h) and (i). Reporting Requirements.]

(a) Initial performance test report. Each owner or operator seeking to comply with 40 C.F.R. § 60.762(b)(2)(iii) must include the following information with the initial performance test report required under 40 C.F.R. § 60.8:

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

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

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

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

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

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

(b) Electronic reporting. The owner or operator must submit reports electronically according to paragraphs (1) and (2) below:

(1) Within 60 days after the date of completing each performance test (as defined in 40 C.F.R. § 60.8), the owner or operator must submit the results of each performance test according to the following procedures:

**SECTION E. Source Group Restrictions.**

(i) For data collected using test methods supported by the EPA's Electronic Reporting Tool (ERT) as listed on the EPA's ERT Web site (https://www3.epa.gov/ttn/chief/ert/ert_info.html) at the time of the test, you must submit the results of the performance test to the EPA via the Compliance and Emissions Data Reporting Interface (CEDRI). CEDRI can be accessed through the EPA's Central Data Exchange (CDX) (<https://cdx.epa.gov/>). Performance test data must be submitted in a file format generated through the use of the EPA's ERT or an alternative file format consistent with the extensible markup language (XML) schema listed on the EPA's ERT Web site, once the XML schema is available. If you claim that some of the performance test information being submitted is confidential business information (CBI), you must submit a complete file 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 Web site, including information claimed to be CBI, on a compact disc, flash drive or other commonly used electronic storage media to the EPA. The electronic media must be clearly marked as CBI and mailed 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 ERT or alternate file with the CBI omitted must be submitted to the EPA via the EPA's CDX as described earlier in this paragraph.

(ii) For data collected using test methods that are not supported by the EPA's ERT as listed on the EPA's ERT Web site at the time of the test, you must submit the results of the performance test to the Administrator at the appropriate address listed in 40 C.F.R. § 60.4.

(2) Each owner or operator required to submit reports following the procedure specified in this paragraph must submit reports to the EPA via the CEDRI. (CEDRI can be accessed through the EPA's CDX.) The owner or operator 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 Web site (<https://www3.epa.gov/ttn/chief/cedri/index.html>). If the reporting form specific to this subpart is not available in CEDRI at the time that the report is due, the owner or operator must submit the report to the Administrator at the appropriate address listed in 40 C.F.R. § 60.4. Once the form has been available in CEDRI for 90 calendar days, the owner or operator 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.

VI. WORK PRACTICE REQUIREMENTS.**# 020 [25 Pa. Code §127.441]****Operating permit terms and conditions.**

The enclosed flares shall meet the following criteria:

- (a) Each flare shall be equipped with an automatic pilot ignition source using an auxiliary fuel (e.g. propane or natural gas);
- (b) Each flare shall be operated with a flame present at all times. The enclosed flare shall be equipped with an automatic shut-off mechanism designed to immediately stop the flow of gases when a flame-out occurs. During the restart or start-up, there should be sufficient flow of auxiliary fuel to the burners such that unburned landfill gases are not emitted to the atmosphere.
- (c) The temperature sensor associated with the continuous temperature monitor shall be positioned so that it will indicate the temperature of the gases.
- (d) In the event that a flare is operating at less than 1500°F, or other minimum temperature established by a stack test, for a 3 hour period of operation based on rolling hourly data taken over the 3-hour period, it should be turned off as soon as practical after discovery. The cause should be investigated and corrected before the flare is restarted.

021 [25 Pa. Code §127.441]**Operating permit terms and conditions.**

The field meter, used for monitoring methane content of the landfill gas to the flares, 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.

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

[Additional authority for this permit condition is also derived from 40 C.F.R. § 60.762 - Standards for air emissions from

**SECTION E. Source Group Restrictions.**

municipal solid waste landfills.]

Each flare must be operated within the parameter ranges established during the initial or most recent performance test. The operating parameters to be monitored are specified in 40 C.F.R. § 60.766.

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

The following conditions apply to each enclosed flare:

- (a) The enclosed flares shall be designed such that there are no visible flames during normal operations.
- (b) The enclosed flares shall be operated with no visible emissions, except for periods not to exceed a total of five minutes during any two consecutive hours.
- (c) Each enclosed flare shall maintain, for each 3-hour period of operation based on rolling hourly data, an average combustion temperature no more than 28°C (82°F) below the average combustion temperature during the most recent performance test in which compliance with the destruction/removal requirement was demonstrated. If there has been no performance test, then a minimum temperature of 1500°F will be necessary.
- (d) The enclosed flares may be operated at a lower temperature provided that the company has demonstrated, by a stack test that the flares will achieve the 98% destruction/removal efficiency or 20 ppm_{dv}, measured as hexane and corrected to 3% oxygen, at the lower temperature and complies with all the emission limits established in the plan approval. If compliance has been demonstrated at the lower temperature, the owner or operator of the landfill should submit a plan approval application to make the lower operating temperature enforceable.

If the MSW landfill has an operating permit, then a minor operating permit modification, which complies with 25 Pa. Code Section 127.462, should be submitted. Operation at the lower temperature cannot occur until approved by DEP. Under no circumstance will DEP approve an operating temperature less than 1200°F.

- (e) The flue gas temperature of each enclosed flare should be measured and recorded in the combustion zone as per the manufacturer's specifications based on the flow into the flare. The temperature in the combustion zone should be used to determine compliance with the minimum temperature requirement. The temperature monitoring device should meet the 40 C.F.R. Section 60.756(b) requirements.

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

[Additional authority for this permit condition is also derived from 40 C.F.R. § 60.763(f). Operational standards for collection and control systems.]

The permittee shall operate the flares at all times when the collected gas is routed to the system.

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

[Additional authority for this permit condition is also derived from 40 C.F.R. § 60.766(b). Monitoring of Operations.]

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

- (1) A temperature monitoring device equipped with a continuous recorder and having a minimum accuracy of ±1 percent of the temperature being measured expressed in degrees Celsius or ±0.5 degrees Celsius, whichever is greater.
- (2) A device that records flow to the control device and bypass of the control device (if applicable). The owner or operator must:
 - (i) Install, calibrate, and maintain a gas flow rate measuring device that must record the flow to the control device at

**SECTION E. Source Group Restrictions.**

least every 15 minutes; or

(ii) Secure the bypass line valve in the closed position with a car-seal or a lock-and-key type configuration. A visual inspection of the seal or closure mechanism 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.

026 [25 Pa. Code §127.441]**Operating permit terms and conditions.**

[Additional authority for this permit condition is also derived from 40 C.F.R. § 60.769(c). Specifications for active collection systems.]

Each owner or operator seeking to comply with 40 C.F.R. § 60.762(b)(2)(iii) must convey the landfill gas to a control system in compliance with 40 C.F.R. § 60.762(b)(2)(iii) through the collection header pipe(s). The gas mover equipment must be sized to handle the maximum gas generation flow rate expected over the intended use period of the gas moving equipment using the following procedures:

(1) For existing collection systems, the flow data must be used to project the maximum flow rate. If no flow data exists, the procedures in paragraph (2) of this condition must be used.

(2) For new collection systems, the maximum flow rate must be in accordance with 40 C.F.R. § 60.765(a)(1).

027 [25 Pa. Code §127.441]**Operating permit terms and conditions.**

[Additional authority under 40 C.F.R. § 60.762(b)(2)(iv)]

The flares shall comply with the requirements for combustors used as controls under 40 C.F.R. Part 63 Subpart AAAA. As allowed under 40 C.F.R. § 60.762(b)(2)(iv), the facility may opt-in to comply with 40 C.F.R. §§ 63.1958, 63.1960 and 63.1961 instead of 40 C.F.R. §§ 60.763, 60.765 and 60.766. Once the facility complies with requirements under the parts 40 C.F.R. Part 63 Subpart AAAA substituted for the allowed parts of 40 C.F.R. Part 60 Subpart XXX, the facility cannot revert to the conditions under Subpart XXX.

028 [25 Pa. Code §127.441]**Operating permit terms and conditions.**

The facility shall take the following actions for landfill gas (LFG) flow rates greater than 4,900 scfm:

(A) An exceedance period is defined as a continuous period during which the LFG flow rate of a flare exceeds the trigger value of 4,900 scfm for more than 25% of hourly averages in a 24 hour day, as defined in 25 Pa Code § 121.1. The exceedance period is considered ended once readings are equal to or less than 4,900 scfm for more than 75% of hourly averages in a 24 hour day.

(B) If an exceedance period occurs for a 24 hour day, as defined in 25 Pa Code § 121.1, the facility shall:

- (1) Notify the DEP Southeast Regional office at:
Henry Kim, District Supervisor (haekim@pa.gov)
Helen Morris, Environmental Group Manager, Operations (hemorris@pa.gov)
Audra Safter-Myers, Permit Engineer (asaftermye@pa.gov)
James Beach, Environmental Engineering Manager (jamesbeach@pa.gov)

(2) Notification must be submitted within 24 hrs after the discovery of the exceedance. The notification must contain the Source ID of flare(s) with exceedance(s), the hours the exceedances occurred and the landfill gas flow rates for exceedance hours.

(C) If an exceedance period extends to more than a continuous 48 hr period, the facility shall:

**SECTION E. Source Group Restrictions.**

(1) Notify DEP as stated in paragraph (B) of this condition.

(2) Monitor and record H₂S concentrations in the LFG for an 8 hour continuous period.

(a) LFG must be monitor with equipment capable of one of the following:

(i) The equipment shall have a 0-500 ppm H₂S concentration range with a +/- 2.5% accuracy minimum.

(ii) Alternatively, a different concentration range or equipment may be used if the concentration of H₂S is not less than 25% of the equipment's calibrated range. The minimum accuracy for alternative equipment shall be +/- 2.5%.

(b) The equipment shall be calibrated using manufacturer's specifications before monitoring begins and 4 hours after the beginning of monitoring.

(c) The H₂S concentration and LFG flow rate will be monitored and recorded hourly for the continuous 8 hour period.

(d) The LFG monitoring must be completed within 72 hours of the start of the exceedance period.

(e) The results of the monitoring shall be reported to the Department the day after the monitoring is completed.

(D) If an exceedance period extends to more than a continuous 96 hour period, the facility shall schedule stack testing for SO₂ using EPA Method 6C for the flare(s) with the exceedance. The facility shall present to the Department possible dates for the stack testing within one week of reaching a 96 hour exceedance period. The facility will inform the Department of the date of the stack testing at least 15 day before the testing date. Should the exceedance period end, as defined in paragraph A of this condition, before stack testing is performed, the facility will still be required to stack test the flare(s) that had an exceedance period.

(E) If the facility installs a control for H₂S in the LFG, with acceptable performance testing as proof of control of H₂S, the facility may petition the Department to modify and / or remove the monitoring, recording and testing requirements related to the 4,900 scfm trigger value and testing for H₂S. All other conditions and requirements of for the ULE flares in this plan approval shall remain in effect.

029 [25 Pa. Code §127.441]**Operating permit terms and conditions.**

(a) The permittee shall measure the amount of propane used for GROWS landfill gas augmentation via a flow meter.

(b) The flow meter used for propane measurement shall be maintained and calibrated according to manufacturer's specifications.

VII. ADDITIONAL REQUIREMENTS.**# 030 [25 Pa. Code §127.441]****Operating permit terms and conditions.**

[Additional authority for this permit condition is also derived from 40 C.F.R. § 60.765(e). and 40 C.F.R. § 63.1960(e)(2) Compliance provisions.]

(a) The provisions of 40 C.F.R. Part 60, Subpart XXX set forth in this permit shall apply at all times, including periods of startup, shutdown or malfunction. During periods of startup, shutdown, and malfunction, the permittee shall comply with the work practices specified in 40 C.F.R. § 60.763(e) in lieu of the compliance provisions in 40 C.F.R. § 60.765.

(b) The provisions of 40 C.F.R. Part 63, Subpart AAAA set forth in this permit shall apply at all times, including periods of startup, shutdown or malfunction. The provisions of 40 C.F.R. § 63.6(e) of Subpart A no longer apply under 40 C.F.R. Part 63 Subpart AAAA. During periods of startup, shutdown, and malfunction, the permittee shall comply with the work practices specified in 40 C.F.R. § 63.1958(e) in lieu of the compliance provisions in 40 C.F.R. § 63.1960.

031 [25 Pa. Code §127.441]**Operating permit terms and conditions.**

This source consists of three (3) Zink Ultra Low Emission (ZULE) enclosed ground flares, each rated at 6,000 SCFM, with a

**SECTION E. Source Group Restrictions.**

residence time of 0.7 seconds, manufactured by John Zink Hamworthy Combustion, LLC, or equivalent.

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

**SECTION E. Source Group Restrictions.**

Group Name: SBR GROUP

Group Description: TK-5 and TK-6

Sources included in this group

ID	Name
007	SEQUENTIAL BATCH REACTOR (TK-5)
011	SEQUENTIAL BATCH REACTOR (TK-6)

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

001 [25 Pa. Code §127.441]

Operating permit terms and conditions.

Ammonia emissions from each Sequential Batch Reactor shall be less than 10.7 tons per year on a 12-month rolling sum basis.

002 [25 Pa. Code §127.441]

Operating permit terms and conditions.

Total ammonia emissions from all units in the Leachate Treatment Plant Section H (B) shall not exceed 25.0 tons per year on a 12-month rolling basis.

Throughput Restriction(s).

003 [25 Pa. Code §127.441]

Operating permit terms and conditions.

Flow to each Sequential Batch Reactor shall not exceed a rate of 300,000 gallons per day.

II. TESTING REQUIREMENTS.

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

III. MONITORING REQUIREMENTS.

004 [25 Pa. Code §127.441]

Operating permit terms and conditions.

- (a) The permittee shall monitor the source daily for compliance with the flow rate limitation for this source.
- (b) The permittee shall monitor the Sequential Batch Reactor (SBR) daily for pH during the oxic phase.
- (c) The permittee shall calculate ammonia emissions from the SBR on a monthly and on a 12-month rolling basis.
- (d) The permittee shall calculate an average for the pH in the SBR during the oxic phase on a 30-day rolling basis.
- (e) The permittee shall calculate ammonia emissions from all sources of the leachate treatment plant, excluding the inactive crystallizers, on a monthly and 12-month rolling basis.

IV. RECORDKEEPING REQUIREMENTS.

005 [25 Pa. Code §127.441]

Operating permit terms and conditions.

The permittee shall keep records of the monitoring required for this source.

V. REPORTING REQUIREMENTS.

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

**SECTION E. Source Group Restrictions.****VI. WORK PRACTICE REQUIREMENTS.****# 006 [25 Pa. Code §127.441]****Operating permit terms and conditions.**

The average pH in the Sequential Batch Reactor during the oxic phase shall be below 7.80, as calculated on a 30-day rolling basis.

VII. ADDITIONAL REQUIREMENTS.

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

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



SECTION F. Alternative Operation Requirements.

No Alternative Operations exist for this Title V facility.

**SECTION G. Emission Restriction Summary.**

Source Id	Source Description		
110	MSW LANDFILL - FAIRLESS		
Emission Limit		Pollutant	
36.900	Tons/Yr	calculated after closure in accordance with the definition of "closed landfill" and "closure" in 40 CFR Section 60.761	VOC
500	EXEMPT EMER GENERATOR PRE-2006 ENGINES		
Emission Limit		Pollutant	
2.750	Tons/OZNESEAS	Combined all engines in group as exempt engines	NOX
6.600	Tons/Yr	Combined all engines in group as exempt engines	NOX
100.000	Lbs/Hr	Combined all engines in group as exempt engines	NOX
1,000.000	Lbs/Day	Combined all engines in group as exempt engines	NOX
501	EMER GENERATORS POST-2006 (PRIOR ID 500 IN 09-0210B)		
Emission Limit		Pollutant	
2.750	Tons/OZNESEAS	Combined all engines in group as exempt engines	NOX
6.600	Tons/Yr	Combined all engines in group as exempt engines	NOX
100.000	Lbs/Hr	Combined all engines in group as exempt engines	NOX
1,000.000	Lbs/Day	Combined all engines in group as exempt engines	NOX
C12	ENCLOSED ULE FLARE 1		
Emission Limit		Pollutant	
10.900	Lbs/Hr		CO
47.760	Tons/Yr	12-month rolling basis	CO
1.630	Lbs/Hr		NMOC
7.140	Tons/Yr	12-month rolling basis	NMOC
20.000	PPMV	dry basis	NMOC
4.540	Lbs/Hr		NOX
19.900	Tons/Yr	12-month rolling basis	NOX
18.220	Lbs/Hr		SO2
79.810	Tons/Yr	12-month rolling basis	SO2
0.020	gr/DRY FT3		TSP
2.700	Lbs/Hr		TSP
11.830	Tons/Yr	12-month rolling basis	TSP
C13	ENCLOSED ULE FLARE 2		
Emission Limit		Pollutant	
10.900	Lbs/Hr		CO
47.760	Tons/Yr	12-month rolling basis	CO
1.630	Lbs/Hr		NMOC
7.140	Tons/Yr	12-month rolling basis	NMOC
20.000	PPMV	dry basis	NMOC

**SECTION G. Emission Restriction Summary.**

Source Id	Source Descriptor		
	4.540	Lbs/Hr	NOX
	19.900	Tons/Yr 12-month rolling basis	NOX
	18.220	Lbs/Hr	SO2
	79.810	Tons/Yr 12-month rolling basis	SO2
	0.020	gr/DRY FT3	TSP
	2.700	Lbs/Hr	TSP
	11.830	Tons/Yr 12-month rolling basis	TSP
C14	ENCLOSED ULE FLARE 3		
Emission Limit			Pollutant
	10.900	Lbs/Hr	CO
	47.760	Tons/Yr 12-month rolling basis	CO
	1.630	Lbs/Hr	NMOC
	7.140	Tons/Yr 12-month rolling basis	NMOC
	20.000	PPMV dry basis	NMOC
	4.540	Lbs/Hr	NOX
	19.900	Tons/Yr 12-month rolling basis	NOX
	18.220	Lbs/Hr	SO2
	79.810	Tons/Yr 12-month rolling basis	SO2
	0.020	gr/DRY FT3	TSP
	2.700	Lbs/Hr	TSP
	11.830	Tons/Yr 12-month rolling basis	TSP

Site Emission Restriction Summary

Emission Limit		Pollutant
100.000	Tons/Yr 12-month rolling basis	PM10
100.000	Tons/Yr 12-month rolling basis	PM2.5

**SECTION H. Miscellaneous.**

March, 2020

(A) Plan Approval 09-0210A serves as the basis for this initial issuance of the Operating Permit, APS 950025 AUTH 1197585.

In addition, listings and conditions from the GROWS permit 09-00007, for the following sources were included:

Sources 007, 011 - Sequential Batch Reactors
Source 500 - Exempt Emergency Generators

(B) Sources at the Leachate Treatment Plant include the Sequential Batch Reactors, Source IDs 007 and 011, and the following units which do not require additional limitations, monitoring or recordkeeping beyond the requirements in Section C:

Reactors, Clarifier, Evaporator, Centrifuge, and Filter Presses
Treatment Process tanks
Leachate Storage Tanks
Kerosene Heaters (600,000 Btu/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 (1000,000 gal. ASTs)
Effluent Storage Tank (100,000 gal. AST)
Waste Oil Storage Tank (550 gal. AST)
Propane Powered Washer (657,000 Btu/hr)
Kerosene Storage Tank (2000 gal. AST)

(C) The following conditions were updated from Plan Approval 09-0210A. Condition numbers refer to the Condition Number for the April 14, 2015 issuance of the Plan Approval.

[Condition number in the Operating Permit is in brackets, if different]

Section C

Condition #006

The training of persons in opacity readings was added to the visible emissions exemptions to conform to the regulation as stated and current DEP guidelines.

Condition #009

A reference to the Department's Source Testing manual was added to the testing condition and the reference to sources in Section A of the Operating Permit was removed, per current DEP guidelines.

Condition #011, #013 [#011, #014]

Procedures for calculating particulate matter emissions by using the emissions factors from Plan Approval 09-0210A were included.

Condition #015 [#018]

The condition pertaining to malfunction, emergencies and incidents reporting was replaced with a generic Commonwealth-wide reporting condition. Some of the requirements are different namely 1-hour reporting rather than immediate reporting is required for emissions posing an imminent danger, 3-business days are allowed rather than 2 for follow-up reporting.

Condition #016

The condition requiring the reporting of the design capacity was removed, as the report was received on May 9, 2016.

Condition #017 [#018]

A paragraph was added to the physical addresses for report submission that specifies that the addresses are to be used only if EPA's electronic reporting tools are not available.

Conditions #018, #019

The source reporting conditions were removed from Section C since the requirements are now in Section B, Condition #031.

Condition #020 [#022]

The municipal and residual waste regulations were removed as an authority for the condition, specifying actions to reduce fugitive emissions from roadways. Included authority of 25 Pa. Code Sections 123.1(c) and 127.441 are sufficient.

**SECTION H. Miscellaneous.****Condition #021 [#023]**

The citations from 40 CFR Part 60 Subpart WWW were replaced with comparable citations from the newly applicable 40 CFR Part 60 Subpart XXX.

Condition #022 [#025]

The phrase "As specified in Section D" was removed from the condition stating the applicability of 40 CFR Subparts. in case the Subparts are revised and no longer consistent with Section D of the permit.

Additional Conditions

The following standard DEP conditions, applicable or relevant to facilities with Operating Permits, or Title V permits were added:

- *Recordkeeping of de minimis emissions increases
- *The annual compliance certification and bi-annual deviation reporting
- *Operation of sources according to good operating practices and according to manufacturer's specifications
- *Application for a plan approval if excess emissions are observed from any source
- *Prohibition of facility modifications without DEP approval, except for exceptions stated in Section B.

*Single source treatment for applicability analyses at GROWS, GROWS North and Fairless landfills was specified for consideration in future projects. The three landfills would be treated as one facility for applicability determinations including, but not limited to, the following air programs: non-attainment new source review (NNSR), prevention of significant deterioration (PSD), maximum achievable control technology (MACT) standards and, accidental release prevention program requirements.

With this Operating Permit, DEP determined that Fairless constitutes a separate facility from GROWS and GROWS North for determining applicability of NSPS 40 CFR Part 60, Subpart XXX and the National Emission Standards for Hazardous Air Pollutants: Municipal Solid Waste Landfills, 40 CFR Part 63, Subpart AAAAA.

Condition #023

The conditions specifying the timeframe for submission of a Title V permit were removed since the Title V application was received on August 14, 2017.

Section D**Source ID 110**

References were changed to that of 40 CFR Part 60 Subpart XXX without any change in requirements:

- Condition #009 (b)
- Condition #010
- Condition #011
- Condition #019
- Condition #025 [#027]
- Condition #026 [#028]

References were changed to that of 40 CFR Part 60 Subpart XXX in the following conditions, which also had additional changes as noted below.

- #002
- #003
- #004
- #005
- #008
- #012
- #015
- #020
- #021
- #024 [026]
- #027 [#029]
- #031 [#032]

Condition #001

For clarity and emphasis, a note "Point sources are not included in this total" was added to the condition specifying the fugitive VOC

**SECTION H. Miscellaneous.**

limit for the Fairless landfill.

Condition #002 (1)

The requirement to submit a revised Gas Collection and Control System (GCCS) Plan prior installing or expanding the gas collection system in a way that was not previously described in the GCCS plan was included, since the initial GCCS plan was submitted on February 14, 2017, and noted as such in the condition. The requirement to submit a GCCS plan within a year of the effective date of the Plan Approval was removed, since the requirement has been met.

The requirement of 40 CFR Section 60.767(d)(1) for the permittee to submit a revised GCCS plan within 90 days in advance of any expansions, not previously approved by a GCCS plan, was included in the Condition.

Condition #002(1)(A)

.Requirements for the Gas Collection and Control System were moved to Section (1)(A) from Section (3) of Condition (2) for clarity.

Condition #002(D)

*Paragraph 40 CFR Section 60.767(c)(6), which allows the permittee to implement a proposed design plan for the landfill, if the Administrator does not approve the Plan or ask questions within 90 days of submission, was included.

*The Note " the Department reserves the right to re-evaluate the adequacy of the GCCS design plan" was removed. DEP can re-evaluate the GCCS design plan as part of the compliance provisions in 40 CFR Section 60.765.

Condition #003

The following changes were made, in accordance with the applicability of 40 CFR Subpart XXX over Subpart WWW.

(a) Nitrogen and oxygen required levels were removed.

(b) Alternate time lines and gas control system expansion in response to inability to correct exceedances of temperature standards were replaced with root cause analysis, corrective action analysis, and implementation schedule and associated recordkeeping and reporting.

(c) Supporting data for a higher operating temperature demonstration must show that the higher value neither causes fires nor kills methanogens (rather than either does not cause fires or doesn't kill methanogens.)

Condition #004

The following change was made, in accordance with the applicability of 40 CFR Subpart XXX over Subpart WWW. In

(c)(i) methane concentration was added to the required monitoring recordkeeping, in addition to location.

Condition #005

Expansion of the gas collection system for exceedances of pressure within 120 days if exceedances cannot be corrected with 15 days and alternate timeline proposals were replaced with root cause analysis, corrective action analysis, and implementation schedule and associated recordkeeping and reporting.

Condition #007

Slip-wells were added to the components which may comprise the interim gas collection and control system as these were identified as components of the interim GCCS in the GCCS Plans, received by the Department on February 14, 1027 and November 6, 2018.

Condition #008

*The wording "unless modified by Plan approval" was added to the acceptable destinations for the landfill gas collected, since Waste Management is in transition over the end user for the landfill gas.

*examples of beneficial uses were added from 40 CFR Section 60.762(b)(2)(iii)(C)

*Source ID C11 was removed from the list of acceptable destinations, since this flare has not yet been constructed.

*Paragraph (d) pertaining to identifying the dominant end-user of the landfill as someone other than the permittee, was removed since Waste Management is in transition over the end user of the landfill gas.

*The ULE flares (Plan Approval 09-0210B) were added as an acceptable destination for the landfill gas.

Condition #012

The following changes were in response to 40 CFR Part 60 Subpart XXX

(a) The phrase "and all cover penetrations" was added to the end of the first sentence. Also, a clarifying sentence was added indicating that surface monitoring is required wherever there is an opening in the landfill where waste was placed and a gas collection and control system is required.

(b) (i), (iii), (iv) For the portable analyzer used in surface scans, the methodology, the instrument specifications, and the calibration

**SECTION H. Miscellaneous.**

procedures were updated to Section 6 (rather than Section 3) of Method 21, Section 8.1 (rather than Section 3.1.3) of Method 21, and Sections 8 and 10 (rather than Section 4.1) of Method 21 of Appendix A of 40 CFR Part 60.

(d) Surface monitoring methodology was updated to Section 8.3.1 (rather than Section 4.3.1) of Method 21 of Appendix A of 40 CFR Part 60.

Condition #013

In response to 40 CFR Part 60 Subpart XXX, the following conditions were added.

- *an annual calibration for the wellhead temperature measuring device
- *ASTM D6522-11 as an acceptable methodology for oxygen determination

*In addition, a note was included indicating that the oxygen or nitrogen need only to be monitored - the wells do not need to be adjusted to meet oxygen or nitrogen standards.

Condition #015

(a) Design capacity report was added to the required recordkeeping.

*In response to 40 CFR Part 60 Subpart XXX, the following recordkeeping was added:

- *Exceedances of the wellhead temperature standard, wellhead nitrogen at or above 20 percent and wellhead oxygen readings at or above 5 percent
- *root cause analyses and related corrective actions, schedules and other related data

Condition #018

The condition was removed as Waste Management has completed all the required capacity and startup notices in the condition.

Condition #020

*In response to the requirements of 40 CFR Part 60 Subpart XXX, the reporting condition for the equipment removal report was revised to account for submission of the original performance test and rate tests through EPA's CDX reporting system, as provided by 40 CFR Part 60 Subpart XXX. If the test reports were originally submitted through the CDX, only the dates have to be submitted with the equipment removal report.

*40 CFR Section 60.767(2) was added, which indicates that the Administrator may request more information to assure that the equipment removal conditions have been met.

Condition #21

+In response to the requirements of 40 CFR Part 60 Subpart XXX in Section 60.767(g) the following changes or additions were made:

- * All instances of landfill gas collection system non-operation must be reported not only instances of more than 5 days.
 - * Reporting was added for any corrective action analysis that takes more than 60 days to correct an exceedance, to include the root cause analysis, description of corrective actions, date, the parameter reading and a schedule
 - * The location of the surface methane exceedances must be determined with an instrument of an accuracy of at least 4 meters. The co-ordinates must be in decimal degrees with at least 5 decimal places.
- +A note was included indicating that nitrogen or oxygen wellhead concentration do not require corrective actions or reporting thereof to meet operational standards.

Condition #024 [#026]

In response to the requirements of 40CFR Part 60 Subpart XXX, the following changes were made.

- * Upon demonstration, an allowance for the lack of ability to operate the gas collection and control system for a minimum of 15 years was included in the condition.
- *NMOC emission rate was revised to 34 Megagrams per year, from 50 Megagrams per year.
- *In addition, paragraph (b)(ii), giving DEP authority to assure compliance with the Pa. Air Pollution Control Act, was removed. Sufficient authority for DEP to assure compliance with the Air Pollution Control Act is given in Section B Condition #008.

Condition #027 [#029]

The requirement that maximum gas flow rate for new GCCS systems must be in compliance with 40 CFR Section 60.765(a)(1) was added to the condition specifying construction of the GCCS.

Condition #030

**SECTION H. Miscellaneous.**

The condition providing submittal addresses was removed since it is redundant with Section C Condition #018.

Condition #031 [#032]

In response to the applicability of 40 CFR Part 60 Subpart XXX, the condition was changed to state that the provisions of 40 CFR Part 60 Subpart XXX apply, rather than do not apply as stated in 40 CFR Part 60 Subpart WWW (Section 60.755(e)), during periods of startup, shutdown and malfunction. During periods of startup, shutdown and malfunction, work practices of Section 60.763(e), pertaining to shutdown of the all valves venting to the atmosphere, shall be followed rather than the operational standards of 40 CFR Section 60.765.

New Recordkeeping condition, in response to applicability of 40 CFR Part 60 Subpart XXX:

Requirements were added for monitoring and recording of bypasses of the treatment system as well as parameters that would assure optimal operation of the landfill gas treatment system.

New Reporting Condition, in response to the applicability of 40 CFR Part 60 Subpart XXX:

Pursuant to 40 CFR Section 60.767(j), the permittee must submit reports to the Administrator for corrective actions required by 40 CFR 60.765(a)(3)(iii) or (a)(5)(iii) no later than 75 days after the first exceedance of pressure or temperature

- (1) If expected to take longer than 120 days
- (2) If not completed in 60 days.

New Reporting Condition in response to 40 CFR Part 60 Subpart XXX: The procedure for submission of reports through CEDRI was included.

Source ID C10, C11

Conditions for Sources C10 and C11 were included as a group (Section E:Flares). Language was added to conditions, indicating when conditions applied individually to each flare or when as a combination of both flares. Notation was included that C11 is to be constructed under Plan Approval 09-0210A and the conditions will apply when installed.

Condition #001(b)

The phrase "to be installed under Plan Approval 09-0210A" was included with Source ID C11 in this condition indicating the combined C10 and C11 emission limits.

#002 Since operations at the facility are in transition, due to the loss or change in end user, a condition was included that the flare may have additional uses or fuel sources as defined by Plan Approval.

Condition #004

The citation was revised to 40 CFR Section 60.762(b)(2)(iii)(B) due to the applicability of Subpart XXX.

Condition #005

The stack testing condition was revised to the standard DEP once in 5 years test condition, which includes 90 days pre-test for protocols.

Condition #007

The condition requesting testing document submittal through www.depgreenport.state.pa.us was deleted since it is no longer envisioned that the greenport site will become available.

Additional Testing Condition

New Department submission requirements for testing documents to the Regional Office and the Department's Central Office were included in a condition. Condition #006 was deleted since its requirements are included in the new condition.

Conditions #009, #013

A phrase is included indicating that emissions from the combination of flares C10 and C11 are to be calculated and recorded when C11 is installed.

Condition #009(c)

A notation is included with Source ID C11, indicating that it is not yet installed.

Condition #007

**SECTION H. Miscellaneous.**

*Changes were made in accordance with 40 CFR Section 60.766(b)(2)(i) and (ii), that both the gas flow meter must be provided for flow to the flare and the flare bypass line must be secured.

*The requirement of 40 CFR Part 60 Subpart XXX to visually inspect the seal or closure mechanism of the bypass line valve monthly to ensure that the valve is in the closed position.

Condition #012 [#011]

The condition was clarified by including the name of the Section (Section E : Group Name:Flares).

Condition #018(b) [#017(b)]

The flare temperature is changed to a minimum of 1547°F, based on the performance testing for flare C10.

Condition #20 [#019]

The model designation and serial number of the flare were included in the identifying condition.

Condition #21 [#020]

The condition was changed to the requirements of 40 CFR Section 60.763(e), which requires that during periods of startup, shutdown and malfunction, that the work practices of Section 60.763(e), pertaining to shutdown of the all valves venting to the atmosphere, shall be followed.

Additional Additional Requirements Condition

A note was added indicating that flare C11 was authorized by Plan Approval 09-0210A, but has not yet been installed. Plan Approval 09-0210A and its extensions describe conditions for C11 until completion of construction and incorporation in the Operating Permit.

Source ID 500

Condition #011 (09-00007)

The condition was revised to take into account the vacatur of May 2, 2016.

Section G

Sources associated with the Leachate Treatment System in the GROWS permit, 09-00007, were moved to Section H of the Fairless Operating Permit.

June 2026: APS No. 950025; Authorization No. 1501577: Issuance of TVOP Renewal with incorporation of terms and conditions from Plan Approvals 09-0210B and 09-0210C.



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