



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

TITLE V/STATE OPERATING PERMIT

Issue Date: June 23, 2022

Effective Date: December 1, 2022

Expiration Date: November 30, 2027

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: 36-05146

Federal Tax Id - Plant Code: 47-4511036-1

Owner Information

Name: EPP RENEWABLE ENERGY LLC

Mailing Address: 1605 N CEDAR CREST BLVD STE 509
ALLENTOWN, PA 18104-2355

Plant Information

Plant: EPP RENEWABLE ENERGY LLC/FREY FARM CRESWELL LDFL

Location: 36 Lancaster County

36938 Manor Township

SIC Code: 4953 Trans. & Utilities - Refuse Systems

Responsible Official

Name: THOMAS JUDGE

Title: SENIOR VP OF OPERATIONS

Phone: (484) 788 - 3788

Email: tjudge@eppservice.com

Permit Contact Person

Name: ROBERT SORENSEN

Title: ASSET MGR

Phone: (610) 557 - 1879

Email: rsorensen@eppservice.com

[Signature] _____

WILLIAM R. WEAVER, SOUTH CENTRAL REGION AIR PROGRAM MANAGER



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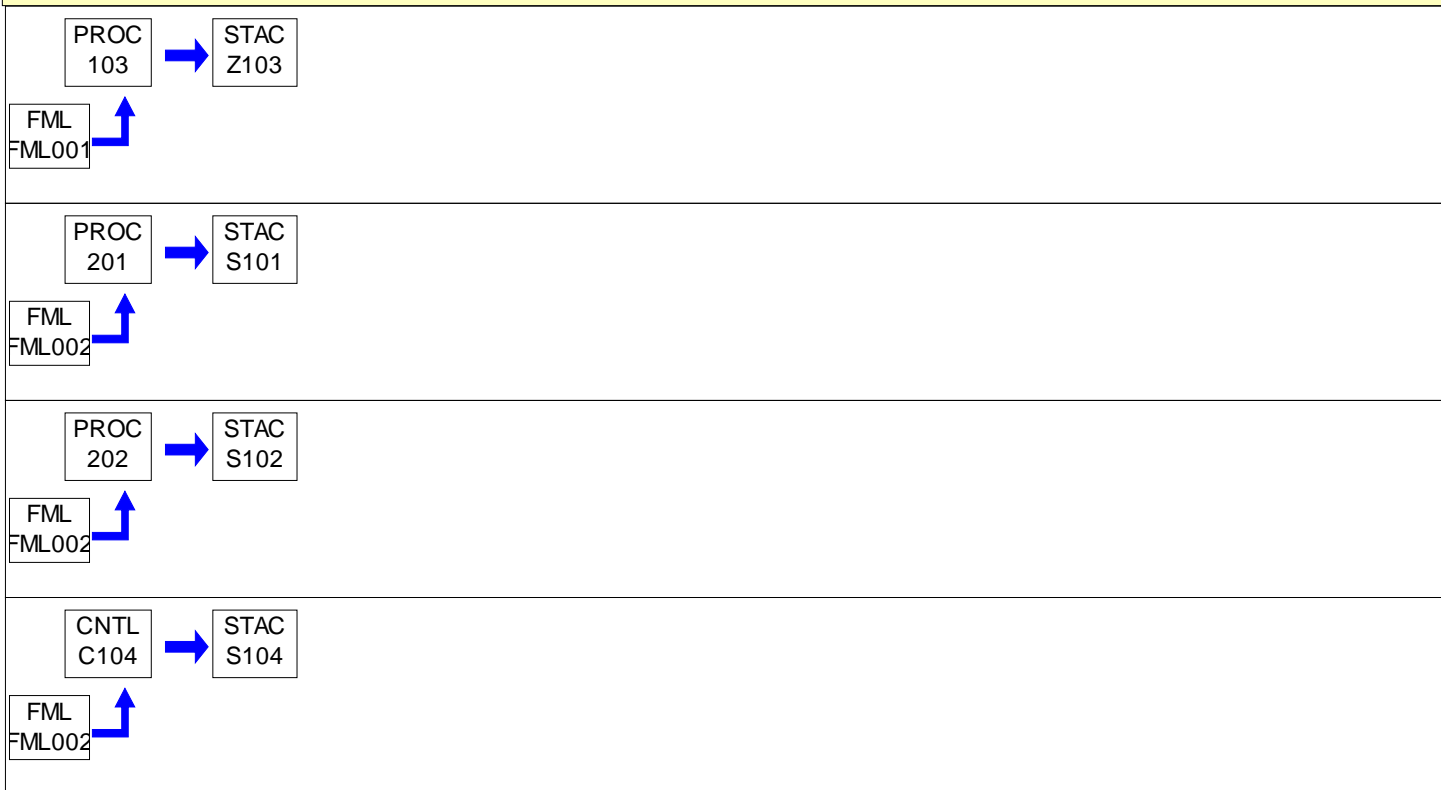
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Source ID	Source Name	Capacity/Throughput	Fuel/Material
103	LANDFILL GAS TREATMENT SYSTEM	58.800 MCF/HR	UNTREATED LFG
201	2233 HP, 1600KW, CAT G3520C, LANDFILL GAS ENG 1, SN GZJ00655	30.600 MMBTU/HR	
		29.400 MCF/HR	TREATED LFG
202	2233 HP, 1600KW, CAT G3520C, LANDFILL GAS ENG 2, SN GZJ00654	30.600 MMBTU/HR	
		29.400 MCF/HR	TREATED LFG
C104	CANDLESTICK FLARE	10.680 MMCF/HR	
FML001	LANDFILL GAS (UNTREATED)		
FML002	TREATED LANDFILL GAS		
S101	ENGINE 1 STACK		
S102	ENGINE 2 STACK		
S104	CANDLESTICK FLARE STACK		
Z103	FUGITIVE: TREATMENT SYSTEM		

PERMIT MAPS

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

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

#002 [25 Pa. Code § 121.7]**Prohibition of Air Pollution**

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

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

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

#004 [25 Pa. Code § 127.446(a) and (c)]**Permit Expiration**

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

#005 [25 Pa. Code §§ 127.412, 127.413, 127.414, 127.446(e), 127.503 & 127.704(b)]**Permit Renewal**

(a) An application for the renewal of the Title V permit shall be submitted to the Department at least six (6) months, and not more than 18 months, before the expiration date of this permit. The renewal application is timely if a complete application is submitted to the Department's Regional Air Manager within the timeframe specified in this permit condition.

(b) The application for permit renewal shall include the current permit number, the appropriate permit renewal fee, a description of any permit revisions and off-permit changes that occurred during the permit term, and any applicable requirements that were promulgated and not incorporated into the permit during the permit term. The fees shall be made payable to "The Commonwealth of Pennsylvania Clean Air Fund" and submitted with the fee form to the respective regional office.

(c) The renewal application shall also include submission of proof that the local municipality and county, in which the facility is located, have been notified in accordance with 25 Pa. Code § 127.413. The application for renewal of the Title V permit shall also include submission of compliance review forms which have been used by the permittee to update information submitted in accordance with either 25 Pa. Code § 127.412(b) or § 127.412(j).

(d) The permittee, upon becoming aware that any relevant facts were omitted or incorrect information was submitted in the permit application, shall promptly submit such supplementary facts or corrected information during the permit renewal process. The permittee shall also promptly provide additional information as necessary to address any requirements that become applicable to the source after the date a complete renewal application was submitted but prior to release of a draft permit.

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

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

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

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the Department.

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

#007 [25 Pa. Code § 127.513, 35 P.S. § 4008 and § 114 of the CAA]**Inspection and Entry**

(a) Upon presentation of credentials and other documents as may be required by law for inspection and entry purposes, the permittee shall allow the Department of Environmental Protection or authorized representatives of the Department to perform the following:

- (1) Enter at reasonable times upon the permittee's premises where a Title V source is located or emissions related activity is conducted, or where records are kept under the conditions of this permit;
- (2) Have access to and copy or remove, at reasonable times, records that are kept under the conditions of this permit;
- (3) Inspect at reasonable times, facilities, equipment including monitoring and air pollution control equipment, practices, or operations regulated or required under this permit;
- (4) Sample or monitor, at reasonable times, substances or parameters, for the purpose of assuring compliance with the permit or applicable requirements as authorized by the Clean Air Act, the Air Pollution Control Act, or the regulations promulgated under the Acts.

(b) Pursuant to 35 P.S. § 4008, no person shall hinder, obstruct, prevent or interfere with the Department or its personnel in the performance of any duty authorized under the Air Pollution Control Act.

(c) Nothing in this permit condition shall limit the ability of the EPA to inspect or enter the premises of the permittee in accordance with Section 114 or other applicable provisions of the Clean Air Act.

#008 [25 Pa. Code §§ 127.25, 127.444, & 127.512(c)(1)]**Compliance Requirements**

(a) The permittee shall comply with the conditions of this permit. Noncompliance with this permit constitutes a violation of the Clean Air Act and the Air Pollution Control Act and is grounds for one (1) or more of the following:

- (1) Enforcement action
- (2) Permit termination, revocation and reissuance or modification
- (3) Denial of a permit renewal application

(b) A person may not cause or permit the operation of a source, which is subject to 25 Pa. Code Article III, unless the source(s) and air cleaning devices identified in the application for the plan approval and operating permit and the plan approval issued to the source are operated and maintained in accordance with specifications in the applications and the conditions in the plan approval and operating permit issued by the Department. A person may not cause or permit the operation of an air contamination source subject to 25 Pa. Code Chapter 127 in a manner inconsistent with good operating practices.

(c) For purposes of Sub-condition (b) of this permit condition, the specifications in applications for plan approvals and operating permits are the physical configurations and engineering design details which the Department determines are essential for the permittee's compliance with the applicable requirements in this Title V permit.

#009 [25 Pa. Code § 127.512(c)(2)]**Need to Halt or Reduce Activity Not a Defense**

It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.

**SECTION B. General Title V Requirements****#010 [25 Pa. Code §§ 127.411(d) & 127.512(c)(5)]****Duty to Provide Information**

(a) The permittee shall furnish to the Department, within a reasonable time, information that the Department may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit, or to determine compliance with the permit.

(b) Upon request, the permittee shall also furnish to the Department copies of records that the permittee is required to keep by this permit, or for information claimed to be confidential, the permittee may furnish such records directly to the Administrator of EPA along with a claim of confidentiality.

#011 [25 Pa. Code §§ 127.463, 127.512(c)(3) & 127.542]**Reopening and Revising the Title V Permit for Cause**

(a) This Title V permit may be modified, revoked, reopened and reissued or terminated for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay a permit condition.

(b) This permit may be reopened, revised and reissued prior to expiration of the permit under one or more of the following circumstances:

(1) Additional applicable requirements under the Clean Air Act or the Air Pollution Control Act become applicable to a Title V facility with a remaining permit term of three (3) or more years prior to the expiration date of this permit. The Department will revise the permit as expeditiously as practicable but not later than 18 months after promulgation of the applicable standards or regulations. No such revision is required if the effective date of the requirement is later than the expiration date of this permit, unless the original permit or its terms and conditions has been extended.

(2) Additional requirements, including excess emissions requirements, become applicable to an affected source under the acid rain program. Upon approval by the Administrator of EPA, excess emissions offset plans for an affected source shall be incorporated into the permit.

(3) The Department or the EPA determines that this permit contains a material mistake or inaccurate statements were made in establishing the emissions standards or other terms or conditions of this permit.

(4) The Department or the Administrator of EPA determines that the permit must be revised or revoked to assure compliance with the applicable requirements.

(c) Proceedings to revise this permit shall follow the same procedures which apply to initial permit issuance and shall affect only those parts of this permit for which cause to revise exists. The revision shall be made as expeditiously as practicable.

(d) Regardless of whether a revision is made in accordance with (b)(1) above, the permittee shall meet the applicable standards or regulations promulgated under the Clean Air Act within the time frame required by standards or regulations.

#012 [25 Pa. Code § 127.543]**Reopening a Title V Permit for Cause by EPA**

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

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

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

R3_Air_Apps_and_Notices@epa.gov

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

**SECTION B. General Title V Requirements****#014 [25 Pa. Code § 127.541]****Significant Operating Permit Modifications**

When permit modifications during the term of this permit do not qualify as minor permit modifications or administrative amendments, the permittee shall submit an application for significant Title V permit modifications in accordance with 25 Pa. Code § 127.541. Notifications to EPA, pursuant to 25 PA Code §127.522(a), if required, shall be submitted, to the following EPA e-mail box:

R3_Air_Apps_and_Notices@epa.gov

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

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

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

R3_Air_Apps_and_Notices@epa.gov

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

#016 [25 Pa. Code § 127.450]**Administrative Operating Permit Amendments**

(a) The permittee may request administrative operating permit amendments, as defined in 25 Pa. Code §127.450(a). Copies of request for administrative permit amendment to EPA, pursuant to 25 PA Code §127.450(c)(1), if required, shall be submitted to the following EPA e-mail box:

R3_Air_Apps_and_Notices@epa.gov

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

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

#017 [25 Pa. Code § 127.512(b)]**Severability Clause**

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

#018 [25 Pa. Code §§ 127.704, 127.705 & 127.707]**Fee Payment**

(a) The permittee shall pay fees to the Department in accordance with the applicable fee schedules in 25 Pa. Code Chapter 127, Subchapter I (relating to plan approval and operating permit fees). The applicable fees shall be made payable to "The Commonwealth of Pennsylvania Clean Air Fund" with the permit number clearly indicated and submitted to the respective regional office.

(b) Emission Fees. The permittee shall, on or before September 1st of each year, pay applicable annual Title V emission fees for emissions occurring in the previous calendar year as specified in 25 Pa. Code § 127.705. The permittee is not required to pay an emission fee for emissions of more than 4,000 tons of each regulated pollutant emitted from the facility.

(c) As used in this permit condition, the term "regulated pollutant" is defined as a VOC, each pollutant regulated under Sections 111 and 112 of the Clean Air Act and each pollutant for which a National Ambient Air Quality Standard has been promulgated, except that carbon monoxide is excluded.

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

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

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

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

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

#019 [25 Pa. Code §§ 127.14(b) & 127.449]**Authorization for De Minimis Emission Increases**

(a) This permit authorizes de minimis emission increases from a new or existing source in accordance with 25 Pa. Code §§ 127.14 and 127.449 without the need for a plan approval or prior issuance of a permit modification. The permittee shall provide the Department with seven (7) days prior written notice before commencing any de minimis emissions increase that would result from either: (1) a physical change of minor significance under § 127.14(c)(1); or (2) the construction, installation, modification or reactivation of an air contamination source. The written notice shall:

(1) Identify and describe the pollutants that will be emitted as a result of the de minimis emissions increase.

(2) Provide emission rates expressed in tons per year and in terms necessary to establish compliance consistent with any applicable requirement.

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

(b) Except as provided below in (c) and (d) of this permit condition, the permittee is authorized during the term of this permit to make de minimis emission increases (expressed in tons per year) up to the following amounts without the need for a plan approval or prior issuance of a permit modification:

(1) Four tons of carbon monoxide from a single source during the term of the permit and 20 tons of carbon monoxide at the facility during the term of the permit.

(2) One ton of NO_x from a single source during the term of the permit and 5 tons of NO_x at the facility during the term of the permit.

(3) One and six-tenths tons of the oxides of sulfur from a single source during the term of the permit and 8.0 tons of oxides of sulfur at the facility during the term of the permit.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

(f) Emissions authorized under this permit condition shall be included in the monitoring, recordkeeping and reporting requirements of this permit.

(g) Except for de minimis emission increases allowed under this permit, 25 Pa. Code § 127.449, or sources and physical changes meeting the requirements of 25 Pa. Code § 127.14, the permittee is prohibited from making physical changes or engaging in activities that are not specifically authorized under this permit without first applying for a plan approval. In accordance with § 127.14(b), a plan approval is not required for the construction, modification, reactivation, or installation of the sources creating the de minimis emissions increase.

(h) The permittee may not meet de minimis emission threshold levels by offsetting emission increases or decreases at the same source.

#020 [25 Pa. Code §§ 127.11a & 127.215]**Reactivation of Sources**

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

(b) A source which has been out of operation or production for more than five (5) years but less than 10 years may be reactivated and will not be considered a new source if the permittee satisfies the conditions specified in 25 Pa. Code § 127.11a(b).

#021 [25 Pa. Code §§ 121.9 & 127.216]**Circumvention**

(a) The owner of this Title V facility, or any other person, may not circumvent the new source review requirements of 25 Pa. Code Chapter 127, Subchapter E by causing or allowing a pattern of ownership or development, including the

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phasing, staging, delaying or engaging in incremental construction, over a geographic area of a facility which, except for the pattern of ownership or development, would otherwise require a permit or submission of a plan approval application.

(b) No person may permit the use of a device, stack height which exceeds good engineering practice stack height, dispersion technique or other technique which, without resulting in reduction of the total amount of air contaminants emitted, conceals or dilutes an emission of air contaminants which would otherwise be in violation of this permit, the Air Pollution Control Act or the regulations promulgated thereunder, except that with prior approval of the Department, the device or technique may be used for control of malodors.

#022 [25 Pa. Code §§ 127.402(d) & 127.513(1)]**Submissions**

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

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

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

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

The Title V compliance certification shall be emailed to EPA at R3_APD_Permits@epa.gov.

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

#023 [25 Pa. Code §§ 127.441(c) & 127.463(e); Chapter 139; & 114(a)(3), 504(b) of the CAA]**Sampling, Testing and Monitoring Procedures**

(a) The permittee shall perform the emissions monitoring and analysis procedures or test methods for applicable requirements of this Title V permit. In addition to the sampling, testing and monitoring procedures specified in this permit, the Permittee shall comply with any additional applicable requirements promulgated under the Clean Air Act after permit issuance regardless of whether the permit is revised.

(b) The sampling, testing and monitoring required under the applicable requirements of this permit, shall be conducted in accordance with the requirements of 25 Pa. Code Chapter 139 unless alternative methodology is required by the Clean Air Act (including §§ 114(a)(3) and 504(b)) and regulations adopted thereunder.

#024 [25 Pa. Code § 127.513]**Compliance Certification**

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

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

(b) The compliance certification shall be postmarked or hand-delivered no later than thirty days after each anniversary of

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the date of issuance of this Title V Operating Permit, or on the submittal date specified elsewhere in the permit, to the Department in accordance with the submission requirements specified in Section B, Condition #022 of this permit. The Title V compliance certification shall be emailed to EPA at R3_APD_Permits@epa.gov.

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

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

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

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

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

#026 [25 Pa. Code §§ 127.411(d), 127.442, 127.463(e) & 127.511(c)]**Reporting Requirements**

(a) The permittee shall comply with the reporting requirements for the applicable requirements specified in this Title V permit. In addition to the reporting requirements specified herein, the permittee shall comply with any additional applicable reporting requirements promulgated under the Clean Air Act after permit issuance regardless of whether the permit is revised.

(b) Pursuant to 25 Pa. Code § 127.511(c), the permittee shall submit reports of required monitoring at least every six (6) months unless otherwise specified in this permit. Instances of deviations (as defined in 25 Pa. Code § 121.1) from permit requirements shall be clearly identified in the reports. The reporting of deviations shall include the probable cause of the deviations and corrective actions or preventative measures taken, except that sources with continuous emission monitoring systems shall report according to the protocol established and approved by the Department for the source. The required reports shall be certified by a responsible official.

(c) Every report submitted to the Department under this permit condition shall comply with the submission procedures specified in Section B, Condition #022(c) of this permit.

(d) Any records, reports or information obtained by the Department or referred to in a public hearing shall be made available to the public by the Department except for such records, reports or information for which the permittee has shown cause that the documents should be considered confidential and protected from disclosure to the public under Section 4013.2 of the Air Pollution Control Act and consistent with Sections 112(d) and 114(c) of the Clean Air Act and 25 Pa. Code § 127.411(d). The permittee may not request a claim of confidentiality for any emissions data generated for the Title V facility.

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

The permittee is authorized to make changes within the Title V facility in accordance with the following provisions in 25 Pa. Code Chapter 127 which implement the operational flexibility requirements of Section 502(b)(10) of the Clean Air Act and Section 6.1(i) of the Air Pollution Control Act:

- (1) Section 127.14 (relating to exemptions)
- (2) Section 127.447 (relating to alternative operating scenarios)
- (3) Section 127.448 (relating to emissions trading at facilities with federally enforceable emissions caps)
- (4) Section 127.449 (relating to de minimis emission increases)
- (5) Section 127.450 (relating to administrative operating permit amendments)
- (6) Section 127.462 (relating to minor operating permit amendments)
- (7) Subchapter H (relating to general plan approvals and operating permits)

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

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

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

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

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

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

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

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

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

**SECTION B. General Title V Requirements**

(e) If the Title V facility is subject to 40 CFR Part 68, the permittee shall maintain records supporting the implementation of an accidental release program for five (5) years in accordance with 40 CFR § 68.200.

(f) When the Title V facility is subject to the accidental release program requirements of Section 112(r) of the Clean Air Act and 40 CFR Part 68, appropriate enforcement action will be taken by the Department if:

(1) The permittee fails to register and submit the RMP or a revised plan pursuant to 40 CFR Part 68.

(2) The permittee fails to submit a compliance schedule or include a statement in the compliance certification required under Section B, Condition #026 of this permit that the Title V facility is in compliance with the requirements of Section 112(r) of the Clean Air Act, 40 CFR Part 68, and 25 Pa. Code § 127.512(i).

#029 [25 Pa. Code § 127.512(e)]**Approved Economic Incentives and Emission Trading Programs**

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

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

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

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

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

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

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

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

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

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

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

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

(a) The permittee shall submit by March 1 of each year an annual emissions report for the preceding calendar year. The report shall include information for all active previously reported sources, new sources which were first operated during the preceding calendar year, and sources modified during the same period which were not previously reported. All air emissions from the facility should be estimated and reported.

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

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

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

**SECTION C. Site Level Requirements****I. RESTRICTIONS.****Emission Restriction(s).****# 001 [25 Pa. Code §123.1]****Prohibition of certain fugitive emissions**

The permittee shall not allow the emission into the outdoor atmosphere of fugitive air contaminants from a source other than the following:

- a. Construction or demolition of buildings or structures.
- b. Grading, paving and maintenance of roads and streets.
- c. Use of roads and streets. Emissions from material in or on trucks, railroad cars and other vehicular equipment are not considered as emissions from use of roads and streets.
- d. Clearing of land.
- e. Stockpiling of materials.

Sources and classes of sources other than those identified in paragraphs (a) - (e), for which the operator has obtained a determination from the Department in accordance with 25 Pa. Code Section 123.1(b) 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**

The permittee shall not allow fugitive particulate matter to be emitted into the outdoor atmosphere from a source specified in the preceding permit Condition #001, Section C, if such emissions are visible at the point the emissions pass outside the person's property.

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

The permittee shall not emit any malodorous air contaminants into the outdoor atmosphere from any source in such a manner that the malodors are detectable outside the property of the person on whose land the source is being operated.

004 [25 Pa. Code §123.42]**Exceptions**

The limitations of 25 Pa. Code Section 123.41 (relating to limitations) do not apply to a visible emission in any of the following instances:

- a. When the presence of uncombined water is the only reason for failure of the emission 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 sources specified in Condition #001, Section C (relating to prohibition of certain fugitive emissions).

005 [25 Pa. Code §129.14]**Open burning operations**

a. The permittee shall not allow open burning of materials in such a manner that:

- 1. The emissions are visible, at any time, at the point such emissions pass outside the property of the person on whose land the open burning is being conducted.
- 2. Malodorous air contaminants from the open burning are detectable outside the property of the person on whose land

**SECTION C. Site Level Requirements**

the open burning is being conducted.

3. The emissions interfere with the reasonable enjoyment of life and property.
4. The emissions cause damage to vegetation or property.
5. The emissions are or may be deleterious to human or animal health.

b. Exceptions: The requirements of subsection a. do not apply where the open burning operations result from the following:

1. A fire set to prevent or abate a fire hazard, when approved by the Department and set by or under the supervision of a public officer.
2. Any fire set for the purpose of instructing personnel in fire fighting as approved by the Department, provided the permittee has notified the Department of the date, time and place of the training.
3. A fire set for the prevention and control of disease or pests, when approved by the Department.
4. A fire set in conjunction with the production of agricultural commodities in their unmanufactured state on the premises of the farm operation.
5. A fire set solely for recreational or ceremonial purposes.
6. A fire set solely for cooking food.

c. This permit does not constitute authorization to burn solid waste in violation of Section 610(3) of the Solid Waste Management Act, 35 P. S. Section 6018.610(3), or any other provision of the Solid Waste Management Act.

II. TESTING REQUIREMENTS.**# 006 [25 Pa. Code §123.43]****Measuring techniques**

Visible emissions may be measured by using either of the following:

- a. A device approved by the Department and maintained to provide accurate opacity measurements.
- b. Observers, trained and certified, to measure plume opacity with the naked eye, as per EPA Method 9, or with the aid of any devices approved by the Department.

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

The Department reserves the right to require exhaust stack testing of any source as necessary during the permit term to verify emissions for purposes including emission fees, malfunctions or permit condition violations.

008 [25 Pa. Code §139.1]**Sampling facilities.**

Upon the request of the Department, the permittee shall provide adequate sampling ports, safe sampling platforms and adequate utilities for the performance by the Department of tests on such 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.**# 009 [25 Pa. Code §127.441]****Operating permit terms and conditions.**

The permittee shall conduct a weekly inspection of the sources covered by this approval during the daylight hours when the



SECTION C. Site Level Requirements

facility is in production to detect visible emissions, fugitive emissions and malodors as follows:

- a. Visible emissions in excess of the limits specifically stated in this permit in Section E. Visible emissions may be measured according to the methods specified in Condition #006, Section C. As an alternative, facility personnel who observe such visible emissions shall report each incident to the Department within two hours of each occurrence and make arrangements for a certified observer to read the visible emissions.
- b. Presence of visible fugitive emissions and fugitive particulate matter beyond the plant property boundaries, as stated in Condition #002, Section C.
- c. Presence of odors beyond the facility property boundaries that have the potential to be malodorous as stated in Condition #003, Section C.

IV. RECORDKEEPING REQUIREMENTS.

010 [25 Pa. Code §127.441]

Operating permit terms and conditions.

The permittee shall maintain a logbook for recording the status of any visible emissions, visible fugitive emissions, or odorous emissions detected. The logbook shall include the name of the facility representative, the date and time the monitoring was conducted; wind direction and the results of the inspection (i.e. corrective actions taken).

Note: A log entry is required for each weekly inspection regardless of whether or not any visible emissions, fugitive emissions, or odorous emissions are detected.

V. REPORTING REQUIREMENTS.

011 [25 Pa. Code §127.441]

Operating permit terms and conditions.

(a) The permittee shall report malfunctions which occur at the facility to the DEP as defined in 40 CFR Section 63.2, a malfunction is any sudden, infrequent, and not reasonably preventable failure of air pollution control and monitoring equipment, process equipment, or a process to operate in a normal or usual manner which causes, or has the potential to cause, the emission limitations in an applicable standard to be exceeded. Failures that are caused in part by poor maintenance or careless operation are not malfunctions. Malfunctions shall be reported as follows:

(1) Any malfunction which poses an imminent danger to the public health, safety, welfare and environment, shall be immediately reported to the Department by telephone. The telephone report of such malfunctions shall occur no later than two (2) hours after the permittee is aware of the malfunction. The permittee shall submit a written report of instances of such malfunctions to the Department within three (3) days of the telephone report.

(2) Unless otherwise required by this permit, any other malfunction that is not subject to the reporting requirements of paragraph (1) above, shall be reported to the Department, in writing, within five (5) days of discovery of the malfunction.

(b) Malfunctions shall be reported to the Department at the following address:

PADEP
Air Quality Program
909 Elmerton Avenue
Harrisburg, PA 17110

(c) Telephone reports can be made to the Reading District Office at (610)916-0100 during normal business hours or to the Department's Emergency Hotline at any time. The Emergency Hotline phone number is changed/updated periodically. The current Emergency Hotline phone number can be found at:

<https://www.dep.pa.gov/About/Regional/SouthcentralRegion/Pages/default.aspx>

**SECTION C. Site Level Requirements****VI. WORK PRACTICE REQUIREMENTS.****# 012 [25 Pa. Code §123.1]****Prohibition of certain fugitive emissions**

The permittee shall take all reasonable actions to prevent particulate matter from the sources identified in Condition #001, Section C from becoming airborne. These actions shall include, but not be limited to, the following:

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

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

The permittee shall submit within thirty days of 01/01/2023 a certificate of compliance with all permit terms and conditions set forth in this Title V permit as required under condition #024 of section B of this permit, and annually thereafter.

014 [25 Pa. Code §127.513]**Compliance certification.**

The permittee shall forward EPA the annual compliance certification report as defined in Condition #024 of Section B, electronically, in lieu of a hard copy version, to the email address: R3_APD_Permits@epa.gov

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**

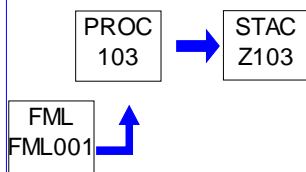
Source ID: 103

Source Name: LANDFILL GAS TREATMENT SYSTEM

Source Capacity/Throughput:

58.800 MCF/HR

UNTREATED LFG

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

The treatment process shall treat the landfill gas prior to use in the engines in the following manner:

- Compression - The gas shall be compressed using gas blowers or similar devices to a level required by the engines to fire the gas.
- De-water - The system must de-water the gas using chillers, moisture separators, or other dehydration equipment.
- Filter - At a minimum, the system must filter the gas using a dry filter or similar device (e.g., impaction, interception or diffusion device). The filter should reduce the particulate matter in the gas to a size of 10 microns or less.

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

The operation of the treatment system shall not result in fugitive emissions in excess of 500 ppmv as propane or 1375 ppmv as methane at a distance of 0.5 inches.

II. TESTING REQUIREMENTS.

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

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

The permittee shall, at a minimum, conduct leak checks weekly on the treated landfill gas handling and processing equipment, that is part of the facility. This includes all piping from and including the connection with the landfill gas collection system. No leaks shall exceed 500 ppmv as propane or 1375 ppmv as methane at a distance of 0.5 inches. Non-repeatable and momentary readings shall not be considered. All leaks shall be fixed as soon as practicable.

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

The permittee shall record all maintenance on the treatment system and any malfunctions. The date, time, length, nature of the malfunction and corrective actions shall be recorded.

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

The permittee shall record the results of all monitoring.



SECTION D. Source Level Requirements

V. REPORTING REQUIREMENTS.

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

VI. WORK PRACTICE REQUIREMENTS.

006 [25 Pa. Code §127.441]

Operating permit terms and conditions.

The permittee shall operate and maintain the following devices:

- a. Equipment that shows the pressure of the gas exiting the compressor.
- b. Equipment that shows the temperature of the gas exiting the dewatering device.
- c. Equipment to show the pressure differential across the particulate filter.

The permittee may request alternative monitoring equipment. All requests shall be submitted to the Department for approval.

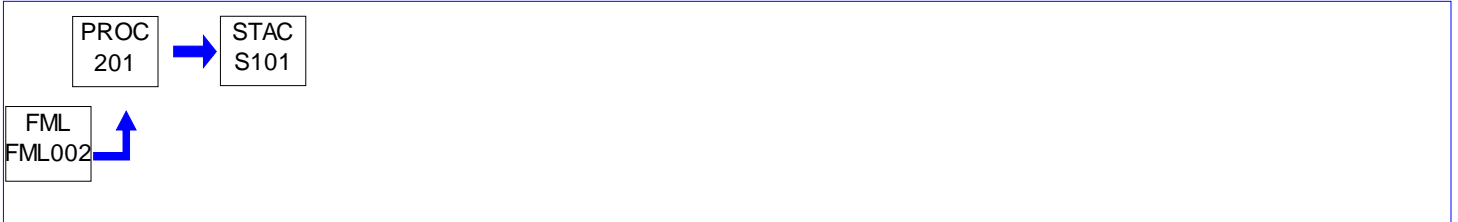
VII. ADDITIONAL REQUIREMENTS.

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

*** Permit Shield in Effect. ***

**SECTION D. Source Level Requirements**

Source ID: 201 Source Name: 2233 HP, 1600KW, CAT G3520C, LANDFILL GAS ENG 1, SN GZJ00655

Source Capacity/Throughput: 30.600 MMBTU/HR
29.400 MCF/HR TREATED LFGConditions for this source occur in the following groups: GROUP 001
GROUP 002
GROUP 003**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. *****

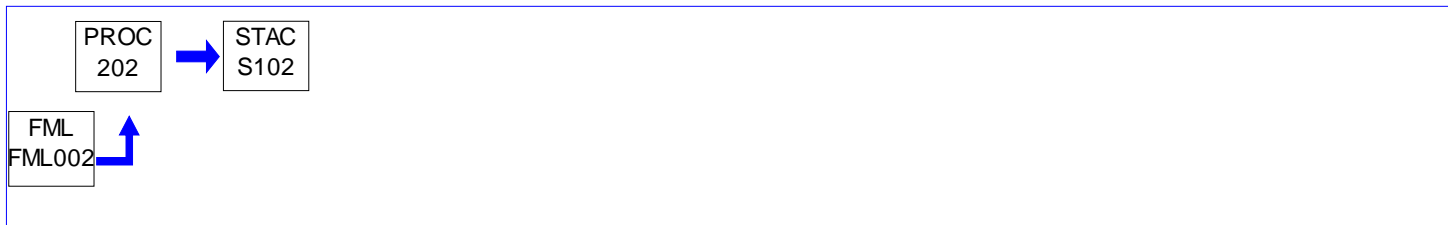
**SECTION D. Source Level Requirements**

Source ID: 202

Source Name: 2233 HP, 1600KW, CAT G3520C, LANDFILL GAS ENG 2, SN GZJ00654

Source Capacity/Throughput: 30.600 MMBTU/HR
29.400 MCF/HR TREATED LFG

Conditions for this source occur in the following groups: GROUP 001
GROUP 002
GROUP 003

**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: C104

Source Name: CANDLESTICK FLARE

Source Capacity/Throughput: 10.680 MMCF/HR

Conditions for this source occur in the following groups: GROUP 004
GROUP 005

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

(a) The total landfill gas combusted in the flare is limited to 300 dscfm, at 50% methane.

(b) The total landfill gas combusted in the flare should not exceed the minimum flow necessary to support combustion in the Lancaster County Frey Farm/Creswell Landfill enclosed flare, based on the manufacturer specified turn-down ratio and Btu requirements, if the enclosed flare has unused capacity to support the landfill gas flow. The enclosed ground flare, Control C104, has a minimum operational flow of 300 dscfm, at 50% methane.

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

Although the facility is not subject to the requirements of 40 CFR Part 60, Subpart XXX, the facility shall nevertheless comply with the following, pursuant to BAT:

(a) The permittee will monitor, on a daily basis (except holidays and weekends), the flow in dry standard cubic feet or the temperature and flow rate of the landfill gas combusted in the flare, unless 40 CFR Part 60 Subpart XXX requires more frequent monitoring.

PER 40 CFR 60.766(c)

(b) Each owner or operator seeking to comply with §60.762(b)(2)(iii) using a non-enclosed flare must install, calibrate, maintain, and operate according to the manufacturer's specifications the following equipment:

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

(2) A device that records flow to the flare and bypass of the flare (if applicable). The owner or operator must:

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

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

**SECTION D. Source Level Requirements**

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.

IV. RECORDKEEPING REQUIREMENTS.

003 [25 Pa. Code §127.441]

Operating permit terms and conditions.

The permittee will record, on a daily basis (except holidays and weekends), the amount of landfill gas combusted in the flare. The flare should be equipped with an automatic pilot ignition 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) and/or Section E (Source Group Restrictions).

VI. WORK PRACTICE REQUIREMENTS.

004 [25 Pa. Code §127.441]

Operating permit terms and conditions.

- (a) The flare should be operated with a flame present at all times when landfill gas is routed to the flare for combustion.
- (b) The flare should be equipped with an automatic shut-off mechanism designed to immediately stop the flow of gases when a flame-out occurs.

VII. ADDITIONAL REQUIREMENTS.

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

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

**SECTION E. Source Group Restrictions.**

Group Name: GROUP 001

Group Description: Best Available Technology (BAT) Requirements

Sources included in this group

ID	Name
201	2233 HP, 1600KW, CAT G3520C, LANDFILL GAS ENG 1, SN GZJ00655
202	2233 HP, 1600KW, CAT G3520C, LANDFILL GAS ENG 2, SN GZJ00654

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

(a) The permittee shall limit emissions from each of the above engines to the following:

- a. Particulate Matter (PM10) - [filterable & condensable] 0.43 g/hp-hr.
- b. Nitrogen Oxides (NOx) - 1.0 g/hp-hr.
- c. Sulfur Dioxide (SO2) - 1.0 g/hp-hr.
- d. Carbon Monoxide (CO) - 3.1 g/hp-hr.
- e. Volatile Organic Compounds (VOC) - [excluding Formaldehyde] 0.15 g/hp-hr
- f. Non-Methane Organic Compounds (NMOC) - 20 ppmvd as hexane at 3% O2 or 98% DE.
- g. Formaldehyde - 0.396 g/hp-hr.

(b) The permittee shall limit total emissions from the engines during any consecutive 12-month rolling period to the following:

- a. Particulate Matter (PM10) - 18.6 tons.
- b. Nitrogen Oxides (NOx) - 43.0 tons.
- c. Sulfur Dioxide (SO2) - 42.7 tons.
- d. Carbon Monoxide (CO) - 133.4 tons.
- e. Volatile Organic Compounds (VOC) - 6.6 tons. (excluding Formaldehyde)
- f. Non-Methane Organic Compounds (NMOC) - 7.8 tons
- g. Formaldehyde - 16.1 tons.

(c) The permittee shall limit the visible emissions from each of the engines to the following:

1. Normal operation: 0 percent
2. Start-up, shutdown and malfunction:
 - (i) 20 percent or less for a period or periods aggregating more than three minutes in any one hour.
 - (ii) Less than 60 percent at any time.

(d) The start-up and/or shutdown period for each engine shall not last longer than 30 minutes at any one time. If the permittee cannot correct a malfunction within 30 minutes of the start, the engine shall be shutdown.

The permittee shall calculate the emissions during these periods.

(e) The permittee is permitted to fire only landfill gas generated by the Frey Farm-Creswell Landfill and treated by the associated treatment system.

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

(a) Unless otherwise approved by the Department in writing, the permittee shall do the following:

**SECTION E. Source Group Restrictions.**

(1) perform a source test for Source ID #202 while the engine is operating within 10 percent of 100 percent peak (or the highest achievable) load. Testing shall include the following:

- (i) Visible emissions (percent opacity).
- (ii) Nitrogen Oxides (NO_x) as NO₂ (g/hp-hr).
- (iii) Carbon Monoxide (CO) (g/hp-hr).
- (iv) Non-methane Organic Compounds (NMOC) (ppm) or (destruction efficiency).
- (v) PM-10 (g/hp-hr) (filterable & condensable)
- (vi) Sulfur Dioxide (SO₂) (g/hp-hr)
- (vii) Formaldehyde (g/hp-hr)
- (viii) Volatile Organic Compounds (VOCs) (g/hp-hr).

(2) compliance with the control system outlet concentration requirement for the testing in (1) shall be indicated by an emission test program demonstrating the NMOC concentration to be less than 50 ppmvd (as carbon) measured at the engine outlet by U.S. EPA Reference Method 25A (RM25A) and U.S. EPA Reference Method 18 (RM18). RM18 is only used to quantify and subtract the non-regulated pollutant of methane from the results of the RM25A test results in order to obtain the engine exhaust concentration as NMOC. If an NMOC concentration of 50 ppmvd or more (as carbon) is measured at the engine outlet by RM25A; the RM25A test cannot be used to demonstrate compliance with the NMOC emission concentration limit. In that event, the permittee must retest the engine within 30 days or longer as approved in writing by the DEP. The permittee shall select one of the following options.

- (i) Perform necessary evaluation and/or maintenance or adjustments as needed and perform a retest using RM25A and RM18, or
- (ii) Retest using U.S. EPA Reference Method 25 (RM25) to determine if the outlet concentrations are less than 20 ppmvd, as Hexane at 3% oxygen, or
- (iii) Retest using RM25, in conjunction with U.S. EPA Reference Methods 1, 2, 3 or 3A, and 4, for testing the control system inlet and outlet or to determine the control device destruction efficiency, or
- (iv) Retest using another methodology otherwise approved in writing by the DEP upon the permittee's request.

(3) The NMOC stack test for the testing in (1) shall, at a minimum, test for NMOC at the engine exhaust in accordance with the provisions of RM25A, RM18 for methane only and 25 Pa Code Section 139; or utilize another test methodology that has been approved in writing by DEP at the permittee's request. As an alternative, the permittee may choose to test the engine outlet concentration or percent destruction efficiency on a mass basis as determined in accordance with U.S. EPA Reference Methods 1,2,3 or 3A, 4; and 25 or 25A/18; and with 25 Pa Code 139 at the engine inlet and/or outlet; or by another test methodology otherwise approved by the DEP.

(4) For the testing specified above, submit to DEP a test protocol for review and approval by no later than 365 days prior to the expiration of this permit, and not conduct the test that is the subject of the protocol until the protocol has been approved by DEP.

(5) If DEP finds deficiencies in the protocol, the permittee shall provide a response to DEP addressing the deficiencies within 30 days of being notified of the deficiencies.

(6) Complete the performance test within 120 days of DEP's approval of the test protocol.

(b) Pursuant to 25 Pa. Code § 139.3 at least 15 calendar days prior to commencing an emission testing program, notification as to the date and time of testing shall be given to the appropriate Regional Office. Notification shall also be sent to the Division of Source Testing and Monitoring. Notification shall not be made without prior receipt of a protocol acceptance letter from the DEP.

(c) Pursuant to 25 Pa. Code Section 139.53(a)(3) within 15 calendar days after completion of the on-site testing portion of an emission test program, if a complete test report has not yet been submitted, an electronic mail notification shall be sent to the DEP's Division of Source Testing and Monitoring and the appropriate Regional Office indicating the completion date of the on-site testing.

(d) Pursuant to 40 CFR Part 60.8(a), 40 CFR Part 61.13(f) and 40 CFR Part 63.7(g) a complete test report shall be submitted to DEP no later than 60 calendar days after completion of the on-site testing portion of an emission test program.

**SECTION E. Source Group Restrictions.**

For those tests being conducted pursuant to 40 CFR Part 61, a complete test report shall be submitted within 31 days after completion of the test.

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

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

(f) Pursuant to 25 Pa. Code § 139.3 to all submittals shall meet all applicable requirements specified in the most current version of the DEP's Source Testing Manual.

(g) All testing shall be performed in accordance with the provisions of Chapter 139 of the Rules and Regulations of the Department of Environmental Protection.

(h) Pursuant to 25 Pa. Code Section 139.53(a)(1) and 139.53(a)(3) all submittals, besides notifications, shall be accomplished through PSIMS*Online available through <https://www.depgreenport.state.pa.us/ecommm/Login.jsp> when it becomes available. If internet submittal cannot be accomplished, one digital copy of each submittal shall be made to each of the following:

Regional Office:

Digital copy: RA-epsctesttesting@pa.gov

Bureau of Air Quality:

Digital copy: RA-epstacktesting@pa.gov

(i) The permittee shall ensure all federal reporting requirements contained in the applicable subpart of 40 CFR are followed, including timelines more stringent than those contained herein. In the event of an inconsistency or any conflicting requirements between state and the federal, the most stringent provision, term, condition, method or rule shall be used by default.

III. MONITORING REQUIREMENTS.

003 [25 Pa. Code §127.441]

Operating permit terms and conditions.

(a) The permittee shall, at a minimum, conduct leak checks weekly on the treated landfill gas handling and processing equipment, that is part of the facility. No leaks shall exceed 500 ppmv as propane or 1375 ppmv as methane at a distance of 0.5 inch.

(b) The permittee, as an alternative to the leak detection methods current being used, may conduct monitoring of the components through use of an optical gas imaging (OGI) device. Leak(s) that are detected and exceed the above limits shall be repaired expeditiously.

IV. RECORDKEEPING REQUIREMENTS.

004 [25 Pa. Code §127.441]

Operating permit terms and conditions.

(a) The permittee shall record the following:

1. Monthly amount of treated landfill gas fired in the engines.
2. 12-month rolling total amount of treated landfill gas fired in the engines.
3. Monthly hours of operation.

**SECTION E. Source Group Restrictions.**

4. Monthly emissions of Particulates, NO_x, SO_x, CO, VOCs, and HAPs.
5. 12-month rolling total emissions of Particulates, NO_x, SO_x, CO, VOCs, and HAPs.

(b) The permittee shall maintain the following records in a method approved by the DEP:

1. The date of the tuning procedures for the engine.
2. The name of the service company and technicians.
3. The final operating rate or load.
4. The final CO and NO_x emission rates.
5. The final excess oxygen rate.
6. Any other information required by this permit.

(c) The permittee shall calculate the emissions for the engines using the emission rates determined during the most recently accepted performance test by the DEP.

(d) The permittee shall record each start-up, shutdown and malfunction of the engines. The records shall include the date, time, duration and type of event.

V. REPORTING REQUIREMENTS.

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

VI. WORK PRACTICE REQUIREMENTS.

005 [25 Pa. Code §127.441]

Operating permit terms and conditions.

- (a) All excess landfill gas not consumed as a fuel by the operation of the engines, shall be directed to the landfill's flare. At no time shall landfill gas be exhausted to the atmosphere from any of the equipment.
- (b) The permittee shall perform an annual adjustment and/or tune-up on each engine, which shall include the following:
 - (1) Inspection, adjustment, cleaning or replacement of combustion equipment, including stationary and moving parts necessary for proper operation as specified by the manufacturer.
 - (2) Inspection of the characteristics and adjustments necessary to minimize emissions of NO_x, and to the extent practicable minimize emissions of CO.
 - (3) Inspection of the air-to-fuel ratio control system and adjustments necessary to ensure proper calibration and operation as specified by the manufacturer.
 - (4) Sampling of the final NO_x and CO emission rates. This sampling shall be conducted with portable metering equipment in accordance with applicable manufacturer's calibrating and operating procedures.
- (c) The permittee shall operate and maintain a device that measures and records the flow of treated landfill gas to the engines.

VII. ADDITIONAL REQUIREMENTS.

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

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

**SECTION E. Source Group Restrictions.**

Group Name: GROUP 002

Group Description: 40 CFR Part 63 - Subpart ZZZZ

Sources included in this group

ID	Name
201	2233 HP, 1600KW, CAT G3520C, LANDFILL GAS ENG 1, SN GZJ00655
202	2233 HP, 1600KW, CAT G3520C, LANDFILL GAS ENG 2, SN GZJ00654

I. RESTRICTIONS.**Emission Restriction(s).****# 001 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.6585]****Subpart ZZZZ - National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines****Am I subject to this subpart?**

Am I subject to this subpart?

You are subject to this subpart if you own or operate a stationary RICE at a major or area source of HAP emissions, except if the stationary RICE is being tested at a stationary RICE test cell/stand.

63.6585(a) A stationary RICE is any internal combustion engine which uses reciprocating motion to convert heat energy into mechanical work and which is not mobile. Stationary RICE differ from mobile RICE in that a stationary RICE is not a non-road engine as defined at 40 CFR 1068.30, and is not used to propel a motor vehicle or a vehicle used solely for competition.

63.6585(b) A major source of HAP emissions is a plant site that emits or has the potential to emit any single HAP at a rate of 10 tons (9.07 megagrams) or more per year or any combination of HAP at a rate of 25 tons (22.68 megagrams) or more per year, except that for oil and gas production facilities, a major source of HAP emissions is determined for each surface site.

63.6585(c) An area source of HAP emissions is a source that is not a major source.

63.6585(d) If you are an owner or operator of an area source subject to this subpart, your status as an entity subject to a standard or other requirements under this subpart does not subject you to the obligation to obtain a permit under 40 CFR part 70 or 71, provided you are not required to obtain a permit under 40 CFR 70.3(a) or 40 CFR 71.3(a) for a reason other than your status as an area source under this subpart. Notwithstanding the previous sentence, you must continue to comply with the provisions of this subpart as applicable.

63.6585(e) [NA – NOT USED FOR NATIONAL SECURITY PURPOSES]

63.6585(f) [NA – RICE NOT RESIDENTIAL, COMMERCIAL OR INSTITUTIONAL]

[69 FR 33506, June 15, 2004, as amended at 73 FR 3603, Jan. 18, 2008; 78 FR 6700, Jan. 30, 2013]

What parts of my plant does this subpart cover?

63.6590(b)(2) - A new or reconstructed stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions which combusts landfill or digester gas equivalent to 10 percent or more of the gross heat input on an annual basis must meet the initial notification requirements of §63.6645(f) and the requirements of §§63.6625(c), 63.6650(g), and 63.6655(c). These stationary RICE do not have to meet the emission limitations and operating limitations of this subpart.

What are my monitoring, installation, operation, and maintenance requirements?

63.6625(c) - If you are operating a new or reconstructed stationary RICE which fires landfill gas or digester gas equivalent to 10 percent or more of the gross heat input on an annual basis, you must monitor and record your fuel usage daily with separate fuel meters to measure the volumetric flow rate of each fuel. In addition, you must operate your stationary RICE in a manner which reasonably minimizes HAP emissions.

**SECTION E. Source Group Restrictions.**

What notifications must I submit and when?

63.6645(a) - You must submit all of the notifications in §§63.7(b) and (c), 63.8(e), (f)(4) and (f)(6), 63.9(b) through (e), and (g) and (h) that apply to you by the dates specified if you own or operate any of the following;

63.6645(a)(1) - N/A (ENGINE IS NOT AN EXISTING UNIT)

63.6645(a)(2) - N/A (ENGINE IS NOT AN EXISTING UNIT)

63.6645(a)(3) - A stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions.

63.6645(a)(4) - A new or reconstructed 4SLB stationary RICE with a site rating of greater than or equal to 250 HP located at a major source of HAP emissions.

63.6645(a)(5) - N/A (ENGINE IS NOT AN EXISTING UNIT)

63.6645(b) - N/A (ENGINE IS CONSTRUCTED AFTER THE EFFECTIVE DATE OF THIS REGULATION)

63.6645(c) - If you start up your new or reconstructed stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions on or after August 16, 2004, you must submit an Initial Notification not later than 120 days after you become subject to this subpart.

63.6645(d) - N/A (ENGINE IS GREATER THAN 500 HP EACH)

63.6645(e) - N/A (ENGINE IS GREATER THAN 500 HP EACH)

63.6645(f) - N/A (FACILITY IS SUBJECT TO ADDITIONAL REQUIREMENTS OF THIS SUBPART)

63.6645(g) - N/A (PERFORMANCE TESTING IS NOT REQUIRED UNDER THIS SUBPART)

63.6645(h) - N/A (PERFORMANCE TESTING IS NOT REQUIRED UNDER THIS SUBPART)

What reports must I submit and when?

63.6650(g) - If you are operating as a new or reconstructed stationary RICE which fires landfill gas or digester gas equivalent to 10 percent or more of the gross heat input on an annual basis, you must submit an annual report according to Table 7 of this subpart by the date specified. You must report the data specified in (g)(1) through (g)(3) below:

(g)(1) - Fuel flow rate of each fuel and the heating values that were used in your calculations. You must also demonstrate that the percentage of heat input provided by landfill gas or digester gas is equivalent to 10 percent or more of the total fuel consumption on an annual basis.

(g)(2) - The operating limits provided in your federally enforceable permit, and any deviations from these limits.

(g)(3) - Any problems or errors suspected with the meters.

What records must I keep?

63.6655(c) - If you are operating a new or reconstructed stationary RICE which fires landfill gas or digester gas equivalent to 10 percent or more of the gross heat input on an annual basis, you must keep the records of your daily fuel usage monitors.

What parts of the General Provisions apply to me?

63.6665(a) Table 8 to this subpart shows which parts of the General Provisions in §§63.1 through 63.15 apply to you. If you own or operate a new or reconstructed stationary RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions (except new or reconstructed 4SLB engines greater than or equal to 250 and less than or equal to 500 brake HP), a new or reconstructed stationary RICE located at an area source of HAP emissions, or any of the

**SECTION E. Source Group Restrictions.**

following RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions, you do not need to comply with any of the requirements of the General Provisions specified in Table 8: An existing 2SLB stationary RICE, an existing 4SLB stationary RICE, an existing stationary RICE that combusts landfill or digester gas equivalent to 10 percent or more of the gross heat input on an annual basis, an existing emergency stationary RICE, or an existing limited use stationary RICE. If you own or operate any of the following RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions, you do not need to comply with the requirements in the General Provisions specified in Table 8 except for the initial notification requirements: A new stationary RICE that combusts landfill gas or digester gas equivalent to 10 percent or more of the gross heat input on an annual basis, a new emergency stationary RICE, or a new limited use stationary RICE.

Note: the above engine is fueled only by landfill gas, and therefore, is only subject to the initial notification requirements as listed under Table 8.

Reporting Address & Regulatory Changes:

Individual sources within this source group that are subject to 40 CFR Part 63 Subpart ZZZZ -National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines shall comply with all applicable requirements of the Subpart. 40 CFR 63.13(a) requires submission of copies of all requests, reports and other communications to both the Department and the EPA. Electronic copies may be sent to the EPA at R3_SubpartZZZZ@epa.gov or hard copy submittals may be forwarded to:

Associate Director
Office of Air Enforcement and Compliance Assistance (3AP20)
U.S. EPA Region III
1650 Arch Street
Philadelphia, PA 19103-2029

The DEP copies shall be forwarded to the DEP SCRO Air Quality Program Manager at wiweaver@pa.gov, unless otherwise directed in writing by DEP.

In the event that the Federal Subpart that is the subject of this Source Group is revised, the permittee shall comply with the revised version of the subpart, and shall not be required to comply with any provisions in this permit designated as having the subpart as their authority, to the extent that such permit provisions would be inconsistent with the applicable provisions of the revised subpart.

II. TESTING REQUIREMENTS.

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

III. MONITORING REQUIREMENTS.

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

IV. RECORDKEEPING REQUIREMENTS.

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

V. REPORTING REQUIREMENTS.

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



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VI. WORK PRACTICE REQUIREMENTS.

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

VII. ADDITIONAL REQUIREMENTS.

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

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

**SECTION E. Source Group Restrictions.**

Group Name: GROUP 003

Group Description: 40 CFR Part 60 - Subpart JJJJ

Sources included in this group

ID	Name
201	2233 HP, 1600KW, CAT G3520C, LANDFILL GAS ENG 1, SN GZJ00655
202	2233 HP, 1600KW, CAT G3520C, LANDFILL GAS ENG 2, SN GZJ00654

I. RESTRICTIONS.**Emission Restriction(s).****# 001 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.4230]****Subpart JJJJ - Standards of Performance for Stationary Spark Ignition Internal Combustion Engines****Am I subject to this subpart?**

Am I subject to this subpart ?

60.4230(a)(1) thru (a)(3) - N/A (PERMITTEE DOES NOT MANUFACTURE ENGINES)

60.4230(a)(4) - Owners and operators of stationary SI ICE that commence construction after June 12, 2006, where the stationary SI ICE are manufactured:

60.4230(a)(4)(i) - On or after July 1, 2007, for engines with a maximum engine power greater than or equal to 500 HP (except lean burn engines with a maximum engine power greater than or equal to 500 HP and less than 1,350 HP);

60.4230(a)(4)(ii) - N/A (ENGINE IS LARGER THAN 1350 HP)

60.4230(a)(4)(iii) - N/A (ENGINE IS LARGER THAN 500HP)

60.4230(a)(4)(iv) - N/A (THE ENGINE IS NOT USED FOR EMERGENCY PURPOSES)

60.4230(a)(5) - N/A (ENGINE IS A NEW UNIT)

60.4230(a)(6) - The provisions of § 60.4236 of this subpart are applicable to all owners and operators of stationary SI ICE that commence construction after June 12, 2006.

60.4230(b) - N/A (ENGINE IS NOT BEING TESTED AT AN ENGINE TEST CELL/STAND)

60.4230(c) - N/A (FACILITY IS REQUIRED TO OBTAIN A TITLE V OPERATING PERMIT)

60.4230(d) - N/A (ENGINE DOES NOT USE ALCOHOL BASED FUELS)

60.4230(e) - N/A (ENGINE IS NOT USED FOR NATIONAL SECURITY PURPOSES)

60.4230(f) - N/A (ENGINE IS PERMANENTLY INSTALLED)

What emission standards must I meet if I am an owner or operator of a stationary SI internal combustion engines ?

60.4233(a) - N/A (THE ENGINE IS MORE THAN 25 HP IN SIZE)

60.4233(b) - N/A (THE ENGINE DOES NOT USE GASOLINE)

60.4233(c) - N/A (THE ENGINE IS LEAN BURN AND DOES NOT USE LPG)

60.4233(d) - N/A (ENGINE IS MORE THAN 100 HP IN SIZE)

60.4233(e) - Owners and operators of stationary SI ICE with a maximum engine power greater than or equal to 75 KW (100 HP) (except gasoline and rich burn engines that use LPG) must comply with the emission standards in Table 1 to this subpart for their stationary SI ICE. For owners and operators of stationary SI ICE with a maximum engine power greater than

**SECTION E. Source Group Restrictions.**

or equal to 100 HP (except gasoline and rich burn engines that use LPG) manufactured prior to January 1, 2011 that were certified to the certification emission standards in 40 CFR part 1048 applicable to engines that are not severe duty engines, if such stationary SI ICE was certified to a carbon monoxide (CO) standard above the standard in Table 1 to this subpart, then the owners and operators may meet the CO certification (not field testing) standard for which the engine was certified. Per Table No. 1:

NO_x limit of 2.0 g/hp-hr
CO limit of 5.0 g/hp-hr
VOC limit of 1.0 g/hp-hr

Note: The facility's compliance with the BAT NO_x limit of 4.91 lb/hr (based on 1.0 g/hp-hr at full load), the BAT CO limit of 15.23 lb/hr (based on 3.1 g/hp-hr at full load), and the BAT VOC limit of 0.76 lb/hr (based 0.15 g/hp-hr at full load) assures compliance with the provisions of Section 60.4233(e) above.

60.4233(f) - N/A (THE ENGINE IS A NEW UNIT)

60.4233(g) - N/A (THE ENGINE IS NOT A WELLHEAD GAS ICE ENGINE)

60.4233(h) - N/A (THE ENGINE IS NOT CERTIFIED BY THE MANUFACTURER)

How long must I meet the emission standards if I am an owner or operator of a stationary SI internal combustion engine ?

60.4234 - Owners and operators of stationary SI ICE must operate and maintain stationary SI ICE that achieve the emission standards as required in §60.4233 over the entire life of the engine.

What is the deadline for importing or installing stationary SI ICE produced in the previous model years ?

60.4236(a) - N/A (ENGINE CAPACITY IS GREATER THAN 500 HP IN SIZE)

60.4236(b) - After July 1, 2009, owners and operators may not install stationary SI ICE with a maximum engine power of greater than or equal to 500 HP that do not meet the applicable requirements in §60.4233, except that lean burn engines with a maximum engine power greater than or equal to 500 HP and less than 1,350 HP that do not meet the applicable requirements in §60.4233 may not be installed after January 1, 2010.

60.4236(c) - N/A (THE ENGINE IS NOT USED FOR EMERGENCY PURPOSES)

60.4236(d) - N/A (ENGINE IS GREATER THAN 25 HP IN SIZE)

60.4236(e) - N/A (ENGINE IS NEW)

What are the monitoring requirements if I am an owner or operator of an emergency stationary SI internal combustion engine?

60.4237 - N/A (THE ENGINE IS NOT USED FOR EMERGENCY PURPOSES)

What are my compliance requirements if I am an owner or operator of a stationary SI internal combustion engine?

60.4243(a) - N/A (THE ENGINE IS NOT SUBJECT TO THE EMISSION STANDARDS SPECIFIED IN §60.4233(a) thru (c))

60.4243(b) - If you are an owner or operator of a stationary SI internal combustion engine and must comply with the emission standards specified in §60.4233(d) or (e), you must demonstrate compliance according to one of the methods specified in paragraphs (b)(1) and (2) of this section.

60.4243(b)(1) - N/A (ENGINE IS NOT CERTIFIED).

60.4243(b)(2) - Purchasing a non-certified engine and demonstrating compliance with the emission standards specified in §60.4233(d) or (e) and according to the requirements specified in §60.4244, as applicable, and according to paragraphs

**SECTION E. Source Group Restrictions.**

(b)(2)(i) and (ii) of this section.

60.4243(b)(2)(i) - N/A (ENGINE IS GREATER THAN 500 HP IN SIZE)

60.4243(b)(2)(ii) - If you are an owner or operator of a stationary SI internal combustion engine greater than 500 HP, you must keep a maintenance plan and records of conducted maintenance and must, to the extent practicable, maintain and operate the engine in a manner consistent with good air pollution control practice for minimizing emissions. In addition, you must conduct an initial performance test and conduct subsequent performance testing every 8,760 hours or 3 years, whichever comes first, thereafter to demonstrate compliance.

60.4243(c) - N/A (ENGINE IS SUBJECT TO THE EMISSION STANDARDS SPECIFIED IN §60.4233(e))

60.4243(d) - N/A (THE ENGINE IS NOT USED FOR EMERGENCY PURPOSES)

60.4243(e) - N/A (ENGINE DOES NOT USE NATURAL GAS)

60.4243(f) - N/A (ENGINE IS RATED AT GREATER THAN 500 HP IN SIZE)

60.4243(g) - N/A (ENGINE DOES NOT USE THREE-WAY CATALYSTS/NON-SELECTIVE CATALYTIC REDUCTION)

60.4243(h) - N/A (ENGINE WAS MANUFACTURED AFTER JULY 1, 2008)

60.4243(i) - N/A (ENGINE IS A NEW UNIT)

What test methods and other procedures must I use if I am an owner or operator of a stationary SI internal combustion engine ?

60.4244 - Owners and operators of stationary SI ICE who conduct performance tests must follow the procedures in paragraphs (a) through (f) of this section.

60.4244(a) - Each performance test must be conducted within 10 percent of 100 percent peak (or the highest achievable) load and according to the requirements in §60.8 and under the specific conditions that are specified by Table 2 to this subpart.

60.4244(b) - You may not conduct performance tests during periods of startup, shutdown, or malfunction, as specified in §60.8(c). If your stationary SI internal combustion engine is non-operational, you do not need to startup the engine solely to conduct a performance test; however, you must conduct the performance test immediately upon startup of the engine.

60.4244(c) - You must conduct three separate test runs for each performance test required in this section, as specified in §60.8(f). Each test run must be conducted within 10 percent of 100 percent peak (or the highest achievable) load and last at least 1 hour.

60.4244(d) - To determine compliance with the NOX mass per unit output emission limitation, convert the concentration of NOX in the engine exhaust using Equation 1 of this section:

(Formula omitted refer to regulation for exact formula notation)

"Equation 1"

Where:

ER = Emission rate of NOX in g/HP-hr.

Cd= Measured NOX concentration in parts per million by volume (ppmv).

1.912×10^{-3} = Conversion constant for ppm NOX to grams per standard cubic meter at 20 degrees Celsius.

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Q = Stack gas volumetric flow rate, in standard cubic meter per hour, dry basis.

T = Time of test run, in hours.

HP-hr = Brake work of the engine, horsepower-hour (HP-hr).

60.4244(e) - To determine compliance with the CO mass per unit output emission limitation, convert the concentration of CO in the engine exhaust using Equation 2 of this section:

(Formula omitted refer to regulation for exact formula notation)

"Equation 2"

Where:

ER = Emission rate of CO in g/HP-hr.

Cd= Measured CO concentration in ppmv.

1.164×10^{-3} = Conversion constant for ppm CO to grams per standard cubic meter at 20 degrees Celsius.

Q = Stack gas volumetric flow rate, in standard cubic meters per hour, dry basis.

T = Time of test run, in hours.

HP-hr = Brake work of the engine, in HP-hr.

60.4244(f) - For purposes of this subpart, when calculating emissions of VOC, emissions of formaldehyde should not be included. To determine compliance with the VOC mass per unit output emission limitation, convert the concentration of VOC in the engine exhaust using Equation 3 of this section:

(Formula omitted refer to regulation for exact formula notation)

"Equation 3"

Where:

ER = Emission rate of VOC in g/HP-hr.

Cd= VOC concentration measured as propane in ppmv.

1.833×10^{-3} = Conversion constant for ppm VOC measured as propane, to grams per standard cubic meter at 20 degrees Celsius.

Q = Stack gas volumetric flow rate, in standard cubic meters per hour, dry basis.

T = Time of test run, in hours.

HP-hr = Brake work of the engine, in HP-hr.

60.4244(g) - If the owner/operator chooses to measure VOC emissions using either Method 18 of 40 CFR part 60, appendix A, or Method 320 of 40 CFR part 63, appendix A, then it has the option of correcting the measured VOC emissions to account for the potential differences in measured values between these methods and Method 25A. The results from Method 18 and Method 320 can be corrected for response factor differences using Equations 4 and 5 of this section. The corrected VOC concentration can then be placed on a propane basis using Equation 6 of this section.

(Formula omitted refer to regulation for exact formula notation)

**SECTION E. Source Group Restrictions.**

"Equation 4"

Where:

RF_i= Response factor of compound i when measured with EPA Method 25A.

CM_i= Measured concentration of compound i in ppmv as carbon.

CA_i= True concentration of compound i in ppmv as carbon.

(Formula omitted...refer to regulation for exact formula notation)

"Equation 5"

Where:

C_i corr= Concentration of compound i corrected to the value that would have been measured by EPA Method 25A, ppmv as carbon.

C_i meas= Concentration of compound i measured by EPA Method 320, ppmv as carbon.

(Formula omitted...refer to regulation for exact formula notation)

"Equation 6"

Where:

CP_{eq}= Concentration of compound i in mg of propane equivalent per DSCM.

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

60.4245 - Owners or operators of stationary SI ICE must meet the following notification, reporting and recordkeeping requirements.

(a) Owners and operators of all stationary SI ICE must keep records of the information in paragraphs (a)(1) through (4) of this section.

(1) All notifications submitted to comply with this subpart and all documentation supporting any notification.

(2) Maintenance conducted on the engine.

(3) N/A (ENGINE IS NOT CERTIFIED BY THE MANUFACTURER)

(4) If the stationary SI internal combustion engine is not a certified engine or is a certified engine operating in a non-certified manner and subject to §60.4243(a)(2), documentation that the engine meets the emission standards.

(b) N/A - (THE ENGINE IS NOT USED FOR EMERGENCY PURPOSES)

60.4245(c) - Owners and operators of stationary SI ICE greater than or equal to 500 HP that have not been certified by an engine manufacturer to meet the emission standards in §60.4231 must submit an initial notification as required in §60.7(a)(1). The notification must include the information in paragraphs (c)(1) through (c)(5) of this section.

60.4245(c)(1) - Name and address of the owner or operator;

60.4245(c)(2) - The address of the affected source;

**SECTION E. Source Group Restrictions.**

60.4245(c)(3) - Engine information including make, model, engine family, serial number, model year, maximum engine power, and engine displacement;

60.4245(c)(4) - Emission control equipment; and

60.4245(c)(5) - Fuel used.

60.4245(d) - Owners and operators of stationary SI ICE that are subject to performance testing must submit a copy of each performance test as conducted in §60.4244 within 60 days after the test has been completed.

60.4245(e) - (THE ENGINE IS NOT USED FOR EMERGENCY PURPOSES)

§ 60.4246 What parts of the General Provisions apply to me?

General Provisions

Table 3 to this subpart shows which parts of the General Provisions in § § 60.1 through 60.19 apply to you

Reporting Address & Regulatory Changes:

Individual sources within this source group that are subject to 40 CFR Part 60 Subpart JJJJ -Standards of Performance for Stationary Spark Ignition Internal Combustion Engines shall comply with all applicable requirements of the Subpart. 40 CFR 63.13(a) requires submission of copies of all requests, reports and other communications to both the Department and the EPA. Electronic copies may be sent to the EPA at R3_SubpartJJJJ@epa.gov or hard copy submittals may be forwarded to:

Associate Director
Office of Air Enforcement and Compliance Assistance, 3AP20
U.S. EPA Region III
1650 Arch Street
Philadelphia, PA 19103-2029
(Email: R3_SubpartJJJJ@epa.gov)

The DEP copies shall be forwarded to the DEP SCRO Air Quality Program Manager at wiweaver@pa.gov, unless otherwise directed in writing by DEP.

In the event that the Federal Subpart that is the subject of this Source Group is revised, the permittee shall comply with the revised version of the subpart, and shall not be required to comply with any provisions in this permit designated as having the subpart as their authority, to the extent that such permit provisions would be inconsistent with the applicable provisions of the revised subpart.

II. TESTING REQUIREMENTS.

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

III. MONITORING REQUIREMENTS.

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

IV. RECORDKEEPING REQUIREMENTS.

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



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).

VI. WORK PRACTICE REQUIREMENTS.

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

VII. ADDITIONAL REQUIREMENTS.

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

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

**SECTION E. Source Group Restrictions.**

Group Name: GROUP 004

Group Description: 40 CFR Part 60 - Subpart A §60.18 Requirements

Sources included in this group

ID	Name
C104	CANDLESTICK FLARE

I. RESTRICTIONS.

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

II. TESTING REQUIREMENTS.

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

III. MONITORING REQUIREMENTS.

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

IV. RECORDKEEPING REQUIREMENTS.

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

V. REPORTING REQUIREMENTS.

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

VI. WORK PRACTICE REQUIREMENTS.

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

VII. ADDITIONAL REQUIREMENTS.**# 001 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.18]****Subpart A - General Provisions****General control device requirements.**

The following conditions are pursuant to Section E, Group 005, Subpart XXX, 60.762(b)(2)(iii)(A) requirements:

§60.18 General control device and work practice requirements.

(a) Introduction. (1) This section contains requirements for control devices used to comply with applicable subparts of 40 CFR parts 60 and 61. The requirements are placed here for administrative convenience and apply only to facilities covered by subparts referring to this section.

(2) [NA - MONITORING LEAKS NOT REQUIRED]

(b) Flares. Paragraphs (c) through (f) apply to flares.

(c)(1) Flares shall be designed for and operated with no visible emissions as determined by the methods specified in paragraph (f), except for periods not to exceed a total of 5 minutes during any 2 consecutive hours.

(2) Flares shall be operated with a flame present at all times, as determined by the methods specified in paragraph (f).

(3) An owner/operator has the choice of adhering to either the heat content specifications in paragraph (c)(3)(ii) of this

**SECTION E. Source Group Restrictions.**

section and the maximum tip velocity specifications in paragraph (c)(4) of this section, or adhering to the requirements in paragraph (c)(3)(i) of this section.

(i)(A) Flares shall be used that have a diameter of 3 inches or greater, are nonassisted, have a hydrogen content of 8.0 percent (by volume), or greater, and are designed for and operated with an exit velocity less than 37.2 m/sec (122 ft/sec) and less than the velocity, V_{max} , as determined by the following equation:

$$V_{max} = (XH_2 - K_1) * K_2$$

Where:

V_{max} = Maximum permitted velocity, m/sec.

K_1 = Constant, 6.0 volume-percent hydrogen.

K_2 = Constant, 3.9(m/sec)/volume-percent hydrogen.

XH_2 = The volume-percent of hydrogen, on a wet basis, as calculated by using the American Society for Testing and Materials (ASTM) Method D1946-77. (Incorporated by reference as specified in §60.17).

(B) The actual exit velocity of a flare shall be determined by the method specified in paragraph (f)(4) of this section.

(ii) Flares shall be used only with the net heating value of the gas being combusted being 11.2 MJ/scm (300 Btu/scf) or greater if the flare is steam-assisted or air-assisted; or with the net heating value of the gas being combusted being 7.45 MJ/scm (200 Btu/scf) or greater if the flare is nonassisted. The net heating value of the gas being combusted shall be determined by the methods specified in paragraph (f)(3) of this section.

(4)(i) Steam-assisted and nonassisted flares shall be designed for and operated with an exit velocity, as determined by the methods specified in paragraph (f)(4) of this section, less than 18.3 m/sec (60 ft/sec), except as provided in paragraphs (c)(4) (ii) and (iii) of this section.

(ii) Steam-assisted and nonassisted flares designed for and operated with an exit velocity, as determined by the methods specified in paragraph (f)(4), equal to or greater than 18.3 m/sec (60 ft/sec) but less than 122 m/sec (400 ft/sec) are allowed if the net heating value of the gas being combusted is greater than 37.3 MJ/scm (1,000 Btu/scf).

(iii) Steam-assisted and nonassisted flares designed for and operated with an exit velocity, as determined by the methods specified in paragraph (f)(4), less than the velocity, V_{max} , as determined by the method specified in paragraph (f)(5), and less than 122 m/sec (400 ft/sec) are allowed.

(5) [NA - NONASSISTED FLARE]

(6) Flares used to comply with this section shall be steam-assisted, air-assisted, or nonassisted.

(d) Owners or operators of flares used to comply with the provisions of this subpart shall monitor these control devices to ensure that they are operated and maintained in conformance with their designs. Applicable subparts will provide provisions stating how owners or operators of flares shall monitor these control devices.

(e) Flares used to comply with provisions of this subpart shall be operated at all times when emissions may be vented to them.

(f)(1) Method 22 of appendix A to this part shall be used to determine the compliance of flares with the visible emission provisions of this subpart. The observation period is 2 hours and shall be used according to Method 22.

(2) The presence of a flare pilot flame shall be monitored using a thermocouple or any other equivalent device to detect the presence of a flame.

(3) The net heating value of the gas being combusted in a flare shall be calculated using the following equation:

**SECTION E. Source Group Restrictions.**

[REFERENCE REGULATION FOR EQUATION]

PER 40 CFR SECTION 60.752(b)(2)(iii)(A) AND 60.754(e)

(e) For the performance test required in §60.752(b)(2)(iii)(A), the net heating value of the combusted landfill gas as determined in §60.18(f)(3) is calculated from the concentration of methane in the landfill gas as measured by Method 3C. A minimum of three 30-minute Method 3C samples are determined. The measurement of other organic components, hydrogen, and carbon monoxide is not applicable. Method 3C may be used to determine the landfill gas molecular weight for calculating the flare gas exit velocity under §60.18(f)(4).

END OF 60.754(e)

(4) The actual exit velocity of a flare shall be determined by dividing the volumetric flowrate (in units of standard temperature and pressure), as determined by Reference Methods 2, 2A, 2C, or 2D as appropriate; by the unobstructed (free) cross sectional area of the flare tip.

(5) The maximum permitted velocity, V_{max} , for flares complying with paragraph (c)(4)(iii) shall be determined by the following equation.

$$\text{Log}_{10}(V_{max}) = (HT + 28.8)/31.7$$

V_{max} = Maximum permitted velocity, M/sec

28.8 = Constant

31.7 = Constant

HT = The net heating value as determined in paragraph (f)(3).

(6) [NA - NONASSISTED FLARE]

(g) & (h) [NA - MONITORING LEAKS NOT REQUIRED]

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

**SECTION E. Source Group Restrictions.**

Group Name: GROUP 005

Group Description: 40 CFR Part 60 - Subpart XXX Requirements

Sources included in this group

ID	Name
C104	CANDLESTICK FLARE

I. RESTRICTIONS.

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

II. TESTING REQUIREMENTS.

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

III. MONITORING REQUIREMENTS.

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

IV. RECORDKEEPING REQUIREMENTS.

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

V. REPORTING REQUIREMENTS.

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

VI. WORK PRACTICE REQUIREMENTS.

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

VII. ADDITIONAL REQUIREMENTS.**# 001 [25 Pa. Code §127.441]****Operating permit terms and conditions.**

Reports, requests, and other communications required in accordance with 40 CFR Part 60 Subpart XXX shall be submitted to both the EPA and the Department. EPA copies shall be forwarded to:

Associate Director
Office of Air Enforcement and Compliance Assistance, 3AP20
U.S. EPA Region 3
1650 Arch Street
Philadelphia, PA 19103-2029

The DEP copies shall be forwarded to the DEP SCRO Air Quality Program Manager at wiveaver@pa.gov, unless otherwise directed in writing by DEP.

In the event that the Federal Subpart that is the subject of this Source Group is revised, the permittee shall comply with the revised version of the subpart, and shall not be required to comply with any provisions in this permit designated as having the subpart as their authority, to the extent that such permit provisions would be inconsistent with the applicable provisions of the revised subpart.

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

§60.763 Operational standards for collection and control systems.

**SECTION E. Source Group Restrictions.**

Each owner or operator of an MSW landfill with a gas collection and control system used to comply with the provisions of §60.762(b)(2) must:

(a) [NA - APPLIES TO LANDFILL EXCLUSIVELY]

(b) [NA - APPLIES TO LANDFILL EXCLUSIVELY]

(c) [NA - APPLIES TO LANDFILL EXCLUSIVELY]

(d) [NA - APPLIES TO LANDFILL EXCLUSIVELY]

(e) Operate the system such that all collected gases are vented to a control system designed and operated in compliance with §60.762(b)(2)(iii). In the event the collection or control system is not operating, the gas mover system must be shut down and all valves in the collection and control system contributing to venting of the gas to the atmosphere must be closed within 1 hour of the collection or control system not operating; and

(f) Operate the control system at all times when the collected gas is routed to the system.

(g) [NA - APPLIES TO LANDFILL EXCLUSIVELY]

003 [25 Pa. Code §127.441]

Operating permit terms and conditions.

§60.760 Applicability, designation of affected source, and delegation of authority.

(a) The provisions of this subpart apply to each municipal solid waste landfill that commenced construction, reconstruction, or modification after July 17, 2014. Physical or operational changes made to an MSW landfill solely to comply with subparts Cc, Cf, or WWW of this part are not considered construction, reconstruction, or modification for the purposes of this section.

(b) The following authorities are retained by the Administrator and are not transferred to the state: §60.764(a)(5).

(c) Activities required by or conducted pursuant to a Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), Resource Conservation and Recovery Act (RCRA), or state remedial action are not considered construction, reconstruction, or modification for purposes of this subpart.

§60.761 Definitions. [INCORPORATED BY REFERENCE]

004 [25 Pa. Code §127.441]

Operating permit terms and conditions.

§60.762 Standards for air emissions from municipal solid waste landfills.

(a) [NA - APPLIES TO LANDFILL EXCLUSIVELY]

(b) Each owner or operator of an MSW landfill having a design capacity equal to or greater than 2.5 million megagrams and 2.5 million cubic meters, must either comply with paragraph (b)(2) of this section or calculate an NMOC emission rate for the landfill using the procedures specified in §60.764. The NMOC emission rate must be recalculated annually, except as provided in §60.767(b)(1)(ii). The owner or operator of an MSW landfill subject to this subpart with a design capacity greater than or equal to 2.5 million megagrams and 2.5 million cubic meters is subject to part 70 or 71 permitting requirements.

(1) If the calculated NMOC emission rate is less than 34 megagrams per year, the owner or operator must:

(i) Submit an annual NMOC emission rate emission report to the Administrator, except as provided for in §60.767(b)(1)(ii); and

(ii) Recalculate the NMOC emission rate annually using the procedures specified in §60.764(a)(1) until such time as the calculated NMOC emission rate is equal to or greater than 34 megagrams per year, or the landfill is closed.

(A) If the calculated NMOC emission rate, upon initial calculation or annual recalculation required in paragraph (b) of this section, is equal to or greater than 34 megagrams per year, the owner or operator must either: Comply with paragraph

**SECTION E. Source Group Restrictions.**

(b)(2) of this section; calculate NMOC emissions using the next higher tier in §60.764; or conduct a surface emission monitoring demonstration using the procedures specified in §60.764(a)(6).

(B) If the landfill is permanently closed, a closure report must be submitted to the Administrator as provided for in §60.767(e).

(2) If the calculated NMOC emission rate is equal to or greater than 34 megagrams per year using Tier 1, 2, or 3 procedures, the owner or operator must either:

(i) [NA - APPLIES TO LANDFILL EXCLUSIVELY]

(ii) [NA - APPLIES TO LANDFILL EXCLUSIVELY]

(iii) Control system. Route all the collected gas to a control system that complies with the requirements in either paragraph (b)(2)(iii)(A), (B), or (C) of this section.

(A) A non-enclosed flare designed and operated in accordance with the parameters established in §60.18 except as noted in §60.764(e); or

(B) [NA - OPEN FLARE UTILIZED]

(C) Route the collected gas to 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. Venting of treated landfill gas to the ambient air is not allowed. If the treated landfill gas cannot be routed for subsequent sale or beneficial use, then the treated landfill gas must be controlled according to either paragraph (b)(2)(iii)(A) or (B) of this section.

(D) All emissions from any atmospheric vent from the gas treatment system are subject to the requirements of paragraph (b)(2)(iii)(A) or (B) of this section. For purposes of this subpart, atmospheric vents located on the condensate storage tank are not part of the treatment system and are exempt from the requirements of paragraph (b)(2)(iii)(A) or (B) of this section.

(iv) Operation. Operate the collection and control device installed to comply with this subpart in accordance with the provisions of §§60.763, 60.765 and 60.766.

(v) [NA - APPLIES TO LANDFILL EXCLUSIVELY]

(c) [NA - FACILITY HAS A TITLE V PERMIT]

(d) [NA - APPLIES TO LANDFILL EXCLUSIVELY]

005 [25 Pa. Code §127.441]

Operating permit terms and conditions.

§60.764 Test methods and procedures.

(a) [NA - APPLIES TO LANDFILL EXCLUSIVELY]

(b) [NA - APPLIES TO LANDFILL EXCLUSIVELY]

(c) When calculating emissions for Prevention of Significant Deterioration purposes, the owner or operator of each MSW landfill subject to the provisions of this subpart must estimate the NMOC emission rate for comparison to the Prevention of Significant Deterioration major source and significance levels in §§51.166 or 52.21 of this chapter using Compilation of Air Pollutant Emission Factors, Volume I: Stationary Point and Area Sources (AP-42) or other approved measurement procedures.

(d) [NA - OPEN FLARE UTILIZED]

(e) For the performance test required in §60.762(b)(2)(iii)(A), the net heating value of the combusted landfill gas as determined in §60.18(f)(3) is calculated from the concentration of methane in the landfill gas as measured by Method 3C. A

**SECTION E. Source Group Restrictions.**

minimum of three 30-minute Method 3C samples are determined. The measurement of other organic components, hydrogen, and carbon monoxide is not applicable. Method 3C may be used to determine the landfill gas molecular weight for calculating the flare gas exit velocity under §60.18(f)(4).

(1) Within 60 days after the date of completing each performance test (as defined in §60.8), the owner or operator must submit the results of the performance tests, including any associated fuel analyses, required by §60.764(b) or (d) according to §60.767(i)(1).

(2) [Reserved]

006 [25 Pa. Code §127.441]

Operating permit terms and conditions.

§60.765 Compliance provisions.

(a) [NA - APPLIES TO LANDFILL EXCLUSIVELY]

(b) [NA - APPLIES TO LANDFILL EXCLUSIVELY]

(c) [NA - APPLIES TO LANDFILL EXCLUSIVELY]

(d) [NA - APPLIES TO LANDFILL EXCLUSIVELY]

(e) The provisions of this subpart apply at all times, including periods of startup, shutdown or malfunction. During periods of startup, shutdown, and malfunction, you must comply with the work practice specified in §60.763(e) in lieu of the compliance provisions in §60.765.

007 [25 Pa. Code §127.441]

Operating permit terms and conditions.

§60.766 Monitoring of operations.

Except as provided in §60.767(c)(2):

(a) [NA - APPLIES TO LANDFILL EXCLUSIVELY]

(b) [NA - OPEN FLARE UTILIZED]

(c) Each owner or operator seeking to comply with §60.762(b)(2)(iii) using a non-enclosed flare must install, calibrate, maintain, and operate according to the manufacturer's specifications the following equipment:

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

(2) A device that records flow to the flare and bypass of the flare (if applicable). The owner or operator must:

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

(ii) Secure the bypass line valve in the closed position with a car-seal or a lock-and-key type configuration. A visual inspection of the seal or closure mechanism must be performed at least once every month to ensure that the valve is maintained in the closed position and that the gas flow is not diverted through the bypass line.

(d) [NA - OPEN FLARE UTILIZED]

(e) [NA - APPLIES TO LANDFILL EXCLUSIVELY]

(f) [NA - APPLIES TO LANDFILL EXCLUSIVELY]

(g) [NA - APPLIES TO THE GAS TREATMENT SYSTEM]

**SECTION E. Source Group Restrictions.**

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

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

§60.768 Recordkeeping requirements.

(a) [NA - APPLIES TO LANDFILL EXCLUSIVELY]

(b) Except as provided in §60.767(c)(2), each owner or operator of a controlled landfill must keep up-to-date, readily accessible records for the life of the control system equipment of the data listed in paragraphs (b)(1) through (5) of this section as measured during the initial performance test or compliance determination. Records of subsequent tests or monitoring must be maintained for a minimum of 5 years. Records of the control device vendor specifications must be maintained until removal.

(1) [NA - APPLIES TO LANDFILL EXCLUSIVELY]

(2) [NA - OPEN FLARE UTILIZED]

(3) [NA - NO BOILER OR PROCESS HEATER]

(4) Where an owner or operator subject to the provisions of this subpart seeks to demonstrate compliance with §60.762(b)(2)(iii)(A) through use of a non-enclosed flare, the flare type (i.e., steam-assisted, air-assisted, or nonassisted), all visible emission readings, heat content determination, flow rate or bypass flow rate measurements, and exit velocity determinations made during the performance test as specified in §60.18; continuous records of the flare pilot flame or flare flame monitoring and records of all periods of operations during which the pilot flame of the flare flame is absent.

(5) [NA - APPLIES TO LANDFILL GAS TREATMENT SYSTEM]

(c) Except as provided in §60.767(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 §60.766 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) [NA - OPEN FLARE UTILIZED]

(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 §60.766.

(3) [NA - NO BOILER OR PROCESS HEATER]

(4) Each owner or operator seeking to comply with the provisions of this subpart by use of a non-enclosed flare must keep up-to-date, readily accessible continuous records of the flame or flare pilot flame monitoring specified under §60.766(c), and up-to-date, readily accessible records of all periods of operation in which the flame or flare pilot flame is absent.

(5) [NA - APPLIES TO LANDFILL EXCLUSIVELY]

(d) [NA - APPLIES TO LANDFILL EXCLUSIVELY]

(e) [NA - APPLIES TO LANDFILL EXCLUSIVELY]

(f) [NA - APPLIES TO LANDFILL EXCLUSIVELY]



SECTION E. Source Group Restrictions.

(g) [NA - APPLIES TO LANDFILL EXCLUSIVELY]

(h) [NA - APPLIES TO LANDFILL EXCLUSIVELY]

(i) Any records required to be maintained by this subpart that are submitted electronically via the EPA's CDX may be maintained in electronic format.

(j) [NA - APPLIES TO LANDFILL EXCLUSIVELY]

009 [25 Pa. Code §127.441]
Operating permit terms and conditions.
§60.767 Reporting requirements.

(a) thru (l) [NA - APPLIES TO LANDFILL EXCLUSIVELY]

010 [25 Pa. Code §127.441]
Operating permit terms and conditions.
The Subpart XXX requirements in this Source Group are annotated specifically for Source 104. Differing Subpart XXX requirements may apply to other sources or control devices at the site.

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



SECTION F. Alternative Operation Requirements.

No Alternative Operations exist for this Title V facility.



SECTION G. Emission Restriction Summary.

No emission restrictions listed in this section of the permit.

**SECTION H. Miscellaneous.**

This permit includes conditions from operating permit No. 36-05146 amended on June 10, 2021 and supersedes those requirements.

Note: The throughput capacity for the landfill gas-fired engine was supplied by the manufacturer and is based on the Btu content of the treated landfill gas at an average Methane concentration of 50%.



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