GENERAL PERMIT WMGM055

BENEFICIAL USE OF LANDFILL GAS (LFG) GENERATED BY THE DECOMPOSITION OF MUNICIPAL WASTE AND RESIDUAL WASTE FOR USE AS AN ALTERNATIVE FUEL FOR THE ELECTRIC GENERATORS TO PRODUCE ELECTRICITY THAT WILL BE USED: (1) FOR THE LANDFILL'S DAILY NEEDS, (2) TRANSMITTED TO THE LOCAL ELECTRIC UTILITY GRID, AND/OR (3) DISTRIBUTED FOR DIRECT CONSUMER USE.

DEPARTMENT OF ENVIRONMENTAL PROTECTION BUREAU OF WASTE MANAGEMENT DIVISION OF MUNICIPAL AND RESIDUAL WASTE

Issued: June 15, 2016

Expires: June 16, 2026

A. Description.

The approval granted herein is limited to the processing and beneficial use of landfill gas (LFG) generated by the landfill disposal of municipal waste or residual waste.

- a. The approved processing is limited to the removal of nitrogen, water and particulates; filtration; temperature adjustment; compression; and, if needed, excess hydrogen sulfide and carbon dioxide removal.
- b. The processed LFG is approved for the following beneficial uses under this general permit:
 - i. As a substitute high or medium British Thermal Units (Btu) LFG for natural gas or other fuel.
 - ii. As a substitute for natural gas or other fuel that will be:
 - a. Transported in a pipeline that is interconnected with another pipeline for consumer use.
 - b. Transported in a pipeline that is directly interconnected with a near-by industrial facility.
 - Used by the landfill operator for the landfill's daily needs.
 - iii. As an alternative fuel for the electric generators to produce electricity that will be:
 - a. Used by the landfill operator for the landfill's daily needs.
 - b. Transmitted to the local electric utility grid for consumer use.
 - c. Distributed for direct consumer use.

B. Determination of Applicability Requirements

A person or municipality that proposes to operate under the terms and conditions of this general permit after the date of permit issuance must obtain a "Determination of Applicability" from the appropriate Department Regional Office (see attached list). A completed application on forms provided by the Department, along with the application fee for a determination of applicability in the amount identified in Section A (General Information) of the Form 20M (Application For A Municipal Waste General Permit), must be submitted to the appropriate Department Regional Office. Checks shall be made payable to the "Commonwealth of Pennsylvania".

C. Sampling and Analysis.

1. For each LFG stream, prior to the processing for beneficial use as authorized in Condition A of this general permit, the permittee shall collect samples and analyze the LFG for the following: temperature, moisture content, particulate content, and hydrogen

WMGM055 Page 2 of 6

sulfide, if needed. Thereafter, each LFG stream shall be managed in a manner that meets applicable Federal and/ or State regulatory requirements. Re-analyzing LFG streams shall be performed on an annual basis, when a change in the LFG processing occurs; or the quality of incoming LFG varies significantly.

- The chemical analyses required in this general permit shall be performed by a laboratory accredited or registered for accreditation under the Pennsylvania Environmental Laboratory Accreditation Act, Act of 2002, No. 25.
- 3. Upon request by the Department, the permittee shall collect for representative samples of the LFG stream(s) and analyze for the parameters required in Condition C1 of this general permit, within 48 hours of the request.

D. Operating Requirements.

- All activities conducted under this permit shall be conducted in accordance with the
 permittee's application. Except to the extent that the permit states otherwise, the
 permittee shall utilize the processed LFG for beneficial use purposes as described in the
 approved permit application.
- 2. This general permit does not authorize and shall not be construed as an approval to discharge any industrial wastes, wastewater, leachate or runoff from the processing and storage areas where solid waste management activities are conducted to the waters of the Commonwealth. Any treatment of wastes or wastewater shall be managed at a treatment facility that is operated and in compliance with the Clean Streams Law (35 P. S. §§ 691.1-691.1001) and the regulations promulgated thereunder.
- 3. The permittee shall comply with the fugitive air emissions regulations under 25 Pa. Code, Chapter 123 (Standards for Contaminants) issued under the Air Pollution Control Act, the Act of January 8, 1960, P.L. 2119, 35 P.S. §4005 and shall comply with all the applicable provisions of the Fugitive Emissions §§123.1 and 123.2, as they apply to the permittee's operations.
- 4. Nothing in this permit shall be construed to supersede, amend, or authorize a violation of any of the provisions of any valid and applicable local law, ordinance, or regulations, providing that said local law, ordinance, or regulation is not preempted by the Solid Waste Management Act, 35 P.S. §6018.101 et seq.; and the Municipal Waste Planning, Recycling and Waste Reduction Act of 1988, 53 P.S. §4000.101 et seq.
- 5. As a condition of this permit and of the permittee's authority to conduct the activities authorized by this permit, the permittee hereby authorizes and consents to allow authorized employees or agents of the Department, without advance notice or search warrant, upon presentation of appropriate credentials and without delay, to have access to and to inspect all areas on which solid waste management activities are being, will be, or have been conducted by the permittee. This authorization and consent shall include consent to collect samples of wastes, soils, water, or gases; take photographs; to perform measurements, surveys, and other tests; inspect any monitoring equipment; to inspect the methods of operation and to inspect and/or copy documents, books, and papers required by the Department to be maintained. This permit condition is referenced in accordance with §§608 and 610(7) of the Solid Waste Management Act, 35 P.S.

WMGM055 Page 3 of 6

§§6018.608 and 6018.610(7). This condition in no way limits any other powers granted under the Solid Waste Management Act.

- 6. Failure of the design, equipment, and/or methods herein approved to perform as intended, or as designed, or in compliance with the applicable laws, rules and regulations, and terms and conditions of this permit, for any reason, shall be grounds for the revocation or suspension of the permittee's approval to operate under this permit.
- 7. Any independent contractors or agents retained by the permittee to conduct processing activities authorized under this permit shall be subject to a compliance history review by the Department as specified by the Solid Waste Management Act of 1980, as amended.
- 8. The processing and beneficial use of LFG authorized by this general permit shall be in a matter that will not create a nuisance, harm or present a threat of harm to the health, safety or welfare of the people or environment of this Commonwealth.
- Storm water run-off from processing areas shall not cause surface water pollution or groundwater degradation and shall be managed in accordance with The Clean Streams Law and regulations promulgated thereunder.
- 10. The permittee shall maintain at the permitted facility an updated copy of a Preparedness, Prevention, and Contingency (PPC) plan for the facility prepared in accordance with the most recent edition of the Department's "Guidelines for the Development and Implementation of Environmental Emergency Response Plans" (Document No. 400-2200-001). The PPC plan shall be updated at least once every 5 years.
- 11. LFG shall not be processed within these minimum isolation distances:
 - a. In the 100-year floodplain of waters of this Commonwealth, unless the Department approves, in writing, a method of protecting the facility from a 100-year flood consistent with the Flood Plain Management Act (32 P.S. §§679.101-679.601) and the Dam Safety and Encroachments Act (32 P.S. §§693.1-693.27);
 - b. In or within 300 feet of an exceptional value wetland;
 - c. Within 300 feet measured horizontally from an occupied dwelling, unless the current owner has provided a written waiver consenting to the activities being closer than 300 feet:
 - d. Within 100 feet of an intermittent or perennial stream, unless storage and processing will not occur within that distance and no adverse hydrologic or water quality impacts will result;
 - e. Within 50 feet of a property line unless the operator demonstrates that actual processing of waste is not occurring within that distance, or that the current owners of occupied dwellings within that distance have provided written waivers consenting to the facility being closer than 50 feet. The waiver shall be knowingly made and separate from a lease or deed unless the lease or deed contains an explicit waiver from the owner;

WMGM055 Page 4 of 6

- f. Except for areas that were subject to a Department-issued permit prior to September 26,1988, within 300 yards of a park or playground or building that is owned by a school district or a parochial school and used for instructional purposes unless the current property owner has provided a written waiver to the prohibition.
- 12. The permittee shall maintain a bond, unless operated as part of a permitted facility's gas management plan, in an amount and with sufficient guarantees as provided by 25 Pa. Code, Chapter 271, Subchapter D (Bonding and Insurance Requirements).
- 13. The bond filed with the Department under Condition D (12) shall continue for the period of operations of the facility, until 10 years after final closure of the facility, unless released in whole or in part by the Department, in writing, prior thereto as provided by 25 Pa, Code §271.341 (relating to Bond Release).
- 14. The permittee shall maintain a general liability insurance policy, in accordance with 25 Pa. Code, Chapter 271, Subchapter D (Bonding and Insurance) to provide continuous coverage during operation of the facility and until the Department issues a final closure certification.

E. Recordkeeping.

The following records shall be retained by the permittee at the permittee's processing facility, for a minimum of 5 years, and made available to the Department upon request:

- 1. Analytical evaluations conducted on the LFG which shall include, at a minimum, the dates of testing, each parameter tested, the results, the laboratory name, sampling procedures, analytical methodologies and person analyzing the sample.
- 2. BTU value and amount of LFG processed daily.
- Documentation that the processed LFG meets each users specifications.
- 4. Amount of LFG generated by the permittee and the disposition of that LFG.
- 5. Records of inspections of the facility-by-facility personnel.

F. Reporting.

- 1. The permittee shall submit to the appropriate Department Regional Office, an annual report that summarizes the information outlined in Conditions C (1), F (2), and F (3) for the preceding 12 months. The annual report is due 30 days after the anniversary date that the permit became applicable to a permittee.
- 2. Any person operating under the provisions of this permit shall immediately notify the appropriate Department Regional Office (see attached list), in writing, of any changes in: the company name, address, ownership, operators and responsible officials; the location of the facilities; land ownership and the right to enter and operate on any land occupied; the physical or chemical characteristics of LFG; the status of any bond or insurance

WMGM055 Page 5 of 6

required by this permit; and the status of any permit issued by the Department or federal government under the environmental protection acts.

- 3. The permittee shall immediately notify the appropriate Department Regional Office (see attached list) in the event of a discharge or spill of liquid waste to soil in the amount of 5 gallons or more and shall take appropriate immediate action to protect the health and safety of the public and the environment.
- 4. Any person operating under the provisions of this general permit must notify the appropriate Department Regional Office (see attached list), in writing, if the processing facility is relocated or if a new location(s) is to be included under this general permit. At least thirty (30) days prior to a permittee operating at a new location, a completed application on forms provided by the Department must be submitted to the appropriate Department Regional Office, for review and approval. An application fee for existing permittees to operate at a new operation is not required.

G. Renewal:

A person that plans to continue the operations authorized under this general permit, after the expiration date indicated on the approval for coverage page, shall file a complete application for permit renewal at least 180 days before the expiration date of this general permit unless permission has been granted by the Department for submission at a later date. The renewal application shall be made using the "Form 20 (Application For a Municipal or Residual Waste General Permit)". The renewal shall be sent to the attention of the Department's Bureau of Waste Management, Rachel Carson State Office Building, 400 Market Street, P.O. Box 69170, Harrisburg, PA 17106-9170.

In the event that a timely and complete application for renewal has been submitted and the Department is unable, through no fault of the permittee, to reissue the general permit or approval for coverage before its current coverage expiration date, the terms and conditions of the approved coverage will automatically continue and will remain fully effective and enforceable pending the issuance or denial of the renewal for permit coverage, provided the permittee is, and has been, operating in compliance with the terms and conditions of the general permit

Department of Environmental Protection Regional Offices (and Counties Served)

Bucks, Chester, Delaware, Montgomery, Philadelphia

Southeast Regional Office

2 East Main Street Norristown, PA 19401 Phone: (484) 250 - 5960

II. Carbon, Lackawanna, Lehigh, Luzerne, Monroe, Northampton, Pike, Schuylkill, Susquehanna, Wayne, Wyoming

Northeast Regional Office

2 Public Square Wilkes-Barre, PA 18711-0790 Phone: (570) 826 – 2516

III. Adams, Bedford, Berks, Biair, Cumberland, Dauphin, Franklin, Fulton, Huntingdon, Juniata, Lancaster, Lebanon, Mifflin, Perry, York.

Southcentral Regional Office

909 Elmerton Avenue Harrisburg, PA 17110-8200 Phone: (717) 705 – 4706

IV. Bradford, Cameron, Centre, Clearfield, Clinton, Columbia, Lycoming, Montour, Northumberland, Potter, Snyder, Sullivan, Tioga, Union.

Northcentral Regional Office

208 West 3rd Street - Suite 101 Williamsport, PA 17701 Phone: (570) 327 - 3653

V. Allegheny, Armstrong, Beaver, Cambria, Fayette, Greene, Indiana, Somerset, Washington, Westmoreland.

Southwest Regional Office

400 Waterfront Drive Pittsburgh, PA 15222-4745 Phone: (412) 442 – 4000

VI. Butler, Clarion, Crawford, Elk, Erie, Forest, Jefferson, Lawrence, McKean, Mercer, Venango, Warren.

Northwest Regional Office

230 Chestnut Street Meadville, PA 16335-3481 Phone: 814-332-6848