GENERAL PERMIT WMGR106 PROCESSING AND BENEFICIAL USE OF PLASTIC DERIVED FUEL

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

Amended September 19, 2014

Expires December 9, 2015

A. Description:

- 1. This general permit authorizes the processing of types of plastics and wastes and wastes listed below ("waste") from recycling facilities and residual waste generators to produce an alternative fuel that is predominantly plastic ("plastic-derived fuel" or "PDF"). The following types of wastes may be processed under this general permit:
 - a. Types 4 through 7 plastics
 - b. Types 1 and 2 plastics that are one of the following:
 - 1. Co-laminated with other plastics, paper or cardboard;
 - 2. Cannot be practically separated from Types 4 through 7 plastics;
 - 3. Cannot be practically recycled by other means and would otherwise be destined for disposal.
 - c. Paper and cardboard that cannot be practically recycled by other means and would otherwise be destined for disposal
 - d. Wood and wood-based materials
- 2. The authorized processing is polyvinyl chloride (PVC) and other halogenated plastics removal using infrared or x-ray technology with air separation, shredding, grinding, magnetic and manual metal removal, and blending.

B. Determination of Applicability Requirements:

A person or municipality that proposed to operate under the terms and conditions of this general permit after the date of permit issuance must obtain a "Determination of Applicability" ("DOA") from the appropriate Department Regional Office (See attached list) prior to commencing authorized activities under this general permit. A completed (i) General Information Form (Authorization Application for a Residual or Municipal Waste General Permit Application), (ii) Form B (Professional Certification), (iii) Form 20 (Application for a Municipal or Residual Waste General Permit), (iv) Form 27R (Acceptance of General Permit Conditions), (v) Form HW-C (Compliance History), (vi) Form E-GP (Contractual Consent of Landowner), and (vii) A DOA application fee in the amount identified in Section A (General Information) of the Form 20 must be submitted to the appropriate Department Regional Office. A check in the amount of \$500 shall be made payable to the "Commonwealth of Pennsylvania."

The Department recommends conducting a pre-application meeting with the appropriate regional office prior to submitting an application for "Determination of Applicability." Additional forms and information required will be determined at this meeting. No activities shall commence unless approved, in writing, by the Department.

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C. Operating Conditions:

- 1. All activities conducted under the authorization granted in this permit shall be conducted in accordance with the permittee's application. Except to the extent that the permit states otherwise, the permittee shall operate the facility as described in the approved application.
- 2. Prior to accepting waste for processing, the permittee shall visually inspect the waste for unusual coloration, odor, or any other indication of contamination or the presence of other wastes or materials. If the presence of other wastes is indicated, as a result of visual observation, the waste shall not be processed unless the other wastes have been removed to the greatest extent practical.
- 3. Prior to accepting waste from a new residual waste source or a different type of waste from an existing residual waste source, the permittee shall prequalify the waste. This pregualification shall include
 - a. For waste plastics, identification of the type of plastic, a description of the process by which the waste was generated. In addition, the prequalification shall identify the concentrations of the following in the plastic: chlorine, fluorine, sulfur and any of the following metals if used as a pigment or additive in the plastic formulation: antimony, arsenic, barium, beryllium, cadmium, chromium, cobalt, copper, lead, manganese, mercury, nickel, selenium, silver, thallium and zinc. These concentrations may be determined by chemical analysis or by knowledge of the plastic formulation.
 - b. For waste wood or wood-based materials, identification of the type of wood or wood-based materials. In addition, the prequalification shall identify:
 - i. For wood treated with metals, the concentrations of any of the following used in the process that treated the wood formulation: antimony, arsenic, barium, beryllium, cadmium, chromium, cobalt, copper, lead, manganese, mercury, nickel, selenium, silver, thallium and zinc. For example, prequalification for CCA (chromated copper arsenate) treated wood shall identify the concentrations of arsenic, chromium and copper in the wood,
 - ii. For painted wood, the concentrations of lead.
- 4. The waste shall not be hazardous waste.
- 5. The waste shall not be mixed with other types of solid wastes, including hazardous waste, special handling waste, or residual or municipal waste other than those approved in this permit.
- 6. The waste and processed waste shall not be accumulated speculatively.

- 7. This permit does not authorize and shall not be construed as an approval to discharge any waste, wastewater, or runoff from the site of processing to the land or waters of the Commonwealth.
- 8. The permittee shall comply with the fugitive emissions standards adopted under 25 Pa. Code Sections 123.1 and 123.2.
- 9. 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 regulation, provided that said local law, ordinance, or regulation is not preempted by the Pennsylvania Solid Waste Management Act, 35 P.S. §6018.101 et seq., or the Municipal Waste Planning, Recycling and Waste Reduction Act of 1988, 53 P.S. §4000.101 et seq.
- 10. As a condition of this permit and of the permittee's authority to conduct the activities authorized by this permit, the permittee hereby 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 and to inspect all areas or permittee controlled adjacent areas where solid waste management activities are being or will be conducted. This authorization and consent shall include consent to collect samples of waste, water, or gases; to take photographs; to perform measurements, surveys, and other tests; to 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 or produced. (See Sec. 608 and 610(7) of the Solid Waste Management Act, 35 P.S. Section 6018.608 and 6018.610(7).) This condition in no way limits any other powers granted to the Department under the Solid Waste Management Act.
- 11. Failure of the measures 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.
- 12. Any independent contractors or agents retained by the permittee in the completion of activities authorized under this permit shall be subject to prior compliance history review by the Department as specified by the Pennsylvania Solid Waste Management Act of 1980.
- 13. The activities authorized by this permit shall not harm or present a threat of harm to the health, safety or welfare of the people or environment of this Commonwealth. The Department may modify, suspend, revoke or reissue the authorization granted in this permit if it deems necessary to prevent harm or the threat of harm to the public health, or the environment.

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- 14. Daily inspections of equipment during waste processing activities shall be conducted to ensure that equipment will operate properly and to examine for evidence of equipment failure. 15. During periods of extended equipment failure or shutdown, waste may be stored for no more than 90 days from the time the equipment failure or shutdown occurred.
- 16. 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". The PPC plan shall be updated every 5 years or more frequently if necessary (e.g., if changes in phone numbers, equipment, or regulatory requirements occur).
- 17. Storage of waste by the permittee shall be in a manner that complies with 25 Pa. Code Chapter 299 (relating to the storage of residual waste). Leachate and runoff produced from the storage of waste shall be managed in accordance with The Clean Streams Law. Storage of residues from the processing of waste shall be in a manner that complies with 25 Pa. Code Chapter 299 or 40 CFR Part 262, Subpart C (relating to pre-transport requirements for hazardous waste), as incorporated by reference in 25 Pa. Code 262a.10, whichever is applicable.
- 18. The permittee shall comply with the terms and conditions of this general permit and with the environmental protection acts to the same extent as if the activities were covered by an individual permit. The Department may require an individual permit if the permittee is not in compliance with the conditions of this general permit or is conducting an activity that harms or presents a threat of harm to the health, safety, or welfare of the people or the environment.
- 19. Upon cessation of operations at the facility, the permittee shall comply with any applicable closure requirements in 25 Pa. Code § 297.272.
- 20. The permittee shall obtain a grab sample of the PDF every operating shift over a 7-day period. These grab samples shall be composited as follows:
 - a. Into one weekly composite sample if the permittee will be the sole burner of the PDF or if the PDF is marketed to a single burner.
 - b. Into multiple composite samples of the specific grab samples of the PDF that will be provided to each burner if the permittee will burn some of the PDF and market the remainder of the PDF or will market the PDF to multiple burners.

- 21. The composite sample shall be analyzed for the following: heat value (Btu/lb), chlorine content (percent by weight), lead (parts per million by weight, ppmw), manganese (ppmw), nickel (ppmw), silver (ppmw), thallium (ppmw), antimony (ppmw), arsenic (ppmw), copper (ppmw), mercury (ppmw), selenium (ppmw), barium (ppmw), beryllium (ppmw), cadmium (ppmw), chromium (ppmw), cobalt (ppmw) and zinc (ppmw). The chemical analyses required in this Condition shall be performed by a laboratory that is in compliance with the Pennsylvania Environmental Laboratory Accreditation Act, Act of 2002, No. 90, 27 Pa C.S. §4101 et. seq. A copy of the results of the chemical analysis shall be provided by the permittee to the burners to whom the PDF is marketed in the 7-day period for compliance with the air quality permit limitations.
- 22. The PDF shall be made up predominantly plastics and have a minimum heat content of 8000 BTU/lb.
- 23. PDF may be marketed only to burners whose test burns and air quality permits or approvals cover each plastic formulation that makes up the PDF.
- 24. PDF produced by the permittee that meets the air quality permit specifications of the burner to whom it is marketed is no longer a waste provided it is actually used as a fuel by that burner.

D. Recordkeeping:

The permittee shall maintain records that contain: the name, address, and phone number of each source of incoming waste, the date of receipt and quantity of waste received at each location, the prequalification information in Condition C3, the results of testing to show PDF meets any specifications required by the combustion device in which it will be used and the testing requirements in Condition C21, and the name, address, and phone number, and quantity for each destination of outgoing shipment of PDF. The permittee shall also maintain records of all spills and releases of 1000 pounds or greater that contain: location, date, time, identification and quantity of spilled or released material, and a description of how the material was cleaned up. These records shall be retained by the permittee at the permittee's place of business for a minimum of 5 years from the date the records were generated and shall be available to the Department for inspection.

E. Reporting Requirements:

1. The permittee shall immediately notify the Department's Emergency Hotline at (717) 787-4343 and the appropriate DEP regional office in the event of a discharge or spill of waste, PDF or any residue from processing that exceeds 1000 pounds and shall take appropriate immediate action to protect the health and safety of the public and the environment.

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- 2. Any person that operates under the provisions of this permit shall immediately the appropriate Department Regional Office via certified mail of any changes in: the company name, address, owners, operators and responsible officials; land ownership and the right to enter and operate on any land occupied by a facility; the system used to process waste; and the status of any permit issued by the Department or federal government under the environmental protection acts.
- 3. At least sixty (60) days prior to a permittee operating a processing facility at a new location.

F. Renewal:

A person and municipality 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)

I. 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, Blair, 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