

GENERAL PERMIT WMGR155

PROCESSING AND BENEFICIAL USE  
OF PLASTIC DERIVED FUEL

DEPARTMENT OF ENVIRONMENTAL PROTECTION  
BUREAU OF WASTE MANAGEMENT  
DIVISION of MUNICIPAL and RESIDUAL WASTE

Issued: October 12, 2016

Expires: October 12, 2026

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**A. Description:**

1. This general permit authorizes the processing of the following types of plastics and wastes (“waste”) from recycling facilities and residual waste generators to produce an alternative fuel that is predominantly plastic (“plastic-derived fuel” or “PDF”):
  - a. Plastics, types 4 through 7.
  - b. Plastics, types 1 and 2 that are also one of the following:
    - i. Co-laminated with other plastics, paper or cardboard;
    - ii. Cannot be practically separated from Types 4 through 7 plastics;
    - iii. 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 processing authorized under this general permit is limited to 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 proposes 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 application on forms provided by the Department along with the application fee for a DOA in the amount identified in Section A of Form 20 (Application for a Municipal or Residual Waste General Permit) must be submitted to the appropriate Department Regional Office. Checks 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 a DOA. Additional forms and information required will be determined at the pre-application 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 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, other indication of contamination or the presence of other wastes or materials not included in section A.1 of this general permit. If wastes or materials not included in section A.1 of this general permit are observed, the waste shall not be processed unless the wastes or materials not included in section A.1 of this general permit 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. The prequalification shall include:
  - a. For waste plastics, the prequalification shall identify the type of plastic and provide a description of the process by which the waste plastic was generated. In addition, the prequalification shall identify, by chemical analysis or by knowledge of the plastic formulation, the concentrations of the following in the waste plastic:
    - i. Chlorine, fluorine, sulfur, and
    - ii. 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. .
  - b. For waste wood or wood-based materials, the prequalification shall identify the type of wood or wood-based materials and the following:
    - 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 chromated copper arsenate (CCA) treated wood shall identify the concentration of arsenic, chromium, and copper in the wood;
    - ii. For painted wood, the concentration of lead.
4. The permittee shall obtain a grab sample of PDF for every operating shift over a 7-day period. These grab samples shall be composited as follows:

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- 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.
5. The composite sample collected in accordance with Condition 4 of this general permit shall be analyzed for the following:
- a. Heat value (Btu/lb),
  - b. Chlorine content (percent by weight), and
  - c. The following as parts per million by weight (ppmw): lead, manganese, nickel, silver, thallium, antimony, arsenic, copper, mercury, selenium, barium, beryllium, cadmium, chromium, cobalt, and zinc.
6. The PDF shall be made up predominantly plastics and have a minimum heat content of 8000 BTU/lb.
7. 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.
8. PDF produced by the permittee that meets the air quality specifications of the burner to whom it is marketed is no longer a waste provided it is used as a fuel by that burner.
9. The chemical analyses required in this general permit 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. et seq. The permittee shall provide a copy of the results of the chemical analysis to the burners to whom the PDF is marketed in the 7-day period for compliance with air quality permit limitations.
10. The waste shall not be hazardous waste, as defined by 40 CFR § 261.3, which is incorporated by reference at 25 Pa Code §261a.1.
11. 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.
12. The waste and processed waste shall not be accumulated speculatively, as the term is defined by 25 Pa Code § 287.1.

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13. This permit does not authorize and shall not be construed as an approval to discharge any waste, wastewater, or runoff from the site of storage to the land or waters of the Commonwealth.
14. The permittee shall comply with the fugitive emissions standard adopted under 25 Pa. Code §§ 123.1 and 123.2.
15. 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, providing that said local law, ordinance or regulation is not preempted by the Pennsylvania Solid Waste Management Act, 35 P.S. §6018.101 et seq (SWMA); or the Municipal Waste Planning, Recycling and Waste Reduction Act of 1988, 53 P.S. §4000.101 et seq.
16. As a condition of this general permit and of the permittee's authority to conduct the activities authorized by this general 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 inspect all areas or permittee controlled adjacent areas where solid waste management activities are 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 310(7) of the SWMA, 35 P.S. §§ 6018.608 and 6018.610(7).) This condition in no way limits any other powers granted to the Department under the SWMA.
17. Failure of the measures herein approved to perform as intended, 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.
18. Any independent contractors or agents retained by the permittee in the completion of activities authorized under this general permit shall be subject to prior compliance history review by the Department as specified by the SWMA.
19. The activities authorized by this general 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, and reissue the authorization granted in this general permit if it deems necessary to prevent harm or the threat of harm to the public health, and the environment.

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20. 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.
21. 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.
22. 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).
23. Storage of waste by the permittee shall be in a manner that complies with 25 Pa. Code Chapter 299 (relating to the storage and transportation). Leachate and runoff produced from the storage of waste shall be managed in accordance with The Clean Streams Law, 35 P.S. § 691.1 et seq. 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 22, Subpart C (relating to pre-transport requirements for hazardous waste), as incorporated by reference in 25 Pa. Code § 262a.10, whichever is applicable.
24. The permittee shall comply with the terms and conditions of this general permit and 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.
25. The permittee shall maintain a bond in an amount and with sufficient guarantees acceptable to the Department as provided by 25 Pa Code, Chapter 287, Subchapter E (relating to bonding and insurance requirements). The bond shall continue in effect for the operational life of the facility, and for up to 10 years after final closure of the facility, unless released in writing in whole or in part by the Department.  
  
If the permittee will be the sole user of the PDF, the permittee will not be required to maintain a bond.
26. Upon cessation of operations at the facility, the permittee shall comply with any applicable closure requirements in 25 Pa. Code § 297.272.

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**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 required by Condition C.3 of this general permit; the results of testing to show that the PDF meets any specifications required by the combustion device in which it will be used and the testing requirements in Condition C.5 of this general permit; 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 100 pounds or greater that contain the location, date, time, identification and quantity of spilled or released material and a description of how the material was cleaned up. All 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 100 pounds, and shall take appropriate immediate action to protect the health and safety of the public and the environment.
2. Any person that operates under the provisions of this permit shall immediately notify 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, two copies of the following must be supplied to the Department, in writing:
  - a. Name, address, phone number, and contact person for the new facility;
  - b. A description of the processing operations, including a detailed site drawing showing placement of storage units and their capacities, containment areas, and other significant features, and a map showing the facility placement;
  - c. Proof that copies of the notification have been submitted to the municipality, county, county planning agency and county health department in which the processing activities will be conducted;

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- d. 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";
- e. Proof that the applicant has legal right to enter the land and operate the facilities approved under this permit;
- f. An irrevocable written consent from the landowner giving the Department permission to enter upon the land where the applicant will be conducting waste management activities;
- g. Proof that any independent contractors retained by the permittee to perform any activities authorized under this permit are in compliance with Department regulations as required in Condition C.12.

**F. Renewal:**

A person or 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 include 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 27 (Acceptance of General Permit Conditions), (v) Form HW-C (Compliance History), (vi) Form E-GP (Contractual Consent of Landowner, and (vii) a renewal 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 shall be made payable to the "Commonwealth of Pennsylvania." A copy of the renewal application shall also be sent to the attention of the Department's Bureau of Waste Management, Division of Municipal and Residual Waste, 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.