

BUREAU OF WASTE MANAGEMENT DIVISION OF MUNICIPAL and RESIDUAL WASTE GENERAL PERMIT WMGM017

ON-FARM SOURCE SEPARATED COMPOSTING

Issued: September 20, 2012

Amended: June 5, 2020

Expires: September 20, 2022

A. Description:

This general permit authorizes the composting, vermicomposting and hermetiacomposting of wastes identified in this paragraph and beneficial use of the processed compost, vermicompost and hermetiacompost produced per the terms and conditions of this permit. The waste streams accepted for composting shall be non-liquid waste¹ and limited to the following categories of wastes: manure, yard waste, source separated food scraps from food markets, grocery stores, restaurants, food banks, food distribution centers, school cafeterias and institutions, source-separated newspaper, and source-separated corrugated paper (cardboard). The waste(s) accepted for composting may not be mixed with other garbage or wastes, including hazardous waste, municipal waste, special handling waste, or other residual waste, as the terms are defined in 25 Pa. Code § 287.1. The beneficial uses of finished compost, vermicompost and hermetiacompost approved in this permit are for the marketing or distribution as soil substitute, soil conditioner, soil amendment, fertilizer, or mulch.

B. Definitions:

The following terms, when used in this permit, have the following meanings:

Composting – The process by which organic solid waste is biologically decomposed under a controlled anaerobic or aerobic environment to yield a humus-like product.

Composting Facility – A facility for processing solid waste by composting.

Composting Pad – An area within a composting facility where compost or solid waste is processed, stored, loaded, or unloaded.

Curing – The final stage of the composting process in which stabilization of the compost continues but the rate of decomposition has slowed to a point where turning or forced aeration is no longer necessary.

Frass – Debris or excrement produced by insect larvae.

General Permit – Except as provided in Subchapter J (relating to beneficial use of sewage sludge by land application), a regional or Statewide permit issued by the Department of Environmental Protection (DEP) for a specified category of beneficial use or processing of solid waste, the terms and conditions of which allow an original applicant, a registrant and a person or municipality that obtains a determination of applicability, to operate under the permit if the terms and conditions of the permit and certain requirements of this article are met.

Hermetiacomposting – Composting by using larvae of the black soldier fly, Hermetia illucens, to convert organic material into a humus-like product.

Hermetiacomposting Facility – A facility for processing solid waste by hermetiacomposting.

WMGM017XXXX Page 2 of 12

¹ EPA Method 9095 (Paint Filter Test) as described in the EPA Publication No. SW-846

Institutional establishment – An establishment engaged in service, including, but not limited to, hospitals, nursing homes, orphanages, schools, and universities.

Landowner – The person or municipality in whom legal title to the surface of the land is vested.

Leaf Waste – Leaves, garden residues, shrubbery and tree trimmings, and similar material, but not including grass clippings.

Manure – Waste that is produced by animals on a farm.

Non-Liquid Waste – Wastes that do not contain free liquids, as determined using the paint filter liquid test (EPA Method 9095) as described in the EPA Publication No. SW-846.

Normal Farming Operations – The customary and generally accepted activities, practices and procedures that farms adopt, use or engage in year after year in the production and preparation for market of poultry, livestock and their products; and in the production, harvesting and preparation for market of agricultural, agronomic, horticultural, silvicultural and aquacultural crops and commodities, if the operations are conducted in compliance with applicable laws, and if the use or disposal of these materials will not pollute the air, water or other natural resources of this Commonwealth. The term includes the storage and utilization of agricultural and food processing wastes, screenings, and sludges on land where the materials will improve the condition of soil, the growth of crops or in the restoration of the land for the same purposes.

Permit Area – The area of land and water within the boundaries of the permit which is designated on the permit application maps as approved by DEP. The term includes areas which are or will be used or affected by the residual waste processing or disposal facility.

Source Separated Recyclable Materials – Materials that are separated from municipal waste at the point of origin for the purpose of recycling. The term is limited to clear glass, colored glass, aluminum, steel and bimetallic cans, high-grade office paper, newsprint, corrugated paper (cardboard), plastics and other marketable grades of paper.

Source Separated Food Scraps – Pre-consumer food wastes that are separated from municipal waste at the point of origin for the purpose of recycling and composting.

Storage – The containment of waste on a temporary basis in a manner that does not constitute disposal of the waste. It shall be presumed that containment of waste in excess of 1 year constitutes disposal. This presumption can be overcome by clear and convincing evidence to the contrary.

Vermicomposting – Composting by using *Eisenia fetida* or other approved worm to convert organic material into a humus-like product

Vermicomposting Facility – A facility for processing solid waste by vermicomposting.

Yard Waste – Leaves, grass clippings, garden residue, tree trimmings, chipped shrubbery, and other vegetative material.

WMGM017XXXX Page 3 of 12

Yard Waste Composting Facility – A facility that is used to compost leaf waste, or leaf waste and grass clippings, garden residue, tree trimmings, chipped shrubbery, and other vegetative material. The term includes land affected during the lifetime of the operation, including, but not limited to, areas where compost actually occurs, support facilities, borrow areas, offices, access roads, associated onsite or contiguous collection and transportation activities, and other activities in which the annual surface has been disturbed as a result of or incidental to operation of the facility.

C. Determination of Applicability Requirements:

A person or municipality that proposes to compost, vermicompost or hermetiacompost 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 DEP Regional Office (see attached list) prior to commencing authorized activities under this general permit. A completed application on forms provided by DEP along with the application fee for a DOA must be submitted to the appropriate DEP Regional Office. Checks shall be made payable to the "Commonwealth of Pennsylvania". No activities shall commence unless approved, in writing, by DEP.

D. Operating Conditions:

- The approval herein allows for composting, vermicomposting and hermetiacomposting activities to be conducted at sites that meet the definition of a normal farming operation.
- 2. The compost, vermicompost or hermetiacompost facility (which shall include all raw material and waste storage areas, the processing, composting and curing areas, and the finished material storage areas) shall be operated in a manner which results in the active biological decomposition or consumption of the organic materials received.
- 3. Approval to operate under this general permit is limited to facilities which meet all three of the following criteria:
 - a. Does not exceed five (5) acres.
 - b. Does not exceed 500 tons or 1,000 cubic yards per year of source separated food scraps.
 - c. Does not exceed 3,000 cubic yards per acre of total materials.
- 4. Incoming food scraps must be incorporated into the composting process, such as in windrows, aerated static piles, or in vessels, including worm or larvae feeding vessels, within 24 hours of receipt of the food scraps at the facility. Incorporation of all other materials must occur within one week of receipt, unless otherwise approved by DEP in the approved plans provided as part of the application.

WMGM017XXXX Page 4 of 12

- 5. Putrescible waste, other than manure, must be stored in closed, leak-proof containers. Putrescible waste may not be held in closed containers for more than 24 hours prior to being incorporated into the composting, vermicompost or hermetiacompost process. In addition, non-putrescible waste and compost may not be stored for more than one (1) year at the permitted facility unless authorized by the DEP in writing. Manure must be stored in accordance with DEP's "Manure Management Manual".
- 6. Use of food processing sludge, spent mushroom substrate and materials other than the wastes specified in Section A. (Description) of this general permit are prohibited.
- 7. The finished compost, vermicompost or hermetiacompost produced under the terms and conditions of this general permit shall cease to be a waste when the compost, vermicompost or hermetiacompost:
 - a. Is used, sold, or distributed as soil substitute, soil conditioner, soil amendment, fertilizer, or mulch;
 - b. Does not present a greater harm or threat of harm than the use of wastes which the compost, vermicompost and hermetiacompost is replacing; and
 - c. Is not abandoned or disposed.
- 8. Unless authorized by DEP in writing, the maximum amount of the finished compost material shall not be stored for more than one (1) year, and at any one time may not exceed 3,000 cubic yards per acre specified in Section D.3. of this permit.
- 9. Non-compostable materials, prohibited materials or wastes otherwise rejected by the receiving facility shall be segregated from the acceptable incoming wastes and shall be managed properly at a permitted disposal facility or recycled with sufficient frequency to prevent a nuisance.
- 10. An operational plan must be developed and implemented at the facility. The operational plan must include the following information:
 - a. A general site plan which contains the following information for on farm composting, vermicomposting and hermetiacomposting sites:
 - i. Access road,
 - ii. Tipping area,
 - iii. Surface water and storm water controls for all compost related areas located outdoors.
 - iv. Farm Soil Conservation Plan, and
 - v. Nutrient Management Plan if available

WMGM017XXXX Page 5 of 12

- An operational narrative that includes the operational hours for receiving waste.
- c. The volume of waste processed during the previous year or expected to be processed during the first year of operation.
- d. A detailed description of the compost, vermicompost or hermetiacompost system(s).
- 11. The operator of the facility shall not cause or allow conditions that are harmful to the environment or public health, or which create safety hazards, odors, noise, or other public nuisances cause or allow the attraction, harborage, or breeding of vectors.
- 12. Areas at the permitted facility where incoming materials or waste and finished compost materials are stored, processed, composted, or cured shall not be located:
 - a. In the 100-year floodplain of waters of this Commonwealth;
 - b. In, or within 300 feet of, an exceptional value wetland;
 - c. In, or within 100 feet of, a wetland other than an exceptional value wetland;
 - d. Within 100 feet of a sinkhole or area draining into a sinkhole;
 - e. Within 300 feet measured horizontally from an occupied dwelling unless the owner has provided a written waiver consenting to the facility being closer than 300 feet;
 - f. Within 50 feet of a property line unless the owner has provided a written waiver consenting to the facility being closer than 50 feet;
 - g. Within 100 feet of a perennial stream;
 - h. Within 300 feet of a water source unless the owner has provided a written waiver consenting to the facility being closer than 300 feet.
 - i. Within 3.3 feet of a perched, seasonal, or regional ground water table.
- 13. The beneficial use(s) of the compost, vermicompost and hermetiacompost as listed in Section A. (Description), is contingent upon compliance with this permit and if sold, the Pennsylvania Fertilizer Act, and the Pennsylvania Soil and Plant Amendment Act of the Pennsylvania Department of Agriculture. (Information relating to this law may be obtained from the Department of Agriculture by writing the Bureau of Plant Industry, Division of Agronomic Services, 2301 North Cameron Street, Harrisburg, PA 17110-9408.)
- 14. Upon cessation of operations at the composting facilities, the operator shall remove any wastes and structures or other materials which contain or have been contaminated with waste and shall provide for the processing and disposal of the waste or material in accordance with the Solid Waste Management Act (SWMA), 35

WMGM017XXXX Page 6 of 12

- P.S. §§ 6018.101—6018.1001; the environmental protection acts and the regulations promulgated thereunder.
- 15. Any waste generated from the composting process shall be managed in accordance with the Solid Waste Management Act (SWMA), 35 P.S. §§ 6018.101—6018.1001; the environmental protection acts, and the regulations promulgated thereunder.
- 16. The activities authorized by this permit shall not cause or allow conditions that are harmful to the environment, public health or safety, including but not limited to, odors, noise, or other public nuisances. The permittee shall not cause or allow the attraction, harborage, or breeding of vectors. Storage of the active compost, curing materials, and finished compost shall be covered to prevent dispersal by wind or water erosion and in a manner that prevents fire or explosion. The active compost, curing materials and finished compost may not be stored in a manner that causes ground or surface water contamination.
- 17. 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. DEP 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 or if they cannot be adequately regulated under the conditions of this general permit.
- 18. The local police, fire department, or other appropriate state or local emergency response agencies shall be contacted immediately in the event of a fire, spill, or other hazard arising from the storage and curing of produced compost that threatens public health, safety, and welfare, or the environment, and whenever necessary in the event of personal injury related to such storage.
- 19. The permittee shall develop and implement a Preparedness, Prevention and Contingency Plan (PPC) that is consistent with the DEP's most recent guidelines.
- 20. 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 utilize materials as described in the permit application.
- 21. The permittee shall comply with the fugitive emissions regulations under 25 Pa. Code, Chapter 123 (relating to 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 25 Pa. Code §§123.1 and 123.2 (relating to prohibition of certain fugitive emissions and fugitive particulate matter).
- 22. 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 Solid Waste Management Act (SWMA), 35 P.S. §§ 6018.101—6018.1001; and

WMGM017XXXX Page 7 of 12

the Municipal Waste Planning, Recycling and Waste Reduction Act of 1988, 53 P.S. §§4000.101, et seq.

- 23. 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 DEP, without advance notice or search warrant, upon presentation of appropriate credentials and without delay, to have access to and inspect all areas on which solid waste management activities are being, will be, or have been conducted. This authorization and consent shall include consent to collect samples of waste, compost, soils, water, or gases; take photographs; perform measurements, surveys, and other tests; inspect any monitoring equipment; inspect the methods of operation and inspect and/or copy documents, books, and papers required by DEP to be maintained. This permit condition is referenced in accordance with Sections 6018.608 and 6018.610(7) of the SWMA, 35 P.S. §§ 6018.608 and 6018.610(7). This condition in no way limits any other powers granted under the SWMA.
- 24. Any independent contractors or agents retained by the permittee in the completion of activities authorized under this general permit shall be subject to compliance history review by DEP prior to performance of any activities, as specified by the SWMA.
- 25. Failure of 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.
- 26. 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. DEP may require an individual permit be obtained if the permittee cannot comply 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 public or the environment of this Commonwealth.
- 27. This permit does not authorize and shall not be construed as an approval to discharge any waste, wastewater, or runoff from the processing areas, waste storage areas, composting windrows, curing areas, or enclosed vessels to the land or waters of the Commonwealth.
- 28. Best Management Practices shall be implemented to divert storm water run-on from the processing areas, curing areas, and finished product storage area(s). Storm water runoff shall be managed in accordance with The Clean Streams Law and regulations promulgated thereunder. Prior to beginning operations at the facility, the operator must obtain all necessary storm water management permits.
- 29. A copy of an approved conservation plan by the County Conservation District must be maintained at the facility at all times. The conservation plan must be implemented

WMGM017XXXX Page 8 of 12

during all phases of operation of the facility. A copy of the approved conservation plan must be provided to DEP with the application.

- 30. The permittee shall maintain in force and affect a general liability insurance policy in accordance with 25 Pa. Code, Chapter 287, Subchapter E (relating to bonding and insurance requirements) to provide continuous coverage during operation of the facility and until DEP issues a final closure certification.
- 31. Equipment used for the composting, vermicomposting, or hermetiacomposting process, storage, and transportation of the finished materials shall be maintained in good operating condition to prevent the finished materials from being unintentionally conveyed out of the storage area(s). Weekly inspections of each storage area and their surrounding environs are to be conducted to determine compliance of the terms and conditions of this general permit, and for evidence of failure.
- 32. Storage of finished materials by the permittee shall be in a manner that complies with the requirements set forth in 25 Pa. Code, Chapter 299 (relating to storage and transportation of residual waste).
- 33. Wastes authorized for composting under this general permit shall not be mixed with, stored with, or beneficially used with other types of solid wastes, including hazardous waste, municipal waste, special handling waste, or other residual waste, as the terms are defined in 25 Pa. Code § 287.1.
- 34. Wastes that are not authorized under this general permit are not allowed to be received, mixed, stored or beneficially used with the raw materials for composting.
- 35. Analytical testing required by this general permit shall be performed by a laboratory accredited under the Pennsylvania Environmental Laboratory Accreditation Act, Act of 2002, 27 Pa. C.S.A. §§ 4101-4113.

E. Operating Conditions Specific to Composting (not Vermicomposting or Hermetiacomposting)

- 1. This permit requires the use of windrows, aerated static piles, or in-vessel methods for composting. The temperature of the compost during the composting phase of the operation shall be maintained at a minimum of 55 degree Celsius (131°F) or greater for at least 15 days for the windrow method and for at least 72 consecutive hours for the static aerated pile or in-vessel method. For the windrow method, turning shall be consistent with currently accepted science-based composting technology. In addition, the compost shall be cured for a minimum of 30 days.
- 2. The composting area shall be constructed in a well-drained area with a workable surface and slope of 2-4 percent to prevent ponding and control surface water. All storm water should be diverted away from the composting area. The working surface should be firm, uniformly graded, and dry. Compost pad options include:

WMGM017XXXX Page 9 of 12

- a. A compacted mixture of select granular material with adequate fine-grained particles to bind it together and reduce permeability,
- b. Using lime stabilized soil blends, and
- c. Paving with concrete, asphalt or geosynthetics.
- 3. Adequate space shall be maintained between windrows and at the site to allow the un-obstructed movement of emergency personnel and equipment.

F. Operating Conditions Specific to Vermicomposting and Hermetiacomposting

- This permit requires the area designated as the active vermicomposting or hermetiacomposting portion of the operation to occur in an enclosed structure(s) or vessel(s). Sufficient insulation, heating, cooling, ventilation and/or irrigation systems shall be provided as necessary to maintain optimal conditions for the proper husbandry of worm or black soldier fly lifecycles.
- 2. Quantities and loading rates of incoming food wastes and other feedstocks shall be limited to the capacity that the worms or black soldier fly larvae can effectively process so that the operation does not create excessive odors, leachate, wastewater or unprocessed material. Seasonal variations that may cause processing capacity fluctuations shall also be taken into consideration when determining proper feedstock quantities and loading rates.
- 3. Vermicomposting and hermetiacomposting facilities that accept food scraps or manure shall include a composting pad constructed to meet the specifications listed in Condition E.2. The composting pad shall be utilized to:
 - a. Incorporate an optional pre-composting step in the vermicomposting or hermetiacomposting process, or
 - b. Provide a contingency in the event that the worm or black soldier fly larvae population is unable to effectively process incoming quantities of waste materials. The time and temperature requirements listed in Section E.1. shall be adhered to. The 30-day curing period is not required for the pre-composting processing step.

G. Recordkeeping:

1. The permittee shall maintain records of all analytical evaluations conducted in accordance with this permit, and records shall be made available to DEP upon request. Required records shall be retained for a minimum of 5 years. Records of analytical evaluations must include, at a minimum, the following for each sample: the dates of sampling and testing, sampling procedures utilized, name of the individual who collected the sample, the volume or weight of the sample, each parameter

WMGM017XXXX Page 10 of 12

tested, the analytical results, the name of the analytical laboratory used, and the analytical methodologies employed.

2. The permittee shall maintain records of all waste accepted by the facility, and records shall be made available to DEP upon request. Required records shall be retained for a minimum of 5 years. Records of each source of incoming waste must include, at a minimum, the following: the name, address, and phone number of each source of incoming waste; the date of receipt; the quantity of waste received; the results of visual observations; and the name, address, and phone number of the destination of each outgoing shipment of waste. The permittee shall also maintain records of spills or releases that include, at a minimum, the following: the location, date, time, identification, and quantity of spilled or released material, and a description of how the material was cleaned up. The permittee shall also maintain records of all reports submitted to DEP or to the U.S. Environmental Protection Agency.

H. Reporting:

- Any person that operates under the provisions of this permit shall immediately notify DEP via certified mail of any changes in: the company name, address, owners, operators, and/or responsible officials of the company, compliance status, and the status of any permit issued by DEP or federal government under the environmental protection acts.
- 2. Persons operating under the provision of this general permit shall submit to the appropriate DEP Regional Office (see attached list), an annual report on the beneficial use activities conducted under this permit by March 1 for the preceding calendar year. This report shall include: records of each source of incoming waste including the name of each source; the date of receipt; the quantity of waste received; the results of visual observations; the quantity compost sent for beneficial use; the quantity of each outgoing shipment of waste, and the name of the destination of each outgoing shipment of waste.
- 3. The permittee shall immediately notify DEP's Emergency Hotline by telephone at 800-541-2050 and the waste management program in the appropriate DEP regional office (see attached list) of any accidental spills and shall take appropriate immediate action to protect the health and safety of the public and the environment.

I. Renewal:

A generator or supplier 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 DEP for submission at a later date. The renewal applications shall be submitted to the

WMGM017XXXX Page 11 of 12

appropriate DEP Regional Office (see attached list) and include, at a minimum, the following:

- 1. General Information Form (Authorization Application for a Residual or Municipal Waste General Permit Application),
- Form B (Professional Certification),
- 3. Form 20 (Application for a Municipal or Residual Waste General Permit),
- 4. Form 27R (Acceptance of General Permit Conditions), and
- DOA application fee in the amount identified in Section A (General Information) of the Form 20. A check shall be made payable to the "Commonwealth of Pennsylvania."

A copy of the renewal application shall also be sent to DEP'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 DEP 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.

WMGM017XXXX Page 12 of 12

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, Beaver, Cambria, Fayette, Greene, Somerset, Washington, Westmoreland.

Southwest Regional Office

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

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

Northwest Regional Office

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