



pennsylvania
DEPARTMENT OF ENVIRONMENTAL
PROTECTION

BUREAU OF WASTE MANAGEMENT

DIVISION OF MUNICIPAL AND RESIDUAL WASTE

GENERAL PERMIT WMGR103

**PROCESSING OF TREE STUMPS, ROOTS, LEAF WASTE, STUMP
GRINDINGS, GRUBBING MATERIAL, FRESHWATER DREDGED
MATERIAL FROM SEYFERTS BASIN, SPENT MUSHROOM
SUBSTRATE, DRINKING WATER TREATMENT RESIDUALS AND
WASTE FOUNDRY SAND FOR BENEFICIAL USE AS MULCH AND
MANUFACTURED TOPSOIL**

Issued: June 9, 2018
Expires: June 9, 2028

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PROCESSING OF VARIOUS WASTES TO
PRODUCE MULCH AND MANUFACTURED SOIL

A. Description.

This general permit authorizes the following solid waste management activities:

1. Processing by grinding, mixing, screening and biological decomposition of tree stumps, roots, leaf waste, stump grindings, and grubbing material, hereinafter referred to as "wood waste," for beneficial use as a mulch material.
2. Processing by grinding, screening, and mixing of freshwater dredged material from Seyferts basin, spent mushroom substrate, tree stumps, roots, leaf waste, stump grindings, drinking water treatment residuals and waste foundry sand with soil that has not been affected by a spill or release for beneficial use as a manufactured topsoil. The waste foundry sand used in the production of manufactured topsoil must be authorized either under the general permit numbered WMGR019 or WMGR098. Freshwater dredged material from basins other than Seyferts must meet the definition of clean fill and comply with the requirements provided in the Department's Guidance Document, "Management of Fill, Document No. 258-2182-773".

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 must be submitted to the appropriate Department Regional Office. Check shall be made payable to the "Commonwealth of Pennsylvania". No activities shall commence unless approved, in writing, by the Department.

C. Operating Requirements.

1. A permittee shall collect representative samples of water treatment residuals and determine its quality prior to acceptance for use in the production of manufactured topsoil. Samples shall be collected and analyzed as follows:
 - a. To obtain a representative sample of the water treatment residuals, samples must be taken from multiple locations in the batch and represent the entire amount of water treatment residuals being sampled. More than one sample is necessary to accurately represent a particular batch. In general, the more samples taken, the greater the chance that the sampling results will be representative. The pollutant limits specified in this section pertain to the quality of the water treatment residuals that will be processed and beneficially used, and therefore, samples must be collected after the final stage of treatment and prior to storage of the water treatment residuals.
 - b. Any water treatment residuals exceeding the limits specified in Table 1, below, may not be accepted by the permittee for use in manufactured soil.

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Table 1

Isotope	Concentration
Uranium-238 (in equilibrium with its decay series)*	1.0 pCi/g
Thorium-232 (in equilibrium with its decay series)*	1.0 pCi/g
Radiation Survey (alpha, beta and gamma)	Report in μ R/hr

*Use EPA Method 901.1.

- c. A subsequent sampling and analysis event shall be conducted in accordance with Condition C(1)(a-b) prior to accepting a new source of drinking water treatment residuals.
2. Spent mushroom substrate used as an ingredient in the production of manufactured topsoil shall be aged for 12 months or greater prior to its receipt at the processing facility.
3. A permittee shall collect representative samples of manufactured topsoil produced and determine its quality before the material may be beneficially used. Samples shall be collected and analyzed as follows:
 - a. To obtain a representative sample of the manufactured topsoil, samples must be taken from multiple locations in the batch and represent the entire amount of manufactured topsoil being sampled. In the batch process, more than one sample is necessary to accurately represent a particular batch. In general, the more samples taken, the greater the chance that the sampling results will be representative. The pollutant limits specified in this condition pertain to the quality of the manufactured topsoil that will be beneficially used, and therefore, samples must be collected after the final stage of processing and prior to storage of the produced manufactured topsoil. Should knowledge of the processing operation, visual observations, or analytical results indicate variability in the quality of the material, more frequent testing shall be conducted. The sampling location shall be safe and accessible.
 - b. Representative samples shall be analyzed for each parameter identified in Table 2, below. Manufactured topsoil may be beneficially used if results of the chemical analysis do not exceed the concentration limits for any parameter as specified in Table 2, below.

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Table 2

Manufactured Topsoil

Parameters	Total (mg/kg)^(a)	Leachable (mg/l)^(b)
Antimony	6.75	-
Arsenic	12	-
Barium	1,000	-
Beryllium	2.3	-
Cadmium	2.5	-
Chloride	-	250
Chromium (Total)	94	2.5
Copper	1,500	-
Iron	66,000	-
Lead	112.5	-
Mercury	1	-
Molybdenum ^(c)	18	
Nickel	50	-
Selenium	25	-
Sulfate	-	500
Thallium	2.2	-
Zinc	1,000	-

- (a) - Dry Weight Basis
 - (b) - Leachability evaluations shall be conducted using the Toxicity Characteristic Leaching Procedure (EPA method 1311) or the Synthetic Precipitation Leaching Procedure (EPA method 1312).
 - (c) - Only required for manufactured topsoil that contains drinking water treatment residuals.
- c. The determination of compliance with Table 2 above may be based on the 90% upper confidence level (UCL) for each metal or the 80% UCL for pH using the most recent edition of EPA's Test Methods for Evaluating Solid Waste (EPA SW-846) as guidance for the statistical treatment of data.
- d. The frequency of monitoring for the pollutants listed in Table 2 shall be as follows:
- i. When manufactured topsoil is produced continuously, the frequency of monitoring shall be as specified in Table 3, below:

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TABLE 3

Frequency of Monitoring

Amount of Manufactured Topsoil Produced (Tons per 365 Day Period)	Frequency of Monitoring
Greater than 0 but less than 319	Once per year
Equal to or greater than 319 but less than 1,650	Once per quarter
Equal to or greater than 1,650 but less than 16,500	Once per 60 days
Equal to or greater than 16,500	Once per month

- ii. After chemical testing has been conducted at the frequency specified in Table 3 and has met the concentration limits as specified in Table 2 for a two-year period, the permittee may request a reduced frequency of monitoring. Requests for a reduction in the required frequency of monitoring must be submitted in writing to the appropriate Department Regional Office (see attached list), and a written approval from the Department must be obtained before commencing a reduced sampling frequency. The reduced frequency of monitoring may not be less than once per year. A
 - iii. When the manufactured topsoil is produced in batch processes or seasonally, a representative sample shall be collected and analyzed for every 3,000 tons of the manufactured topsoil produced.
4. On-site storage of drinking water treatment residuals intended for use in the production of manufactured topsoil shall not exceed six (6) months from the date the drinking water treatment residuals were received by the permittee, unless otherwise approved in writing by the Department. Drinking water treatment residuals shall be covered with an impermeable tarp to prevent storm water from infiltrating through the drinking water treatment residuals. The storage surface shall meet the requirements as specified in Condition C(7).
5. On-site storage of spent mushroom substrate intended for use in the production of manufactured topsoil shall not exceed sixty (60) days from the date the spent mushroom substrate was received by the permittee, unless otherwise approved in writing by the Department.
6. During the seasonal period when manufactured topsoil is not being produced, manufactured topsoil shall be covered with an impermeable tarp to prevent storm water from infiltrating through the manufactured topsoil. The integrity of the tarp must be maintained at all the times, and the storage surface shall meet the requirements as specified in Condition C(7).
7. The working surface of the tipping, staging, curing and processing areas of waste materials used in the production of mulch material and manufactured topsoil shall be a prepared surface capable of maintaining structural integrity under normal operating conditions, collecting all liquids and solids generated by the mulching and manufacturing process and supporting vehicular traffic on the surface. The working surface shall be

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inspected for uniformity, damage and imperfections during construction, installation and operation. The prepared surface shall be sloped to prevent the ponding of liquids.

8. Leachate shall be managed in accordance with the Clean Streams Law and regulations promulgated thereunder. All necessary permits for the management of leachate at the facility must be obtained prior to beginning permitted operations. Leachate generated at the facility, if required to be collected, shall be managed in accordance with 25 Pa. Code, Chapter 299 (relating to storage and transportation of residual waste) prior to treatment or reuse on-site, discharge to a POTW or hauling off-site for treatment and/or disposal.
9. Mulch material and manufactured topsoil authorized to be beneficially used under the terms and conditions of this general permit shall cease to be a waste if the following requirements are met:
 - a. The quality of manufactured topsoil satisfies the requirements in Condition C(3)(b);
 - b. The mulch material or manufactured topsoil is sold, traded, distributed, given away or used for application in landscaping activities. This provision applies to finished mulch, and manufactured topsoil that is sold, traded, given away, distributed or used for application in landscaping activities at locations other than the processing facility where the material is produced;
 - c. The mulch material or manufactured topsoil is not abandoned or disposed; and
 - d. The beneficial use of mulch material or manufactured topsoil complies with the terms and conditions of this general permit.
10. The waste authorized in Section A of this general permit shall not be processed or stored as follows:
 - a. Within 100 feet of a perennial stream, unless one of the following applies:
 - i. The storage and processing take place in an enclosed facility and no adverse hydrologic or water quality impacts will result.
 - ii. Storage and processing that is not enclosed will not occur within that distance and no adverse hydrologic or water quality impacts will result.
 - b. Within 33 feet of an intermittent stream.
 - c. Within 300 feet of a water supply source.
 - d. Within 300 feet of an exceptional value wetland.
 - e. Within 100 feet of a wetland other than an exceptional value wetland, unless storage and processing will not occur within that distance or the storage and processing take place in an enclosed facility and one of the following applies:

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- i. The operation is in or along the wetland, and the operator has received a permit from the Department under Chapter 105 (relating to dam safety and waterway management).
 - ii. The operation is not in or along the wetland, and no adverse hydrologic or water quality impacts will result.
- f. In or below the 100-year floodplain of waters of this Commonwealth.
- g. Within 3.3 feet of a regional groundwater table.
- h. Within 100 feet of the edge of a sinkhole or area drainage into a sinkhole.
- i. Within 50 feet of a property line unless the operator demonstrates that actual processing of waste is not occurring within that distance, storage and processing take place in an enclosed facility, or that the owners of occupied dwelling 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.
11. Upon cessation of operations or by the expiration date of this general permit or unless extended by the Department in writing, the permittee shall remove any remaining wood waste, freshwater dredged material from Seyferts basin, spent mushroom substrate, waste foundry sand, mulch material, manufactured topsoil, drinking water treatment residuals and any other residual wastes or other materials which contain or have been contaminated by the wood waste, freshwater dredged material from Seyferts basin, spent mushroom substrate, leaf waste, waste foundry sand, mulch material, drinking water treatment residuals or manufactured topsoil and provide for the processing and disposal of the waste or material in accordance with the Solid Waste Management Act, 35 P.S. §§ 6018.101 -6018.1001(SWMA), the environmental protection acts and the regulations promulgated thereunder.
12. The activities authorized by this permit shall not cause or allow conditions that are harmful to the environment, public health or safety, including odors, noise, or other public nuisances. The permittee shall not cause or allow the attraction, harborage, or breeding of vectors. Produced mulch or manufactured topsoil shall be covered to prevent dispersal by wind or water erosion and in a manner that prevents fire or explosion. The produced mulch or manufactured topsoil may not be stored in a manner that causes ground or surface water contamination.
13. The permittee shall develop and implement a Preparedness, Prevention and Contingency Plan (PPC) that is consistent with the Department's most recent guidelines.
14. 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 application states otherwise, the permittee shall utilize materials as described in the permit application.

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15. 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 the applicable provisions of 25 Pa. Code §§123.1 and 123.2 (relating to prohibition of certain fugitive emissions and fugitive particulate matter).
16. 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 SWMA and the Municipal Waste Planning, Recycling and Waste Reduction Act of 1988, 53 P.S. §§4000.101, et seq.
17. 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 to 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 wastes, 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 the Department 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.
18. Any independent contractors or agents retained by the permittee in the completion of processing activities authorized under this permit shall be subject to compliance history review by the Department prior to performance of any activities, as specified by the SWMA.
19. 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.
20. The activities authorized under 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, or 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 of if they cannot be adequately regulated under the conditions of this general permit.
21. 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 be obtained if the permittee cannot comply with the conditions of this general permit or is conducting an

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activity that harms or presents a threat of harm to the health, safety, or welfare of the public or the environment of this Commonwealth.

22. 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.
23. Best Management Practices shall be implemented to divert storm water run-on from the storage area. 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 the necessary storm water management permits.
24. The permittee shall maintain in force and effect 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 the Department issues a final closure certification.
25. Equipment used for the storage of the residual wastes authorized in this permit shall be maintained in good operating condition. Daily inspections of each storage area and surrounding environs shall be conducted to determine compliance of the terms and conditions of this general permit and for evidence of failure.
26. The storage and transportation of waste materials authorized to be processed in Section A, shall comply with the requirements set forth in 25 PA Code, Chapter 299 (relating to storage and transportation of residual waste).
27. The residual wastes authorized in this permit shall not be mixed 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.
28. The permittee shall maintain a bond in an amount and with sufficient guarantees as provided by 25 Pa. Code, Chapter 287, Subchapter E (relating to bonding and insurance requirements). The bond filed with the Department under this general permit shall continue for the operational life 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 §287.341 (relating to release of bonds).
29. The waste authorized to be processed in Section A shall not be used as a valley fill material, to fill open pits from coal or other fills, or to level an area or bring an area to grade.
30. Analytical testing required by this general permit shall be performed by a laboratory accredited under the Pennsylvania Environmental Laboratory Accreditation Act, Act of 202, 27 Pa. C.S.A. §§4101 - 4113.

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D. Recordkeeping:

1. The permittee shall maintain records of all analytical evaluations conducted in accordance with this permit. Records of analytical evaluations must include, at a minimum, the following for each sample: the dates of sampling and testing; sampling procedures utilized; the name of the individual who collected the sample; the volume or weight of the sample; each parameter 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 of all finished materials sold, given away, etc. for beneficial use. 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 and type of waste received; and the results of visual observations.
3. The permittee shall 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.
4. The permittee shall maintain records of all reports submitted to the Department or to the U.S. Environmental Protection Agency.
5. The permittee shall maintain records of rejected, unacceptable and unauthorized wastes that are disposed of by the permittee or otherwise not accepted, processed or beneficially used in accordance with this general permit. The records shall include, at a minimum, the name, address, and phone number of the of each outgoing shipment of waste., date of shipment or disposal, and the type of, and volume or weight of, each outgoing shipment of waste.
6. All records required by this general permit shall be retained for a minimum of five years and made available to the Department upon request.

E. Reporting Requirements:

1. For each new source of: (a) spent mushroom substrate, (b) freshwater dredged material, (c) waste foundry sand and (d) drinking water treatment residuals other than from the sources described in the application, intended for beneficial use in the production of manufactured topsoil, the permittee shall notify the appropriate Department Regional Office, in writing, no less than fifteen (15) working day prior to acceptance and beneficial use of the waste material from a new source. This notification shall include: (i) name and address of the generator, (ii) the volume or weight of waste material from each source and (iii) the analytical results for the radioisotopes and radiation screening in Table 1. The permittee may beneficially use the waste material from a new source in accordance with the conditions of this general permit after the aforementioned fifteen-day period unless otherwise instructed by the Department.

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2. Any person that operates under the provisions of this permit shall immediately notify the Department 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 the Department or federal government under the environmental protection acts.
3. The permittee shall immediately notify the Department's Emergency hotline by telephone at 800-541-2050 and the waste management program in the appropriate DEP regional office of any accidental spills and shall take appropriate immediate action to protect the health and safety of the public and the environment.
4. Persons operating under the provisions of this general permit shall submit an annual report to the appropriate Department Regional Office (see attached list). The annual report shall include a summary of the (i) spent mushroom substrate, (ii) dredge river sand, (iii) waste foundry sand, and (iv) drinking water treatment residuals received at the facility, (iv) a copy of any required analytical data, and (v) a summary of the weight or volume of manufactured topsoil generated at, sold, traded, given away, and distributed from, the facility during the last 12 months ending 30 days prior to the anniversary date of the permit. Analytical data submitted in compliance with this requirement must be from samples of the manufactured topsoil collected within the last 12 months.

F. Renewal.

A person or municipality that plans to continue 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 applications shall be submitted to the appropriate DEP Regional Office and include, at a minimum, the following:

- 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), and
- v. Permit renewal 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 be sent to 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 in effect and enforceable pending the issuance or denial of the renewal application, provided the

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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
