

**GENERAL PERMIT WMGR103
PROCESSING AND BENEFICIAL USE OF
TREE STUMPS, ROOTS, LEAF WASTE, STUMP GRINDINGS,
GRUBBING MATERIAL, FRESHWATER DREDGED MATERIAL FROM
SEYFERTS BASIN, SPENT MUSHROOM SUBSTRATE, LEAF WASTE,
WATER TREATMENT RESIDUAL AND WASTE FOUNDRY SAND**

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

Amended August 21, 2012

Expires June 8, 2018

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PROCESSING OF VARIOUS WASTES TO
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A. Description.

This general permit authorizes the following solid waste management activities:

1. Processing by size reduction (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 size reduction (grinding), screening, and mixing of freshwater dredged material from Seyferts basin, spent mushroom substrate, leaf waste, water treatment residual and waste foundry sand with uncontaminated soil 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 Form 20 (Application for a Residual Waste General Permit), along with 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. Checks shall be made payable to the: "Commonwealth of Pennsylvania".

C. Operating Requirements.

1. Any water treatment residuals exceeding any level in Table 1 may not be accepted by the permittee for use in manufactured soil.

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.

2. The manufactured topsoil may be beneficially used if the chemical analysis of manufactured topsoil does not exceed the concentration limits for any parameter 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	29	-
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 water treatment residual.

The determination of compliance with Table 2 may be based on the 90 percent upper confidence level for each metal or the 80 percent confidence interval for pH using the Test Methods for Evaluating Solid Waste (EPA SW-846) as guidance for the statistical treatment of data.

- The 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.

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4. 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 be capable of supporting vehicular traffic on the surface. The working surface shall be inspected for uniformity, damage and imperfections during construction, installation and operation. The prepared surface shall be sloped to prevent the ponding of liquids.
5. The 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 composting 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.
6. Best Management Practices shall be implemented to divert storm water run-on from the facility. Storm water runoff shall be managed in accordance with The Clean Streams Law and regulations promulgated thereunder. Prior to beginning construction at the facility, the operator must obtain all the necessary storm water management permits.
7. The storage and transportation of waste materials authorized to be processed in Condition A, shall be in a manner that will not create a nuisance or be harmful to public health, safety or the environment and shall comply with the requirements of 25 PA Code, Chapter 299 (relating to storage and transportation of residual waste).
8.
 - a. On-site storage of spent mushroom substrate intended for use in the production of manufactured topsoil shall not exceed sixty (60) days unless approved in writing by the Department.
 - b. On-site storage of water treatment residual intended for use in the production of manufactured topsoil shall not exceed six (6) months unless approved in writing by the Department.
 - b. During the seasonal period when manufactured topsoil is not being produced, storage of manufactured topsoil produced at the facility shall be covered with an impermeable tarp to prevent storm water from being commingled with 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.4.
9. The waste authorized to be processed in Condition A shall not be processed or stored as follows:
 - a. Within 100 feet or less of a perennial stream, unless one of the following applies:

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- i. The storage and processing take place in an enclosed facility and no adverse hydrologic or water quality impacts will results.
 - ii. Storage and processing that is not enclosed will not occur within that distance and no adverse hydrologic or water quality impacts will results.
 - 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:
 - 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 results.
 - f. In a 100-year flood plain or below the 100-year flood plain.
 - 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.
- 10. 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).
- 11. The bond filed with the Department under Condition C.10. 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).

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12. 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 as provided by 25 Pa. Code §287.342 (relating to final closure certification).
13. The waste authorized to be processed in Condition 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.
14. The permittee shall comply with all applicable standards for contaminants set forth in Chapter 123 (relating to standards for contaminants) including §§123.1, 123.2, and 123.31 promulgated in accordance with the Air Pollution Control Act, 35 P.S. §§ 4001-4005.
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 Solid Waste Management Act, 35 P.S. §§ 6018.101 -6018.1003; the Municipal Waste Planning, Recycling and Waste Reduction Act, 53 P.S. §§ 4000.101-4000.1904; Air Pollution Control Act, 35 P.S. §§ 4001 - 4015; or the Clean Stream Law, 35 P.S. §§ 691.1 – 691.1001 or any other applicable environmental laws or regulations promulgated thereunder.
16. As a condition of this permit and of the permittee's authority to conduct the activities authorized by this permit, the permittee hereby authorizes and consents to allow authorized employees or agents of the Department, without advance notice or search warrant, upon presentation of appropriate credentials and without delay, to have access to and to inspect all areas on which solid waste management activities are being, will be, or have been conducted. This authorization and consent shall include consent to collect samples of wastes, soils, water, or gases; take photographs; to perform measurements, surveys, and other tests; inspect any monitoring equipment; to inspect the methods of operation and to inspect and/or copy documents, books, and papers required by the Department to be maintained. This permit condition is referenced in accordance with §§608 and 610(7) of the Solid Waste Management Act, 35 P.S. §§6018.608 and 6018.610(7). This condition in no way limits any other powers granted under the Solid Waste Management Act.
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. The Department may:
 - a. Modify, suspend, revoke, or reissue the authorization granted in this general permit if the permittee cannot comply with the conditions of this general permit or if the authorized activities cannot be adequately regulated under the conditions of this general permit.

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- b. Require an individual permit be obtained if it is deemed necessary to prevent harm or the threat of harm to public health and the environment.
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 Solid Waste Management Act.
19. 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 conflicts with the regulations or governing statutes.
20. 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.
21. The 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.2.;
 - 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.
22. A person or municipality that plans to continue operation under this general permit, after the expiration date indicated on the permit cover 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 Residual Waste General Permit)".

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 permittee is, and has been, operating in compliance with the terms and conditions of the general permit.

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23. 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, water treatment residual 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, water treatment residual or manufactured topsoil and shall provide for the processing and disposal of the waste or material in accordance with the Solid Waste Management Act, the environmental protection acts and the regulations promulgated thereunder.

D. Sampling and Analysis.

1. The permittee shall collect representative samples of each new source of water treatment residual that will be used in the manufactured topsoil prior to initial acceptance and analyze for the radioisotopes and radiation screening in Table 1. The radioisotope analyses required in Condition C.1. shall be performed by a laboratory accredited or registered for accreditation under the Pennsylvania Environmental Laboratory Accreditation Act, 27 Pa.C.S. §§4101– 4113 and regulations promulgated thereunder.
2. The permittee shall collect representative samples of the manufactured topsoil and analyze for the total (mg/kg) and leachable (mg/L) levels for each parameter specified in Table 2 of Condition C.2. The chemical analyses required in Condition C.2. shall be performed by a laboratory accredited or registered for accreditation under the Pennsylvania Environmental Laboratory Accreditation Act, 27 Pa.C.S. §§4101– 4113 and regulations promulgated thereunder.
3. In compliance with the requirements specified in Condition C.2., representative samples of the manufactured topsoil produced must be collected and analyzed. To obtain a representative composite sample of the manufactured topsoil, the samples must be taken from locations that represent the entire amount of manufactured topsoil or in the batch process. More than one sample is necessary to accurately represent the manufactured topsoil produced and stored. Core samples at different locations and at various depths shall be collected and then composited to obtain a representative sample of the manufactured topsoil produced or stored. The key is to obtain a representative sample. In general, the more samples taken, the greater the chance that the sampling results will be representative of the quality of the manufactured topsoil that is produced. Because the chemical concentration limits pertain to the quality of the manufactured topsoil that will be beneficially used, samples must be collected after the final stage of the manufactured topsoil generation process and prior to storage. The sampling location should be safe and accessible.

Should knowledge of the production of manufactured topsoil, analytical results, or visual observations indicate variability in the quality of the manufactured topsoil, more frequent testing shall be conducted.

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E. Frequency of Monitoring of Manufactured Topsoil.

The frequency of monitoring for the pollutants as listed in Table 2 of Condition C.2. shall be as follows:

1. When the manufactured topsoil is produced continuously, the frequency of monitoring for the pollutants as listed in Table 2 of Condition C.2. shall be as specified in Table 3 below:

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

After chemical testing of representative samples of the manufactured topsoil has been conducted at the frequency specified in Condition E.1.a. for a two-year period and has met the concentration limits as specified in Table 2 of Condition C.2., the Department may reduce the required frequency of monitoring if a written request for the reduction of sampling frequency is submitted by the permittee. However, the frequency of monitoring may not be less than once per year. A written approval from the Department must be obtained before commencing a reduced sampling frequency.

2. 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.
3. Once a chemical analysis of the manufactured topsoil produced has been demonstrated in compliance with the concentration limits as specified in Table 2 of Condition C.2., re-analysis of the produced manufactured topsoil is not required.

F. Recordkeeping.

1. The permittee shall maintain records to demonstrate that the water treatment residuals meet the limits listed in Table 1 of Condition C.1. and manufactured topsoil meets the concentration limits listed in Table 2 of Condition C.2.
2. The permittee shall maintain records of rejected, unacceptable and unauthorized wastes that are disposed of by the permittee. The records shall include the name and address of the disposal location, date of disposal, volume or weight of the waste that is disposed.

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3. The permittee shall maintain records of all analytical evaluations conducted on the manufactured topsoil. This analytical information shall include the following on each sample: the dates of sampling and testing, sampling procedures, person collecting the sample, the volume or weight of the sample, each parameter tested, the analytical results, the laboratory used, and analytical methodologies.
4. All records required in this general permit shall be retained at the facility for a minimum of 5 years and made available to the Department upon request.

G. Reporting.

1. For each new source of: (a) spent mushroom substrate, (b) freshwater dredged material from Seyferts basin, (c) waste foundry sand and (d) water treatment residual 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.
2. The permittee shall immediately notify the appropriate Department Regional Office (see attached list), in writing, of any changes in: the name, address, owners, operators and/or responsible officials of the company; changes in facility location; changes in land ownership or the right to operate on the land occupied; the physical or chemical characteristics of the manufactured topsoil; the process which produces the manufactured topsoil; the change in status of bonding and insurance of the facility and the change in status of any permit issued by the Department or any state authority or federal government under the environmental protection acts.
3. Persons operating under the provisions of this general permit shall submit an annual report to the appropriate Department Regional Office (see attached list), if requested. The annual report shall include a summary of the (i) spent mushroom substrate, (ii) dredge river sand, (iii) waste foundry sand, and (iv) water treatment residual 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 past 12 months.

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4. Any person operating under the provisions of this general permit must notify the Department, in writing, if the processing facility is relocated or if new location(s) are to be included under this general permit. At least thirty (30) days prior to a permittee operating at a new location, a completed Form 20 (Application For A Residual Waste General Permit) must be provided to the appropriate Department Regional Office, for review and approval. An application fee for existing permittees to operate at a new operation is not required.

**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
