General Permit WMGR046

Processing and Beneficial Use of Drinking Water Treatment Sludge, Yard Waste, Bark Ash, Coal Ash, Agricultural Residues, Waste Cardboard and Paper, Sludge Generated by Paper or Pulp Mills, Waste from Vegetable Food Processing, Unused Sands, Waste Foundry Sand, Spent Mushroom Substrate, and Freshwater, Brackish and Marine Dredged Material as Manufactured Soil or Soil Amendments

> Department of Environmental Protection Bureau of Waste Management Division of Municipal and Residual Waste

> > Amended July 2010

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A. Description:

The approval herein granted is limited to the processing and beneficial use of the following wastes: drinking water treatment sludge, yard waste, bark ash, coal ash, agricultural residues, waste cardboard and paper, sludge generated by paper or pulp mills (SIC Code 2621 and 2611), waste from vegetable food processing, unused sands, waste foundry sand that is authorized for use as a soil additive or soil substitute under General Permit Number WMGR019, spent mushroom substrate, and freshwater, brackish and marine dredged material ("waste"). The approved processing is limited to separation, size reduction (grinding), mixing, windrow composting, static composting, and screening prior to beneficial use as manufactured soil or soil amendments.

The activities authorized by this permit shall not harm or present a threat of harm to the health, safety, or welfare of the people or environment of this Commonwealth. The Department may modify, suspend, revoke, or reissue the authorization granted in this permit if it deems necessary to prevent harm or the threat of harm to the public health, the environment, or if the activities cannot be adequately regulated under the conditions of this permit.

B. Determination of Applicability Requirements:

Persons or municipalities that propose to operate transfer facilities under the terms and conditions of this general permit after the date of permit issuance must apply for and obtain a "Determination of Applicability" ("DOA") from the Department prior to commencing authorized activities under the general permit. The request shall be sent to the appropriate Regional Office of the Department that has jurisdiction for waste-related activities in the county where the transfer facility will be located. A completed Form 20 (Application for a Municipal or Residual Waste General Permit), completed Bonding Worksheets A and E (Waste Processing Decontamination and Summary Cost Worksheet), completed Form R1 (Waste Analysis and Classification Plan), 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 Regional Office. Checks shall be made payable to the "Commonwealth of Pennsylvania."

C. Operating Conditions

1. The beneficial use of the waste as manufactured soil or soil amendments is contingent upon compliance with this permit and, if sold, the *Pennsylvania Fertilizer, Soil Conditioner and Plant Growth Substance Law* 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, 230 North Cameron Street, Harrisburg, PA 17110-9408.*)

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- 2. All activities conducted under the authorization granted in this permit shall be conducted in accordance with the permittee's application. Except to the extent that the permit states otherwise, the permittee shall operate the facility as described in the approved application.
- 3. Wastes may be processed under this permit provided:
 - a. Total analysis of a representative sample of sludge generated by a paper or pulp mill indicates the level of dioxin does not exceed 30 ppt^{*}.
 - b. Total analysis of a representative sample of drinking water treatment sludge indicates the level of reactive sulfide does not exceed 250 mg/kg^{*}.
 - c. Analysis of a representative sample of freshwater, brackish and marine dredged material indicates that the MPN (most probable number) for fecal coliform does not exceed 2x10⁶.
 - d. Total and leaching analysis of a representative sample of waste foundry sand does not exceed any level in Table 1, Option 2 in General Permit Number WMGR019.

^{*}This may be based on the 90 percent upper confidence level using *Test Methods for Evaluating Solid Waste* (EPA SW-846) as guidance for the statistical treatment of data.

- 4. The manufactured soil or soil amendments may be beneficially used if all of the following are met:
 - a. the maximum total concentration of a representative sample of manufactured soil or soil amendment not containing dredged material does not exceed any level in Table 1.

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Table 1	
Constituent	Total (mg/kg) [†]
Arsenic	29
Cadmium	47
Chromium	
Hexavalent	94
Trivalent	1200
Copper	1500
Lead	500
Mercury	86
Nickel	420
Selenium	1100
Zinc	2800
PCBs [†]	
For use at a minesite	2
For other uses	1
Benzene [†]	41
Ethylbenzene [†]	180
Toluene [†]	350
Xylenes [†]	310
Physical Contaminants (Man-made) [‡]	
For use at a minesite	3 percent
For other uses	1 percent
Plastic [‡]	
For use at a minesite	1 percent
For other uses	0.5 percent

*Should an individual sample of manufactured soil and soil amendments exceed the above limits, the waste may be resampled and the waste analysis determination may be based on the 90 percent upper confidence level for each constituent using *Test Methods for Evaluating Solid Waste* (EPA SW-846) as guidance for the statistical treatment of data.

[†]Applicable for manufactured soil and soil amendments that contain sludge generated by a paper mill that recycles paper or cardboard.

[‡]As measured using a 4 mm screen.

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 b. leaching analysis, using the Toxicity Characteristic Leaching Procedure (EPA Method 1311) or the Synthetic Precipitation Leaching Procedure (EPA Method 1312), on a representative sample of manufactured soil or soil amendment not containing dredged material indicates none of the levels in Table 2 are exceeded.

Constituent	Leachable (mg/L)*
Arsenic	0.25
Boron	7.0
Cadmium	0.125
Chloride	250
Chromium	2.5
Copper	25
Lead	0.375
Mercury	0.05
Nickel	2.5
Selenium	1
Zinc	50
Benzene [†]	0.005
Ethylbenzene [†]	0.7
Toluene [†]	1.0
Xylenes [†]	10

Та	bl	е	2

*Should an individual sample of manufactured soil and soil amendments exceed the above limits, the waste may be resampled and the waste analysis determination may be based on the 90 percent upper confidence level for each constituent using *Test Methods for Evaluating Solid Waste* (EPA SW-846) as guidance for the statistical treatment of data.

[†]Applicable for manufactured soil and soil amendments that contain sludge generated by a paper mill that recycles paper or cardboard.

c. the maximum total concentration of a representative sample of manufactured soil or soil amendment containing dredged material does not exceed any level in Tables 3-5.

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Table 3

Constituent	Limit (mg/kg) [*]
Chloromethane	180
Bromomethane	95
Vinyl Chloride	12
Chloroethane	1200
Methylene Chloride	180
Acetone	1600
Carbon Disulfide	3200
1,1-Dichloroethene	6.4
1,1-Dichloroethane	200
1,2-Dichloroethene (total)	200
cis-1,2-Dichloroethene	640
trans-1,2-Dichloroethene	1300
Chloroform	6
1,2-Dichloroethane	12
2-Butanone (MEK)	10,000
1,1,1-Trichloroethane	750
Carbon Tetrachloride	21
Bromodichloromethane	8.6
1,2-Dichloropropane	31
cis-1,3-Dichloropropene	80
Trichloroethene	190
Dibromochloromethane	12
1,1,2-Trichloroethane	20
Benzene	41
1,3-Dichloropropene	80
Bromoform	290
4-Methyl-2-pentanone (MIBK)	1500
Tetrachloroethene	240
1,1,2,2-Tetrachloroethane	5.5
Toluene	350
Chlorobenzene	490
Ethylbenzene	180
Styrene	1400
Xylenes(total)	310
Semivolatiles	
Phenol	9300
bis-(2-Chloroethyl)ether	32
2-Chlorophenol	330
1,3-Dichlorobenzene	190
1,4-Dichlorobenzene	210

Constituent	Total (mg/kg) [†]
Semivolatiles (Continued)	
1,2-Dichlorobenzene	260
2-Methylphenol	1200
4-Methylphenol	1100
N-Nitroso-di-n-propylamine	2.6
Hexachloroethane	220
Nitrobenzene	110
Isophorone	1100
2-Nitrophenol	390
2,4-Dimethylphenol	4400
bis(2-Chloroethoxy)methane	100
2,4-Dichlorophenol	660
1,2,4-Trichlorobenzene	340
Naphthalene	140
4-Chloroaniline	880
Hexachlorobutadiene	44
4-Chloro-3-methylphenol	100
2-Methylnaphthalene	2000
Hexachlorocylcopentadiene	66
2,4,6-Trichlorophenol	66
2,4,5-Trichlorophenol	12,000
2-Chloronaphthalene	500
2-Nitroaniline	13
Dimethylphthalate	100
Acenaphthylene	360
2,6-Dinitrotoluene	75
3-Nitroaniline	9.2
Acenaphthene	94
2,4-Dinitrophenol	4400
4-Nitrophenol	1800
2,4-Dinitrotoluene	58
Diethylphthalate	440
Fluorene	76
4-Nitroaniline	13
4,6-Dinitro-2-methylphenol	30
N-Nitrosodiphenylamine	100
4-Bromophenyl-phenyl ether	100
Hexachlorobenzene	0.15
Pentachlorophenol	150
Phenanthrene	210
Anthracene	7.3
Carbazole	15
Di-n-butylphthalate	3200

Constituent	Total (mg/kg) [†]
Semivolatiles (Continued)	
Fluoranthene	65
Pyrene	46
Butylbenzylphthalate	460
3,3'-Dichlorobenzidine	40
Benzo(a)anthracene	20
Chrysene	5.1
bis(2-Ethylhexyl)phthalate	130
Di-n-octylphthalate	4400
Benzo(b)fluoranthene	3.7
Benzo(k)fluoranthene	13
Benzo(a)pyrene	2.5
Indeno(1,2,3-cd)pyrene	25
Dibenzo(a,h)anthracene	2.5
Benzo(g,h,i)perylene	3.9
Pesticides/Aroclors	
alpha-BHC	2.8
beta-BHC	1.3
delta-BHC	77
gamma-BHC (Lindane)	14
Heptachlor	4.0
Aldrin	1.1
Heptachlor epoxide	2.0
Endosulfan I	5.0
Dieldrin	1.1
4,4'-DDE	18
Endrin	13
Endosulfan II	5.4
4,4'-DDD	36
4,4'-DDT	7.1
Methoxychlor	15
Chlordane	28
Toxaphene	4.0
PCBs (Total) [‡]	1.0

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Constituent	Total (mg/kg) [†]
Inorganics	
Antimony	6.75
Arsenic	29
Barium	15,000
Beryllium	440
Boron	20,000
Cadmium	47
Calcium	NEL
Chromium, Total	
Trivalent	1200
Hexavalent	94
Cobalt	4400
Copper	1500
Iron	66,000
Lead	500
Manganese	31,000
Mercury	66
Molybdenum	18
Nickel	420
Selenium	1100
Silver	1100
Thallium	15
Vanadium	1500
Zinc	2800
Chloride	NEL
Cyanide (Free)	4400
Sulfate	NEL
Sulfide	500

*Should an individual sample of manufactured soil and soil amendments exceed the above limits, the waste may be resampled and the waste analysis determination may be based on the 90 percent upper confidence level for each constituent using *Test Methods for Evaluating Solid Waste* (EPA SW-846) as guidance for the statistical treatment of data.

[†]On a dry weight basis

[‡]The sample preparation for PCB determinations shall be EPA Method 3545.

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Table 4

Constituent	Total (mg/kg) [†]
Dioxins and Furans	Total (ng/kg) [†]
Dioxins and Furans (TEQ) ‡	120*

*Should an individual sample of manufactured soil and soil amendments exceed the above limit, the waste may be resampled and the waste analysis determination may be based on the 90 percent upper confidence level for each constituent using *Test Methods for Evaluating Solid Waste* (EPA SW-846) as guidance for the statistical treatment of data.

[†]On a dry weight basis

Table 5

	Total
Physical Contaminants (Man-made Inerts) [‡]	
For use at a minesite	3 percent
For other uses	1 percent
Plastic	
For use at a minesite	1 percent
For other uses	0.5 percent

[‡]As measured using a 4 mm screen.

d. Leaching analysis, using the Toxicity Characteristic Leaching Procedure (EPA Method 1311) or the Synthetic Precipitation Leaching Procedure (EPA Method 1312), on a representative sample of manufactured soil or soil amendment containing dredged material indicates none of the levels in Table 6 are exceeded.

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Table 6

Constituent	Leachable (mg/L)
Volatiles	
Chloromethane	0.003
Bromomethane	0.003
Vinyl Chloride	0.002
Chloroethane	0.002
Methylene Chloride	0.005
Acetone	3.5
Carbon Disulfide	1.9
1,1-Dichloroethene	0.007
1,1-Dichloroethane	0.007
1,2-Dichloroethene (total)	0.027
cis-1,2-Dichloroethene	0.007
trans-1,2-Dichloroethene	0.07
Chloroform	0.07
1,2-Dichloroethane	0.005
2-Butanone (MEK)	2.8
1,1,1-Trichloroethane	0.2
Carbon Tetrachloride	0.05
Bromodichloromethane	0.05
1,2-Dichloropropane	0.005
cis-1,3-Dichloropropene	0.005
Trichloroethene	0.005
Dibromochloromethane	0.005
1,1,2-Trichloroethane	0.003
Benzene	0.005
1,3-Dichloropropene	0.066
Bromoform	0.000
4-Methyl-2-pentanone (MIBK)	0.19
Tetrachloroethene	0.005
1,1,2,2-Tetrachloroethane	0.003
Toluene	1.0
Chlorobenzene	0.1
Ethylbenzene	0.7
Styrene	0.1
Xylenes(total)	10

Constituent	Leachable (mg/L)
Semivolatiles	
Phenol	4
bis-(2-Chloroethyl)ether	3.18x10 ⁻⁵
2-Chlorophenol	0.04
1,3-Dichlorobenzene	0.6
1,4-Dichlorobenzene	0.075
1,2-Dichlorobenzene	0.6
2-Methylphenol	1.75
4-Methylphenol	0.18
N-Nitroso-di-n-propylamine	5.0x10 ⁻⁶
Hexachloroethane	0.001
Nitrobenzene	0.018
Isophorone	0.18
2-Nitrophenol	0.29
2,4-Dimethylphenol	0.7
bis(2-Chloroethoxy)methane	0.005
2,4-Dichlorophenol	0.02
1,2,4-Trichlorobenzene	0.07
Naphthalene	0.1
4-Chloroaniline	0.14
Hexachlorobutadiene	0.001
4-Chloro-3-methylphenol	0.005
2-Methylnaphthalene	0.73
Hexachlorocylcopentadiene	0.05
2,4,6-Trichlorophenol	0.00318
2,4,5-Trichlorophenol	3.5
2-Chloronaphthalene	2.8
2-Nitroaniline	0.0021
Dimethylphthalate	0.005
Acenaphthylene	2.2
2,6-Dinitrotoluene	0.037
3-Nitroaniline	0.0021
Acenaphthene	2.1
2,4-Dinitrophenol	0.73
4-Nitrophenol	0.06
2,4-Dinitrotoluene	0.0021
Diethylphthalate	5.0
Fluorene	1.4
4-Nitroaniline	0.0021
4,6-Dinitro-2-methylphenol	0.007
N-Nitrosodiphenylamine	0.00714

Constituent	Leachable (mg/L) [*]
Semivolatiles (Continued)	
4-Bromophenyl-phenyl ether	0.005
Hexachlorobenzene	0.001
Pentachlorophenol	0.001
Phenanthrene	1.1
Anthracene	0.066
Carbazole	0.033
Di-n-butylphthalate	3.5
Fluoranthene	0.26
Pyrene	0.13
Butylbenzylphthalate	2.7
3,3'-Dichlorobenzidine	7.78x10 ⁻⁵
Benzo(a)anthracene	0.0009
Chrysene	0.0019
bis(2-Ethylhexyl)phthalate	0.006
Di-n-octylphthalate	0.73
Benzo(b)fluoranthene	0.0009
Benzo(k)fluoranthene	0.00055
Benzo(a)pyrene	0.0002
Indeno(1,2,3-cd)pyrene	0.0009
Dibenzo(a,h)anthracene	0.00009
Benzo(g,h,i)perylene	0.00026
Pesticides/Aroclors	
alpha-BHC	5.56x10 ⁻⁶
beta-BHC	0.00037
delta-BHC	0.022
gamma-BHC (Lindane)	0.0002
Heptachlor	0.0004
Aldrin	8.7 x10 ⁻⁶
Heptachlor epoxide	0.0002
Endosulfan I	0.21
Dieldrin	4.1x10 ⁻⁵
4,4'-DDE	1.03x10 ⁻⁴
Endrin	0.02
Endosulfan II	0.21
4,4'-DDD	1.46x10 ⁻⁴
4,4'-DDT	1.03x10 ⁻⁴
Methoxychlor	0.0004
Chlordane	0.002
Toxaphene	0.002
PCBs (Total) [‡]	NEL

Constituent	Leachable (mg/L)
Inorganics	
Aluminum	5.0
Antimony	0.15
Arsenic	0.25
Barium	50
Beryllium	0.1
Boron	7.0
Cadmium	0.125
Calcium	NEL
Chromium, Total	2.5
Trivalent	NEL
Hexavalent	NEL
Cobalt	17.5
Copper	25
Iron	7.5
Lead	0.375
Manganese	2.5
Mercury	0.05
Molybdenum	4.375
Nickel	2.5
Selenium	1.0
Silver	2.5
Thallium	0.0125
Vanadium	6.5
Zinc	50
Chloride	250
Cyanide (Free)	0.2
Sulfate	500
Sulfide	NEL

- e. Analysis using ASTM D5435 (Standard Test Method for Diagnostic Soil Test for Plant Growth and Food Chain Protection) on a representative sample of manufactured soil and soil amendments indicates that the manufactured soil or soil amendments falls within the normal range for the constituents covered in that standard. An alternate method involving plant growth studies may be used instead of ASTM D5435 if authorized in writing by the Department.
- f. The manufactured soil is not placed within 4 feet of the seasonal high water table, perched water table, or within 4 feet of bedrock unless otherwise authorized in writing by the Department.

- g. Should the waste contain other constituents which do not meet the requirements of §288.623(a) (relating to minimum requirements for acceptable waste) or which pose a threat of harm to human health or the environment, the waste shall not be placed directly into the environment.
- 5. The drinking water treatment sludges, yard waste, bark ash, coal ash, agricultural residues, waste cardboard and paper, sludge generated by paper or pulp mills, waste from food processing, waste virgin sands, and spent mushroom substrate shall not be hazardous waste.
- 6. The drinking water treatment sludges, yard waste, bark ash, coal ash, agricultural residues, waste cardboard and paper, sludge generated by paper or pulp mills, waste from food processing, waste virgin sands, and spent mushroom substrate shall not be mixed with other types of solid wastes, including hazardous waste, other municipal waste, special handling waste, or other residual waste.
- 7. This permit does not authorize and shall not be construed as an approval to discharge any waste, wastewater, or runoff from the site of processing or use of manufactured soil and soil amendments to the land or waters of the Commonwealth. The permittee shall comply with the fugitive emissions standards adopted under 25 Pa. Code Sections 123.1 and 123.2.
- 8. This permit does not authorize the discharge of air emissions. The permittee shall comply with the applicable requirements of the Air Pollution Control Act and Title 25, Subchapter C, Article III (relating to air resources), including odor emissions, contained in 25 Pa. Code Section 123.31 (relating to limitations).
- 9. Based on the composting volume capacity, the facility may be subject to the plan approval and operating requirements of 25 Pa. Code Chapter 127. If plan approval is required, the permittee may not construct, assemble, install, modify, or operate the facility prior to obtaining a plan approval from the Department's Air Quality Program.
- 10. Nothing in this permit shall be construed to supersede, amend, or authorize a violation of any of the provisions of any valid and applicable local law, ordinance, or regulation, provided that said local law, ordinance, or regulation is not preempted by the Pennsylvania Solid Waste Management Act, 35 P.S. §6018.101 <u>et seq</u>., or the Municipal Waste Planning, Recycling and Waste Reduction Act of 1988, 53 P.S. §4000.101 <u>et seq</u>.

- 11. As a condition of this permit, the permittee shall obtain from all landowners of his place of business where processing activities will occur, on a form provided by the Department, the authority to conduct the activities authorized by this permit and consent to allow authorized employees or agents of the Department to enter the permit area. This authorization and consent shall be obtained prior to the occurrence of processing at a location and be submitted to the appropriate Regional Office of the Department that has jurisdiction for waste-related activities in the county where the facility is located via certified mail.
- 12. As a condition of this permit and of the permittee's authority to conduct the activities authorized by this permit, the permittee hereby consents to allow authorized employees or agents of the Department, without advance notice or search warrant, upon presentation of appropriate credentials and without delay, to have access and to inspect all areas or permittee controlled adjacent areas where solid waste management activities are being or will be conducted. This authorization and consent shall include consent to collect samples of waste, water, or gases; to take photographs; to perform measurements, surveys, and other tests; to inspect any monitoring equipment; to inspect the methods of operation; and to inspect and/or copy documents, books, and papers required by the Department to be maintained or produced. (See Sec. 608 and 610(7) of the Solid Waste Management Act, 35 P.S. Section 6018.608 and 6018.610(7).) This condition in no way limits any other powers granted to the Department under the Solid Waste Management Act.
- 13. Failure of the measures herein approved to perform as intended, or as designed, or in compliance with the applicable laws, rules and regulations and terms and conditions of this permit, for any reason, shall be grounds for the revocation or suspension of the permittee's approval to operate under this permit.
- 14. Any independent contractors or agents retained by the permittee in the completion of activities authorized under this permit shall be subject to prior compliance history review by the Department as specified by the Pennsylvania Solid Waste Management Act of 1980, as amended.
- 15. The activities authorized by this permit shall not harm or present a threat of harm to the health, safety or welfare of the people or environment of this Commonwealth. The Department may modify, suspend, revoke or reissue the authorization granted in this permit if it deems necessary to prevent harm or the threat of harm to the public health, or the environment.

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16. Any person that operates under the provisions of this permit shall immediately notify the appropriate Regional Office of the Department that has jurisdiction for waste-related activities in the county where the facility is located 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; bonding and insurance status; the system used to process the waste; the physical or chemical characteristics of the waste; the generator(s) of the waste; and the status of any permit issued by the Department or federal government under the environmental protection acts.

Permittees may not operate a facility at a new location without obtaining written authorization from the Department. Requests for authorization should be submitted to the Waste Management Program at appropriate Regional Office of the Department that has jurisdiction for waste-related activities in the county where the facility will be located at least thirty (30) days prior to a permittee's intended operating date. The request should include a completed Form 20 (Application for a Municipal or Residual Waste General Permit) and completed Bonding Worksheets A and E (Waste Processing Decontamination and Summary Cost Worksheet). There is no application fee for this request.

- 17. Equipment used for the processing of waste shall be maintained in good operating condition. 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.
- 18. The processing unit(s) shall be set up and operated in a manner that prevents spills, leaks, or other releases.
- 19. The temperature of the compost during the windrow composting phase shall be maintained at 55 degrees Celsius (131 degrees Fahrenheit) or greater for at least 15 days. Turning shall be consistent with current science-based composting technology. The compost shall be cured for a minimum of 30 days before bagging or being sold or supplied in bulk.
- 20. Yard waste shall not be incorporated into the manufactured soil prior to being composting in windrows that satisfy the requirements in Condition 19 and removal of physical contaminants and plastic so that the yard waste meets the limits for these contaminants in Table 1 of Condition 4.

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21. The composting pad shall be constructed from concrete, asphalt, remolded asphalt, or similar materials approved by the Department. The pad shall be located in a well-drained area and sloped 2-4% to prevent ponding. The composting pad shall be capable of maintaining structural integrity under normal operating conditions and all types of weather and be capable of supporting vehicular traffic on the pad. The composting pad shall not be constructed where continuous or intermittent contact can occur between the pad and groundwater. The composting pad shall be inspected by the permittee for uniformity, damage, and imperfections during construction, installation, and during the operational life of the pad.

Except for areas where salts will be leached from spent mushroom substrate, this requirement for a composting pad may be waived or modified by the Department, provided the facility has an operating groundwater monitoring system and the permittee possesses a Department approved groundwater monitoring plan to cover the operations approved under this permit.

- 22. The composting pad must be capable of collecting all liquids and/or solids generated by the process unless it is demonstrated to the Department that the runoff will not create adverse impacts on human health or the environment.
- 23. Incoming materials or waste, active compost, curing materials, and finished compost shall be stored in a manner that prevents harborage or breeding of vectors or creation of odors, litter, and other nuisances which may be harmful to public health, safety, welfare, or the environment. Storage shall be in a manner that prevents dispersal of waste or compost by wind or water erosion or a risk of fire or explosion. Waste may not be stored in a manner that causes groundwater or surface water contamination.
- 24. Putrescible waste must be stored in closed, leak-proof containers. Putrescible waste may not be held in closed containers for more than 72 hours prior to being incorporated into the composting process. In addition, nonputrescible waste and manufactured soil and soil amendments must be stored in accordance to the requirements of 25 Pa. Code 299, Subchapter A (Standards for Storage of Residual Waste), and may not be stored for more than one (1) year at the permitted facility.
- 25. Leachate from the process, if collected, shall be managed as residual waste.

- 26. The permittee shall maintain a bond in an amount and with sufficient guarantees acceptable to the Department as provided by 25 Pa. Code 287, Subchapter E (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 whole or in part by the Department, in writing.
- 27. The permittee shall maintain in force and effect a general liability insurance policy in accordance with 25 Pa. Code, Chapter 287, Subchapter E (Bonding and Insurance Requirements) to provide continuous coverage during operation of the facility and until the Department issues a final closure certification.
- 28. Facilities that process waste shall not be located:
 - a. within 300 yards of a building owned by a school district or parochial school used for instructional purposes, existing prior to the date the Department received an administratively complete application, unless a written waiver is obtained from the current property owner of the school.
 - b. within 300 yards of a park or playground, existing prior to the date the Department received an administratively complete application, unless a written waiver is obtained from the current property owner of the park.
 - c. in a 100 year flood plain of waters of this Commonwealth, unless the Department approves, in writing, a method of protecting the facility from a 100-year flood consistent with the Flood Plain Management Act (32 P.S. §§ 679.101-679.601) and the Dam Safety and Encroachments Act (32 P.S. §§ 693.1-693.27).
 - d. within 300 feet measured horizontally from an occupied dwelling unless the owner of the dwelling has provided a written waiver consenting to the facility being closer than 300 feet.
 - e. within 50 feet of a property line unless the permittee demonstrates that the actual processing of waste and the storage of putrescible waste is not occurring within that distance or the owner of the occupied dwelling has provided a written waiver consenting to the facility being closer than 50 feet.
 - f. within 100 feet of a perennial or intermittent stream, unless storage and processing will not occur within that distance.
 - g. within 300 feet of a water source.
 - h. within 4 feet of a seasonal high water table.
 - i. in or within 300 feet of an exceptional value wetland.

- 29. 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 or any residue from processing and shall take appropriate immediate action to protect the health and safety of the public and the environment. Spills of less 1000 pounds of waste, manufactured soil, soil amendment, or any residue from the processing need not be immediately reported, but should be recorded as specified in Condition 31.
- 30. Records of any analytical evaluations conducted on waste, pursuant to the residual waste regulations and this permit, shall be kept by the permittee at the permittee's place of business for a minimum of 5 years and shall be available to the Department for inspection. At a minimum, these records shall include information on the dates of testing, each parameter tested, the results, the laboratory, sampling procedures, analytical methodologies, and person collecting the sample.
- 31. 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 processed at each location, composting temperatures and duration demonstrating compliance with the requirements of Condition 19, the results of analyses as required in Conditions 34 and 35, and the name, address, and phone number, and quantity for each destination of outgoing shipment of manufactured soil or soil amendment. The permittee shall also maintain records of all spills and releases that contain: location, date, time, identification and quantity of spilled or released material, a description of how the material was cleaned up, and the destination of clean-up wastes. These records shall be retained by the permittee at the permittee's place of business for a minimum of 5 years from the date the records were generated and shall be available to the Department for inspection.
- 32. 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 "<u>Guidelines for the Development and Implementation of Environmental Emergency Response Plans</u>". 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).

- 33. The permittee shall comply with the terms and conditions of this general permit and with the environmental protection acts to the same extent as if the activities were covered by an individual permit. The Department may require an individual permit if the permittee is not in compliance with the conditions of this general permit or is conducting an activity that harms or presents a threat of harm to the health, safety, or welfare of the people or the environment.
- 34. The permittee shall obtain results of an initial chemical analysis on representative samples of each source of waste for the appropriate constituents of Condition 3 and total and leachable metals in Condition 4. The permittee shall maintain records which include the results of the initial chemical analysis and, annually, one (1) of the following:
 - For each source of waste, an analysis performed within the last year that has been conducted on a representative sample of the waste for all of the appropriate parameters listed in Conditions 3 and 4;
 - b. For each source of waste, a copy of the waste generator's analysis that includes the appropriate parameters listed in Conditions 3 and 4 and that is not more than one (1) year old;
 - c. For each source of waste that has been analyzed by the generator of the waste for the appropriate parameters listed in Conditions 3 and 4, a signed certification that is not more than one year old and states that the physical and chemical properties of the waste have not changed.
- 35. Prior to the distribution or beneficial use of manufactured soil and soil amendments,
 - a. the permittee shall perform a chemical analysis on a representative composite sample of each batch of manufactured soil and soil amendments not containing dredged material, after composting and other processing are complete, for the appropriate parameters listed in Tables 1 and 2, except for benzene, ethylbenzene, toluene and xylenes. The permittee shall perform a chemical analysis on representative grab samples from each batch of manufactured soil and soil amendments not containing dredged material, after composting and other processing are complete, for benzene, ethylbenzene, toluene and xylenes at a minimum of 1 grab sample per 1000 cubic yards.

- b. the permittee shall perform a chemical analysis on a representative composite sample of each batch of manufactured soil and soil amendments containing dredged material, after composting and other processing are complete, for the appropriate parameters listed in Tables 3 6, except for volatiles. The permittee shall perform a chemical analysis on representative grab samples from each batch of manufactured soil and soil amendments not containing dredged material, after composting and other processing are complete, for volatiles at a minimum of 1 grab sample per 1000 cubic yards. In lieu of performing a chemical analysis on representative samples from each batch of manufactured soil amendments not containing dredged material analysis on representative samples from each batch of performing a chemical analysis on representative samples from each batch of manufactured soil and soil amendments containing dredged material, after composting and other processing are complete, for the parameters listed in Tables 3 6, the permittee may do the following:
 - i. Require the supplier to perform chemical analysis on representative samples of dredged material for the appropriate parameters listed in Tables 3 6. The number of samples required shall be:
 - A. For an ongoing dredge project 100,000 cubic yards or less, one composite sample per 10,000 cubic yards shipped. In addition, one grab sample per 10,000 cubic yards shipped will be used for determination of volatile organic compounds.
 - B. For ongoing dredge projects over 100,000 cubic yards, a different frequency than the frequency specified in A may be approved in writing by the Department's Bureau of Waste Management or the Regional Waste Management Program.
 - C. For dredge material removed from surface impoundments, disposal areas, or facilities that mix dredge material from more than one dredging project, one composite sample per 10,000 cubic yards shipped. In addition, one grab sample per 10,000 cubic yards shipped will be used for determination of volatile organic compounds.
 - D. For an ongoing dredge project or dredge material removed from surface impoundments in quantities of less than 10,000 cubic yards, one composite sample per shipment. In addition, one grab sample per shipment will be used for determination of volatile organic compounds.
 - ii. Reject any dredged material that exceeds any level in Tables 3 6.
 - iii. Annually, test a grab sample from each source of dredged material for the parameters listed in Tables 3 6.
 - iv. Satisfy the analytical requirements in a.

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36. The permittee shall inform all persons or municipalities which propose to beneficially use, in bulk quantities, manufactured soil and soil amendments covered under this permit of all the conditions and limitations imposed on the use of manufactured soil and soil amendments by the Department of Environmental Protection. This notification shall be by providing a copy of Appendix A (Restrictions on Manufactured Soil and Soil Amendments). The conditions in Appendix A apply to any permittee, including one who obtains a Determination of Applicability to conduct activities authorized by this permit, and to any user of the manufactured soil and soil amendments. This notification is not required for manufactured soil and soil amendments when sold or otherwise supplied in bags or other containers holding 100 kg of manufactured soil and soil amendments or less.

APPENDIX A Use Restrictions on Manufactured Soil and Soil Amendments General Permit Number WMGR046

The following restrictions apply to the beneficial use of manufactured soil and soil amendments prepared from drinking water treatment sludges, yard waste, bark ash, coal ash, agricultural residues, waste cardboard and paper, sludge generated by paper or pulp mills (SIC Code 2621 and 2611), and unused sands, and spent mushroom substrate when sold or otherwise supplied in bulk quantities. Persons receiving, storing, and/or using the manufactured soil for beneficial use purposes are required to comply with the following requirements:

- A1. Manufactured soil and soil amendments shall not be stored in direct contact with, or applied within 4 feet of the seasonal high water table, perched water table, or within 4 feet of bedrock unless otherwise authorized in writing by the Department.
- A2. The amount of the manufactured soil and soil amendments that may be stored at any site at any point in time is limited to the amount of manufactured soil and soil amendments that is intended to be used, and can be practicably applied, on the site for the next 365 days, but in no case shall more than 2000 tons of the manufactured soil and soil amendments be stored on any one acre of land.
- A3. Runoff from the manufactured soil and soil amendments storage areas shall not cause surface water pollution or groundwater degradation and shall be managed in accordance with The Clean Streams Law and regulations promulgated thereunder.
- A4. The application rate of manufactured soil and soil amendments at any site shall not exceed a depth of eight inches.
- A5. On agricultural lands, the application rate for nitrogen shall be based on the nutrient requirements of the intended crop.
- A6. Agricultural sites, land reclamation sites, golf courses, athletic fields, parks and playgrounds must have a nutrient management plan developed prior to land application of the manufactured soil or soil amendment.
- A7. Manufactured soil and soil amendments shall not be applied to the land during periods of rain or to ground that is saturated, covered with snow, or frozen. Manufactured soil and soil amendments shall be incorporated into the soil within twenty-four (24) hours of application, except when application is to lands that already support substantial volunteer growth, or when manufactured soil is applied to sloped areas that, if plowed, would cause soil displacement.

DEP Regional Offices (and Counties Served)

Southeast Regional Office

Bucks, Chester, Delaware, Montgomery, Philadelphia

2 East Main Street Norristown, PA 19401 Phone: 484-250-5960 Fax: 484- 250-5961

Northeast Regional Office

Carbon, Lackawanna, Lehigh, Luzerne, Monroe, Northampton, Pike, Schuylkill, Susquehanna, Wayne, Wyoming

2 Public Square Wilkes-Barre, PA 18711-0790 Phone: 570-826-2516 Fax: 570-826-5448

Southcentral Regional Office

Adams, Bedford, Berks, Blair, Cumberland, Dauphin, Franklin, Fulton, Huntingdon, Juniata, Lancaster, Lebanon, Mifflin, Perry, York 909 Elmerton Avenue

Harrisburg, PA 17110-8200 Phone: 717-705-4706 Fax: 717-705-4930

Northcentral Regional Office

Bradford, Cameron, Centre, Clearfield, Clinton, Columbia, Lycoming, Montour, Northumberland, Potter, Snyder, Sullivan, Tioga, Union 208 West 3rd Street, Suite 101 Williamsport, PA 17701 Phone: 570-327-3653 Fax: 570-327-3420

Southwest Regional Office

Allegheny, Armstrong, Beaver, Cambria, Fayette, Greene, Indiana, Somerset, Washington, Westmoreland

400 Waterfront Drive Pittsburgh, PA 15222-4745 Phone: 412-442-4000 Fax: 412-442-4194

Northwest Regional Office

Butler, Clarion, Crawford, Elk, Erie, Forest, Jefferson, Lawrence, McKean, Mercer, Venango, Warren

230 Chestnut Street Meadville, PA 16335-3481 Phone: 814-332-6848 Fax: 814-332-6117I