pennsylvania
DEPARTMENT OF ENVIRONMENTAL PROTECTION

BUREAU OF WASTE MANAGEMENT

DIVISION OF MUNICIPAL and RESIDUAL WASTE

GENERAL PERMIT WMGR046

PROCESSING BY SEPARATION, SIZE REDUCTION (GRINDING), SCREENING, MIXING, WINDROW COMPOSTING AND STATIC COMPOSTING OF VARIOUS WASTES PRIOR TO BENEFICIAL USE AS MANUFACTURED SOIL OR SOIL AMENDMENT

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GENERAL PERMIT WMGR046
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A. Description:

This General Permit authorizes the following:

1. Processing by separation, size reduction (grinding), screening, mixing, windrow composting and static composting 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,

    for beneficial use as a manufactured soil or soil amendment, or

2. Beneficial use of manufactured soil or soil amendment that was processed by a separate DEP-permitted processing or composting facility. Manufactured soil and soil amendments may only be beneficially used if the waste streams from which they are derived are limited to the following wastes:

    - biosolids,
    - water treatment plant residuals/sludge,
    - untreated and unpainted wood waste,
    - sawdust, wood shavings and turnings from untreated and unpainted wood,
    - yard waste,
    - wood ash generated from the burning of untreated and unpainted wood,
    - food processing waste/residuals/sludge,
    - other organic residuals, as approved by DEP,
    - spent activated carbon from industrial processes (not generated from groundwater treatment),
    - paper, laminated paper, cardboard, shredded paper, paper pulp, paper residuals/sludge and lignin,
    - textile wastes (limited to cotton, wool and silk),
    - pre-consumer and post-consumer food waste,
    - gypsum plaster molds and virgin drywall,
    - restaurant grease trap waste,
    - and agricultural waste.

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 of Environmental Protection (DEP) Regional Office (see attached list). The appropriate DEP Regional Office will provide a checklist, either at a pre-application meeting or by mail or email, that indicates the forms needed for the application. A completed application on forms provided by the DEP, along with the application fee for a DOA in the amount identified in Section A (General Information) of the Form 20 (Application for a Municipal or Residual General Permit), must be included with the application. Checks shall be made payable to the "Commonwealth of Pennsylvania." 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. A permittee must collect a representative sample of sludge generated by a paper or pulp mill, drinking water treatment sludge, freshwater, brackish and marine dredged material and waste foundry sand to determine its quality prior to acceptance for processing in accordance with the authorization granted in this general permit.

   If waste is processed by a separate DEP-permitted processing or composting facility prior to beneficial use under this general permit, the permittee must maintain records showing that the sampling and analysis of the above waste streams was performed prior to processing of the waste.

   A permittee must also collect a representative sample of manufactured soil and soil amendments prior to beneficial use.

2. To obtain a representative sample of the wastes, samples must be taken from multiple locations in the batch and represent the entire amount of waste material 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.

3. Sludge generated by a paper or pulp mill, drinking water treatment sludge, freshwater, brackish and marine dredged material and waste foundry sand may be processed under this general permit provided the following criteria are met:

a. For each source of waste, and for each waste type, the permittee must perform an initial analysis on a representative sample for the constituents listed in subparagraphs b-e of this condition, and for the total and leachable metals in Condition C.4. The permittee shall maintain records that include the results of the initial chemical analyses and one of the following:

   i. For each source of waste, an analysis performed within the prior year that has been conducted on a representative sample of the waste for all of the appropriate parameters listed in Condition C.3.b-e and the total and leachable metals in Condition C.4;

   ii. For each source of waste, a copy of the waste generator's analysis that includes the appropriate parameters listed in Condition C.3.b-e and the total and leachable metals in Condition C.4; or

   iii. For each source of waste that has been analyzed by the generator of the waste for the appropriate parameters listed in Conditions C.3.b-e and the total and leachable metals in Condition C.4, a signed certification that is less than one year old and states that the physical and chemical properties of the waste(s) have not changed.

b. 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.

   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.

c. Total analysis of a representative sample of drinking water treatment sludge indicates the level of reactive sulfide does not exceed 250 mg/kg*.

d. 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 $2x10^6$.

e. 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.

f. If waste is processed by a separate DEP-permitted processing or composting facility prior to beneficial use under this general permit, the permittee must maintain records showing that the sampling and analysis of the above waste streams was performed in accordance with Condition C.3.(a)-(c) prior to processing of the waste.

4. Prior to the distribution or beneficial use of manufactured soil or soil amendment, the following criteria must be met:

   a. The maximum total concentration of a representative sample of manufactured soil or soil amendment not containing dredged material must not exceed any level in Table 1. The permittee shall perform a chemical analysis on a representative composite sample of each batch of manufactured soil and soil amendment not containing dredged material, after composting and other processing are complete, for the appropriate parameters listed in Table 1, 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.

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 limits in Table 1, 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.

b. A leach 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. The permittee shall perform a chemical analysis on a representative composite sample of each batch of manufactured soil and soil amendment not containing dredged material, after composting and other processing are complete, for the appropriate parameters listed in Table 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.

Table 2

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

*Should an individual sample of manufactured soil and soil amendments exceed the limits in Table 2, 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. 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 - 5, except for volatiles. The permittee shall perform a chemical analysis on representative grab samples from each batch of manufactured soil and soil amendments containing dredged material, after composting and other processing are complete, for volatiles at a minimum of 1 grab sample per 1000 cubic yards.

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)	
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

Table 3 Continued

Constituent	Total (mg/kg)* †
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
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

Table 3 Continued

Constituent	Total (mg/kg)* †
Semivolatiles (Continued)	
N-Nitrosodiphenylamine	100
4-Bromophenyl-phenyl ether	100
Hexachlorobenzene	0.15
Pentachlorophenol	150
Phenanthrene	210
Anthracene	7.3
Carbazole	15
Di-n-butylphthalate	3200
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

Table 3 Continued

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 limits in Table 3, 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.

Table 4

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

[*]Should an individual sample of manufactured soil and soil amendments exceed the limit in Table 4, 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. A leach 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. 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 6, except for volatiles. The permittee shall perform a chemical analysis on representative grab samples from each batch of manufactured soil and soil amendments containing dredged material, after composting and other processing are complete, for volatiles at a minimum of 1 grab sample per 1000 cubic yards.

Table 6

Constituent	Leachable (mg/L)
Volatiles	
Chloromethane	0.003
Bromomethane	0.01
Vinyl Chloride	0.002
Chloroethane	0.23
Methylene Chloride	0.005
Acetone	3.5
Carbon Disulfide	1.9
1,1-Dichloroethene	0.007
1,1-Dichloroethane	0.027
1,2-Dichloroethene (total)	
cis-1,2-Dichloroethene	0.007
trans-1,2-Dichloroethene	0.07
Chloroform	0.1
1,2-Dichloroethane	0.005
2-Butanone (MEK)	2.8
1,1,1-Trichloroethane	0.2
Carbon Tetrachloride	0.05
Bromodichloromethane	0.1
1,2-Dichloropropane	0.005
cis-1,3-Dichloropropene	0.0066
Trichloroethene	0.005
Dibromochloromethane	0.1
1,1,2-Trichloroethane	0.003
Benzene	0.005
1,3-Dichloropropene	0.066
Bromoform	0.1
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

Table 6 Continued

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

Table 6 Continued

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	7.78×10^{-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	5.56×10^{-6}
beta-BHC	0.00037
delta-BHC	0.022
gamma-BHC (Lindane)	0.0002
Heptachlor	0.0004
Aldrin	8.7×10^{-6}
Heptachlor epoxide	0.0002
Endosulfan I	0.21
Dieldrin	4.1×10^{-5}
4,4'-DDE	1.03×10^{-4}
Endrin	0.02
Endosulfan II	0.21
4,4'-DDD	1.46×10^{-4}
4,4'-DDT	1.03×10^{-4}
Methoxychlor	0.0004
Chlordane	0.002
Toxaphene	0.002
PCBs (Total) ‡	NEL

Table 6 Continued

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. In lieu 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, as outlined in Condition C.4.c-d, 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 DEP'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 Condition C.4.a-b.

f. 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 DEP.

g. 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 DEP.

h. 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.

i. In lieu of performing a chemical analysis on representative samples from each batch of manufactured soil and soil amendments, individually permitted DEP-permitted processing or composting facilities using the beneficial use provision in Description A.2. can opt to sample and analyze monthly in accordance with Condition C.3., provided that adequate pre-screening parameters are included in the individual permit that authorizes the composting.

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 processing unit(s) shall be set up and operated in a manner that prevents spills, leaks, or other releases.

7. 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.

8. Yard waste shall not be incorporated into the manufactured soil until the following requirements are met:

   a. The yard waste has been composted in windrows that satisfy the requirements in Condition C.7, and

   b. Physical contaminants and plastic have been removed from the yard waste so that it meets the limits for the parameters listed in Table 1.

9. The composting pad shall be constructed from concrete, asphalt, remolded asphalt, or similar materials approved by the DEP. 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.

10. The composting pad must be capable of collecting all liquids and/or solids generated by the process unless it is demonstrated to the DEP that the runoff will not create adverse impacts on human health or the environment.

11. Except for areas where salts will be leached from spent mushroom substrate, the requirement for a composting pad in Condition C.9 may be waived or modified by the DEP, provided the facility has an operating groundwater monitoring system and the permittee possesses a DEP approved groundwater monitoring plan to cover the operations approved under this permit.

12. Leachate from the process, if collected, shall be managed as residual waste.

13. 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 DEP's Air Quality Program.

14. The processing of waste authorized under this general permit 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 DEP 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 DEP 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 DEP 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.

15. The beneficial use of the waste as manufactured soil or soil amendment is contingent upon compliance with this general permit and, if distributed, the Pennsylvania Commercial Feed Act, the Pennsylvania Fertilizer Act, and the Pennsylvania Soil and Plant Amendment Act of the Pennsylvania Department of Agriculture, as applicable. (Information relating to these laws may be obtained from the Department of Agriculture by writing the Bureau of Plant Industry, Division of Agronomic Services, 2301 North Cameron Street, Harrisburg, PA 17110-9408.)

16. Upon cessation of permitted operations at the facility, the permittee shall remove all wastes and provide for the processing, recycling, beneficial use, or disposal of wastes in accordance with the SWMA, the environmental protection acts and the regulations promulgated thereunder.

17. The activities authorized by this permit shall not cause or allow conditions that are harmful to the environment, public health or safety, including but not limited to, odors, noise, or other public nuisances. The permittee shall not cause or allow the attraction, harborage, or breeding of vectors. Storage of waste shall be in a manner that prevents dispersal by wind or water erosion and in a manner that prevents fire or explosion. Waste may not be stored in a manner that causes ground or surface water contamination.

18. The local police, fire department, or other appropriate state or local emergency response agencies shall be contacted immediately in the event of a fire, spill, or other hazard arising from the storage and curing of manufactured soil or soil amendment that threatens public health, safety, and welfare, or the environment, and whenever necessary in the event of personal injury related to such storage.

19. The permittee shall develop and implement a Preparedness, Prevention and Contingency Plan (PPC) that is consistent with the DEP's most recent guidelines.

20. All activities conducted under the authorization granted in this permit shall be conducted in accordance with the permittee's application. Except to the extent the

permit states otherwise, the permittee shall utilize materials as described in the permit application.

21. The permittee shall comply with the fugitive emissions regulations under 25 Pa. Code, Chapter 123 (relating to standards for contaminants) issued under the Air Pollution Control Act, the Act of January 8, 1960, P.L. 2119, 35 P.S. §4005, and shall comply with all the applicable provisions of 25 Pa. Code §§123.1 and 123.2 (relating to prohibition of certain fugitive emissions and fugitive particulate matter).

22. Nothing in this permit shall be construed to supersede, amend, or authorize a violation of any of the provisions of any valid and applicable local law, ordinance, or regulation, providing that said local law, ordinance, or regulation is not preempted by the Solid Waste Management Act (SWMA), 35 P.S. §§ 6018.101—6018.1001; and the Municipal Waste Planning, Recycling and Waste Reduction Act of 1988, 53 P.S. §§4000.101, et seq.

23. As a condition of this general permit and of the permittee's authority to conduct the activities authorized by this general permit, the permittee hereby authorizes and consents to allow authorized employees or agents of the DEP, without advance notice or search warrant, upon presentation of appropriate credentials and without delay, to have access to and inspect all areas on which solid waste management activities are being, will be, or have been conducted. This authorization and consent shall include consent to collect samples of waste, 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 DEP to be maintained. This permit condition is referenced in accordance with Sections 6018.608 and 6018.610(7) of the SWMA, 35 P.S. §§ 6018.608 and 6018.610(7). This condition in no way limits any other powers granted under the SWMA.

24. Any independent contractors or agents retained by the permittee in the completion of activities authorized under this general permit shall be subject to compliance history review by the DEP prior to performance of any activities, as specified by the SWMA.

25. Failure of measures herein approved to perform as intended, or as designed, or in compliance with the applicable laws, rules, and regulations and terms and conditions of this permit, for any reason, shall be grounds for the revocation or suspension of the permittee's approval to operate under this permit.

26. The 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 DEP may modify, suspend, revoke, and reissue the authorization granted in this general permit if it deems necessary to prevent harm or the threat of harm to the public health, and the environment or if they cannot be adequately regulated under the conditions of this general permit.

27. 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 DEP may require an individual permit be obtained if the permittee cannot comply with the conditions of this general permit or is conducting an activity that harms or presents a threat of harm to the health, safety, or welfare of the public or the environment of this Commonwealth.

28. 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.

29. 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 necessary storm water management permits.

30. The permittee shall maintain in force and affect a general liability insurance policy in accordance with 25 Pa. Code, Chapter 287, Subchapter E (relating to bonding and insurance requirements) to provide continuous coverage during operation of the facility and until the DEP issues a final closure certification.

31. The permittee shall maintain a bond in an amount and with sufficient guarantees acceptable to the DEP 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 DEP, in writing.

32. Equipment used for the storage of waste material 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.

33. 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.

34. Storage of waste material by the permittee shall be in a manner that complies with the requirements set forth in 25 Pa. Code, Chapter 299 (relating to storage and transportation of residual waste).

35. The wastes authorized for processing under this general 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.

36. Analytical testing required by this general permit shall be performed by a laboratory accredited under the Pennsylvania Environmental Laboratory Accreditation Act, Act of 2002, 27 Pa. C.S.A. §§ 4101-4113.

D. Recordkeeping

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

2. 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 C.7, the results of analyses as required in Conditions C.3 and C.4 , 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 DEP for inspection.

E. Reporting Requirements

1. Any person that operates under the provisions of this permit shall immediately notify the appropriate DEP Regional Office (see attached list) 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 DEP or federal government under the environmental protection acts.

2. Persons operating under the provision of this general permit shall submit to the appropriate DEP Regional Office, an annual report on the beneficial use activities

conducted under this permit by March 1 for the preceding calendar year. This report shall include a summary of the waste received at the facility, a copy of any required analytical data, and a summary of the weight or volume of manufactured soil or soil amendment generated at, and distributed from, the facility for the previous year.

3. The permittee shall immediately notify the DEP'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 D.2.

4. 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 DEP. This notification shall be fulfilled 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.

F. Renewal

A generator or supplier that plans to continue the operations authorized under this general permit, after the expiration date indicated on the approval for coverage page, shall file a complete application for permit renewal at least 180 days before the expiration date of this general permit unless permission has been granted by the DEP for submission at a later date. The renewal applications shall be submitted to the appropriate DEP Regional Office (see attached list) and include, at a minimum, the following:

1. General Information Form (Authorization Application for a Residual or Municipal Waste General Permit Application),

2. Form B (Professional Certification),

3. Form 20 (Application for a Municipal or Residual Waste General Permit),

4. Form 27R (Acceptance of General Permit Conditions), and

5. Completed Bonding Calculation Worksheets

6. DOA application fee in the amount identified in Section A (General Information) of the Form 20. A check shall be made payable to the "Commonwealth of Pennsylvania."

   A copy of the renewal application shall also be sent to the DEP's Bureau of Waste Management, Division of Municipal and Residual Waste, Rachel Carson State Office Building, 400 Market Street, P.O. Box 69170, Harrisburg, PA 17106-9170.

   In the event that a timely and complete application for renewal has been submitted and the DEP is unable, through no fault of the permittee, to reissue the general permit or approval for coverage before its current coverage expiration date, the terms and conditions of the approved coverage will automatically continue and will remain fully effective and enforceable pending the issuance or denial of the renewal for permit coverage, provided the permittee is, and has been, operating in compliance with the terms and conditions of the general permit.

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), waste from vegetable food processing, unused sands, waste foundry sand authorized under General Permit Number WMGR019, spent mushroom substrate, and freshwater, brackish and marine dredged material 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 of Environmental Protection.

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

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

Northwest Regional Office

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

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