

**SPECIAL CONDITIONS**  
**BENEFICIAL USE PERMIT NO. WMGR002**

(Exp. 2/4/14)

1. The approval herein granted is limited to the beneficial use of wastewater treatment sludge generated by paper and pulp mills (SIC Code 2621 and 2611), hereinafter referred to as “wastewater treatment sludge” or “waste”, for application on disturbed lands as a soil additive to establish or reestablish agricultural productivity, for use in establishing or improving herbaceous wildlife habitat, and for use as a soil additive to facilitate revegetation on disturbed land at permitted mine sites regulated under the Department's Bureau of Mining and Reclamation and at abandoned mine sites reclaimed under a contract with the Department’s Bureau of Abandoned Mine Reclamation or with another governmental agency.

The term “herbaceous wildlife habitat” refers to an area that is specifically cultivated with various flora intended to support the indigenous wildlife of that area.

2. The wastewater treatment sludge may be beneficially used at permitted mine sites and abandoned mine sites under contract if all of the following are met:
- a. the maximum lifetime metal loading on lands where waste is applied does not exceed any of the following:

<u>Constituent</u>	<u>Limit (lbs./acre)</u>
Cadmium	34
Chromium	2600
Copper	1300
Lead	260
Nickel	370
Selenium	88
Zinc	2460

- 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 the wastewater treatment sludge indicates that none of the following are exceeded:

<u>Constituent</u>	<u>Leachable (mg/L)*</u>
Cadmium	0.25
Chromium	1.25
Copper	32.5
Lead	1.25
Manganese	5.0
Nickel	2.5
Zinc	125

- c. Total analysis of a representative sample of the wastewater treatment sludge indicates the level of dioxin does not exceed 30 ppt.\*

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\* These determinations may be based upon the 90 percent upper confidence level using *Test Methods for Evaluating Solid Waste* (EPA SW-846) as guidance for statistical treatment of data.

3. The wastewater treatment sludge may be beneficially used as a soil additive for application upon disturbed lands to establish or reestablish agricultural productivity and as a soil additive for establishing or improving herbaceous wildlife habitat if all of the following are met:

a. The maximum lifetime metal loading on lands where waste is applied does not exceed any of the following:

<u>Constituent</u>	<u>Limit (lbs./acre)</u>
Cadmium	34
Chromium	2600
Copper	1300
Lead	260
Nickel	370
Selenium	88
Zinc	2460

b. A “total” analysis conducted utilizing the “Test Methods for Evaluating Solid Waste, Physical/Chemical Methods” (EPA SW-846) on a representative sample of the wastewater treatment sludge indicates that none of the following are exceeded:

<u>Constituent</u>	<u>Limit *</u>
pH (range)	5.5-8.5
Arsenic	41 mg/kg dry wt.
Cadmium	25 mg/kg dry wt.
Chromium	1200 mg/kg dry wt.
Copper	1500 mg/kg dry wt.
Lead	300 mg/kg dry wt.
Nickel	420 mg/kg dry wt.
Selenium	36 mg/kg dry wt.
Zinc	2800 mg/kg dry wt.

\* These determinations may be based upon the 90 percent upper confidence level using “*Test Methods for Evaluating Solid Waste, Physical/Chemical Methods*” (EPA SW-846) as guidance for statistical treatment of data.

4. The wastewater treatment sludge may not be mixed with other types of solid wastes, including other residual wastes, hazardous waste, municipal waste, or special handling waste, unless approved by the Department in writing.

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5. This permit does not authorize and shall not be construed as an approval to discharge any industrial wastes, wastewater, leachate or runoff from the land application sites to the waters of the Commonwealth.
6. The permittee shall comply with the fugitive emissions standards adopted under Chapter 123 regulations (Standards for Contaminants) issued under Air Pollution Control Act, the Act of January 8, 1960, P.L. 2119, 35 P.S. §4005 and shall be required to comply with all the applicable sections of 25 Pa. Code, §§123.1 and 123.2 (relating to fugitive emissions).
7. 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 regulations, providing that said local law, ordinance, or regulation is not preempted by the Pennsylvania Solid Waste Management Act, 35 P.S. §6018.101 et seq.; and the Municipal Waste Planning, Recycling and Waste Reduction Act of 1988, 53 P.S. §4000.101 et seq.
8. 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 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.
9. 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.
10. 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.
11. 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.
12. Persons or municipalities that propose to operate under the terms and conditions of this general permit after the date of permit issuance must obtain a "Determination of Applicability" from the Department's Bureau of Land Recycling and Waste Management, Division of Municipal and Residual Waste, P.O. Box 8472, Harrisburg, PA 17105-8472. No activities shall commence unless specifically authorized by the Department in writing.

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At a minimum, the following information must be provided on forms available from the Department's Bureau of Land Recycling and Waste Management (See address above):

- a. Name and street address of applicant;
  - b. For each source of waste, a chemical and physical analysis, and description of the wastewater treatment sludge that fully characterizes its composition and properties; the wastewater treatment sludge generation process; and a plan for screening, managing, and rejecting incoming wastewater treatment sludge;
  - c. Name and location of the generator of the wastewater treatment sludge;
  - d. Total volume of wastewater treatment sludge to be applied at each site;
  - e. Description of method of beneficial use;
  - f. Number and title of general permit;
  - g. Proof the wastewater treatment sludge and waste management activities are consistent with the general permit;
  - h. Signed and notarized statement by the person who seeks authorization to operate under the terms and conditions of this permit that states that the person accepts all conditions of this general permit;
  - i. An application fee in the amount as specified in the residual waste regulations, payable to the "Commonwealth of Pennsylvania";
  - j. Proof that copies of the application have been submitted to each municipality, county, county planning agency and county health department, if one exists, in which beneficial use activities are or will be located;
  - k. Proof that the applicant has legal right to enter the land and perform the activities approved under this permit;
  - l. An irrevocable written consent from the landowner giving the Department permission to enter upon land where the applicant will be conducting waste management activities;
  - m. Information that identifies the applicant (i.e., individual, corporation, partnership, government agency, association, etc.), including the names and addresses of every officer that has a beneficial interest in or otherwise controls the operation of the company;
  - n. A list of all previous permits or licenses issued by the Department or federal government under the environmental protection acts; the dates issued, status and compliance history concerning environmental protection acts;
  - o. Proof that any independent contractors retained by the permittee to perform any activities authorized under this permit are in compliance with Department regulations as required in Condition 10;
  - p. A map clearly showing the land application site and all setback distances as required under Condition 38.
13. Any person that operates under the provisions of this permit shall immediately notify the Department's Bureau of Land Recycling and Waste Management (see address in Condition 11, in writing, of any changes in: the company name, address, owners, operators and responsible officials; the location of land application sites; land ownership and the right to enter and operate on any land where the wastewater treatment sludge application is to take place; the physical or chemical characteristics of the wastewater treatment sludge; the generator(s) of the wastewater treatment sludge; the manufacturing

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process that generates the wastewater treatment sludge; and the status of any permit issued by the Department or federal government under the environmental protection acts.

For persons that operate under the provisions of this permit on permitted mine sites, the above notification must also be provided to the appropriate District Mining Office of the Department's Bureau of Mining and Reclamation.

For persons that operate under the provisions of this permit on abandoned mine sites that are under contract, the above notification must also be provided to the appropriate District Office of the Department's Bureau of Abandoned Mine Reclamation and any other governmental agency that is party to the contract.

14. Any person or municipality who is permitted to operate under the provisions of this general permit may utilize new application sites or expand existing sites by providing notification to the Department (see address in Condition 12). The notification shall be by certified mail and contain the following:
  - a. For expansion of an existing site, submission of information as required in items *d, f, g, j, o, and p*, of Condition 12 above, is mandatory, whereas items *k* and *l* are required only when the information on land ownership by the permittee has changed. The notification shall be submitted at least 20 days prior to starting expanded operations.
  - b. For waste application at a new location, the information required in items *a, c, d, e, f, g, j, k, l, and p*, of Condition 12 above must be submitted. The notification shall be submitted at least 30 days prior to starting the new operations at a new waste application site.
15. Equipment used for the storage and application of the wastewater treatment sludge shall be maintained in good operating condition. Daily inspections of equipment during wastewater treatment sludge application activities are to be conducted to ensure that equipment will operate properly and examine for evidence of equipment failure.
16. The amount of the wastewater treatment sludge that may be stored on a mine reclamation site at any point in time is limited to that amount of wastewater treatment sludge 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 wet tons of the wastewater treatment sludge be stored on any one acre at a reclamation site.

When beneficially used on agricultural lands or herbaceous wildlife habitat, wastewater treatment sludge may be stored for a maximum of 30 days on the farm or land where land application is to take place. The total amount of waste that may be stored shall not exceed the 50 dry tons per acre per year loading rate multiplied by the number of acres on which waste is to be applied. If storing wastewater treatment sludge in a pile, under no circumstances may free liquids be present in the waste, as determined by Method 9095 (Paint Filter Liquids Test) "Test Methods for Evaluating Solid Wastes, Physical/Chemical Methods (EPA SW-846).

17. Wastewater treatment sludge shall not be stored in direct contact with, or applied directly into, ground water.

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18. The storage, transportation, or use of the wastewater treatment sludge shall be in a manner that will not create a nuisance or be harmful to public health, safety, or the environment, and shall be in a manner that prevents the dispersal of wastewater treatment sludge by wind or water erosion.
19. Runoff from the wastewater treatment sludge 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.
20. The permittee shall manage surface water and control erosion and sedimentation to meet the applicable requirements of 25 Pa. Code, Chapter 102 (relating to erosion control).
21. Wastewater treatment sludge shall be stored and managed in a manner that complies with 25 Pa. Code, Chapter 299, the residual waste regulations (relating to the storage of residual waste).
22. The permittee shall immediately notify the Department by telephone at (717) 787-4343 and the appropriate DEP regional office in the event of a discharge or spill of wastewater treatment sludge, and shall take appropriate immediate action to protect the health and safety of the public and the environment.
23. Records of any analytical evaluations conducted on the wastewater treatment sludge pursuant to the residual waste regulations shall be kept by the permittee at the permittee's place of business and shall be available to the Department for inspection. At a minimum, these records are to include information on the dates of testing, each parameter tested, the results, the laboratory, sampling procedures, analytical methodologies and person collecting the sample. This waste analysis information shall be retained by the permittee at the permittee's place of business for a minimum of 5 years after the analyses were performed.
24. 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.
25. The permittee shall submit to the Department's Bureau of Land Recycling and Waste Management, (see address in Condition 12), an annual report that contains the information outlined in Conditions 13 and 23, and identifies the location of all sites where wastewater treatment sludge was applied during the past 12 months, and identifies all landowners who were notified that waste was to be placed upon their land, and contains a map clearly showing each land application site and all setback distances as indicated in Condition 38. The annual report shall also identify for each site: the weight or volume of the wastewater treatment sludge applied, remaining weight or volume of wastewater treatment sludge intended to be applied to complete the reclamation, the wastewater treatment sludge loading rate, and the date beneficial use activities were completed or are estimated to be completed. Additionally, for sites where waste was applied for establishing or reestablishing agricultural productivity and herbaceous wildlife habitat, the report shall identify for each site: the number of acres to which waste

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was applied, weather conditions at the time of application, the date and time waste was applied to each agricultural site, the waste loading rate in dry tons per acre.

In the case of application upon mine sites, the annual report shall also include an evaluation at completed sites of the success or failure of efforts to promote vegetation. Standards for successful revegetation on a permitted mine reclamation site shall be consistent with standards promulgated by the Department's Bureau of Mining and Reclamation at 25 Pa. Code, Sec. 77.618 and Sec. 87.155. Standards for successful revegetation on an abandoned mine reclamation site shall be consistent with the standards for successful revegetation as specified in the permittee's contract with the Bureau of Abandoned Mine Reclamation or other governmental agency.

For persons that operate under the provisions of this permit on permitted mine sites, the above annual report must also be provided to the appropriate District Mining Office of the Department's Bureau of Mining and Reclamation.

For persons that operate under the provisions of this permit on abandoned mine sites that are under contract, the above annual report must also be provided to the appropriate District Office of the Department's Bureau of Abandoned Mine Reclamation and any other governmental agency that is party to the contract.

The annual report, due on the anniversary date that the permit became applicable to a permittee, must also include one (1) of the following:

- a. For each source of wastewater treatment sludge, an analysis performed within the last year that has been conducted on a representative sample of the wastewater treatment sludge for all of the parameters listed in Condition 2 and/or 3, as applicable;
  - b. For each source of wastewater treatment sludge, a copy of the waste generator's analysis that includes the parameters listed in Condition 2 and/or 3, as applicable, and that is not more than one (1) year old;
  - c. For each source of wastewater treatment sludge that has been analyzed by the generator of the waste for the parameters listed in Condition 2 and/or 3, as applicable, a signed certification that is not more than one year old and states that the physical and chemical properties of the wastewater treatment sludge have not changed.
26. For activities authorized under this permit at mine sites, the permittee shall submit to the Department's Bureau of Land Recycling and Waste Management(see address in Condition 12), the appropriate regional office of the Bureau of Land Recycling and Waste Management, and the appropriate county, county planning agency, and county health department, if one exists, notice of intention to revise the revegetation plan for each permitted and abandoned mine site at which wastewater treatment sludge is intended to be applied. For permitted mine sites, the above notification must also be provided to the appropriate District Mining Office of the Department's Bureau of Mining and Reclamation. For abandoned mine sites, the above notification must also be provided to the appropriate District Office of the Department's Bureau of Abandoned Mine Reclamation or contracting governmental agency.

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For permitted mine sites, the revision process shall comply with all requirements for revising revegetation plans at permitted mine sites as promulgated by the Department's Bureau of Mining and Reclamation at 25 Pa. Code, Sec. 77.618 and Sec. 87.155. For abandoned mine sites, the revision procedure shall be that specified in the permittee's contract with the Bureau of Abandoned Mine Reclamation or other contracting governmental agency.

27. When beneficially using the waste on disturbed lands as a soil additive to establish or reestablish agricultural productivity or when beneficially using the waste for establishing or improving herbaceous wildlife habitat, the permittee shall—prior to waste application—notify by letter the county planning commission, county conservation district, and municipality in which application waste application is proposed, describing the proposed project and identifying its location
28. A farm conservation plan in accordance with 25 Pa. Code, Chapter 102 (relating to erosion control) shall be implemented at the farm at which wastewater treatment sludge will be land applied.
29. When land applying wastewater treatment sludge on agricultural lands, display the permit number of this general permit on the sides of each application vehicle that is used in the land application of wastewater treatment sludge, in alphanumeric characters at least 3 inches high in a color contrasting to the background
30. When beneficially used on mine reclamation sites, wastewater treatment sludge loading rates shall be determined by the lime requirement of the soils onto which wastewater treatment sludge is to be applied. The lime requirement shall be based upon the amount of lime necessary to obtain the correct soil pH range as specified in the site revegetation plan for a permitted mine site or contract for an abandoned mine site. Under no circumstances shall the maximum metal loading rates in Condition 2 be exceeded.
31. When beneficially used to establish or reestablish agricultural productivity, during the land application of water treatment sludge and for two year after waste application has ceased, soil pH on sites where water treatment sludge is applied shall be maintained within the range of 6.5 or greater.
32. When beneficially used to establish or reestablish agricultural productivity, prior to the first land application of wastewater treatment sludge on each field—as delineated in the farm's conservation plan—the permittee shall obtain, at a minimum, one background chemical analysis for each field on which the waste is to be land applied, for pH, arsenic, cadmium, chromium, copper, nickel, lead, selenium, and zinc. The results of these analyses shall be maintained by the permittee.
33. When beneficially used to establish or re-establish agricultural productivity, annual soil samples must be collected from the application site and analyzed for the total values for the following parameters; Lead, Copper, Chromium, Zinc, and Cadmium. Such sampling shall be performed each fall of the year and shall be carried out every year that waste is applied to the site.



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34. When beneficially used on mine reclamation sites, under no circumstances shall the wastewater treatment sludge loading rate exceed 350 wet tons per acre, except when hydroseeding is the method of application, in which case the maximum loading rate shall not exceed 5 wet tons per acre.

When beneficially used on agricultural lands or herbaceous wildlife habitat, under no circumstances shall the wastewater treatment sludge loading rate exceed 50 dry tons per acre.

35. When beneficially used on mine reclamation sites, wastewater treatment sludge 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 wastewater treatment sludge is applied to sloped areas that, if plowed, would cause soil displacement.

When beneficially used on agricultural lands or herbaceous wildlife habitat, wastewater treatment sludge shall not be applied to slopes greater than 15%. Unless otherwise approved by the Department or the Soil Conservation Service in the approved farm conservation plan.

36. Reclamation activities may not commence on permitted mine sites unless specifically authorized by the Department's Bureau of Mining and Reclamation. Reclamation activities may not commence on abandoned mine sites unless specifically authorized by the Department's Bureau of Abandoned Mine Reclamation or other contracting governmental agency.

37. Wastewater treatment sludge shall not be applied to the land during periods of rain or to ground that is saturated, covered with snow, or frozen.

38. Wastewater treatment sludge shall not be applied or stored within these minimum isolation distances:

1. 100 feet of an intermittent or perennial stream;
2. 300 feet of a water source, unless otherwise approved by the Department, in writing;
3. 25 feet of a bedrock outcrop;
4. 50 feet of a property line, unless the current owner has provided a written waiver consenting to the activities being closer than 50 feet;
5. 300 feet of an occupied dwelling, unless the current owner has provided a written waiver consenting to the activities being closer than 300 feet;
6. 100 feet of a sinkhole or area draining into a sinkhole;
7. 1,000 feet upgradient of a surface water source, unless otherwise approved by the Department, in writing;
8. 25 feet of the perimeter of an undrained depression;

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9. 100 feet of an exceptional value wetland.
  
39. The permittee shall provide a copy of this permit to each user of wastewater treatment sludge approved under this permit. It is incumbent upon the permittee to see that all users of wastewater treatment sludge approved under this permit comply with all conditions of this permit.
  
40. 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 as described in the approved application.
  
41. For each new source of wastewater treatment sludge, the permittee shall submit an analysis of a representative sample of the waste to this office by certified mail for all the parameters listed in Condition 2 and/or 3 no less than fifteen days prior to waste acceptance and application. The permittee may apply the wastewater treatment sludge in accordance with the conditions of this permit after the aforementioned fifteen day period unless otherwise instructed by the Department.