

**GENERAL PERMIT WMGR017
BENEFICIAL USE OF WATER SUPPLY TREATMENT PLANT SLUDGE**

A. Description.

This general permit authorizes the beneficial use of water supply treatment plant sludge, hereinafter referred to as "water treatment residual", as (i) a soil additive by land application upon agricultural, agronomic, horticultural, and silvicultural lands and (ii) land application on disturbed lands to facilitate re-vegetation for land reclamation purposes.

B. Determination of Applicability Requirements.

A person or municipality that proposes to operate under the terms and conditions of this general permit after the date of permit issuance must obtain a Determination of Applicability (DOA) from the appropriate Department Regional Office (see attached list) prior to commencing authorized activities under this general permit. A completed (i) General Information Form (Authorization Application for a Residual or Municipal Waste General Permit Application), (ii) Form B (Professional Certification), (iii) Form 20 (Application For A Municipal or Residual Waste General Permit), (iv) Form 27R (Acceptance of General Permit Conditions), and (v) a "Determination of Applicability (DOA)" application fee in the amount identified in Section A (General Information) of the Form 20 must be submitted to the appropriate Department Regional Office. A check shall be made payable to the "Commonwealth of Pennsylvania". No activities shall commence unless approved, in writing, by the Department.

C. Standard Requirements.

1. The water treatment residual may be beneficially used as a soil additive upon agricultural, agronomic, horticultural, and silvicultural lands or to facilitate re-vegetation on disturbed lands if the chemical concentration of any pollutant in the proposed water treatment residual does not exceed the chemical concentration limits as specified in Table 1 of this Condition below.

Table 1

Water Treatment Residual

Parameters	Total (mg/kg) ^(a)
pH	5.5 – 8.5 std unit
Arsenic	41
Cadmium	25
Chromium	1,200
Copper	1,500
Lead	300
Mercury	17
Molybdenum	18
Nickel	420

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Table 1 (Continued)

Water Treatment Residual

Parameters	Total (mg/kg) ^(a)
Selenium	36
Sodium	3,500
PCBs	2
Zinc	2,800

(a) = Dry Weight Basis

The determination of compliance with Table 1 may be based on the 90 percent upper confidence level for each metal or the 80 percent confidence interval for pH using the Test Methods for Evaluating Solid Waste (EPA SW-846) as guidance for the statistical treatment of data.

2. The beneficial use of water treatment residual to facilitate re-vegetation on disturbed lands for land reclamation purposes, under the authorization granted in this general permit, at an active or abandoned mine site must be approved by the Department as part of a mine reclamation permit or project.
3. Water treatment residual may not be applied at a rate that is greater than the maximum application rate of 15 dry tons per acre per year. If the water treatment residual is a liquid waste, the application rate shall not exceed 25,000 gallons per acre per week, unless a greater application rate is approved by the Department based upon justifications and the calculation provided, in the permit application, by the applicant. A greater application rate may be approved by the Department, to facilitate re-vegetation on disturbed lands, for land reclamation purposes.
4. A surface water and erosion and sedimentation (E&S) controls plan in accordance with 25 Pa. Code, Chapter 102 (relating to erosion and sediment control) shall be implemented at the land at which the wastewater treatment residual is land applied for beneficial use purposes.
5. The permittee shall not cause or allow a point or non-point source discharge of any of the following: residual wastes; wastewater; combined storm water runoff and leachate, if generated; or runoff from the staging, processing, and storage areas where solid waste management activities are conducted; to the surface waters of the Commonwealth, unless permitted by the Department.
6. The water treatment residual that is beneficially used under this general permit shall not be mixed with other types of waste materials, including hazardous waste, municipal waste, special handling waste, or other residual waste, unless otherwise approved by the Department in writing.

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7. The beneficial use of water treatment residual authorized by this general permit shall not harm or present a threat of harm to the health, safety, or welfare of the people or environment of this Commonwealth. The Department may:
 - a. Modify, suspend, revoke, or reissue the authorization granted in this general permit if the permittee cannot comply with the conditions of this general permit or if the authorized processing and beneficial use activities cannot be adequately regulated under the conditions of this general permit.
 - b. Require an individual permit be obtained if it is deemed necessary to prevent harm or the threat of harm to public health and the environment.
8. Nothing in this general permit shall be construed to supersede, amend, or authorize a violation of any of the provisions of any valid and applicable law, ordinance, or regulations, providing that said local law, ordinance, or regulation is not preempted by the Solid Waste Management Act, 35 P.S. §§6018.101 - 6018.1003; Municipal Waste Planning, Recycling and Waste Reduction Act, 53 P.S. §§4000.101 - 4000.1904; Air Pollution Control Act, 35 P.S. §§4001 - 4005; Waste Transportation Safety Act, 27 Pa. C.S. §§6201 - 6209; Oil and Gas Act, §§58 P.S. 601.101 - 601.605; Radiation Protection Act, 35 P.S. §§7110.101 - 7110.703 and the Clean Streams Law, 35 P.S. §§691.1 - 691.1001.
9. 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 general permit, for any reason, shall be grounds for the revocation or suspension of the permittee's approval to operate under this general permit.
10. The water treatment residual and all other wastes generated by the operation shall be:
 - a. Conducted in a manner that will not create a nuisance or be harmful to the public health, safety or the environment of this Commonwealth; and
 - b. Stored and transported in accordance with 25 Pa. Code Chapter 299 (relating to storage and transportation) and the Waste Transportation Safety Act, 27 Pa. C.S. §§6201 - 6209.
11. The permittee shall comply with the fugitive emissions regulations under 25 Pa. Code, Chapter 123 (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 the Fugitive Emissions §§123.1, 123.2, and 123.31.
12. Unless stated otherwise by the Department, water treatment residual that is authorized under this general permit shall not be used as a valley fill material, to fill open pits from coal or non-coal mining or other fills, or to level an area or bring an area to grade.
13. 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

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authorized employees or agents of the Department, without advance notice or search warrant, upon presentation of appropriate credentials and without delay, to have access to and to inspect all areas on which solid waste management activities required of the permittee 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; to perform measurements, surveys, and other tests; inspect any monitoring equipment; to inspect the methods of operation; and to inspect and/or copy documents, books, and papers required by the Department to be maintained. This permit condition is referenced in accordance with §§608 and 610(7) of the Solid Waste Management Act, 35 P.S. §§6018.608 and 6018.610(7). This condition in no way limits any other powers granted under the Solid Waste Management Act.

14. Any independent contractors or agents retained by the permittee in the completion of beneficial use activity authorized under this permit shall be subject to a compliance history review by the Department prior to performance of activities under this general permit, as specified by the Solid Waste Management Act.
15. Water treatment residual may be stored for a maximum of 180 days on the site where land application of water treatment residual is to take place. The total amount to be stored shall not exceed the 15 dry tons per acre per year loading rate multiplied by the number of acres on which water treatment residual is to be applied. Under no circumstances may free liquids be present in the water treatment residual, as determined by Method 9095 (Paint Filter Liquids Test) "Test Methods for Evaluating Solids Wastes, Physical/Chemical Methods (EPA SW-846)". Temporary storage in piles (staging) may take place for up to 7-days in areas where water treatment residual is permitted to be land applied as authorized in this general permit.
16. Water treatment residual shall not:
 - a. Be stored in direct contact with, or applied directly into groundwater or surface water.
 - b. Be stored or applied within 11 inches of the seasonal high water table, nor within 3.3 feet of the regional ground water table. For purposes of this condition, the depths to seasonal high water table and regional ground water table shall be based on the most recent soil mapping as published by the United States Department of Agriculture (USDA) Natural Resources Conservation Service, or more detailed mapping data as mapped by an expert in soil science using standard and acceptable mapping procedures as developed by the USDA Natural Resources Conservation Service.
 - c. Be stored or applied in an area where the beneficial use activity would likely to adversely affect a Federal or Pennsylvania threatened or endangered species or designated critical habitat.
 - d. Be stored or applied within 100 feet or less of a perennial stream, within 33 feet of an intermittent stream, unless the water treatment residual is stored within an enclosed building or other structure.

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- e. Be stored or applied within 300 feet of a water source, unless the current owner has provided a written waiver consenting to the activities closer than 300 feet;
 - f. Be stored or applied within 100 feet of an exceptional value wetland, as defined in 25 Pa. Code §105.17 (relating to wetlands);
 - g. Be stored or applied within 100 feet of the edge of a sinkhole;
 - h. Be applied in an area without an implemented erosion and sedimentation control plan;
 - i. Be stored or applied within 300 feet of an occupied dwelling, unless the current owner has provided a written waiver consenting to the activities closer than 300 feet.
 - j. Be stored on slopes greater than 3 percent unless otherwise approved by the Department.
 - k. Be stored more than necessary to satisfy the maximum application rate of 15 dry tons per acre unless a greater application rate is approved by the Department.
17. Unless stated otherwise by the Department, in writing, the storage areas of water treatment residual shall be graded and maintained in a well-drain area with a slope of 3% to prevent ponding and control surface run-off.
- a. Storm water run-on at the storage area shall be diverted away from the water treatment residual under the authorization granted in the general permit. Proper drainage (i.e., diversions, drains, dikes, etc.) must be constructed and maintained to prevent storm water from coming into contact with the water treatment residual stored.
 - b. Storm water run-off from the storage area shall not cause surface water pollution or groundwater degradation and shall be managed in accordance with The Clean Streams Law and regulations promulgated thereunder.

The permittee shall not cause or allow a point or non-point source discharge of the combined stormwater run-off, water treatment residual, and leachate, if generated, from the storage area to the surface water of this Commonwealth. An NPDES (National Pollutant Discharge Elimination System) permit may be required if a point or non-point source discharge of the combined stormwater run-off, water treatment residual, or leachate, if generated, to the surface waters of the Commonwealth exists.

18. During the land application of water treatment residual, soil pH of the site where water treatment residual is applied shall be 6.0 or greater prior to land application of water treatment residual.
19. Water treatment residual shall not be land applied to slopes greater than 25% upon agricultural, agronomic, horticultural, and silvicultural lands.

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20. Water treatment residual shall not be land applied to slopes greater than 15% to facilitate re-vegetation on disturbed lands, for land reclamation purposes.
21. Water treatment residual shall not be applied to the land during periods of rain or to ground that is saturated, covered with snow, or frozen.
22. Display the permit number of this general permit on sides of each vehicle that is used in the transportation of water treatment residual, to the site where water treatment residual will be land applied, in alphanumeric characteristics at least 3 inches high in a color contrasting to the background.
23. All activities conducted under the authorization granted in this general permit shall be performed in accordance with the permittee's application, except to the extent that there is a conflict with the regulations or governing statutes.
24. Person who transports water treatment residual to the land application site shall be in compliance with federal and state rules and regulations relating to transportation.
25. Any waste generated from the beneficial use activity authorized by this general permit shall be managed in accordance with the Solid Waste Management Act, 35 P.S. §§6018.101 - 6018.1003 and the regulations promulgated thereunder.
26. The water treatment residual that is not beneficially used in accordance with this general permit, and any waste generated from the beneficial use activity authorized by this general permit shall be managed properly at a permitted disposal facility unless authorized by the Department, in writing, to do otherwise.
27. Upon cessation of operations at the facilities operating under the authorization granted in this permit, the operator shall clean and/or remove any residual waste, storage tanks and structures or other materials that contain or have been contaminated with residual waste and shall provide for the processing and disposal of the waste or material in accordance with the Solid Waste Management Act, other environmental protection acts and the regulations promulgated thereunder.
28. Transportation of water treatment residual to the land application site, and storage of water treatment residual shall be as follows:
 - a. In a manner which prevents harborage or breeding of vectors (including mosquitoes) or creation of odor, litter, and other nuisances which may impact the public health, safety, welfare, and the environment.
 - b. In a manner that prevents dispersal of water treatment residual by wind or water erosion or a risk of fire or explosion and shall comply with the requirements of Title 25 Pa. Code, Chapter 299 (relating to Storage, Collection and Transportation of Residual Waste).

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- c. Equipment used for the storage and transportation of the water treatment residual shall be maintained in good operating condition to prevent the water treatment residual from being unintentionally conveyed out of the storage areas. Routinely inspections of each storage areas and their surrounding environs are to be conducted to determine:
(i) dispersal of water treatment residual by wind, (ii) water erosion is prevented, (iii) compliance of the terms and conditions of this general permit, and (iv) for evidence of failure.
29. Best Management Practices (BMPs) as part of 25 Pa. Code, Chapter 102 (relating to erosion control) shall be implemented at storage areas to divert storm water run-on away from the storage areas. Storm water runoff shall be managed in accordance with The Clean Streams Law and regulations promulgated thereunder. If the storm water permit is required for construction of the storage area, the permittee must obtain necessary permit prior to storage of water treatment residual the facility, the permittee must obtain all the necessary storm water management permits.
30. For land reclamation purposes, re-vegetation shall provide for an effective and permanent vegetative cover of the same seasonal variety as vegetation native to the site and capable of self-regeneration and plant succession. Introduced species may be used when desirable and necessary to achieve the approved post closure land use. Vegetative cover shall be considered of the same seasonal variety when it consists of a mixture of species that is equal or superior utility to native vegetation during each season of the year.
31. A person or municipality 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 Department for submission at a later date. The renewal application shall be made using the "Form 20 (Application For a Municipal or Residual Waste General Permit)".

In the event that a timely and complete application for renewal has been submitted and the Department is unable, through no fault of the permittee, to reissue the general permit or approval for coverage before its current coverage expiration date, the terms and conditions of the approved coverage will automatically continue and will remain fully 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.

D. Sampling, Analysis and Frequency of Monitoring.

1. Sampling Requirements:
 - a. The sampling frequency for determining the constituents contained in the water treatment residual, as required in Condition C(1) of this general permit, shall be as follows for each storage unit cleanout:

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TABLE 2

Sampling Frequency

Amount of Water Treatment Residual Removed from Storage Unit (Dry Tons)	Number of Representative Samples
Greater than 0 but less than 290	1 sample
Equal to or greater than 290 but less than 1,500	2 samples
Equal to or greater than 1,500 but less than 15,000	4 samples
Equal to or greater than 15,000	4 samples plus 1 additional sample for each 4000 tons or fraction thereof above 15,000 tons

- b. The waste water treatment residual beneficially used without being placed in a storage unit for periods exceeding one week, sampling frequency for determining the constituents contained in the water treatment residual, as required in Condition C(1) of this general permit, shall be as follows:

TABLE 3

Sampling Frequency

Amount of Water Treatment Residual Produced (Dry Tons per 365 Day Period)	Frequency of Monitoring
Greater than 0 but less than 290	Once per year
Equal to or greater than 290 but less than 1,500	Once every 6 months
Equal to or greater than 1,500 but less than 15,000	Once per 90 days
Equal to or greater than 15,000	Once per month

2. All chemical analyses shall be made on representative samples.

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- a. To obtain a representative sample of the water treatment residuals prior to removal from storage units, the samples must be taken from the different locations and represent the entire amount of water treatment residuals. Core samples at different locations and at various depths shall be collected and then composited to obtain a representative sample of the water treatment residuals. In general, the more samples taken, the greater the chance that the sampling results will be representative of the quality of the water treatment residuals that is produced.
 - b. To obtain a representative sample of the water treatment residuals during removal from storage units or for residuals as produced, samples should be taken at different times and then composited to obtain a representative sample of the water treatment residuals. In general, the more samples taken, the greater the chance that the sampling results will be representative of the quality of the water treatment residuals that is produced.
3. Chemical Analysis Requirements:
- a. The chemical analysis required in Condition C(1) of this general permit shall be performed by a laboratory accredited or registered for accreditation under the act of June 29, 2002 (P.L. 596, No. 90)(27 Pa.C.S.A. §§ 4101-4113), known as the Environmental Laboratory Accreditation Act.
 - b. The analytical methodologies used to meet the requirements as specified in Condition C(1) of this general permit shall be those in the most recent edition of the EPA's "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods" (EPA SW-846), "Methods for Chemical Analysis of Water and Wastes" (EPA 600/4-79-020), "Standard Methods for Examination of Water and Water" (prepared and published jointly by the American Public Health Association, American Waterworks Association, and Water Pollution Control Federation), the Department's "Sampling Manual for Pollutant Limits, Pathogens and Vector Attraction Reductions in Sewage Residuals" or a comparable method subsequently approved by the EPA or the Department.
 - c. Upon request by the Department, the permittee shall collect and analyze representative samples of the water treatment residual as required in Condition C(1) of this general permit, within 48 hours of the request.
 - d. The radioactivity may not exceed 10 μ R/hr above background levels.
4. After the chemical analysis of representative samples of the water treatment residuals has been conducted as required in Condition C(1) at the frequency as specified in Condition D(1) of this general permit for a two-year period and has met the requirements and concentration limits as specified in Condition C(1) of the general permit, the Department may reduce the required frequency of monitoring if a written request for the reduction of sampling frequency is submitted by the permittee. A written approval from the Department must be obtained before commencing a reduced sampling frequency.

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E. Recordkeeping.

1. For each site or disturbed land where water treatment residual was applied, the permittee shall develop documents for the beneficial use activity during the last 12 months as follows:
 - a. Name of the generator and location where the water treatment residual was generated;
 - b. Name and location of the site or disturbed land where water treatment residual was applied;
 - c. The dates and volumes of water treatment residual applied on the site or disturbed land;
 - d. The number of acres to which water treatment residual was applied; and
 - e. The water treatment residual application rate in dry tons per acre.
2. All records required in this general permit shall be retained by the permittee at the permittee's place of business for a minimum of five years and shall be made available to the Department upon request.

F. Reporting Requirements.

1. The permittee shall immediately notify the appropriate Department's Regional Office and District Mining Office of the Department's Bureau of Mining Reclamation, in writing, of any changes in: the name, address, owners, operators and/or responsible officials of the company; changes in facility location; changes in land ownership or the right to operate on the land occupied; the physical or chemical characteristics of the water treatment residual, and the status of any permit issued by the Department or any state authority or federal government under the environmental protection acts.
2. Any person or municipality operating under the provisions of this general permit may utilize new application sites by providing the Department, in writing, the information below.
 - a. If the new application site will be located within the same Department's Regional Office having jurisdiction over the existing site, the permittee shall submit, to the Department's Regional Office or District Mining Office of the Department's Bureau of Mining Reclamation, for its review, a copy of the Form 20 (Application For A Municipal or Residual Waste General Permit) and provide the information indicated below as requested in the Form.
 - i. Section A (General Information) -- Reference shall be made to the general permit number currently held by the permittee.
 - ii. Section B (Applicant Information)
 - iii. Section C (Site Information)

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- iv. Section D (Consultant Information)
 - v. Section E (Project Information), items 1, 4, 7, 9, and 10.
 - vi. Section G (Certification).
- b. If the new application site will not be located within the same Department's Regional Office having jurisdiction over the existing site, the permittee shall submit a copy of the Form 20 (Application For A Municipal or Residual Waste General Permit), to the Department's Regional Office or District Mining Office of the Department's Bureau of Mining Reclamation having jurisdiction over the new application site, and provide the information indicated below, as requested in the Form, for its review.
- i. Section A (General Information)
 - ii. Section B (Applicant Information)
 - iii. Section C (Site Information)
 - iv. Section D (Consultant Information)
 - v. Section E (Project Information), items 1, 4, 7, 9, and 10.
 - vi. Section G (Certification).
 - vii. Application fee as specified in Section A of the Form. The check shall be made payable to the "Commonwealth of Pennsylvania".
 - viii. A copy of the original application shall be provided to the Department's Regional Office having jurisdiction over the new application site if requested.
- c. The information required in this Condition D(2) must be submitted, no less than fifteen (15) working days, prior to commencing land application activities at the new application. The permittee may land apply the water treatment residual at the new site in accordance with the conditions of this general permit after the aforementioned fifteen-day period unless otherwise instructed by the Department.
3. For each new source of water treatment residual, generated by water supply treatment plants, the permittee shall submit an analysis of a representative sample of the water treatment residual to the appropriate Department's Regional Office, by certified mail, to demonstrate the water treatment residual is in compliance with the requirements as specified in Table 1 of Condition C(1) no less than fifteen (15) working days prior to acceptance and beneficial use of the water treatment residual from a new source. The permittee may receive the water treatment residual from a new source in accordance with the conditions of this general permit after the aforementioned fifteen days period unless otherwise instructed by the Department.

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4. The permittee shall notify the county planning commission, county conservation district, and municipality in which application of water treatment residual as a soil additive is proposed, by delivering or causing to be delivered a copy of this permit, a copy of the chemical analysis of the water treatment residual, and identifying the location(s) onto which water treatment residual application is intended.

5. The permittee shall immediately notify the Department's Emergency Hotline by telephone at 800-541-2050 and the appropriate DEP regional office waste management program in the event of any spill of the water treatment residual in a quantity capable of reaching surface water, and shall take appropriate immediate action to protect the health and safety of the public and the environment.

**Department of Environmental Protection
Regional Offices
(and Counties Served)**

- I. Bucks, Chester, Delaware, Montgomery, Philadelphia.

Southeast Regional Office
2 East Main Street
Norristown, PA 19401
Phone: (484) 250-5960

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

Northeast Regional Office
2 Public Square
Wilkes-Barre, PA 18711-0790
Phone: (570) 826-2516

- III. Adams, Bedford, Berks, Blair, Cumberland, Dauphin, Franklin, Fulton, Huntingdon, Juniata, Lancaster, Lebanon, Mifflin, Perry, York.

Southcentral Regional Office
909 Elmerton Avenue
Harrisburg, PA 17110-8200
Phone: (717) 705-4706

- IV. Bradford, Cameron, Centre, Clearfield, Clinton, Columbia, Lycoming, Montour, Northumberland, Potter, Snyder, Sullivan, Tioga, Union.

Northcentral Regional Office
208 West 3rd Street - Suite 101
Williamsport, PA 17701
Phone: (570) 327-3653

- V. Allegheny, Armstrong, Beaver, Cambria, Fayette, Greene, Indiana, Somerset, Washington, Westmoreland.

Southwest Regional Office
400 Waterfront Drive
Pittsburgh, PA 15222-4745
Phone: (412) 442-4000

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

Northwest Regional Office
230 Chestnut Street
Meadville, PA 16335-3481
Phone: 814-332-6848

