

SPECIAL CONDITIONS GENERAL PERMIT WMGR129

A. Description.

This general permit authorizes the beneficial use of alkaline clay, a by-product generated during the recovery of aluminum from bauxite ore, as a soil additive for reclamation of acidic coal refuse at mine sites, hereinafter referred to as the “reclamation site”.

B. Determination of Applicability (DOA) 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 apply for and obtain a 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), along with a DOA application fee in the amount identified in Section A (General Information) of the Form 20 must be submitted to the appropriate Department Regional Office. Checks shall be made payable to the “Commonwealth of Pennsylvania”. No activities shall commence unless approved, in writing, by the Department.

C. Operating Conditions.

1. The beneficial use of alkaline clay as a soil additive to establish sustainable vegetation at a reclamation site shall meet all requirements below:
 - i. The maximum lifetime metals loading rate of alkaline clay shall not exceed the loading limit for any pollutant as specified in Table 1 below:

Table 1
Maximum Lifetime Metal Loading Rate

Pollutant	Cumulative Loading Rate	
	Pounds per acre (lbs/acre)	Kilogram per hectare (kg/hectare)
Arsenic	36	41
Boron	60	67.2
Cadmium	34	38
Chromium	2,672	3,104

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**Table 1 (continued)
Maximum Lifetime Metal Loading Rate**

Pollutant	Cumulative Loading Rate	
	Pounds per acre (lbs/acre)	Kilogram per hectare (kg/hectare)
Copper	1,320	1,490
Lead	264	296
Mercury	15	17
Molybdenum	16	18
Nickel	370	420
Selenium	88	99
Zinc	2,464	2,780

- ii. Leaching analysis on a representative sample of the alkaline clay shall not exceed the chemical concentration limit for any pollutant as specified in Table 2 below:

**Table 2
Allowable Leachate Concentration Limits**

Pollutant	Leachate (*) Concentration Limit (mg/l)
Aluminum	5.0
Ammonia	30
Antimony	0.15
Arsenic	0.25
Barium	50.0
Beryllium	0.10
Boron	15.0
Cadmium	0.125
Calcium	-
Chloride	250
Chromium (Total)	2.5
Cobalt	17.5
Copper	25.0
Fluoride	4.0

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**Table 2 (continued)
Allowable Leachate Concentration Limits**

Pollutant	Leachate (*) Concentration Limit (mg/l)
Iron	7.5
Lead	0.375
Magnesium	-
Manganese	2.5
Mercury	0.05
Molybdenum	4.375
Nickel	2.5
Nitrate	10
Nitrite	1
Potassium	-
Selenium	0.5
Silver	2.5
Sodium	-
Sulfate	2,500
Sulfur	-
Thallium	0.0125
Vanadium	6.5
Zinc	50

(*) = Leaching analysis must be determined using EPA Method 1312, the Synthetic Leaching Procedure, unless another leaching procedure is required by the Department.

2. The beneficial use of alkaline clay authorized under this general permit shall be land applied to approximately 24 inches depth on top of waste coal refuse material followed by hydro-seeding and mulching.
3. The alkaline clay 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, other residual waste, except as set forth in the application or as specifically approved by the Department in a reclamation plan or in some other form of written authorization.
4. Nothing in this general permit shall be construed to supersede, amend, or authorize a violation of any of the provisions of any valid state or federal law or regulation.

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5. The permittee shall not cause or allow a point or non-point source discharge of any of the following to occur as a result of the beneficial use related activities: residual wastes including industrial waste and wastewater from the staging, processing, and storage areas where beneficial use related activities are conducted; combined storm water runoff and leachate, if generated; runoff or leachate from the reclamation sites to the surface waters of the Commonwealth, unless permitted by the Department.
6. 35 P.S. §§ 4001 – 4016, and the regulations promulgated under the Act, including Chapter 123, Standards for Contaminants, Fugitive Emissions at 25 Pa. Code §§ 123.1 and 123.2 and Odor Emissions at 25 Pa. Code § 123.31.
7. 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.
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 to and to inspect all areas on which beneficial use related activities are being, will be, or have been conducted. This authorization and consent shall include consent to: collect samples of the alkaline clay, any other waste generated, 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 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.
9. 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.
10. The beneficial use of alkaline clay 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:

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- 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.
11. The amount of alkaline clay that may be stored at a reclamation site at any point in time is limited to the amount that is intended to be beneficially used on the site within the subsequent 365 days.
12. Alkaline clay shall not be stored in direct contact with, or applied directly into the waters of the Commonwealth, except as specially approved by the Department in a reclamation plan or in some other form of written authorization.
13. The alkaline clay authorized under this general permit shall be stored and transported in accordance with 25 Pa. Code Chapter 299 (relating to storage and transportation). In addition, the facility shall be in compliance with federal and state statutes, rules and regulations relating to transportation.
14. At a minimum, monthly inspections of all alkaline clay storage areas are to be conducted to determine compliance with the terms and conditions of this general permit, and for evidence of failure.
15. The permittee shall manage surface water and erosion and sedimentation control to meet applicable requirements under 25 Pa. Code, Chapter 102 (relating to erosion control).
 - a. Rills and gullies shall be filled, graded or otherwise stabilized and the area reseeded or replanted when rills and gullies deeper than 9 inches form in areas where alkaline clay has been applied or stored.
 - b. Rills and gullies of lesser size shall be stabilized and the area reseeded or replanted if the rills and gullies may result in additional erosion, sedimentation or pollution.
16. All beneficial use 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 the permit states otherwise, the permittee shall operate as described in the approved application.
17. 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.

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18. Alkaline clay 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.
19. Alkaline clay shall not be applied to the land during periods of rain or to ground that is saturated, covered with snow or frozen.
20. Alkaline clay shall not be applied or stored within the minimum isolation distances below:
 - a. In an area where the beneficial use activity would adversely affect a habitat of a known endangered or threatened species.
 - b. 100 feet or less of a perennial or an intermittent stream;
 - c. 300 feet or less of a water source, unless the operator obtains a written waiver from the water source's owner consenting to the activities closer than 300 feet;
 - d. 100 feet of an exceptional value wetland, as defined in 25 Pa. Code §105.17 (relating to wetlands);
 - e. 100 feet or less of the edge of a sinkhole or area draining into a sinkhole;
 - f. 300 feet or less of an occupied dwelling, unless the operator obtains a written waiver from the dwelling's owner consenting to the activities closer than 300 feet; and
 - g. Where the regional groundwater table is less than 3.3 feet from the surface.
21. Best Management Practices (BMPs) shall be implemented to divert storm water run-on away from the storage area of alkaline clay. Storm water runoff shall be managed in accordance with The Clean Streams Law and regulations promulgated thereunder. Prior to commencing beneficial use related activities at the facility, the permittee must obtain all the necessary storm water management permits.
22. Upon completion of beneficial use activities or by the expiration date of this permit, unless extended by the Department, the permittee shall remove any remaining alkaline clay and any other residual waste, storage tanks and structures or other materials which contain or have been in contact with the alkaline clay, and shall provide for the processing and/or disposal of these materials in accordance with the Solid Waste Management Act, and/or any other applicable federal or state environmental protection acts, and the regulations promulgated thereunder.

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23. Beneficial use activities may not commence on permitted mine sites unless specially authorized by the District Mining Office of the Department's Bureau of District Mining Operations. Beneficial use activities may not commence on abandoned mine reclamation contracts unless specifically authorized by the contracting governmental agency.
24. It is incumbent upon the permittee to ensure that all uses of alkaline clay approved under this general permit comply with all conditions of this general permit.

D. Sampling, Analysis and Frequency of Monitoring.

1. Prior to the first beneficial use of any alkaline clay material under the provisions of this permit, the permittee shall collect representative samples of the alkaline clay and analyze it for the "leachable" levels for each constituent as listed in Table 2, Condition C(1) of this general permit. The permittee is required to take necessary type (e.g., grab and/or composite) and number of samples to ensure the analytical results accurately represent all of the alkaline clay to be used.
2. 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 Environmental Laboratory Accreditation Act, 27 Pa.C.S.A. §§ 4101-4113.
3. For each new source of alkaline clay, the permittee shall submit the analytical results of a representative sample of that alkaline clay to the appropriate Department's District Mining Office, by certified mail, to demonstrate the proposed alkaline clay is in compliance with the requirements as specified in Table 2 of Condition C(1). A copy shall also be submitted to the appropriate Department's Regional Office.
4. 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

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Wastewater" (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 Sludge" or a comparable method subsequently approved by the Department.

5. Should knowledge of the generation process, visual observations, or analytical results indicate variability in the quality of the alkaline clay material produced, more frequent testing shall be conducted.
6. The frequency of monitoring for the pollutants as required in Condition C(1)(ii) of this general permit shall be as follows:

TABLE 3
Compliance Monitoring

Amount of Alkaline Clay Produced for Beneficial Use (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

7. Upon request by the Department, the permittee shall collect and analyze representative samples of alkaline clay for compliance with Condition C(1) of this general permit, within 48 hours of the request.

E. Recordkeeping.

1. The permittee shall develop and maintain documents for the beneficial use activity during the last 12 months as follows:
 - a. Percent solids and weight in dry tons or volume in cubic yards of the alkaline clay that was land applied to the mine site.
 - b. The transporter(s) of the alkaline clay.
 - c. The particular map location of reclamation site being used for land application of the alkaline clay.
 - d. The application rate in pounds per acre of alkaline clay.

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- e. Name, address and phone number of each person or municipality beneficially using the alkaline clay authorized under this general permit;
- f. Date and quantity of alkaline clay provided to each person or municipality;

- g. Date, time, location and quantity of spills, releases or actions taken to correct violations of the terms and conditions of this general permit; and
 - h. Description of how a spill or release was cleaned-up or a violation was corrected.
2. The permittee shall maintain records to demonstrate that alkaline clay meets the requirements as specified in Condition C(1) of the general permit.

Records of all analytical evaluations conducted on alkaline clay shall include the following on each sample: the dates of sampling and testing; sampling procedures; person collecting the sample; each parameter tested; the analytical results; the laboratory used; and analytical methodologies. Records of all operational parameters (pH value, time, temperature, etc.) achieved on the alkaline clay shall include the name and address of the reading location, date and time, value and unit of the reading result.

3. 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, in writing, of any changes in the name, address, owners, operators and/or responsible officials of the company; changes in the location of mine reclamation sites; changes in land ownership or the right to enter or operate on the land occupied required by this general permit; changes in the physical or chemical characteristics of the alkaline clay; the generator(s) of alkaline clay; and changes in the status of any permit issued by the Department or any state authority or federal government under any applicable federal or state environmental protection acts, or the regulations promulgated thereunder.
2. Analytical results of samples conducted as specified in Condition C(1) of this general permit shall be submitted to the appropriate District Mining Office one (1) month after receipt of the analyses.
3. The permittee shall immediately notify the Department's Emergency Hotline by telephone at 800-541-2050 and the waste management program of the appropriate Department's Regional Office in

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the event of a discharge or any spill of alkaline clay 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.

4. For each site where alkaline clay was beneficially used, the permittee shall submit an annual report to the appropriate Department's Regional Office, prior to

January 31, for the previous calendar year that shall include the following information:

- a. The weight in dry tons or volume in cubic yards of alkaline clay applied to the reclamation site.
- b. Change in ownership or operators of the reclamation site where the alkaline clay is beneficially used.
- c. Change in the lease or other similar agreement for the use of reclamation site that may affect the operator's rights upon the lands.

G. Permit Renewal.

1. A permittee that plans to continue the operations authorized under this general permit after the expiration date of this general permit, shall file a complete application for permit renewal at least 180 days before said expiration date 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.

**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