

DEPARTMENT OF ENVIRONMENTAL
PROTECTION
BUREAU OF WASTE MANAGEMENT
DIVISION OF MUNICIPAL and RESIDUAL WASTE

GENERAL PERMIT WMGR156

BENEFICIAL USE OF BAUXITE RESIDUE IN NATURAL
ENGINEERED WASTEWATER TREATMENT (NEWT) SYSTEMS

Issued: March 21, 2017

Expires: March 21, 2027

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WASTEWATER TREATMENT (NEWT) SYSTEMS

A. Description:

This general permit authorizes the beneficial use of bauxite residue as a filtration aid in natural engineered wastewater treatment (NEWT) systems. Bauxite residue used under this general permit is defined as a residual by-product produced when alumina is extracted from bauxite ore.

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 application on forms provided by the Department along with the application fee for a DOA 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. 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 the processed material as described in the permit application.
2. The permittee shall comply with the fugitive emissions regulations under Title 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 Sections 123.1 and 123.2.
3. 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 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.
4. 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 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

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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; 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.

5. 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 Department prior to performance of any activities, as specified by the Pennsylvania Solid Waste Management Act of 1980.
6. Failure of the permittee to comply with the applicable laws, rules, and regulations and terms of this permit, for any reason, shall be grounds for the revocation or suspension of the permittee's approval to conditions of this permit, or of the measures herein approved to perform as intended or operate under this permit.
7. 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 Department 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.
8. 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 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.
9. 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.
10. 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

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beginning operations at the facility, the operator must obtain all necessary storm water management permits.

11. 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 Department issues a final closure certification.
12. Equipment used for the storage of bauxite residue 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.
13. Storage of bauxite residue by the permittee shall be in a manner that complies with the requirements set forth in 25 Pa. Code Chapter 299.
14. The permittee shall maintain at the permitted facility an updated copy of a Preparedness, Prevention, and Contingency (PPC) Plan for the facility prepared in accordance with the most recent edition of the Department's "Guidelines for the Development and Implementation of Environmental Emergency Response Plans." The PPC Plan shall be updated every 5 years or more frequently as necessary.
15. Representative samples of bauxite residue shall be tested at a minimum, on an annual basis and when provided to a facility for beneficial use in accordance with this general permit. The analysis of bauxite residue shall include the following parameters:

Parameter	Acceptable Limit Total (mg/kg)	Acceptable Limit Leachate (mg/L)
Aluminum	190,000	0.1
Ammonia	1,900	30.0
Antimony	88	0.0006
Arsenic	29	0.05
Barium and compounds	15,000	2
Beryllium	440	0.004
Boron and compounds	20,000	0.6
Cadmium	47	0.005
Chlorides	N/A	250
Chromium, Total	N/A	0.1
Chromium III	1,200	0.1 (Cr ³⁺ + Cr ⁶⁺)
Chromium VI	94	0.1 (Cr ³⁺ + Cr ⁶⁺)

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Cobalt	4,400	0.73
Copper	1,500	1
Cyanide, Free	4,400	0.2
Iron	66,000	0.3
Lead	500	0.015
Manganese	31,000	0.1
Mercury	66	0.002
Molybdenum	118	0.175
Nickel	420	0.1
Nitrate Nitrogen	N/A	10
Nitrite Nitrogen	N/A	1
Selenium	1,100	0.05
Silver	1,100	0.1
Sulfates	N/A	500
Thallium	15	0.002
Tin	130,000	22
Uranium	660	0.11
Vanadium	1,500	0.26
Zinc and compounds	2,800	2

16. Upon cessation of operations at the facility, the permittee shall comply with any applicable closure requirements in 25 Pa. Code § 293.262.

D. Recordkeeping:

1. Records of any analytical evaluations conducted on the bauxite residue shall be kept by the permittee at the permittee's place of business and shall be readily available to the Department upon inspection. At a minimum, these records shall include information on the dates of testing, each parameter tested, the results, the laboratory, sampling procedures, analytical methodologies, and person collecting the sample. This waste analysis information shall be retained by the permittee at the permittee's place of business for a minimum of five years after the analyses were performed.
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, the results of visual observations, and the name, address, and phone number of the destination of each outgoing shipment of waste. The permittee shall also maintain records of spills or releases that include: location, date, time, identification, and quantity of spilled or released material, and a description of

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how the material was cleaned up. The permittee shall also maintain records of all reports submitted to the Department or to the U.S. Environmental Protection Agency.

3. These records shall be retained by the permittee at the permittee's place of business for a minimum of five years from the date the records were generated and shall be readily available to the Department for inspection in a format acceptable to the Department.

E. Reporting Requirements:

1. Any person that operates under the provisions of this permit shall immediately notify the Department of any changes in: the company name, address, owners, operators, and/or responsible officials of the company, compliance status, and the status of any permit issued by the Department or federal government under the environmental protection acts.
2. The permittee shall immediately notify the Department's Emergency Hotline at 800-541-2050 and the appropriate DEP regional office waste management program in the event of any accidental spills and shall take appropriate immediate action to protect the health and safety of the public and the environment in accordance with the approved PPC plan.

F. Renewal:

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. The renewal application shall include 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 27 (Acceptance of General Permit Conditions), and (v) bonding worksheets, and (vi) 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. A check shall be made payable to the "Commonwealth of Pennsylvania." A copy of the renewal application shall also be sent to the attention of the Department'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 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

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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