



pennsylvania
DEPARTMENT OF ENVIRONMENTAL
PROTECTION

BUREAU OF WASTE MANAGEMENT
DIVISION OF MUNICIPAL and RESIDUAL WASTE

GENERAL PERMIT WMGM038

PROCESSING AND BENEFICIAL USE OF
GROUND GYPSUM WALLBOARD

Issued: March 22, 2019

Expires: March 22, 2029

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OF GROUND GYPSUM WALLBOARD

A. Description:

This general permit authorizes the grinding, shredding, and screening of untreated and unpainted gypsum wallboard products using a regular or Type X gypsum core and faced with paper, generated at residential homes and commercial construction sites, or manufacturing facilities. The resultant materials, hereinafter referred to as “ground gypsum” and backing paper, are approved for the following beneficial uses:

1. Sale or distribution of the ground gypsum for use as a component of mushroom growing media;
2. Sale or distribution of the ground gypsum for use in the production of a soil additive material or in the production of mulch;
3. Land application of the ground gypsum as a soil amendment;
4. Use as a component or ingredient in a manufacturing process, provided the ground gypsum conforms to national, state or industry standards for which it is being used;
5. Use as a bulking agent;
6. Use as an ingredient in cement, concrete, grout, asphalt or flowable backfill mixtures for construction purposes, provided such usage meets applicable performance criteria and standards such as those specified by PennDOT, ASTM, AASHTO, etc.; or
7. Utilization of the backing paper as an animal bedding material.

B. Registration Requirements:

A person or municipality that proposes to process and beneficially use ground gypsum wallboard under the terms and conditions of this general permit after the date of general permit issuance must obtain a registration from the appropriate Department of Environmental Protection (DEP) Regional Office (see attached list) prior to commencing authorized activities under this general permit. A completed application on forms provided by DEP along with the application fee for a registration must be submitted to the appropriate DEP regional office. Checks shall be made payable to the “Commonwealth of Pennsylvania”. No activities shall commence unless approved, in writing, by the DEP. In addition, if required by DEP’s Regional Air Program, a Plan Approval to construct or an Operating Permit for the processing facility must be obtained.

C. Operating Conditions:

1. Representative samples of the entire amount of ground gypsum, or samples taken at a regular frequency during the batch process shall be collected and analyzed. To obtain a representative sample, the samples must be taken from the correct locations and represent the entire amount of ground gypsum generated. More than one sample is usually necessary to accurately represent the ground gypsum produced and stored. Core samples at different locations and at various depths shall be collected and then composited to obtain a representative sample of the ground gypsum produced or stored. The key is to obtain a representative sample. In general, the more

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samples taken, the greater the chance that the sampling results will be representative of the quality of the ground gypsum that is produced. Should knowledge of the production of ground gypsum, visual observations, or analytical results indicate variability in the quality of the ground gypsum, more frequent testing shall be conducted.

The ground gypsum may be beneficially used if the analytical results of ground gypsum do not exceed the chemical concentration limits for any constituents as specified in Table 1, below.

Table 1

Ground Gypsum Constituent Limits		
Constituent	Total Level (mg/kg)	Leachate Level (mg/l)
Arsenic	29.0	0.05
Fluoride	-	4.0
Mercury	1.0	-
Selenium	25	-

Notes:

- 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.
 - Leachability evaluations in compliance with the permit requirement shall be conducted on a representative sample of the processed waste using the Toxicity Characteristic Leaching Procedure (EPA Method 1311) or the Synthetic Precipitation Leaching Procedure (EPA Method 1312).
 - It is not necessary to perform leaching analysis if total analysis levels are such that the leachate requirement will not be exceeded. For example, if the total analysis result on a mg/kg basis is less than or equal to 20 times the leaching analysis limit where the extraction would be completed by the Toxicity Characteristic Leaching Procedure, it would not be necessary to perform the leaching procedure.
 - The determinations of compliance with Table 1 may be based on the 90 percent upper confidence level 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.
 - The analytical methodologies used to meet the requirements in this section 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 Wastewater" (prepared and published jointly by the American Public Health Association, American Waterworks Association, and Water Pollution Control Federation), or a comparable method subsequently approved by the EPA or the DEP.
2. Unless gypsum wallboard, backing paper, or ground gypsum are processed or stored in an enclosed structure that is not located in the 100-year floodplain, the permittee shall not process or store gypsum wallboard, backing paper, or ground gypsum as follows:
- a. Within 100 feet or less of a perennial stream.

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- b. Within 33 feet of an intermittent stream.
 - c. Within 300 feet of a water supply source.
 - d. Within 300 feet of an exceptional value wetland.
 - e. Within 300 feet of an occupied dwelling.
 - f. Within 100 feet of a wetland other than an exceptional value wetland.
 - g. In a 100-year flood plain.
3. The permittee shall ensure that unacceptable wallboard and other materials not authorized under this permit are removed to the greatest practical extent. The permittee shall notify the generators (or contractor in the case of intermediate parties) of the acceptable wallboard categories under this permit and require separation of the nonconforming types of drywall prior to delivery for processing. The permittee is to use due diligence with generators and contractors and pre-screen loads delivered to ensure the quality of materials. Loads of materials delivered for processing and subsequent reuse which are comprised of unacceptable drywall shall be rejected. Alternatively, if a load containing nonconforming materials is delivered for processing, the permittee may segregate the nonconforming component and reject that portion or otherwise coordinate for the proper management of the rejected materials. Processing the following types of waste materials for beneficial use is not authorized under this general permit:
- a. Gypsum wallboard resulting from the demolition of buildings and other structures.
 - b. Painted drywall materials.
 - c. Specialty drywalls, especially those comprised of foil, wax, lead, or fiberglass facings. Only paper-faced drywall, or drywall that is not faced, are permissible drywall types.
 - d. Drywall comprised of cores other than regular or Type X gypsum
4. Solid wastes, including gypsum wallboard, backing paper or ground gypsum as specified in Condition A of this general permit that are not intended for processing or beneficial use shall be removed from the site and transported to a recycling facility or properly disposed of at a permitted municipal waste disposal facility.
5. The ground gypsum may be land applied for beneficial use if the following quality criteria are met:
- a. Equal to or greater than 98% of the ground gypsum (dry weight basis) passes a screen with a 1-inch opening;
 - b. The ground gypsum that is beneficially used is tilled or incorporated into the upper 4 – 12 inches of soil within 24 hours of the land application, unless applied to land that is being used for hay or pasture, or under no-till cultivation; and
 - c. The actual land application rate of ground gypsum is determined using the analytical results of a current soil analysis performed, within the past 12 months.

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6. 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.
7. This permit does not authorize and shall not be construed as an approval to discharge any waste, wastewater, leachate or runoff from the site of processing to the land or waters of the Commonwealth.
8. 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 prohibitions of certain fugitive emissions and fugitive particulate matter).
9. 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 (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.
10. 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 DEP, without advance notice or search warrant, upon presentation of appropriate credential and without delay, to have access to and 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 wastes, waters, 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 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.
11. 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.
12. 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 DEP prior to performance of any activities, as specified by the SWMA.
13. 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. DEP may modify, suspend, revoke or reissue the authorization granted in this general permit if it deems necessary to prevent harm or the threat of harm to the public health, or the environment or if they cannot be adequately regulated under the conditions of this general permit.
14. The gypsum wallboard, backing paper, or ground gypsum shall be managed in accordance with

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the SWMA, the environmental protection acts, and the regulations promulgated thereunder.

15. 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. DEP may require an individual permit 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 people or the environment of this Commonwealth.
16. The permittee shall maintain in force and affect a general liability insurance policy in accordance with 25 Pa. Code, Chapter 271, Subchapter D (relating to financial assurances requirements) to provide continuous coverage during operation of the facility and until DEP issues a final closure certification.
17. Equipment used for the processing and transportation of the gypsum wallboard, backing paper, or ground gypsum shall be maintained in good operating condition. Daily inspections of processing areas and their surrounding environs shall be conducted to determine compliance of the terms and conditions of this general permit and for evidence of failure.
18. The processing and transportation of the gypsum wallboard, backing paper, or ground gypsum shall be in a manner that will not create a nuisance or be harmful to the public health, safety or the environment of this Commonwealth.
19. The transportation of gypsum wallboard shall comply with the requirements of 25 Pa. Code, Chapter 285 (relating to storage, collection and transportation of municipal waste).
20. Upon cessation of permitted operations at the facility, the permittee shall ensure removal of all wastes and provided for the processing, recycling, beneficial use, or disposal of wastes in accordance with the SWMA, the environmental protection acts and the regulations promulgated thereunder.
21. The ground gypsum shall not be land applied or beneficially used as follows:
 - a. In direct contact with surface water or groundwater, or
 - b. When the ground is saturated, snow covered, frozen, or during periods of rain.
22. Unless otherwise authorized by the DEP, in writing, the gypsum wallboard, backing paper or ground gypsum shall be stored in accordance with the requirements of 25 Pa. Code, Chapter 285 (relating to storage, collection and transportation of municipal waste) and the following apply:
 - a. The gypsum wallboard received shall not be accumulated before being processed and beneficially used unless the operator shows that the gypsum wallboard has the potential to be beneficially used and has a feasible means of being beneficially used; and
 - b. The amount of gypsum wallboard, backing paper, or ground gypsum that is beneficially used or transferred to a different site for beneficial use, equals at least 75% by weight or volume of the gypsum wallboard, backing paper, or ground gypsum accumulated at the beginning of the period. In calculating the percentage of turnover, the 75% requirement is to be applied to each waste of the same type (i.e., gypsum wallboard, ground gypsum or backing paper) that is beneficially used in the same way (that is, from which the same material is recovered or

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that is used in the same way).

23. Best Management Practices shall be implemented to divert storm water run-on from the processing, staging, and storage areas. 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 necessary storm water management permits.

The gypsum wallboard, backing paper, or ground gypsum shall be stored in a structure with a permanent roof or be covered with a waterproof tarp. The integrity of the tarp must be maintained at all times.

24. The permittee shall develop and implement a Preparedness, Prevention and Contingency Plan (PPC) that is consistent with DEP's most recent guidelines.
25. The backing paper and ground gypsum authorized in Condition A that comply with the terms and conditions of this general permit shall cease to be a waste when:
- a. The ground gypsum and backing paper are sold, traded, distributed, given away or used for beneficial use activities authorized in Condition A of this general permit. This provision applies to ground gypsum and backing paper that are sold, traded, given away, distributed or used for beneficial use activities at locations other than the processing facility where the ground gypsum and backing paper are produced; and
 - b. The ground gypsum and backing paper do not present a greater harm or threat of harm than the use of products that the ground gypsum and backing paper are replacing.

The backing paper and ground gypsum authorized in Condition A are considered a waste if they are abandoned, disposed, or are not beneficially used in accordance with the terms and conditions required in this general permit.

D. Frequency of Monitoring.

1. The frequency of monitoring for the constituents required in Table 1 of Condition C(1) shall be as follows:

Table 2

Compliance Monitoring of Processed Gypsum Wallboard

Amount of Gypsum Wallboard Processed (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

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Table 2 Continued...

Amount of Gypsum Wallboard Processed (Tons-per-365-Day Period)	Frequency of Monitoring
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. Upon request by the DEP, the permittee shall also collect for analysis representative samples of the ground gypsum produced or stored, as required in Condition C (1) of this general permit within 48 hours of the request.

E. Recordkeeping.

1. The permittee shall maintain records of all analytical evaluations conducted in accordance with this permit, and records shall be made available to 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 of all waste accepted at the facility, and records shall be made available to DEP upon request. Required records shall be retained for a minimum of 5 years. Records of each source of incoming waste must include, at a minimum, the following: the name, address, and phone number of each source of incoming waste; the date of receipt; the quantity of waste received; 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, at a minimum, the following: the location, date, time, identification, and quantity of spilled or released material, and a description of how the material was cleaned up. The permittee shall also maintain records of all reports submitted to DEP or the U.S. Environmental Protection Agency.
3. The permittee shall maintain records of all rejected, unacceptable and unauthorized wastes that are disposed of by the permittee. The records shall include the name and address of the disposal location, date of disposal, volume or weight of the waste that is disposed.
4. The permittee shall maintain records of volume or weight of the ground gypsum that is produced.
5. The permittee shall maintain the (i) name and address of the manufacturing facility, and (ii) volume or weight of the ground gypsum that is used as a component or ingredient in the manufacturing process at the facility.

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F. Reporting:

1. Any person that operates under the provisions of this permit shall immediately notify DEP via certified mail 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 DEP or federal government under the environmental protection acts.
2. The permittee shall immediately notify the DEP Emergency Hotline by telephone at 800-541-2050 and the waste management program in the appropriate DEP regional office on any accidental spills and shall take appropriate immediate action to protect the health and safety of the public and the environment.
3. Persons operating under the provision of this general permit shall submit to the appropriate DEP Regional Office (see attached list), an annual report on the beneficial use activities conducted under this permit by March 1 for the preceding calendar year. This report shall summarize the name and address of each person or municipality and the weight or volume of the ground gypsum and backing paper that was land applied, sold, distributed, traded, given away or used as a component in the manufacturing process during the last 12 calendar months.

G. 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 unless permission has been granted by 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:

- a. General Information Form (Authorization Application for a Residual or Municipal Waste General Permit),
- b. Form B (Professional Certification),
- c. Form 20 (Application for a Municipal or Residual Waste General Permit),
- d. Form 27R (Acceptance of General Permit Conditions), and
- e. Renewal 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 be sent to 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 in effect and enforceable pending the issuance or denial of the renewal application, provided the permittee is, and has been, operating in compliance with the terms and conditions of the general permit.

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

Southwest Regional Office

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

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

Northwest Regional Office

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