GENERAL PERMIT WMGM038 PROCESSING AND BENEFICIAL USE GROUND GYPSUM WALLBOARD

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

Amended September 9, 2013,

Expires March 20, 2019

Rev. 9/2013

A. Authorization.

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. For sale or distribution of the ground gypsum for use as a component of mushroom growing media;
- 2. For sale or distribution of the ground gypsum for use in the production of a soil additive material or in the production of mulch;
- 3. For land application of the ground gypsum as a soil amendment;
- 4. For 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. For use as a bulking agent;
- 6. For 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 PaDOT, ASTM, AASHTO, etc.; and
- 7. For utilization of the backing paper as an animal bedding material.

B. Registration Requirements.

A person or municipality that proposes to operate under the terms and conditions of this general permit after the date of general permit issuance must obtain from the appropriate Department Regional Office (see attached list) that has jurisdiction for waste-related activities in the county where the facility will be located the following documentation:

- 1. If required by the Department's Regional Air Program, a Plan Approval to construct or an Operating Permit for the processing facility.
- 2. A registration from the Department's Regional Waste Program. A completed Form 20 (Application for a Municipal or Residual Waste General Permit), along with a registration 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 until the registration is authorized, in writing, by the Department.

Rev. 9/2013

C. Operating Requirements.

1. 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 Produced

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

Notes:

- 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).
- ii. 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.
- iii. 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.
- iv. 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 Poliution Control Federation), or a comparable method subsequently approved by the EPA or the Department of Environmental Protection (Department).
- 2. a. Except as provided in subsection (b) of this Condition, the permittee shall not process or store gypsum wallboard, backing paper, or ground gypsum as follows:
 - i. Within 100 feet or less of a perennial stream.
 - ii. Within 33 feet of an intermittent stream.
 - iii. Within 300 feet of a water supply source.
 - iv. Within 300 feet of an exceptional value wetland.
 - v. Within 300 feet of an occupied dwelling.
 - vi. Within 100 feet of a wetland other than an exceptional value wetland.
 - vii. In a 100-year flood plain.
 - b. The prohibited areas, as specified in subsection (a) of this Condition, do not apply if the gypsum wallboard, backing paper, and ground gypsum are processed or stored in an enclosed structure that

Rev. 9/2013

is not located in the 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 as well as 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. The processing for beneficial use of waste materials below is not authorized under this general permit:
 - a. Gypsum wallboard resulting from the demolition of buildings and other structures.
 - b. The approval granted herein assumes that processing will be limited to unpainted drywall materials comprised of regular or Type X gypsum cores of various thicknesses. These drywall materials are typically faced although not always. If the drywall is faced, only paper-faced drywall with the noted cores are permissible wallboard types. Specialty drywalls, especially those comprised of foil, wax, lead, or fiberglass facings or those comprised of cores other than regular or Type X gypsum are not permissible drywall types.
- 4. Solid wastes, including gypsum wallboard, backing paper and 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.
- 6. This general permit does not authorize and shall not be construed as an approval to discharge any industrial wastes, wastewater, leachate or runoff from the processing facility to the waters of the Commonwealth.

Rev. 9/2013

- 7. The permittee shall comply with all applicable standards for contaminants set forth in Chapter 123 (relating to standards for contaminants) including §§123.1, 123.2, and 123.31 promulgated in accordance with the Air Pollution Control Act, 35 P.S. §§ 4001-4005.
- 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, and the Clean Streams Law, 35 PS. §§691.1 691.1001.
- 9. 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 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 the Department to be maintained or produced. (See §§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 to the Department under the Solid Waste Management Act.
- 10. 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.
- 11. Any independent contractors or agents retained by the permittee in the completion of a processing activity authorized under this general permit shall be subject to compliance history review by the Department prior to performance as specified by the Solid Waste Management Act.
- 12. The gypsum wallboard, backing paper, and ground gypsum 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 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.
- 13. The gypsum wallboard, backing paper, and ground gypsum shall be managed in accordance with the Solid Waste Management Act and the regulations promulgated thereunder.
- 14. 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 of this Commonwealth.

Rev. 9/2013

- 15. Equipment used for the processing and transportation of the gypsum wallboard, backing paper, and ground gypsum shall be maintained in good operating condition. Weekly inspections of processing areas and their surrounding environs are to be conducted to determine compliance of the terms and conditions of this general permit, and for evidence of failure.
- 16. The processing and transportation of the gypsum wallboard, backing paper, and 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.
- 17. 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).
- 18. Upon cessation of operations or by the expiration date of this general permit, unless extended by the Department, the permittee shall remove and manage any remaining gypsum wallboard, backing paper and ground gypsum in accordance with the Solid Waste Management Act, the environmental protection acts and the regulations promulgated thereunder.
- 19. The ground gypsum shall not be land applied or beneficially used:
 - a. In direct contact with surface water or groundwater.
 - b. When the ground is saturated, snow covered, frozen or during periods of rain.
- 20. Unless otherwise authorized by the Department, in writing, the gypsum wallboard, backing paper and 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, backing paper, and ground gypsum shall be stored in a structure with a permanent roof or be covered with a waterproof tarp to prevent storm water from being commingled with the unprocessed and processed gypsum wallboard materials. The integrity of the tarp must be maintained at all times.
 - b. 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
 - c. The amount of gypsum wallboard, backing paper, and 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, and 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 that is used in the same way).

Rev. 9/2013

- 21. a. Storm water run-on at the facility shall be diverted away from the processing, staging, and storage areas of gypsum wallboard, backing paper, and ground gypsum authorized in Condition A of this general permit. Proper drainage (i.e., diversions, drains, dikes, etc.) must be constructed and maintained to prevent storm water from coming into contact with gypsum wallboard, backing paper, and ground gypsum.
 - b. Storm water run-off from the facility shall not cause surface water pollution or groundwater degradation and shall be managed in accordance with The Clean Streams Law and regulations promulgated thereunder.
 - c. The permittee shall not cause or allow a point or non-point source discharge of the storm water run-off or leachate or both from the facility to the surface water of this Commonwealth. A National Pollutant Discharge Elimination System permit may be required if a point or non-point source discharge of the storm water run-off or leachate or both to the surface waters of the Commonwealth exists. Prior to beginning construction at the facility, the operator must obtain all the necessary storm water management and other permits.
- 22. A Preparedness, Prevention and Contingency Plan (PPC) that is consistent with the Department's most recent guidelines on the development and implementation of PPC plans shall be developed and implemented at the processing facility. A copy of the PPC plan shall be submitted with the registration as specified in Condition B, for the Department's review, when a person or municipality is seeking coverage to operate under this general permit.
- 23. a. 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:
 - i. 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
 - ii. 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.
 - b. The backing paper and ground gypsum authorized in Condition A are considered a waste if they are abandoned, disposed or not beneficially used in accordance with the terms and conditions required in this general permit.
- 24. A person or municipality that plans to continue: (i) the processing of untreated and unpainted wallboard materials authorized herein, and/or (ii) beneficial use of ground gypsum and backing paper authorized under this general permit, after the expiration date indicated on the general permit cover page, shall file a complete application for general 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)".

Rev. 9/2013

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 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.

D. Sampling and Analysis.

- 1. Representative samples of the entire amount of ground gypsum or in 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 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.
- 2. The chemical analyses required in Condition C(1) shall be performed by a laboratory that is in compliance with the Pennsylvania Environmental Laboratory Accreditation Act, Act of 2002, No.90, 27 Pa C.S. §4101 et. seq.
- 3. 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 Department of Environmental Protection (Department).

Rev. 9/2013

E. Frequency of Monitoring.

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

<u>Table 2</u>

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
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 Department, 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.

F. Recordkeeping.

The permittee shall:

- 1. Maintain actual laboratory reports of the analytical evaluations conducted on: (i) ground gypsum, or (ii) performed upon request by the Department. The analytical information shall include the following on each sample: the location and dates of sampling and testing, sampling procedures, person collecting the sample, the volume or weight of the sample, each parameter tested, the analytical results, the laboratory used, and analytical methodologies.
- 2. Maintain records of rejected, unacceptable and unauthorized wastes that are disposed 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.
- 3. Maintain records of volume or weight of the ground gypsum that is produced.
- 4. Maintain (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.

Rev. 9/2013

5. Retain analytical reports and other records, required in this Condition F of the general permit, for a minimum of 5 years and made available to the Department upon request.

G. Reporting.

- 1. The permittee shall immediately notify the appropriate Department Regional Office (see attached list), 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 process through which gypsum wallboard is processed and the change in status of any permit issued by the Department or any state authority or federal government under the environmental protection acts.
- 2. An annual report that summarizes 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 shall be maintained by the permittee and provided to the Department upon request.
- 3. Any person operating under the provisions of this general permit must notify the Department, in writing, if the processing facility is relocated or if new location(s) is to be included under this general permit. At least thirty (30) days prior to a permittee operating at a new location, a completed Form 20 (Application for a Municipal or Residual Waste General Permit) must be provided to the appropriate Department Regional Office for review and approval.

Rev. 9/2013

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 3 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