

BUREAU OF WASTE MANAGEMENT DIVISION OF MUNICIPAL and RESIDUAL WASTE

GENERAL PERMIT WMGR028

BENEFICIAL USE OF BAGHOUSE FINES OR SCRUBBER POND PRECIPITATES FROM HOT-MIX ASPHALT PLANTS

Issued: August 1, 2017

Expires: August 1, 2027

A. Description.

This general permit authorizes the use of baghouse fines or scrubber pond precipitates, generated by hot-mix asphalt plants, for the following beneficial uses:

- (i) an aggregate in roadway construction,
- (ii) a soil additive,
- (iii) a soil conditioner, or
- (iv) a component or ingredient in the manufacturing of construction products.

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) 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 (see attached list). Checks shall be made payable to the "Commonwealth of Pennsylvania." No activities shall commence unless approved, in writing, by the Department.

C. Operating Requirements.

- Where used as an aggregate in roadway construction, the baghouse fines or scrubber pond precipitates must comply with the requirements of the Pennsylvania Department of Transportation's (PennDOT) specifications as outlined in their Publication No. 408 (Specifications).
- 2. Where used as a component or ingredient in the manufacturing of construction products, the baghouse fines or scrubber pond precipitates must meet the applicable requirements of the American Society for Testing and Materials (ASTM) Standard, or other national, state, or industry standard for which it is being used.
- 3. Where used as a soil additive or soil conditioner, the maximum amount of baghouse fines or scrubber pond precipitates applied to any site shall not exceed 500 dry tons per acre.
- 4. Beneficial use of baghouse fines or scrubber pond precipitates as aggregate for roadway construction or a component or ingredient in the manufacturing of construction products must conform with the applicable engineering, other professional, or industry practices and procedures as the raw material for which it is being substituted.
- 5. Baghouse fines or scrubber pond precipitates shall not be placed in direct contact with surface water or groundwater.
- 6. Equipment used for the storage and transportation of baghouse fines or scrubber pond precipitates shall be maintained in good operating condition to prevent unintentional dispersal of waste materials outside of the generating and storage areas. Weekly inspections of each storage area and the surrounding environs shall be conducted to determine compliance with the terms and conditions of this general permit and for evidence of failure. Storage and transportation of baghouse fines or scrubber pond

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precipitates shall comply with the requirements of 25 Pa. Code, Chapter 299 (relating to storage and transportation of residual waste).

- 7. 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 Solid Waste Management Act (SWMA), 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.
- 8. Upon cessation of permitted operations at the facility, the permittee shall remove any remaining baghouse fines or scrubber pond precipitates, all other wastes, and materials which contain or have been contaminated by baghouse fines or scrubber pond precipitates and provide for the processing, recycling, beneficial use, or disposal of wastes in accordance with the SWMA, the environmental protection acts and the regulations promulgated thereunder.
- 9. 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 prohibition of certain fugitive emissions and fugitive particulate matter).
- 10. 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 inspect all areas on 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; perform measurements, surveys, and other tests; inspect any monitoring equipment; 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 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. 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.
- 12. The baghouse fines or scrubber pond precipitates 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 to level or bring an area to grade unless one of the following applies:
 - a. Baghouse fines or scrubber pond precipitates are used as embankment material, to level or bring an area to grade where a construction activity will commence within three (3) months after the placement of baghouse fines or scrubber pond precipitates.

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- b. For multi-phase construction projects (such as development of a commercial/industrial park), all baghouse fines or scrubber pond precipitates shall be covered within sixty (60) days of completion of fill placement, unless it is uncovered as a requirement of ongoing active phase construction.
- c. When approved for use as a soil additive or conditioner as part of the reclamation plan for permitted surface mining operations.
- 13. Staging or storage areas for baghouse fines or scrubber pond precipitates shall not cause or allow a point or non-point source discharge of any wastes, wastewater, or runoff to the land or waters of the Commonwealth. A National Pollutant Discharge Elimination System (NPDES) permit may be required if a point or non-point source discharge exists.
- 14. Best Management Practices shall be implemented to divert storm water run-on from the storage or staging 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 all necessary storm water management permits.
- 15. Unless otherwise approved in writing by the Department, storage of baghouse fines or scrubber pond precipitates shall be as follows:
 - a. The baghouse fines or scrubber pond precipitates generated or received shall not be accumulated speculatively, as the term is defined at 25 Pa. Code § 287.1, before being beneficially used. The permittee must show that the baghouse fines or scrubber pond precipitates have the potential and feasible means to be beneficially used.
 - b. Baghouse fines or scrubber pond precipitates generated or received shall <u>not</u> be stored for more than one (1) year, and at any one time, the maximum amount stored may <u>not</u> exceed the total amount of materials in the approved application.
 - c. During the calendar year (commencing on January 1), the baghouse fines or scrubber pond precipitates generated, received, beneficially used, or transferred to another site for beneficial use, must equal at least 75%, by weight or volume, of the baghouse fines or scrubber pond precipitates received or accumulated at the beginning of the period. The 75% requirement must be applied to <u>each</u> waste that is beneficially used in the same way (i.e., baghouse fines should be counted separately from scrubber pond precipitates, and baghouse fines or scrubber pond precipitates from different generators or generating processes should be counted separately).
- 16. Hazardous wastes, municipal waste, special handling waste, and other residual wastes, as the terms are defined in 25 Pa. Code §287.1, may not be mixed, stored or beneficially used with baghouse fines or scrubber pond precipitates.

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D. Sampling and Analysis.

- 1. All chemical analysis required in in this general permit shall be performed by a laboratory accredited or registered for accreditation under the Pennsylvania Environmental Laboratory Accreditation Act, Act of 2002, 27 Pa. C.S.A. §§ 4101-4113.
- 2. Prior to the beneficial use of baghouse fines or scrubber pond precipitates, representative samples of the baghouse fines or scrubber pond precipitates shall be collected and analyzed for each constituent as specified in Table 1, Condition D.4 of this general permit. Chemical analysis obtained within one (1) year prior to the issuance of coverage under this general permit may be used to satisfy this requirement, provided all the constituents as listed in Table 1 have been analyzed.
- 3. To obtain a representative sample of the baghouse fines or scrubber pond precipitates, samples must be taken from multiple locations in the batch or storage pile and represent the entire amount of baghouse fines or scrubber pond precipitates being sampled. More than one sample is necessary to accurately represent the entire batch or storage pile. In general, the more samples taken, the greater the chance that the sampling results will be representative. The pollutant limits specified in this general permit pertain to the quality of the baghouse fines or scrubber pond precipitates that will be beneficially used, and therefore, samples must be collected after the final stage of the manufacturing process and prior to storage or beneficial use.

Should knowledge of the process used to generate the baghouse fines or scrubber pond precipitates, visual observations, or analytical results indicate variability in the quality of the baghouse fines and/or scrubber pond precipitates material, more frequent testing shall be conducted.

4. The chemical concentration of baghouse fines or scrubber pond precipitates, for any constituent, shall not exceed the limits as specified in Table 1 of this Condition. The permittee shall select one of the options, as indicated in Table 1, to demonstrate compliance with the chemical concentration limits. The selected option for the quality of baghouse fines and/or scrubber pond precipitates shall be utilized and applicable for the life of this general permit.

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Table 1⁽⁷⁾
Chemical Concentration Limits

	Option 1 ⁽²⁾	Option 2 ⁽³⁾		Option 3 ⁽⁶⁾	
Constituents	Total	Total	Leachate ⁽¹⁾	Total	Leachate ⁽¹⁾
	(mg/kg)	(mg/kg)	(mg/L)	(mg/kg)	(mg/L)
Arsenic	29	29	0.25	29	0.05
Barium	1,000	15,000	50	15,000	2
Cadmium	2.5	47	0.125	47	0.005
Chromium (Total)	50	94	2.5	94	0.1
Copper	1,500	1,500	25	1,500	1
Lead	112.5	500	0.125	500	0.005
Mercury	1	66	0.05	66	0.002
Molybdenum	18	18	4.375	18	0.175
Nickel	50	420	2.5	420	0.1
PHC ⁽⁴⁾ (Total)	500	500	-	500 ⁽⁵⁾	-
Selenium	25	1,100	1	1,100	0.05
Zinc	1,000	2,800	50	2,800	2
pH (standard units)	> 5.5	> 5.5	-	> 5.5	-

- (1) = Leachability evaluations shall be conducted using the Toxicity Characteristic Leaching Procedure (EPA method 1311) or the Synthetic Precipitation Leaching Procedure (EPA method 1312).
- There must be at least four (4) feet of attenuating soil between the lowest area where the baghouse fines or scrubber pond precipitates are placed and the seasonal high water table, perched water table or bedrock unless otherwise authorized in writing by the Department.
- The total and leachate levels must be met when using Option 2. There must be at least four (4) feet attenuating soil between the lowest area where the baghouse fines or scrubber pond precipitates are placed and the seasonal high water table, perched water table or bedrock unless otherwise authorized in writing by the Department.
- ⁽⁴⁾ = Petroleum Hydrocarbons. The EPA methods 3560 and 8440 are recommended for demonstrating compliance with the chemical concentration limit for PHC.
- (5) = The four (4) feet of attenuating soil between the lowest area where the baghouse fines or scrubber pond precipitates are placed and the seasonal high water table, perched water table or bedrock does not apply for PHC when using Option 3.
- (6) = The total and leachate levels must be met when using Option 3. Attenuating soil is not required for placement of the material if in compliance with the chemical concentration limits for Option 3.
- (7) = Options 1 and 2 may be used in combination on a constituent-specific basis.

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- 5. Analytical determinations for 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.
- 6. A "total" and/or "total and leaching" analysis shall be performed on a representative sample of the baghouse fines and/or scrubber pond precipitates at least annually for all the parameters listed in Condition D.4, Table 1 of this permit.
- 7. Upon request by the Department, the permittee shall collect and analyze representative samples of the baghouse fines or scrubber pond precipitates, as required in Section D of this general permit. Sample collection shall occur within 48 hours of the Department's 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 the Department 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 baghouse fines or scrubber pond precipitates are distributed for beneficial use under this permit. Records shall be made available to the Department upon request and retained for a minimum of 5 years. Records must include, at a minimum, the name and address of each persons or municipality to which baghouse fines or scrubber pond precipitates are distributed and the intended beneficial use.
- 3. 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.
- 4. The permittee shall inform all persons or municipalities that propose to beneficially use baghouse fines or scrubber pond precipitates authorized under this general permit of the terms, conditions and limitations imposed by the Department. The notification shall be made by providing a copy of Appendix A (relating to acceptable uses & restrictions) of this general permit.

F. Reporting Requirements.

 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 physical or chemical characteristics of the baghouse fines or scrubber pond precipitates generated or

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previously stockpiled; the manufacturing process which generates the baghouse fines or scrubber pond precipitates; change in fuel type (if appropriate); and the change in status of any permit issued by the Department or federal government under the environmental protection acts.

- Persons operating under the provisions of this general permit shall submit, by March 1 of
 the following calendar year, to the appropriate Department Regional Office (see attached
 list), an annual report which contains the information required by Section D for the
 baghouse fines or scrubber pond precipitates sold, traded or given away during the
 previous calendar year.
- 3. For each new source of baghouse fines or scrubber pond precipitates, the permittee shall notify the appropriate Department Regional Office (see attached list), in writing, no less than fifteen (15) working days prior to acceptance and beneficial use of the baghouse fines and/or scrubber pond precipitates from a new source as follows:
 - a. The permittee shall submit an analysis of representative samples of baghouse fines or scrubber pond precipitates to the Department for the constituents specified in Table 1, Condition D.4. of this general permit. The chemical analysis required in this Condition shall be based on the proposed beneficial use of baghouse fines or scrubber pond precipitates.
 - b. The permittee may beneficially use baghouse fines or scrubber pond precipitates from a new source in accordance with the conditions of this general permit after the aforementioned fifteen (15) day period unless otherwise instructed by the Department.
- 4. Persons storing, transporting or beneficially using the baghouse fines or scrubber pond precipitates must immediately notify the Department's Emergency Hotline by telephone at 800-541-2050 and the waste management program in the appropriate DEP regional office (see attached list) of any accidental spills of 1,000 pounds or more of baghouse fines, scrubber pond precipitates, or combination thereof, and shall take appropriate immediate action to protect the health and safety of the public and the environment.

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 the Department 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:

- (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

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(v) DOA 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 also be sent to 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 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.

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APPENDIX A

ACCEPTABLE USES AND RESTRICTIONS GENERAL PERMIT NO. WMGR028

The beneficial use of baghouse fines or scrubber pond precipitates, generated by hot-mix asphalt plants is limited to the following: (i) an aggregate in roadway construction, (ii) a soil additive, (iii) a soil conditioner, or (iv) a component or ingredient in the manufacturing of construction products. The beneficial use of baghouse fines or scrubber pond precipitates must comply with the acceptable uses and use restrictions below.

A. ACCEPTABLE USES:

- Where used as an aggregate in roadway construction, the baghouse fines or scrubber pond precipitates must comply with the requirements of the Pennsylvania Department of Transportation's (PennDOT) specifications as outlined in their Publication No. 408 (Specifications), and conform with applicable engineering, other professional, or industry practices and procedures as the raw material for which it is being substituted.
- 2. The beneficial use of baghouse fines or scrubber pond precipitates as a component or ingredient in the manufacturing of construction materials must meet the applicable standards set forth by the American Society of Testing and Materials (ASTM), or other national, state, or industry standard for which it is being used.
- 3. Where used as a soil additive or soil conditioner, the maximum amount of baghouse fines or scrubber pond precipitates applied to any site shall not exceed 500 dry tons per acre.

B. USE RESTRICTIONS:

- 1. Baghouse fines and/or scrubber pond precipitates shall not be placed in direct contact with surface water or groundwater.
- 2. The baghouse fines or scrubber pond precipitates 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 to level or bring an area to grade unless one of the following applies:
 - a. Baghouse fines or scrubber pond precipitates are used as embankment material, to level or bring an area to grade where a construction activity will commence within three (3) months after the placement of baghouse fines or scrubber pond precipitates.
 - b. For multi-phase construction projects (such as development of a commercial/industrial park), all baghouse fines or scrubber pond precipitates shall be covered within sixty (60) days of completion of fill placement, unless it is uncovered as a requirement of ongoing active phase construction.
 - c. When approved for use as a soil additive or conditioner as part of the reclamation plan for permitted surface mining operations.

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APPENDIX A

ACCEPTABLE USES AND RESTRICTIONS GENERAL PERMIT NO. WMGR028

- 3. Hazardous wastes, municipal waste, special handling waste, and other residual wastes, as the terms are defined in 25 Pa. Code §287.1, may not be mixed, stored or beneficially used with baghouse fines or scrubber pond precipitates.
- 4. The storage and transportation of baghouse fines or scrubber pond precipitates shall be in a manner which will not create a nuisance or be harmful to the public health, safety or the environment, and comply with the requirements of 25 Pa. Code, Chapter 299.
- 5. Persons storing, transporting or beneficially using the baghouse fines or scrubber pond precipitates must immediately notify the Department's Emergency Hotline by telephone at 800-541-2050 and the waste management program in the appropriate DEP regional office (see attached list) of any accidental spills of 1,000 pounds or more of baghouse fines, scrubber pond precipitates, or combination thereof, and shall take appropriate immediate action to protect the health and safety of the public and the environment.

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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, 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