

GENERAL PERMIT NUMBER WMGR042
BENEFICIAL USE OF BOP SLAG FINES

Rev. 12/2007

A. Description:

This approval authorizes the beneficial use of use of slag fines from the production of steel using the basic oxygen process (BOP) as construction material. The approval herein granted to beneficially use BOP slag fines as a construction material is limited to the uses that meet the applicable PennDOT standards set forth in Appendix A, Condition A7.

The activities authorized by this 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 permit if it deems necessary to prevent harm or the threat of harm to the public health, the environment, or if the activities cannot be adequately regulated under the conditions of this permit.

B. Determination of Applicability Requirements:

Persons or municipalities that propose to beneficially use slag fines by operating under the terms and conditions of this general permit after the date of permit issuance must apply for and obtain a "Determination of Applicability" ("DOA") from the Department prior to commencing authorized activities under the general permit. The request shall be sent to the appropriate Regional Office of the Department that has jurisdiction for waste-related activities in the county where the stainless steel slag will be beneficially used. A completed Form 20 (Application for a Municipal or Residual Waste General Permit), 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 Regional Office. Checks shall be made payable to the "Commonwealth of Pennsylvania."

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 that the permit states otherwise or the application conflicts with the regulations or governing statutes.
2. BOP slag fines may be beneficially used as a construction material provided the following levels for Options 1, 2 or 3 are not exceeded:

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PARAMETER	Option 1 ^a Limit Total (mg/kg) ^d	Option 2 ^b Total (mg/kg) ^d	Option 2 ^b Leachable (mg/L) ^e	Option 3 ^c Total (mg/kg) ^d	Option 3 ^c Leachable (mg/L) ^e
Antimony	6.75	88	0.15	88	0.006
Arsenic	29	29	0.25	29	0.01
Cadmium	2.5	47	0.125	47	0.005
Chromium, Total			2.5		0.1
Chromium III	3,000	190,000		190,000	
Chromium VI	50	94		94	
Copper	8,200	8,200	25	1,500	1
Iron			7.5		0.3
Lead	112.5	500	0.125	500	0.005
Manganese	31,000	31,000	2.5	31,000	0.1
Nickel	50	4,400	2.5	4,400	0.1
Thallium	2.2	15	0.0125	15	0.002
Zinc	1,000	66,000	50	66,000	2

^aOption 1: There must be at least 4 feet between the lowest area where waste is placed and the seasonal high water table, perched water table or bedrock unless otherwise authorized in writing by the Department.

^bOption 2: The total and leachate levels must be met. There must be at least 4 feet between the lowest area where waste is placed and the seasonal high water table, perched water table or bedrock unless otherwise authorized in writing by the Department.

^cOption 3: The total and leachate levels must be met.

^dOn a dry weight basis

^eThe toxicity characteristic leaching procedure (EPA Method 1311) or the synthetic precipitation leaching procedure (EPA Method 1312) or other leaching procedure approved by the Department shall be used for all leaching analyses.

Notes:

Options 1 and 2 may be used in combination on a constituent-specific basis

This evaluation may be based on the 90 percent upper confidence level using *Test Methods for Evaluating Solid Waste* (EPA SW-846) as guidance for the statistical treatment of data.

Should the BOP slag fines contain other constituents which do not meet the requirements of §288.623(a) (relating to minimum requirements for acceptable waste) or which pose a threat of harm to human health or the environment, the BOP slag fines shall not be placed directly into the environment.

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3. Prior to the beneficial use of the BOP slag fines, the permittee shall perform chemical analysis on a representative sample of BOP slag fines for the appropriate parameters listed in Condition C2. The permittee shall perform chemical analysis on additional representative samples of BOP slag fines as follows:
 - a. every 50,000 tons or annually, whichever comes first, as long as the source of the BOP slag fines does not change; or
 - b. each time a new source BOP slag fines is received; or
 - c. each time there is a significant change in the process generating the BOP slag fines.
4. The chemical analyses required in this general permit 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.
5. The BOP slag fines shall not be hazardous waste.
6. The BOP slag fines shall not be mixed with other types of solid wastes, including hazardous waste, municipal waste, special handling waste, or other residual waste.
7. 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.
8. The permittee shall comply with the fugitive emissions standards adopted under 25 Pa. Code, Sections 123.1 and 123.2.
9. 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, provided that said local law, ordinance, or regulation is not preempted by the Pennsylvania Solid Waste Management Act, 35 P.S. §6018.101 et seq., or the Municipal Waste Planning, Recycling and Waste Reduction Act of 1988, 53 P.S. §4000.101 et seq.
10. As a condition of this permit and of the permittee's authority to conduct the activities authorized by this permit, the permittee hereby 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 and to 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 waste, water, 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 Sec. 608 and 610(7) of the Solid Waste Management Act, 35 P.S. Section 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.
11. Failure of the 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.

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12. Any independent contractors or agents retained by the permittee in the completion of activities authorized under this permit shall be subject to prior compliance history review by the Department as specified by the Pennsylvania Solid Waste Management Act of 1980.
13. The activities authorized by this 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 permit if it deems necessary to prevent harm or the threat of harm to the public health, or the environment.
14. Any person that operates under the provisions of this permit shall immediately notify the appropriate regional office of the Department via certified mail of any changes in: the company name, address, owners, operators and responsible officials; the physical or chemical characteristics of the BOP slag fines; the generator(s) of the BOP slag fines; and the status of any permit issued by the Department or federal government under the environmental protection acts.
15. Storage of BOP slag fines by the permittee shall be in a manner that complies with 25 Pa. Code, Chapter 299 (relating to the storage of residual waste). Leachate and runoff produced from the storage of BOP slag fines shall be managed in accordance with The Clean Streams Law.
16. The permittee shall immediately notify the Department's Emergency Hotline at (717) 787-4343 and the appropriate DEP regional office in the event of a discharge or spill BOP slag fines and shall take appropriate immediate action to protect the health and safety of the public and the environment. Spills of less 1000 pounds of BOP slag fines need not be reported.
17. Records of any analytical evaluations conducted on BOP slag fines pursuant to the residual waste regulations and this permit, shall be kept by the permittee at the permittee's place of business and shall be available to the Department for 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 5 years after the analyses were performed.
18. The permittee shall maintain records that contain: the name, address, and phone number of each source of incoming BOP slag fines, the date of receipt and quantity of BOP slag fines received at each location, the results of analysis as required in Condition C3, and the name, address, and phone number, and quantity for each destination of outgoing shipment of BOP slag fines. The permittee shall also maintain records of all spills of 1000 pounds or greater and releases that contain: location, date, time, identification and quantity of spilled or released material, and a description of how the material was cleaned up. These records shall be retained by the permittee at the permittee's place of business for a minimum of 5 years from the date the records were generated and shall be available to the Department for inspection.
19. 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 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.

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20. Prior to the beneficial use of BOP slag fines as an aggregate or supplying BOP slag fines for use as an aggregate, the permittee shall hydrate the BOP as described in Section 703.2(a)(4) of the Pennsylvania Department of Transportation (PennDOT) as outlined in their Publication 408, Specifications. Leachate and runoff produced from the hydration of BOP slag fines shall be managed in accordance with The Clean Streams Law.
21. The permittee shall inform all persons or municipalities which propose to beneficially use BOP slag fines covered under this permit of all the conditions and limitations imposed on the use of BOP Slag Fines by the Department of Environmental Protection. This notification shall be by providing a copy of Appendix A (Restrictions on Use of BOP Slag Fines an Construction Material) of this permit to the persons or municipalities. The conditions in Appendix A shall apply to any person who operates pursuant to this general permit, including persons who obtain a Determination of Applicability to conduct activities authorized by this permit.
22. A person or municipality that plans to continue the beneficial use of residual waste 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 application shall be made using the "Form 20 (Application For A 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.

APPENDIX A
Restrictions on Use of BOP Slag Fines
As Construction Material
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The following restrictions apply to the beneficial use of slag fines from the production of steel using the basic oxygen process (BOP) (SIC Code, 3312) as construction material.. Persons receiving, storing, and/or using BOP slag fines for beneficial use purposes are required to comply with the following requirements:

STORAGE AND TRANSPORTATION

- A1. BOP slag fines shall not be stored in direct contact with ground or surface water.
- A2. The amount of BOP slag fines that may be stored at any site at any point in time is limited to that amount of BOP slag fines that is intended to be used, and can be practicably used, on the site for the next 365 days, but in no case shall more than 5000 tons of unused BOP slag fines be stored on any one site unless otherwise approved by the Department.
- A3. Runoff from BOP slag fines storage areas shall not cause surface water pollution or groundwater degradation and shall be managed in accordance with The Clean Streams Law and regulations promulgated thereunder.
- A4. BOP slag fines shall not be stored within these minimum isolation distances:
- (a) 100 feet of an intermittent or perennial stream;
 - (b) 300 feet of a water source, unless otherwise approved by the Department, in writing;
 - (c) 50 feet of a property line, unless the current owner has provided a written waiver consenting to the activities being closer than 50 feet;
 - (d) 300 feet of an occupied dwelling, unless the current owner has provided a written waiver consenting to the activities being closer than 300 feet;
 - (e) 100 feet of a sinkhole or area draining into a sinkhole;
 - (f) 1,000 feet upgradient of a surface water source, unless otherwise approved by the Department, in writing;
 - (g) 25 feet of the perimeter of an undrained depression
 - (h) 300 feet of an exceptional value wetland
- A5. The storage and transportation of the BOP slag fines shall be in a manner which will not create a nuisance or be harmful to the public health, safety or the environment. The storage and transportation of BOP slag fines shall comply with the requirements of 25 PA Code, Chapter 299 (relating to storage and transportation of residual waste).

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APPENDIX A
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A6. BOP slag fines shall not be transported to or stored at any site prior to obtaining all necessary zoning and planning approvals for the proposed development project, prior to having an end use contract in place for the site where the BOP slag fines are to be used, and prior to having financing in place for the proposed development project.

ACCEPTABLE USES:

A7. Approval to use BOP slag fines as a construction material is limited to the following activities and must comply with the following technical standards developed by the Pennsylvania Department of Transportation (PennDOT) as outlined in their Publication 408, Specifications.

- (a) 206 (Embankment)
- (b) 210 (Subgrade)
- (c) 350 (Subbase)
- (d) 600 (Incidental Construction)
- (e) 703 (Aggregate), excluding 703.4 (Anti-skid Material)

USE RESTRICTIONS:

A8. BOP slag fines shall not be placed in direct contact with surface water or groundwater or used in any construction activity within 100 feet of a perennial stream, 300 feet of an exceptional value wetland or 300 feet of a private or public water source.

A9. BOP slag fines shall not be used as a valley fill material, to fill open pits from coal or other fills; or to level an area or bring an area to grade where the construction activity is not completed promptly after the placement of the solid waste.

A10. Use of BOP slag fines as fill material in landfill closure and site remediation is not authorized under this general permit.

A11. Hazardous wastes, municipal waste, special handling waste, and other residual wastes may not be mixed and/or beneficially used with the BOP slag fines.

APPENDIX A
Restrictions on Use of BOP Slag Fines
As Construction Material
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- A12. The beneficial use of BOP slag fines shall be in a manner which will not create a nuisance or be harmful to the public health, safety or the environment.
- A13. Placement of BOP slag fines on any one project shall not continue for longer than 365 days without written authorization from the Department.