



**pennsylvania**  
DEPARTMENT OF ENVIRONMENTAL  
PROTECTION

BUREAU OF WASTE MANAGEMENT  
DIVISION OF MUNICIPAL and RESIDUAL WASTE  
GENERAL PERMIT WMGR047

BENEFICIAL USE OF METAL ALLOY SLAG

**Issued: November 1, 2017**  
**Amended: October 31, 2017**  
**Expires: November 1, 2027**

GENERAL PERMIT WMGR047  
BENEFICIAL USE OF METAL ALLOY SLAG

**A. Description:**

This general permit authorizes the beneficial use of the “residual aggregate” generated from the extraction of metal from metal alloy slag. For the purposes of this general permit, “metal alloy slag” shall be defined as slag generated from the production of carbon and/or stainless steel. The authorized beneficial uses under this general permit are limited to the following:

1. As an agricultural liming agent.
2. As an ingredient in agricultural and specialty fertilizers.
3. As an ingredient in mine grouting material.
4. For sludge stabilization.
5. As a construction material.
6. As a raw material for concrete production (i.e. road surface concrete, ready mix concrete, bagged cement, and concrete products).
7. For underground storage tank and pipe backfill.
8. As a mine buffering agent.
9. As acid mine drainage (AMD) treatment plant feed stock.
10. As briquettes to reclaim AMD-affected streams.
11. For grout production for flowable backfill.
12. For road base reclamation and soil stabilization.
13. As a raw material for asphalt production.

**B. Determination of Applicability Requirements:**

Persons or municipalities that propose to beneficially use metal alloy slag 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 appropriate Department Regional Office (see attached list) prior to commencing authorized activities under this general permit. A completed application on forms provided by the Department along with the application fee for a DOA must be submitted to the appropriate Department Regional Office. Checks shall be made payable to the “Commonwealth of Pennsylvania”.

The Department recommends conducting a pre-application meeting with the appropriate regional office prior to submitting an application. Additional forms and information required will be determined at this meeting.

No activities shall commence unless approved, in writing, by the Department.

**C. Operating Conditions**

1. All activities conducted under the authorization granted in this permit shall be conducted in accordance with the permittee's application. Except to the extent that the permit states otherwise, the permittee shall beneficially use the residual aggregate as described in the approved application.
2. 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

GENERAL PERMIT WMGR047  
BENEFICIAL USE OF METAL ALLOY SLAG

environment, or if the activities cannot be adequately regulated under the conditions of this permit.

3. The residual aggregate may be used as an agricultural liming agent provided the pH of the residual aggregate is between 9.0 and 12.5, the calcium carbonate equivalency (CCE) is at least 70 percent, and the levels in Tables 1 or 2, as applicable, are not exceeded.
4. The residual aggregate may be used as an ingredient in agricultural and specialty fertilizers provided the pH of the residual aggregate is between 9.0 and 12.5 and the levels in Tables 1 or 2, as applicable, are not exceeded, unless the parameter that is exceeded is a micronutrient essential to the agricultural or specialty fertilizer.
5. The residual aggregate may be used as a mine buffering agent, an acid mine drainage (AMD) treatment plant feedstock, as briquettes to reclaim AMD-affected streams, a construction material, a sludge stabilization agent, or for underground storage tank and pipe backfill, provided the levels in Tables 1 or 2, as applicable, are not exceeded.
6. The residual aggregate may be used for road base reclamation and soil stabilization provided the pH of the residual aggregate is between 9.0 and 12.5 and the levels in Tables 1 or 2, as applicable, are not exceeded.
7. The beneficial use of the residual aggregate as an ingredient in agricultural and specialty fertilizers must comply with the permit and the provisions of the *Soil and Plant Amendment Act*, 3 Pa. C.S.A. § 6901 et seq. and the *Fertilizer Act*, 3 C.S.A. § 6701 et seq., as applicable.
8. When the residual aggregate is sold, offered, or otherwise supplied for use as an agricultural liming agent for pasture lands or forage crops for livestock, the permittee shall:
  - a. Conspicuously affix, on the outside of each package, a plainly printed, stamped, or otherwise marked label or tab, or, in the case of bulk sales, a delivery slip setting forth the following information in conformance with §132-4 of the *Agricultural Liming Materials Act*, 3 P.S. § 132-4:
    - i. The name and principal office address of the manufacturer or distributor.
    - ii. The brand or trade name of the material.
    - iii. The identification of the product as to the type of agricultural liming material.
    - iv. The net weight of the agricultural liming material.
    - v. The minimum percentage of calcium oxide and magnesium oxide and/or calcium carbonate and magnesium carbonate.

GENERAL PERMIT WMGR047  
BENEFICIAL USE OF METAL ALLOY SLAG

- vi. Calcium carbonate equivalent as determined by methods prescribed by the Association of Official Analytical Chemists. Minimum calcium carbonate equivalents as prescribed by regulation.
  - vii. The minimum percent by weight passing through the United States Standard sieves as prescribed by regulations.
- b. The label or tab, or delivery slip in (a) shall also indicate the following:
- i. The material contains residual aggregate that has been prepared from metal alloy slag.
  - ii. The recommended application rate shall not exceed 50 pounds per 1000 square feet (50 lbs/1000ft<sup>2</sup>).
  - iii. The residual aggregate is not to be stored or placed in direct contact with groundwater or surface water.
  - iv. The proper nutritional care of grazing animals to prevent illness or injury, including the administration of a copper supplement to prevent molybdenosis.
- c. No information or statement shall appear on any package, label, delivery slip or advertising matter that is false or misleading to the purchaser or user as to the quality, analysis, type of composition of the agricultural liming material, in conformance with § 132-4 of the *Agricultural Liming Materials Act*, 3 P.S. § 132-4.
- d. The permittee shall inform all persons that propose to beneficially use residual aggregate as an agricultural liming material that § 132-4 of the *Agricultural Liming Materials Act*, 3 P.S. § 132-4, requires at every site from which agricultural liming materials are delivered in bulk, and at every place where consumer orders for bulk delivery orders are placed, a conspicuously posted copy of the delivery slip required by § 132-4 for each brand of material.
9. Prior to the initial beneficial use of residual aggregate, the permittee shall perform chemical analysis on a representative sample of residual aggregate for the appropriate parameters listed in Tables 1, 2, or 3. The chemical analyses required in this Condition 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. The permittee shall perform chemical analysis on additional representative samples of metal alloy slag as follows:
- a. annually, for metal alloy slag or residual aggregate obtained directly from the generator and produced on an ongoing basis. In addition, each time there is a significant change in the process generating the metal alloy slag or residual aggregate.
  - b. each time a new source of metal alloy slag or residual aggregate is received.

GENERAL PERMIT WMGR047  
BENEFICIAL USE OF METAL ALLOY SLAG

- c. quarterly, for metal alloy slag or residual aggregate which has previously been disposed and is being mined. One grab sample of residual aggregate shall be taken each week, of the metal alloy slag that was mined during that week. These weekly grab samples shall be composited to make up the quarterly sample.
  - d. Should the level of any constituent equal or exceed 90 percent of an applicable limit in Tables 1, 2, or 3, future chemical analyses for the constituent shall be based on monthly samples until such time as levels of the constituent in three consecutive monthly samples are below 90 percent of the applicable limit in Tables 1, 2, or 3. The monthly samples shall also be made up of composites of the weekly grab samples. Monthly samples are not required in months where no residual aggregate is produced.
  - e. Should the level of any constituent exceed the applicable limit in Tables 1, 2, or 3, the permittee shall notify the appropriate Regional Office of the Department of the exceedances within 3 business days. Future chemical analyses shall be based on weekly samples until such time as levels of all constituents are equal to or below the applicable limits in Tables 1, 2, or 3. Weekly samples are not required in weeks where no residual aggregate is produced.
  - f. Should knowledge of the generation process, visual observations, or analytical results indicate variability in the quality of the residual aggregate, more frequent analysis may be required.
10. Prior to the beneficial use of residual aggregate or distribution of residual aggregate prior to beneficial use, the permittee shall visually inspect the residual aggregate for unusual coloration, stain, or any other indication of contamination or the presence of other wastes or materials. If the presence of other wastes are indicated, as a result of visual observation or testing in compliance with Tables 1, 2, or 3, the residual aggregate shall not be beneficially used unless the other wastes have been removed from the residual aggregate to the greatest extent practical and the residual aggregate is retested and found to be in compliance with Tables 1, 2, or 3 or the use of the other waste(s) has been approved by the Department, under a beneficial use general permit, for the same beneficial use(s) as the residual aggregate will be utilized under this permit.

GENERAL PERMIT WMGR047  
BENEFICIAL USE OF METAL ALLOY SLAG

**Table 1**

**Residual Aggregate Used With Attenuating Soil Restriction<sup>a</sup>**

Parameter	Concentration Limits <sup>b</sup>	
	Total (mg/kg) <sup>c</sup>	Leachate (mg/L) <sup>d</sup>
Antimony	88	0.15
Arsenic	29	0.25
Cadmium	47	0.125
Chromium, Total	N/E	2.5
Chromium(VI)	94	N/E
Copper	1,500	25
Iron	66,000	7.5
Lead	500	0.125
Manganese	31,000	2.5
Mercury	66	0.05
Molybdenum	(Report Only)	4.375
Nickel		
Agricultural uses <sup>e</sup>	420	2.5
Non-agricultural uses <sup>f</sup>	840	2.5
PCBs, Total (for landfilled metal alloy slag only) <sup>g</sup>		
Residential uses	1	N/E
Non-residential uses	2	N/E
Selenium	1,100	1
Sodium	3500	N/E
Thallium	15	(Report only)
Zinc	2,800	50

<sup>a</sup> There must be at least 4 feet between the lowest area where residual aggregate is placed and the seasonal high water table, perched water table or bedrock unless otherwise authorized in writing by the Department.

<sup>b</sup> The total and leachable concentration levels must be met. The determinations may be based upon the 90 percent upper confidence level using Test Methods for Evaluating Solid Waste (EPA SW-846) as guidance for the statistical treatment of data.

<sup>c</sup> On a dry weight basis.

<sup>d</sup> The 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.

<sup>e</sup> Applicable to the uses allowed pursuant to Conditions C.3. and C.4.

<sup>f</sup> Applicable to the uses allowed pursuant to Conditions C.5. and C.6.

<sup>g</sup> The sample preparation for PCB determinations shall be EPA Method 3545.

GENERAL PERMIT WMGR047  
BENEFICIAL USE OF METAL ALLOY SLAG

**Table 2**

**Residual Aggregate Used Without Attenuating Soil Restriction**

<b>Parameter</b>	<b>Concentration Limits<sup>a</sup></b>	
	<b>Total (mg/kg)<sup>b</sup></b>	<b>Leachate (mg/L)<sup>c</sup></b>
Antimony	88	0.006
Arsenic	29	0.05
Cadmium	47	0.005
Chromium, Total	N/E	0.1
Chromium(VI)	94	N/E
Copper	1,500	1.0
Iron	66,000	0.3
Lead	500	0.015
Manganese	31,000	0.1
Mercury	66	0.002
Molybdenum	(Report Only)	0.175
Nickel		
Agricultural uses <sup>d</sup>	420	0.1
Non-agricultural uses <sup>e</sup>	840	0.1
PCBs, Total (for landfilled metal alloy slag only) <sup>f</sup>		
Residential uses	1	N/E
Non-residential uses	2	N/E
Selenium	1,100	0.05
Sodium	3500	N/E
Thallium	15	(Report only)
Zinc	2,800	2.0

<sup>a</sup> The total and leachable concentration levels must be met. The determinations may be based upon the 90 percent upper confidence level using Test Methods for Evaluating Solid Waste (EPA SW-846) as guidance for the statistical treatment of data.

<sup>b</sup> On a dry weight basis.

<sup>c</sup> The 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.

<sup>d</sup> Applicable to the uses allowed pursuant to Conditions C.3. and C.4.

<sup>e</sup> Applicable to the uses allowed pursuant to Conditions C.5 and C.6.

<sup>f</sup> The sample preparation for PCB determinations shall be EPA Method 3545.

11. The residual aggregate may be used an ingredient in mine grouting material, for grout production for flowable backfill, or as a raw material for concrete production provided the residual aggregate will undergo cementitious reactions after placement, the pH of the residual aggregate is between 9.0 and 12.5 and the levels in Table 3 are not exceeded in the residual aggregate.

GENERAL PERMIT WMGR047  
BENEFICIAL USE OF METAL ALLOY SLAG

**Table 3**

PARAMETER	Leachable <sup>a</sup> (mg/L)
Antimony	0.15
Arsenic	0.25
Cadmium	0.125
Chromium, Total	2.5
Copper	25
Iron	7.5
Lead	0.375
Manganese	2.5
Mercury	0.05
Molybdenum	4.375
Nickel	2.5
Selenium	1
Thallium	(Report only)
Zinc	50

<sup>a</sup> The 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. The above determinations may be based upon the 90 percent upper confidence level using *Test Methods for Evaluating Solid Waste* (EPA SW-846) as guidance for the statistical treatment of data.

12. The residual aggregate may be used for asphalt production provided pH of the residual aggregate is between 9.0 and 12.5 and the residual aggregate is totally encapsulated by asphaltic emulsion.
13. Should the residual aggregate contain other constituents which do not meet the requirements of 25 Pa Code §288.623(a) (relating to minimum requirements for acceptable waste), or which pose a threat of harm to human health or the environment, the residual aggregate shall not be placed into the environment unless it undergoes cementitious reactions or is totally encapsulated by asphaltic emulsion.
14. The residual aggregate shall not be hazardous waste, as the term is defined in 40 CFR Part 261, as incorporated by reference at 25 Pa. Code § 261a.1 and modified at § 261a.3.
15. The residual aggregate shall not be mixed with other types of solid wastes, including hazardous waste, municipal waste, special handling waste, or other residual waste unless authorized in writing by the Department.
16. The residual aggregate shall not be accumulated speculatively, as the term is defined in 25 Pa Code § 287.1.



GENERAL PERMIT WMGR047  
BENEFICIAL USE OF METAL ALLOY SLAG

17. The storage and transportation of metal alloy slag or residual aggregate shall be in a manner that does not create a nuisance or be harmful to the public health, safety or the environment. Storage and transportation shall comply with the requirements of 25 Pa. Code Chapter 299 (relating to storage, collection and transportation of residual waste).
18. 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.
19. The permittee shall comply with the fugitive emissions standards adopted under 25 Pa. Code Sections 123.1 and 123.2.
20. In addition to the requirements of this general permit, a noncoal/industrial minerals permit approved by the appropriate District Mining Office is required to reprocess metal alloy slag under this authorization or approval under 25 Pa. Code Chapter 77 prior to excavation of any previously disposed slag.
21. 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.
22. 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.
23. 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.
24. 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.

GENERAL PERMIT WMGR047  
BENEFICIAL USE OF METAL ALLOY SLAG

25. 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.
26. 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; and the status of any permit issued by the Department or federal government under the environmental protection acts.
27. 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 of metal alloy slag or residual aggregate and shall take appropriate immediate action to protect the health and safety of the public and the environment. Spills of less than 1,000 pounds of metal alloy slag or residual aggregate need not be reported.
28. The permittee shall provide a copy of the Appendix A (Restrictions on Use of Residual Aggregate as an Agricultural Liming Agent) or Appendix B (Restrictions on Use of Residual Aggregate as an Ingredient in Mine Grouting Material) of this permit to the persons or municipalities that propose to beneficially use residual aggregate for these purposes. The conditions in the Appendices shall apply to any person who operates pursuant to this general permit, including persons who obtain a DOA to conduct activities authorized by this permit. This notification is not required when the residual aggregate is sold or otherwise supplied in bags or other containers holding 100 kg of residual aggregate or less.
29. When sold or otherwise supplied for use as an agricultural liming agent in bags or other containers holding 100 kg of residual aggregate or less, each bag or container shall be labeled with the following:
  - a. An indication that the bag or container contains residual aggregate prepared from metal alloy slag.
  - b. A notice that unless soil test results indicate a greater application rate is needed for very acidic soils, the recommended application rate should not exceed 50 pounds per 1000 square foot (50 lbs/1000 ft<sup>2</sup>).
  - c. A statement that the residual aggregate is not to be stored or placed in direct contact with groundwater or surface water.
30. Metal alloy slag that is beneficially used under this permit ceases to be a waste if it is used in accordance with the terms and conditions of this permit.

**D. Recordkeeping:**

1. Records of any analytical evaluations conducted on residual aggregate 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,

GENERAL PERMIT WMGR047  
BENEFICIAL USE OF METAL ALLOY SLAG

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.

2. The permittee shall maintain records that contain: the name, address, and phone number of each source of incoming metal alloy slag or residual aggregate, the date of receipt and quantity of metal alloy slag or residual aggregate received, and the name, address, and phone number, and quantity for each destination of outgoing shipment of residual aggregate. 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.

**E. Reporting Requirements:**

The permittee shall submit an annual report to the appropriate regional office for the county in which the permittee is located. This report shall contain a summary of all the information required in Conditions D.1 and D.2, and shall be submitted by March 1 for the previous calendar year.

**F. Renewal:**

A person or municipality that plans to continue the operations authorized under this general permit, after the expiration date indicated on the approval for coverage page, shall file a complete application for permit renewal at least 180 days before the expiration date of this general permit unless permission has been granted by the Department for submission at a later date. A completed application on forms provided by the Department along with the application fee for a renewal in the amount identified in Section A (General Information) of the Form 20R (Application For A Residual Waste General Permit) must be submitted to the appropriate Department Regional Office. A check shall be made payable to the "Commonwealth of Pennsylvania." A copy of the renewal application shall also be sent to the attention of the Department's Bureau of Waste Management, Division of Municipal and Residual Waste, Rachel Carson State Office Building, 400 Market Street, P.O. Box 69170, Harrisburg, PA 17106-9170.

In the event that a timely and complete application for renewal has been submitted and the Department is unable, through no fault of the permittee, to reissue the general permit or approval for coverage before its current coverage expiration date, the terms and conditions of the approved coverage will automatically continue and will remain fully 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  
GENERAL PERMIT WMGR047  
BENEFICIAL USE OF RESIDUAL AGGREGATE  
AS AN AGRICULTURAL LIMING MATERIAL

The following restrictions apply to residual aggregate when sold or otherwise supplied in bulk quantities for use as an agricultural liming agent. Persons receiving, storing, and/or using the residual aggregate are required to comply with the following requirements:

- A1. Residual aggregate shall not be stored in direct contact with or applied directly into ground water or surface water.
- A2. Runoff from residual aggregate storage areas shall not cause surface water pollution or groundwater degradation and shall be managed in accordance with The Clean Streams Law, 35 P.S. §691.1 et. seq., and regulations promulgated thereunder.
- A3. The amount of the residual aggregate that may be stored at any site, at any time, is limited to the amount of residual aggregate that is intended to be used, and can be practicably applied, on the site for the next 365 days. In no instance shall more than 2,000 tons of the residual aggregate be stored on any one acre of land.
- A4. The storage, transportation and use of the residual aggregate shall be in a manner that will not create a nuisance or be harmful to public health, safety or welfare of the people or environment of this Commonwealth.
- A5. Residual aggregate shall not be applied to the land during periods of rain or placed onto ground that is saturated, covered with snow, or frozen.

APPENDIX B  
GENERAL PERMIT WMGR047  
BENEFICIAL USE OF RESIDUAL AGGREGATE  
AS AN INGREDIENT IN MINE GROUTING MATERIAL

The following restrictions apply to residual aggregate when sold or otherwise supplied in bulk quantities for use as an ingredient in mine grouting projects. Persons receiving, storing, and/or using the residual aggregate are required to comply with the following requirements:

- B1. Residual aggregate shall not be stored in direct contact with ground water or surface water.
- B2. Prior to use of residual aggregate as an ingredient in mine grouting projects, the user shall submit a notice of intent to the appropriate District Mining Office for each site at which residual aggregate is intended to be used. For permitted sites or sites covered under a governmental contract, the above notification must also be provided to the appropriate governmental agency.
- B3. Runoff from residual aggregate storage areas shall not cause surface water pollution or groundwater degradation and shall be managed in accordance with The Clean Streams Law, 35 P.S. §691.1 et seq., and regulations promulgated thereunder.
- B4. Surface water and erosion and sedimentation control shall be managed at mine sites to meet the applicable requirements of 25 Pa. Code, Chapter 102 (relating to erosion control).
- B5. The amount of the residual aggregate that may be stored at any site, at any time, is limited to that amount of residual aggregate that is intended to be used, and can be practicably applied, on the site for the next 365 days. In no instance shall more than 5,000 tons of the residual aggregate be stored on any one mine site or 1,000 tons at any other site, unless otherwise approved by the Department.
- B6. The storage, transportation and use of the residual aggregate shall be in a manner that will not create a nuisance or be harmful to public health, safety or welfare of the people or environment of this Commonwealth.