

**SPECIAL CONDITIONS
GENERAL PERMIT NO. WMGR079**

1. The approval herein granted is limited to the processing and beneficial use of waste asphalt shingles (i.e., imperfections, tabs, trimming scraps, damaged shingles, etc.), hereinafter referred to as “waste asphalt shingles or waste shingles”, generated in the manufacturing of new asphalt shingles for use as an ingredient or a component in the production of hot mix asphalt-paving material and as a sub-base for road and driveway construction.
2. The waste asphalt shingles may be beneficially used if the following quality criteria requirements are met:
 - a. Where the waste asphalt shingles are blended with other aggregate, as a sub-base for roadway construction material, the mixture must comply with the requirements of the Pennsylvania Department of Transportation (PennDOT) specifications as outlined in their Publication No. 408 (Specifications);
 - b. Where the waste asphalt shingles are used as an ingredient or a component in the production of hot mix asphalt-paving material, the asphalt-paving material 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;
 - c. The waste asphalt shingles conform to the applicable engineering properties as the raw material it is being substituted for;
 - d. The waste asphalt shingles do not contain asbestos; and
 - e. The concentration of any constituent, in the waste asphalt shingles, does not exceed the chemical limitations as specified in Condition 3 below.
3.
 - a. Waste asphalt shingles shall not be used in roadway construction if the concentration, for any constituent, listed in Table 1 below is exceeded.
 - b. Waste asphalt shingles shall not be used as an ingredient or a component in the production of hot mix asphalt-paving material if the concentration, in a leach analysis of the material(s), for any constituent listed in Table 1 below is exceeded.

Table 1

Parameters	Total (mg/kg)	Leachable⁽¹⁾ (mg/l)
Arsenic	41	1.25
Barium	5000	50.0
Cadmium	20	0.125
Chromium (Total)	1000	2.5
Copper	700	32.5
pH	5.5 to 9.5	-----
Molybdenum	----	4.375
Nickel	200	17.5
Zinc	1000	125.0

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The determination of 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-946) as guidance for the statistical treatment of data.

⁽¹⁾ = Leachability evaluations shall be conducted using the Toxicity Characteristic Leaching Procedure (EPA method 1311) or the Synthetic Precipitation Leaching Procedure (EPA method 1312).

4. This approval only applies to waste asphalt shingles generated at manufacturing facilities in the production of new asphalt roofing shingles. Wrapping paper that has been segregated from the waste asphalt shingles shall be managed properly at a permitted disposal facility or recycled. Waste asphalt shingles shall not be used as an ingredient or a component in the production of hot mix asphalt-paving material if the leachable levels in Condition 3 are exceeded in the waste asphalt shingles, unless the leachable levels are not exceeded in the asphalt-paving materials. Analysis of the asphalt-paving material manufactured with the waste asphalt shingles shall be determined by representative samples of the asphalt-paving material. Once a leaching analysis of the asphalt-paving material has demonstrated that the leachable levels are not exceeded, re-analysis of any asphalt-paving material manufactured with the waste asphalt shingles as an ingredient or a component will not be required, provided the waste asphalt shingles used to make the paving material:
 - a. Are from the same source and production line;
 - b. The chemical and physical characteristics of the waste asphalt shingles do not change; and
 - c. The amount of waste asphalt shingles used to produce the paving material is not increased.

In compliance with the requirements specified in Condition 4 (a) and (b) of this permit, a signed certificate from the manufacture of the asphalt shingles stating that the physical and chemical properties of the waste asphalt shingles have not changed must be submitted with the annual report required in Condition 15 of this general permit. The signed certificate may be used for a maximum of two (2) years, from the date of last analysis, after which time the waste asphalt shingles must be reanalyzed.

5. The processing and beneficial use of rolled tarpaper and tear-off waste asphalt shingles generated during the demolition or replacement of existing roofs is not authorized under this general permit.
6. The beneficial use of waste asphalt shingles is limited to the following uses:
 - a. As an additive to or component of hot mix asphalt, or
 - b. Being blended with other aggregate that will be used as a roadway-base course and will be covered with asphalt, concrete or other surfacing material.

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7. Prior to the first beneficial use and prior to each construction season thereafter, representative samples of the waste asphalt shingles, intended for beneficial use, shall be analyzed for the total (mg/kg) and leachable (mg/L) levels for each parameter listed in Condition 3 of this general permit. Representative sampling is one of the most difficult aspects of monitoring. To obtain a representative sample of the waste asphalt shingles, the samples must be taken from the correct locations and represent the entire amount of waste asphalt shingles. In the batch process, more than one sample is usually necessary to accurately represent a particular batch or a storage pile of waste asphalt shingles. 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 waste asphalt shingles and because the pollutant limits pertain to the quality of the waste asphalt shingles that will be beneficially used, samples must be collected after the final stage of waste asphalt shingles generation process and prior to storage.

Should knowledge of the waste asphalt shingles generation, visual observations, or analytical results indicate variability in the quality of the waste asphalt shingles, more frequent testing shall be conducted.

8. The permittee shall inform all persons or municipalities which propose to beneficially use waste asphalt shingles covered under this permit of all the conditions and limitations imposed on the beneficial use of waste asphalt shingles by the Department of Environmental Protection (Department). This notification shall be by providing a copy of Appendix "A" (Acceptable Uses and Use Restrictions) of this permit. The conditions in Appendix "A" also apply to any permittee who obtains a Determination of Applicability to conduct activities authorized by this permit. The permittee shall record the name and address of each person who is given or purchases the waste asphalt shingles and shall record its intended use. This information shall be included in the annual report required in Condition 15. It is incumbent upon the permittee to ensure that all users of the waste asphalt shingles approved under this general permit comply with all conditions of this permit.
9. The storage and transportation of waste asphalt shingles shall be in a manner which does not create a nuisance or be harmful to the public health, safety or the environment and shall comply with the requirements of Title 25 Pa Code, Chapter 299 (relating to Storage and Transportation of Residual Waste).
10. Unless otherwise authorized by the Department in writing, waste asphalt shingles shall not be stored for more than one (1) year, and at any one time the maximum amount stored may not exceed 30,000 tons of pre and post processed waste asphalt shingles, prior to blending with other aggregate, described in the approved application.
11. Equipment used for the storage and transportation of the waste asphalt shingles shall be maintained in good operating condition to prevent waste asphalt shingles from being unintentionally conveyed out of the storage area(s). Weekly inspections of each storage area 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.

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12. Upon cessation of operations or by the expiration date of this general permit or unless extended by the Department in writing, the permittee shall remove any remaining waste asphalt shingles and any other residual wastes or other materials which contain or have been contaminated by the waste asphalt shingles and shall provide for the processing and disposal of the waste or material in accordance with the Solid Waste Management Act, the environmental protection acts and the regulations promulgated thereunder.
13. The permittee shall immediately notify the Department, 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 waste asphalt shingles; the manufacturing process which generates the asphalt shingles; the change in status of bonding and insurance of the facility and the change in status of any permit issued by the Department or any state authority or federal government under the environmental protection acts.
14. Records of all analytical evaluations conducted on the waste asphalt shingles or the material manufactured with the waste asphalt shingles shall be retained and made available to the Department upon request. These analytical information shall be retained for a minimum of 5 years and must include the following on each sample: the 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.
15. Persons operating under the provisions of this general permit shall submit, by the anniversary date of this permit, to the Department's Bureau of Land Recycling and Waste Management, Division of Municipal and Residual Waste, P.O. Box 8472, Harrisburg, PA, 17105-8472 and the appropriate Department Regional Office, an annual report which contains the information outlined in Conditions 4, 8 and 14, and summarizes the name and address of generator(s) of waste asphalt shingles and weight or volume of the waste asphalt shingles in storage, sold, traded or given away during the last 12 months ending 30 days prior to the anniversary date of the permit. The annual report must also include the following:
 - a. Actual laboratory reports for the "total" and "leaching" analyses for the waste asphalt shingles for all parameters listed in Table 1 of Condition 3 of this permit. Analysis data submitted in compliance with this requirement must be from samples of the waste asphalt shingles collected within the past 12 months.
 - b. Actual laboratory reports for the "leaching" analysis for all the parameters listed in Table 1 of Condition 3 on the waste asphalt shingles used to produce each new asphalt-paving material since the submission of the previous annual report.
16. The permittee shall comply with the fugitive emissions regulations under 25 Pa. Code, Chapter 123 (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 the Fugitive Emissions §§123.1 and 123.2.

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17. 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 Pennsylvania Solid Waste Management Act, 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.
18. 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 to 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 asphalt shingles, soils, water, or gases; take photographs; to perform measurements, surveys, and other tests; 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. This permit condition is referenced in accordance with §§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 under the Solid Waste Management Act.
19. 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 and reissue the authorization granted in this 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 permit.
20. 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 be obtained if the permittee cannot comply with the conditions of this general permit or is conducting an activity that harms or presents a threat of harm to the health, safety or welfare of the public or the environment.
21. Any independent contractors or agents retained by the permittee in the completion of activities authorized under this permit shall be subject to compliance history review by the Department prior to performance of any activities, as specified by the Solid Waste Management Act of 1980.
22. Persons or municipalities which propose to operate under the terms and conditions of this general permit, after the date of permit issuance, must obtain a "Determination of Applicability" from the Department's Bureau of Land Recycling and Waste Management, Division of Municipal and Residual Waste, P.O. Box 8472, Harrisburg, PA 17105-8472. No activities shall commence unless specifically authorized by the Department in writing.

At a minimum, the following information must be provided on forms available from the Department's Bureau of Land Recycling and Waste Management:

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- a. Name and street address of applicant.
- b. A chemical and physical analysis, and description of the waste asphalt shingles, which fully characterizes its composition and properties.
- c. Name and location of the manufacturer of the waste asphalt shingles.
- d. A description of the manufacturing and production processes that generate the waste asphalt shingles, which includes detailed information on the chemical constituents in all binders or other chemicals used in the asphalt shingles production process.
- e. An evaluation plan for sampling, testing and monitoring new sources of waste asphalt shingles, which includes procedures on managing rejected waste asphalt shingles received at the facility.
- f. Description of method of processing and/or beneficial use.
- g. Number and title of the general permit.
- h. Evidence the waste asphalt shingles and waste management activities are consistent with the general permit.
- i. Signed and notarized statement by the person operating the facility which states that the person accepts all conditions of this general permit.
- j. An application fee in the amount required under Section 287.642 (b) of the Residual Waste Regulations made payable to the "Commonwealth of Pennsylvania".
- k. Proof that copies of the application have been submitted to each municipality, county, county planning agency and county health department in which beneficial use activities are or will be located.
- l. Proof that the applicant has legal right to enter the land and operate the facilities approved under this permit.
- m. An irrevocable written consent from the landowner giving the Department permission to enter upon land where the applicant will be conducting processing activities.
- n. Information which identifies the applicant (i.e. individual, corporation, partnership, government agency, association, etc.), including the names and addresses of every officer which has a beneficial interest in or otherwise controls the operation of the company.
- o. A list of all previous permits or licenses issued by the Department or Federal government under the environmental protection acts; the dates issued, status and compliance history concerning environmental protection acts.

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- p. A copy of the facilities Preparedness, Prevention and Contingency Plan (PPC) which is consistent with the Department's most recent guidelines on the development and implementation of PPC plans.
 - q. Proof that independent contractors retained by the permittee to perform any activities authorized under this permit are in compliance with the Department's regulations as required in Condition 21.
 - r. Total amount of waste asphalt shingles (pre and post processed) to be stored.
 - s. Bonding and insurance in an amount acceptable to the Department with supporting documentation.
 - t. Additional information the Department believes is necessary to make a decision.
23. All waste asphalt shingles and materials derived from the waste asphalt shingles under the authorization granted in this permit shall be managed in accordance with the permittee's application. Except to the extent the permit states otherwise, the permittee shall utilize the waste asphalt shingles for beneficial use purposes as described in the permit application.
24. Failure of measures herein approved to perform as intended, or as designed, or in compliance with the applicable laws, rules, and regulations and terms and conditions of this permit, for any reason, shall be grounds for the revocation or suspension of the permittee's approval to operate under this permit.
25. Hazardous waste, municipal waste, special handling waste, and other residual wastes may not be mixed and/or stored or beneficially used with the asphalt shingles.
26. The permittee shall maintain a bond in an amount and with sufficient guarantees as provided by 25 Pa. Code, Chapter 287, Subchapter E (Bonding and Insurance Requirements).
27. The bond filed with the Department under Condition 26 shall continue for the operational life of the facility, until 10 years after final closure of the facility, unless released in whole or in part by the Department, in writing, prior thereto as provided by 25 Pa. Code §287.341 (relating to Release of Bonds).
28. The permittee shall maintain in force and effect a general liability insurance policy, in accordance with 25 Pa. Code, Chapter 287, Subchapter E (Bonding and Insurance Requirements) to provide continuous coverage during operation of the facility and until the Department issues a final closure certification as provided by 25 Pa. Code §287.342 (relating to Final Closure Certification).
29. Runoff from the waste asphalt shingles storage area(s) shall not cause surface water pollution or groundwater degradation and shall be managed in accordance with The Clean Streams Law and regulations promulgated thereunder.

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30. This permit does not authorize and shall not be construed as an approval to discharge any industrial wastes, wastewater, leachate or runoff from areas where solid waste management activities are conducted to the waters of the Commonwealth.

APPENDIX "A"

ACCEPTABLE USES AND USE RESTRICTIONS GENERAL PERMIT NO. WMGR079

The following "Acceptable Uses and Use Restrictions" apply to the beneficial use of waste asphalt shingles (i.e., imperfections, tabs, trimming scraps, damaged shingles, etc.), hereinafter referred to as "waste asphalt shingles or waste shingles", generated in the manufacturing of new asphalt shingles for use as a sub-base for road and driveway construction and as an ingredient or a component in the production of hot mix asphalt-paving material. Persons receiving, storing and/or using the waste asphalt shingles for beneficial use purposes must comply with the following requirements:

ACCEPTABLE USES:

- A1. Approval for the beneficial use of waste asphalt shingles is limited only to waste asphalt shingles generated at manufacturing facilities in the production of new asphalt roofing shingles. Wrapping paper that has been segregated from the waste asphalt shingles shall be managed properly at a permitted disposal facility or recycled.
- A2. Approval for the beneficial use of waste asphalt shingles as a roadway construction material is limited to and must comply with the following technical standards developed by the Pennsylvania Department of Transportation (PENNDOT) as outlined in their Publication 408, Specifications.
 - (a) 300 (Base Courses)
 - (b) 400 (Flexible Pavements)
 - (c) 703 (Aggregate, excluding 703.4 anti-skid material)
- A3. Approval for the beneficial use of waste asphalt shingles as an ingredient or a component in the production of hot mix asphalt paving material shall conform with the applicable materials standards as set forth in the following American Society of Testing and Material (ASTM) standards or other applicable National, state or industry standard or specification for which the waste is being substituted.
 - (a) D 242 - Standard Specification for Mineral Filler for Bituminous Paving Material.
 - (b) D 692 - Standard Specification for Coarse Aggregate for Bituminous Paving Material.
 - (c) D 693 - Standard Specification for Crushed Aggregate for Macadam Pavements.
 - (d) D 979 - Standard Practice for Sampling Bituminous Paving Mixtures.
 - (e) D 1073 - Standard Specification for Fine Aggregate for Bituminous Paving Material.

APPENDIX "A"

**ACCEPTABLE USES AND USE RESTRICTIONS
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- (f) D 1241 - Standard Specification for Materials for Soil-Aggregate Sub-Base, Base and Surface Courses.
- (g) D 2940 - Standard Specification for Graded Aggregate Materials for Bases or Sub-Bases for Highways or Airports.

USE RESTRICTIONS:

- A4. Hot mix asphalt paving material, using waste asphalt shingles as a component or an ingredient, shall not be placed in direct contact with surface water or groundwater.
- A5. Roadway sub-base material, mixed with the processed waste asphalt shingles, shall not be placed in a wetland or within 300 feet of a private or public water source.
- A6. Waste asphalt shingles or materials manufactured using waste asphalt shingles as a component or ingredient 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 a roadway construction activity is not completed within 3 months after the placement of the waste asphalt shingles or materials derived from the waste asphalt shingles.
- A7. Hazardous waste, municipal waste, special handling waste, and other residual wastes may not be mixed and/or stored or beneficially used with the asphalt shingles.
- A8. Unless specifically approved by the Department in writing, the waste asphalt shingles shall not be stored for more than one (1) year, and at any one time the maximum amount stored may not exceed 30,000 tons of pre and post processed waste asphalt shingles, prior to blending with other aggregate, and as follows:
 - i. The waste asphalt shingles are not accumulated before being beneficially used unless the operator shows that the waste asphalt shingles are potentially reusable and have a feasible means of being beneficially used; and
 - ii. During the calendar year (commencing on January 1), the amount of waste asphalt shingles that is beneficially used or transferred to a different site for beneficial use, equals at least 75% by weight or volume of the waste asphalt shingles 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., waste asphalt shingles from a single manufacturer) 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).
- A9. The storage, transportation or use of the waste asphalt shingles 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 asphalt shingles shall comply with the requirements of 25 Pa Code, Chapter 299 (relating to Storage and Transportation of Residual Waste).

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- A10. Runoff from the waste asphalt shingles 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.