



STATE OF CONNECTICUT  
DEPARTMENT OF ENVIRONMENTAL PROTECTION  
BUREAU OF MATERIALS MANAGEMENT AND  
COMPLIANCE ASSURANCE  
DIVISION OF ENGINEERING AND ENFORCEMENT  
860-424-3372

**General Permit for the Storage and Processing  
of  
Asphalt Roofing Shingle Waste  
for  
Beneficial Use and Recycling**

Issuance Date: June 2, 2011  
Expiration Date: June 2, 2021

Printed on recycled paper

**General Permit for Storage and Processing of Asphalt Roofing Shingle Waste (ARSW) for Beneficial Use and Recycling**

**Table of Contents**

<b>Section 1.</b>	<b>Authority</b> .....	<b>3</b>
<b>Section 2.</b>	<b>Definitions</b> .....	<b>3</b>
<b>Section 3.</b>	<b>Authorization Under This General Permit</b> .....	<b>5</b>
	(a) Eligible Activities .....	5
	(b) Requirements for Authorization .....	5
	(c) Geographic Area .....	6
	(d) Effective Date and Expiration Date of this General Permit .....	6
	(e) Effective Date of Authorization.....	6
	(f) Revocation of an Individual Permit .....	6
	(g) Issuance of an Individual Permit.....	6
<b>Section 4.</b>	<b>Registration Requirements</b> .....	<b>6</b>
	(a) Who Must File a Registration .....	6
	(b) Scope of Registration.....	7
	(c) Contents of Registration .....	7
	(d) Where to File a Registration and Other Related Documents .....	8
	(e) Additional Information.....	9
	(f) Action by Commissioner.....	9
<b>Section 5.</b>	<b>Conditions of This General Permit</b> .....	<b>9</b>
	(a) General Operating Conditions for all ARSRFs.....	9
	(b) Specific Operating Conditions for all ARSRFs.....	14
	(c) Reporting and Recordkeeping Requirements for all ARSRFs.....	17
	(d) Reliance of Registration.....	18
	(e) Duty to Correct and Report Violations.....	18
	(f) Duty to Provide Information.....	18
	(g) Certification of Documents.....	18
	(h) Date of Filing .....	18
	(i) False Statements .....	18
	(j) Correction of Inaccuracies .....	18
	(k) Transfer of Authorization .....	19
	(l) Other Applicable Law .....	19
	(m) Other Rights.....	19
<b>Section 6.</b>	<b>Commissioner’s Powers</b> .....	<b>19</b>
	(a) Abatement of Violations .....	19
	(b) General Permit Revocation, Suspension, or Modification.....	19
	(c) Filing of an Individual Permit Application.....	20
<b>Appendix A</b>	<b>Beneficial Use and Recycling Requirements</b> .....	<b>21</b>

## **General Permit for Storage and Processing of Asphalt Roofing Shingle Waste (ARSW) for Beneficial Use and Recycling**

### **Section 1. Authority**

This general permit is issued under the authority of section 22a-209f of the Connecticut General Statutes.

### **Section 2. Definitions**

As used in this general permit:

*“Aggregate base”* means the layer of compacted, processed stone that may include recycled asphalt shingles (RAS) and is generally located between the binder course and prepared sub-base in the construction of asphalt paving structures.

*“Approval of registration”* means an approval of registration pursuant to Section 4(f) of this general permit.

*“Asphalt paving structures”* means a road, parking lot, driveway or any other constructed paved surface.

*“Asphalt roofing shingles”* or *“ARS”* means a cellulose or fiberglass felt mat saturated with asphalt cement and small rock granules.

*“Asphalt roofing shingle recycling facility”* or *“ARSRF”* means a location or structure authorized to accept, store, and/or process ARSW, and/or store and distribute RAS.

*“Asphalt roofing shingle waste”* or *“ARSW”* means pre- or post-consumer ARS destined for beneficial use, recycling, or disposal.

*“Authorized activity”* means any activity authorized by this general permit.

*“Beneficial use”* means beneficial use as identified in section 22a-209f of the General Statutes.

*“Binder course”* means the layer of hot mix asphalt (HMA) that may contain RAS and is located between the top course and aggregate base in the construction of asphalt paving structures.

*“Bituminous concrete for patching”* or *“Cold Patch”* means bituminous concrete aggregate as described in Section M.04 of Connecticut Department of Transportation (CT DOT) Form 816, where such material is used to temporarily patch any pavement surface or pedestrian passway as specified in Section 4.06 of CT DOT Form 816, with such work conducted in accordance with Section 9.23 of CT DOT Form 816 or as CT DOT Form 816 may be amended.

*“Bulky waste”* means landclearing debris and waste resulting directly from demolition activities other than clean fill, as defined by section 22a-209-1 of the Regulations of Connecticut State Agencies.

*“Commissioner”* means the commissioner as defined by section 22a-2(b) of the General Statutes.

*“Day”* means the calendar day; if any date specified in the general permit falls on a Saturday, Sunday, or legal holiday, such deadline shall be the next business day thereafter.

*“Department”* means the Department of Environmental Protection.

*“Disposal”* means disposal as defined in section 22a-207 of the General Statutes.

*“Hazardous waste”* means any waste material which may pose or present a potential hazard to human health or the environment when improperly treated, stored, transported or disposed of or otherwise managed including hazardous waste as identified or listed as hazardous wastes in accordance with section 3001 of the Federal Resource Conservation Recovery Act of 1976 (42 USC Section 6901) and section 22a-449(c)-100 of the Regulations of Connecticut State Agencies, incorporating 40 CFR 260.

*“Hot mix asphalt”* or *“HMA”* means a mixture of size-graded, high quality aggregate and liquid asphalt cement that is heated and mixed in measured quantities and used in asphalt paving structures.

*“Incidental waste”* means any tarpaper, wood, or metal, typical of a residential roof repair, replacement or demolition.

*“Individual permit”* means a permit issued to a named permittee under section 22a-208a of the General Statutes.

*“MSW”* means municipal solid waste as defined in section 22a-207 of the General Statutes.

*“Municipality”* means municipality as defined in section 22a-207 of the General Statutes.

*“Operator”* means the individual with ultimate responsibility for managing a solid waste facility or recycling facility in conformance with the applicable statutes, regulations and permits.

*“Owner”* means the person in possession of or having legal ownership of the solid waste facility or recycling facility.

*“Permittee”* means a person or municipality to which the commissioner has issued an approval of registration.

*“Person”* means person as defined by section 22a-2(c) of the General Statutes.

*“Pre-consumer asphalt roofing shingle”* means the off-specification residential roofing shingle waste and the waste that is generated when new asphalt roofing shingles are trimmed by the manufacturer to the required physical dimensions during production. In addition, pre-consumer asphalt roofing shingle also includes any asphalt roofing shingle material placed in commerce which has not been installed but may be damaged or is otherwise deemed not saleable.

*“Post-consumer asphalt roofing shingle”* means asphalt roofing shingle waste that is generated during the demolition of a residential source or a former residential source or the replacement of a roof or portion thereof from an existing residential source or a former residential source, which may consist of various asphalt shingle types and may have attached incidental waste.

*“Process”* or *“processing”* means to reduce the amount or volume of solid waste through sorting, separation, shredding, crushing, or grinding so as to recover material resources from the waste or make it more amenable for recovery, storage, recycling and/or beneficial use.

*“Recipient”* means any person who receives RAS from a permittee as product for recycling or beneficial use.

*“Recycling”* means recycling as defined in section 22a-207 of the General Statutes.

*“Recycling facility”* means recycling facility as defined in section 22a-207 of the General Statutes.

“*Recycled Asphalt Shingles*” or “*RAS*” means an aggregate-base material that includes as an ingredient pre- and/or post-consumer asphalt roofing shingles that have been processed.

“*Registrant*” means a person who or municipality which files a registration pursuant to Section 4 of this general permit.

“*Registration*” means a registration form filed with the commissioner pursuant to Section 4 of this general permit.

“*Residential source*” or “*former residential source*” means any house, apartment, condominium, or other structure occupied by individuals primarily as a dwelling, or previously as a dwelling. This excludes commercial and industrial structures that were renovated into residential units.

“*Site*” means geographically contiguous property on which an authorized activity takes place or on which an activity for which authorization is sought under this general permit is proposed to take place. Non-contiguous properties owned by the same person and connected by a right-of-way, which such person controls, and to which the public does not have access shall be deemed the same site.

“*Solid waste*” means solid waste as defined in section 22a-207 of the General Statutes.

“*Solid waste facility*” means solid waste facility as defined in section 22a-207 of the General Statutes.

“*Special waste*” means non-hazardous solid wastes as defined in section 22a-209-1 of the Regulations of Connecticut State Agencies that require special handling procedures at a solid waste disposal facility due to their physical and/or chemical properties.

“*Storage*” means the holding of a solid waste for a temporary period, at the end of which the solid waste is recycled, disposed, or stored elsewhere.

“*Sub-base*” means a layer of the asphalt pavement structure that may include RAS and is located between the sub-grade and aggregate base.

“*Top course*” means the surface or wearing course of asphalt paving structures consisting of HMA and that may contain RAS.

### **Section 3. Authorization Under This General Permit**

#### **(a) Eligible Activities**

Provided the requirements of subsection (b) of this section are satisfied, this general permit authorizes the storage and processing of ARSW for beneficial use and recycling.

#### **(b) Requirements for Authorization**

**This general permit authorizes the activities listed in subsection (a) of this section provided:**

##### **(1) Registration**

A completed registration with respect to such activity has been filed with the commissioner and the commissioner has issued an approval of registration with respect to such activity.

(2) Coastal Area Management

Such activity is consistent with all applicable goals and policies in section 22a-92 of the General Statutes and will not cause adverse impacts to coastal resources as defined in section 22a-93 of the General Statutes.

(3) Endangered and Threatened Species

Such activity does not threaten the continued existence of any species listed pursuant to section 26-306 of the General Statutes as endangered or threatened and will not result in the destruction or adverse modification of habitat essential to such species.

(4) Aquifer Protection

Such activity complies with regulations under section 22a-354b of the General Statutes adopted pursuant to section 22a-354(i) of the General Statutes.

(c) ***Geographic Area***

This general permit applies throughout the State of Connecticut.

(d) ***Effective Date and Expiration Date of this General Permit***

This general permit is effective on the date it is issued by the commissioner and expires ten (10) years from such date of issuance.

(e) ***Effective Date of Authorization***

An activity is authorized by this general permit on the date the commissioner issues an approval of registration with respect to such activity.

(f) ***Revocation of an Individual Permit***

If an activity meets the requirements of authorization of this general permit and such activity is presently authorized by an individual permit, the existing individual permit may be revoked by the commissioner upon a written request by the permittee. If the commissioner revokes such individual permit in writing, such revocation shall take effect on the effective date of authorization of such activity by this general permit.

(g) ***Issuance of an Individual Permit***

If after the commissioner approves a registration under this general permit, the commissioner issues an individual permit authorizing the same activity authorized by such approval, such approval shall become null and void on the date such individual permit is issued.

#### **Section 4. Registration Requirements**

(a) ***Who Must File a Registration***

Any person or municipality, as defined in Section 2 of this general permit, seeking authorization under this general permit to store and process ARSW for beneficial use and recycling;

Shall file with the commissioner:

- (1) a registration form which meets the requirements of Section 4 of this general permit; and
- (2) the applicable registration fee.

**(b) Scope of Registration**

A registrant shall register each ARSRF, by site, for which the registrant seeks authorization under this general permit on a separate registration form.

**(c) Contents of Registration**

**(1) Fees**

- (A) A registration fee shall be submitted along with a registration form for any new registration or renewal of an existing registration. A registration shall not be deemed complete and no activity shall be authorized by this general permit unless the registration fee has been paid in full.

Registration fee for storage and processing of ARSW up to 15,000 cubic yards is \$2,500.

**Note:** In accordance with section 22a-6(b) of the General Statutes, the fee for municipalities is fifty percent (50%) of the fee listed above.

- (B) The registration fee shall be paid by check or money order payable to the **Department of Environmental Protection**.
- (C) The registration fee is non-refundable.

**(2) Registration Form**

A registration shall be filed on forms prescribed and provided by the commissioner and shall include the following:

- (A) Legal name, address, and telephone number of the registrant. If the registrant is an entity transacting business in Connecticut, provide the exact name as registered with the Connecticut Secretary of the State, if applicable.
- (B) Legal name, address, and telephone number of the owner of the site on which the subject activity is to occur.
- (C) Legal name, address, and telephone number of the registrant's attorney or other representative, if applicable.
- (D) Legal name, address, and telephone number of any consultant(s) or engineer(s) retained by the registrant to prepare the registration.
- (E) GPS coordinates of the site with respect to which the registration is submitted.
- (F) An 8 1/2" by 11" copy of the relevant portion or a full-sized original of a United States Geological Survey (USGS) quadrangle map, with a scale of 1:24,000, showing the exact location of the site and the area within a one-mile radius of the site. Identify the quadrangle name and number on such copy.
- (G) The registrant shall submit the following plans and documents, as applicable, prepared in accordance with Section 5(a) of this general permit:
- (i) a Facility Site Plan,
  - (ii) a Facility Description,

- (iii) a Final Closure Plan and Cost Estimate and
- (iv) a Financial Assurance Mechanism: The registrant shall submit the proposed form of the financial assurance mechanism that is required to be obtained pursuant to section 22a-6(a)(7) of the General Statutes to assure compliance with this general permit. The registrant shall ensure that any financial assurance mechanism used to comply with this condition be in the appropriate form as provided by the commissioner. The registrant shall ensure the financial assurance mechanism shall be posted in the amount sufficient to cover the cost of third party closure and is consistent with the Final Closure Plan and Cost Estimate required pursuant to Section 5(a)(1)(D) of this general permit.

The Permittee, after two years, may petition the department to reduce their financial assurance mechanism based on proven marketability of RAS.

The referenced plans and documents, as applicable, including an Operation and Management Plan, shall also be available at the site of the subject facility.

- (H) The signature of the registrant and of the individual or individuals responsible or actually preparing the registration, each of whom shall certify in writing as follows:

“I have personally examined and am familiar with the information submitted in this document and all attachments thereto, and I certify that, based on reasonable investigation, including my inquiry of those individuals responsible for obtaining the information, the submitted information is true, accurate and complete to the best of my knowledge and belief. I understand that a false statement made in the submitted information may be punishable as a criminal offense, in accordance with section 22a-6 of the General Statutes, pursuant to section 53a-157b of the General Statutes, and in accordance with any other applicable statute. I certify that this general permit registration is complete and accurate on forms as prescribed by the commissioner without alteration of their text.

I certify that a Facility Site Plan, a Facility Description, an Operation and Management Plan (including an Emergency and Preparedness Plan), a Final Closure Plan and Cost Estimate (as applicable) and a Financial Assurance Mechanism (as applicable) for the subject facility have been prepared as specified in Section 5(a) of the *General Permit for Storage and Processing of Asphalt Roofing Shingle Waste (ARSW) for Beneficial Use and Recycling* and are available at the site of the subject facility.

I also certify that a letter has been sent to the chief elected official of the municipality in which the subject facility is or will be located informing him or her that this registration has been submitted to the department.”

**(d) *Where to File a Registration and Other Related Documents***

- (1) A registration shall be filed with the commissioner at the following address:

CENTRAL PERMIT PROCESSING UNIT  
DEPARTMENT OF ENVIRONMENTAL PROTECTION  
79 ELM STREET  
HARTFORD, CT 06106-5127



- (2) A letter must be submitted to the chief elected official of the municipality in which the subject facility is or will be located informing him or her that a registration for this general permit has been submitted to the department.
- (3) The permittee shall submit to the local fire department, police department and hospital a copy of the facility's Emergency and Preparedness Plan within thirty (30) days of the registration approval date or prior to commencement of operation, whichever is sooner.

**(e) Additional Information**

The commissioner may require a registrant to submit additional information, which the commissioner reasonably deems necessary to evaluate the consistency of the subject activity with the requirements for authorization under this general permit.

**(f) Action by Commissioner**

- (1) The commissioner may reject without prejudice a registration if the commissioner determines that it does not satisfy the requirements of Section 4(c) of this general permit or more than thirty (30) days have elapsed since the commissioner requested that the registrant submit additional information or the required fee and the registrant has not submitted such information or fee. Any registration re-filed after such a rejection shall be accompanied by a new registration fee.
- (2) The commissioner may disapprove a registration if the commissioner finds that the subject activity is inconsistent with the requirements for authorization under Section 3 of this general permit, or for any other reason provided by law.
- (3) Disapproval of a registration under this subsection shall constitute notice to the registrant that the subject activity may not lawfully be conducted or maintained without the issuance of an individual permit.
- (4) The commissioner may approve a registration with reasonable conditions. If the commissioner approves a registration with conditions, the permittee shall be bound by such conditions as if they were a part of this general permit.
- (5) Rejection, disapproval, or approval of a registration shall be in writing.

**Section 5. Conditions of This General Permit**

The permittee shall at all times continue to meet the requirements for authorization set forth in Section 3 of this general permit. In addition, a permittee shall assure that activities authorized by this general permit are conducted in accordance with the following general conditions and the applicable specific conditions in Section 5(b) of this general permit.

**(a) General Operating Conditions for all ARSRFs**

**(1) Required Plans and Documents**

The permittee shall at all times maintain at the Facility a Site Plan prepared and certified by an engineer licensed to practice in Connecticut; a Facility Description; an Operation and Management Plan, which shall include an Emergency and Preparedness Plan; a Final Closure Plan and Cost Estimate (as applicable) and a Financial Assurance Mechanism (as applicable) for the subject ARSRF as described in this section. Such plans and documents shall be available at the site of the subject facility and shall be maintained for review upon request by the department.

(A) Facility Site Plan

The facility site plan shall be prepared and certified by an engineer licensed to practice in Connecticut and shall provide a clear and detailed presentation of all topographical and man-made features at the subject ARSRF site. The ARSRF site plan shall also include a drawing showing the layout of the facility. More than one map may be used, if necessary. The map(s) or drawing(s) must show the following (as applicable):

- (i) map scale (scale must be at 1 in. = 100 ft. or larger);
- (ii) map date;
- (iii) a meridian arrow showing north;
- (iv) contour sufficient to show surface water flow;
- (v) property boundaries of the site using an A-2 survey;
- (vi) existing and proposed buffer zones to adjacent properties, streams and surface waters, drinking water wells, tidal wetlands, dunes, beaches, bluffs or escarpments;
- (vii) existing and proposed access and internal roads, fencing and gates;
- (viii) all buildings of the ARSRF and its appurtenances showing their relative locations on the site;
- (ix) utilities;
- (x) loading and unloading areas;
- (xi) fire control facilities; and
- (xii) all areas and enclosed structures occupied by storage activities and all areas and enclosed structures used to process ARSW, existing or proposed, with approximate dimensions (all areas and enclosed structures must be labeled).

(B) Facility Description

The facility description shall include the following:

- (i) a detailed description of the facility including the nature and purpose of the business, the activities conducted and a summary of the waste types and quantities stored, processed and otherwise managed;
- (ii) a description of the facility's management, an organizational chart, a description of duties and responsibilities of operating personnel, and the operating hours for receiving, handling or processing ARSW;
- (iii) a description of the processing equipment, (if any) its purpose, type, size, manufacturer's name, and design capacity of each piece of equipment to be used at the ARSRF.

(C) Operation and Management (O&M) Plan

The O&M Plan shall provide detailed information concerning the matters listed below, as well as any other matters the registrant deems relevant:

(i) Traffic Flow

The O&M Plan shall describe the traffic flow to, from, and within the subject ARSRF including staging, queuing and impact on or off-site.

(ii) Emergency and Preparedness Plan

The O&M Plan shall include an Emergency and Preparedness Plan, as a stand-alone document, that describes the emergency procedures to be implemented in case of a spill, fire, flood, or explosion and the emergency equipment to be utilized.

(iii) Operating Records

The O&M Plan shall include a system for measuring and recording on a daily basis the quantities (in cubic yards or tons) and types of ARSW received by the ARSRF, and as applicable, RAS produced, bulky waste generated, and all incidental waste or materials shipped from such ARSRF. The permittee shall maintain on-site operating records, as specified in Section 5(b) of this general permit as applicable to the ARSRF activity, bills of lading, inspection logs, emergency and spill reports, training records, sampling results for asbestos, and closure cost estimates and financial assurance mechanisms as applicable, all for three (3) years beyond the expiration date of the registration.

(iv) Inspection and Maintenance Procedures

The O&M Plan shall include the Best Management Practices (BMPs) in the control of dust, noise, litter and vectors.

(v) Personnel Training Records

The O&M Plan shall include personnel training records and include, at a minimum, a safety training program outline and the materials handling training program outline for all employees managing and handling ARSW.

(D) Final Closure Plan and Cost Estimate

The Final Closure Plan and Cost Estimate is required to be prepared and submitted for all ARSRFs. This cost estimate shall be based upon third party closure to include, at a minimum, the reloading, transportation and disposal of all unprocessed and processed wastes, as applicable, (including ARSW, RAS, bulky waste, or scrap metal residue) to a permitted solid waste facility.

(E) Financial Assurance Mechanism

Within thirty (30) days of the commissioner's approval of registration or prior to commencement of operation, whichever is sooner, the permittee shall obtain and submit to the commissioner the executed financial assurance mechanism used to comply with the Final Closure Plan, Cost Estimate and Financial Assurance requirements pursuant to Sections 5(a)(1)(D) and 4(c)(2)(G)(iv), respectively, of this general permit.

(2) Revision of Required Plans and Documents

Whenever any significant facility or operational change occurs, the permittee shall update the Facility Site Plan; the Facility Description; the O&M Plan, including the Emergency and Preparedness Plan; the Final Closure Plan and Cost Estimate, and the Financial Assurance Mechanism, as applicable, for the subject facility, and shall submit copies of these revised documents to the commissioner. The permittee shall not make changes that would require a permit modification unless the permit has been modified to authorize such changes. Such plans and documents shall be updated prior to making the changes. The permittee shall maintain updated plans and documents available at the site of the subject ARSRF for inspection.

(3) Emergency Response

- (A) The permittee shall submit to the local fire department, police department and hospital a copy of the facility's Emergency and Preparedness Plan within thirty (30) days of the registration approval date or prior to commencement of operation, whichever is sooner.
- (B) The permittee shall maintain a communications system capable of summoning fire, police, or other emergency service personnel.
- (C) The permittee shall notify the commissioner in the event of a fire or an explosion at the facility. Such notification shall:
  - (i) be immediately reported verbally to the commissioner by using the 24-hour emergency spill response telephone number at (860) 424-3338 or (860) 424-3333 or, if that number is incorrect, the telephone number listed for the Emergency Response and Spill Prevention program with the telephone company;
  - (ii) include a written report submitted within thirty (30) days of the incident, to the Bureau of Materials Management and Compliance Assurance, Waste Engineering and Enforcement Division, that details the cause and effect of the incident, the remedial steps taken and the evaluation and implementation of other measures to abate fires or explosions; and
  - (iii) be recorded in the operating records in a log of emergency incidents.

In addition, the permittee shall comply with all other applicable reporting requirements pursuant to section 22a-450 of the General Statutes.

(4) Wastes and Materials

(A) Allowed Wastes and Materials

The permittee shall engage in only the management of ARSW and/or RAS and such incidental wastes in the area or enclosed structure defined on the ARSRF's site plan.

(B) Prohibited Wastes and Materials

The permittee shall **not** accept:

- (i) ARSW from any other source other than **residential and/or former residential** sources;

- (ii) Any rolled or commercial roofing;
  - (iii) Any asphalt *siding* shingle wastes;
  - (iv) Any hazardous or special waste;
  - (v) Any other construction and demolition waste other than that which may be incidentally associated with post-consumer asphalt roofing shingle waste from residential sources (e.g., tarpaper, wood, metal, nails, etc.); or
  - (vi) Any other solid waste not specifically authorized under this general permit.
- (5) Operation of ARSRF
- (A) The permittee shall design, operate, maintain and repair the ARSRF in conformance with the requirements of this general permit.
  - (B) The permittee shall train all staff that handles ARSW within forty-five (45) days of the Commissioner's approval and at least once each calendar year thereafter. Additionally, the permittee shall train all new staff within forty-five (45) days from the date of hire. The training shall include identification of waste, safety and proper management and handling of all wastes and materials on-site, and knowledge and understanding of the O&M Plan and general permit.
  - (C) The permittee shall post and maintain a sign at the ARSRF entrance identifying, at the minimum, the name of the permittee, the hours of operation and the authorized wastes.
  - (D) The permittee shall take appropriate measures to prevent unauthorized entry onto the site. Appropriate control measures may be accomplished through the use of fences, gates, or other natural or artificial barriers.
  - (E) Access and egress vehicles shall not cause an adverse impact on local traffic.
  - (F) The permittee shall maintain the facility in such a manner as to prevent the harboring, feeding or breeding of vectors.
  - (G) Before the end of each operating day, the permittee shall ensure that all ARSW and materials on site are placed in appropriate storage areas or containers.
  - (H) The permittee shall only receive ARSW during times that sufficient personnel are at the ARSRF to inspect all incoming loads of ARSW.
  - (I) The permittee shall visually inspect each load of ARSW upon its receipt at the ARSRF for the presence of prohibited wastes, incidental waste, mandatory recyclable items and for any suspect ARSW that may contain asbestos.
  - (J) Incidental wastes associated with incoming loads shall not exceed a total of five (5%) percent by volume of the overall load. Should the incidental wastes be determined to be greater than 5%, the entire load shall be rejected, reloaded as necessary and sent to a permitted solid waste facility for reprocessing (separation) or disposal.
  - (K) Maintain records of any rejected loads and report as required by Section 5(b)(1)(H) of this general permit.

- (L) The permittee shall at all times take reasonable precautions to control fugitive dust emissions and odors in accordance with section 22a-174-18 and section 22a-174-23, respectively of the Regulations of Connecticut State Agencies.

**(b) Specific Operating Conditions for all ARSRFs**

(1) ARSRF Storage Requirements

- (A) The permittee shall receive ARSW in containers or in truckloads.
- (B) Upon receipt, all ARSW shall be transferred to an appropriate container or appropriate location as shown on the site plan pursuant to Section 5 (a) (1) (A) for storage.
  - (i) The permittee shall store in container(s) or appropriate location as shown on the approved site plan pursuant to Section 5 (a) (1) (A) and not maintain greater quantities than authorized in accordance with the approval (up to 15,000 cy). In addition, the permittee may store incidental wastes in only one (1) container of no greater than forty (40) cubic yards.
  - (ii) Any storage pile of ARSW or RAS shall not exceed 2,500 cubic yards and the height of any storage pile shall not exceed twenty (20) feet.
  - (iii) All storage piles of ARSW and RAS shall be maintained, at a minimum, of twenty- five (25) feet from any property line.
  - (iv) All containers (i.e., roll-offs) of ARSW or RAS shall be maintained in a row(s) that are at least ten (10) feet from any property line. Each container shall be stored and maintained such that it is immediately accessible in the event of an emergency. All storage containers shall be constructed to store the waste contained therein without impairing the container. Each container or appropriate location (storage pile) shall be closed or covered with a waterproof tarp at all times (except when adding or removing waste).
  - (v) All containers and storage piles of ARSW or RAS shall be placed on a sufficiently impervious surface. For storage piles, the sufficiently impervious surface shall minimize dust, support heavy equipment and be sloped to promote runoff. For containers, the sufficiently impervious surface shall support the container, support heavy equipment and be sloped to promote runoff.
  - (vi) The permittee shall post and maintain a sign that identifies each container, storage pile or area as ARSW, RAS, incidental waste, bulky waste or scrap metal.
  - (vii) Storage piles shall be managed so as to minimize water infiltration and fugitive dust emissions.
  - (viii) The permittee shall ensure that each container is covered when not in use or otherwise prevent accumulation of precipitation into the waste container.
- (C) The maximum facility storage capacity for ARSW and RAS is 15,000 cy pursuant to Section 4(c)(1)(A) of this general permit. The maximum storage container size for incidental waste, bulky waste, and scrap metal is forty (40) cubic yards total. The permittee shall not have on site more than one (1) container per waste type.
- (D) The permittee shall separate incidental waste from incoming loads. Incidental waste shall be stored in a container labeled "Bulky Waste". Such container shall be covered when not in use or otherwise prevent accumulation of precipitation into the waste container. Each container of bulky waste shall have the contents disposed at a permitted solid waste facility within two (2) business days of when the container becomes full.

- (E) Scrap metal commingled with incoming loads of ARSW shall be separated and placed in a designated container. This container shall be labeled "Scrap Metal". Such container shall be covered when not in use or otherwise prevent accumulation of precipitation into the waste container. Each container of scrap metal shall be transported to a scrap metal yard for recycling within two (2) business days of when the container is determined to be full.
- (F) The permittee shall have the contents of each container shipped for recycling or disposal within two (2) business days of when the container becomes full.
- (G) The permittee shall instruct the generators of ARSW of best management practices for the transportation and acceptance requirements of ARSW into the ARSRF.
- (H) The permittee shall maintain operating records that identifies the generator's name, the generator's location, all generator's written certifications (e.g., that post-consumer asphalt roofing shingle waste have been generated from a residential source that was constructed after 1975), the quantity (in cubic yards or tons) of ARSW received, the date the ARSW was received, the quantity of ARSW sent for processing, the date such ARSW was shipped off-site, and the name of the permitted facility to which the ARSW was shipped. Operating records shall also include the quantity of ARSW rejected due to the presence of asbestos or an excess of incidental waste and the facilities that received such waste.
- (I) The permittee shall notify, in writing, all recipients of the RAS of the permitted Beneficial Use and Recycling Requirements as identified in Appendix A of this general permit. Should the permittee become aware that any recipients have used RAS not in compliance with the beneficial use and recycling requirements identified in Appendix A of this general permit, then the permittee shall immediately report such non-compliance to the Bureau of Materials Management and Compliance Assurance, Waste Engineering and Enforcement Division.

(2) ARSRF Processing Requirements

(A) Process Equipment Type:

The permittee shall ensure the process equipment complies with the following specifications:

- (i) All process equipment and associated air pollution control system (i.e., water sprays) shall be installed and operated either as a stationary unit in an enclosed structure or as a mobile unit (e.g., shredder). The enclosed structure for a stationary unit shall, at a minimum, be a building that is roofed and enclosed on all sides or is otherwise enclosed to satisfactorily control dust and litter. The mobile unit shall be operated with a dust abatement system (i.e., water sprays) and be located in a dedicated outdoor area.
- (ii) An industrial magnetic head pulley or other automated equipment must be used to separate metal debris (i.e., nails, sheathing, etc.) from the post-consumer ARSW.
- (iii) Screening equipment must be used to ensure and verify that the unprocessed ARSW can be sized, as needed.

- (B) All process equipment shall be located, at a minimum, of fifty (50) feet from any property line.
- (C) The permittee shall remove tarpaper and metal flashing prior to mechanical processing.
- (D) ARSW received on-site shall be processed to an established industry standard enabling beneficial use and recycling in pursuant to this general permit.
- (E) Wood waste from post-consumer ARSW shall be removed by either hand sorting, floated-off in a flotation unit, or separated from the ARSW in another manner acceptable to the commissioner.
- (F) Testing Requirements for ARSRFs Conducting Processing Activities

- (i) Sampling frequency

The permittee shall conduct sampling for asbestos at the rate of one (1) in every twenty (20) truckloads or containers of ARSW as received at the facility. In addition, the permittee shall conduct asbestos testing of all suspected loads. The following loads of ARSW are excluded from asbestos testing requirements and shall not be counted toward the one (1) in twenty (20) sampling frequency: 1) pre-consumer ARSW that has been certified by the manufacturer as not containing asbestos; 2) ARSW which has been tested by a certified laboratory prior to acceptance and accompanied with documented test results; and 3) any post-consumer ARSW that has been generated from a residential source, documented by the contractor or generator, to have been constructed after 1975.

- (ii) Sampling methods

All samples shall be analyzed using Polarized Light Microscopy (PLM), EPA Test Method 600/R-93-116, OSHA testing method number ID-191, or an equivalent test method approved by the commissioner. The permittee may either send all samples for analyses to a laboratory that is licensed for the referenced test method by the Connecticut Department of Public Health or the permittee may operate laboratory facilities licensed by the Connecticut Department of Public Health to conduct such analyses. Should the permittee decide to conduct the sampling and analyses, the permittee shall retain split samples on-site until the material or waste is sent off-site. In addition, for quality control and quality assurance, the permittee shall have one (1) out of every twenty (20) of its retained samples analyzed for asbestos by an independent laboratory that is licensed by the Connecticut Department of Public Health.

- (iii) Test Results

The permittee shall receive the analytical test results identifying whether asbestos is present in the post-consumer pre-processed ARSW load prior to processing such sampled load.

- (iv) Rejection Criteria

The permittee shall reject all loads that test positive for asbestos. The permittee may, however, retest such loads to verify the test results prior to



rejection. Rejected loads shall immediately be segregated, contained (covered) and removed from the site within two (2) business days to a permitted asbestos waste facility.

(v) Analytical Reports

The permittee shall keep records of all sampling results on site and available should they be requested. The permittee shall submit with the quarterly reports, required pursuant to Section 5(c) of this general permit, a summary of the asbestos analytical test results for all samples taken, the identification and explanation of all anomalies and any conclusions based upon such testing.

(3) RAS Distribution Requirements

Approved ARSRF's are required to distribute Appendix A to all recipients of the RAS material.

(4) ARSRF Operating Record Requirements

The permittee shall log, in written form or a form capable of being transferred to written form, the generator's name, generator's location, the quantity (in tons or cubic yards) of ARSW received, the date the ARSW was received, the quantity of unprocessed ARSW on-site, the quantity of RAS stored on-site, the quantity of RAS shipped off-site and the date it was shipped, the quantity of ARSW rejected due to the presence of asbestos or an excess of incidental waste and the facilities that received such waste, the quantity of scrap metal sent for recycling and bulky waste sent for disposal, and the facilities that received the material or waste, all certifications by pre-consumer ARS manufacturers and post-consumer generators (as defined in Section 5(b)(2)(C)(i) of this general permit), all laboratory analyses, and all facilities where RAS was sent for distribution for beneficial use and recycling. The permittee shall maintain this log as part of the facility operating records and shall make it available in written form upon request by the commissioner.

(5) Final Closure

If the commissioner determines that the permittee has discontinued the permitted activities, or the permittee discontinues the permitted activities, the permittee must implement the Final Closure Plan within one hundred and eighty (180) days of ceasing the activity. The permittee shall notify the department in writing thirty (30) days prior to commencing final closure activities. The permittee shall conduct final closure by transporting and disposing of all solid wastes including all ARSW, RAS, bulky waste, or scrap metal residue to a permitted solid waste facility in accordance with the schedule identified in the Final Closure Plan.

(c) ***Reporting and Recordkeeping Requirements for all ARSRFs***

Unless other reporting requirements are approved by the commissioner, all facilities authorized pursuant to this general permit shall maintain and submit operating records as specified in Section 5(a)(1) of this general permit and shall submit quarterly reports to the department as required pursuant to section 22a-209-10(13) of the Regulations of Connecticut State Agencies on forms provided by the commissioner. These quarterly reports shall be submitted to the Solid Waste Program or its successor division of the department by no later than ten (10) days after the last day of each quarter of the calendar year.

**(d) *Reliance on Registration***

When evaluating a registration, the commissioner relies on information provided by the registrant. If such information proves to be false or incomplete, the authorization issued under this general permit may be suspended or revoked in accordance with law, and the commissioner may take any other legal action provided by law.

**(e) *Duty to Correct and Report Violations***

Upon learning of a violation of a condition of this general permit, a permittee shall immediately take all reasonable action to determine the cause of such violation, correct such violation and mitigate its results, prevent further such violation, and report in writing such violation and such corrective action to the commissioner within five (5) days of the permittee learning of such violation. Such report shall be certified in accordance with Section 5(g) of this general permit.

**(f) *Duty to Provide Information***

If the commissioner requests any information pertinent to the authorized activity or to compliance with this general permit or with the permittee's approval of registration, the permittee shall provide such information in writing within thirty (30) days of such request. Such information shall be certified in accordance with Section 5(g) of this general permit.

**(g) *Certification of Documents***

Any document, including but not limited to any notice, which is submitted to the commissioner under this general permit shall be signed by, as applicable, the registrant or the permittee in accordance with section 22a-430-3(b)(2) of the Regulations of Connecticut State Agencies, and by the individual or individuals responsible for actually preparing such document, each of whom shall certify in writing as follows:

"I have personally examined and am familiar with the information submitted in this document and all attachments thereto, and I certify that, based on reasonable investigation, including my inquiry of those individuals responsible for obtaining the information, the submitted information is true, accurate and complete to the best of my knowledge and belief. I understand that a false statement made in the submitted information may be punishable as a criminal offense, in accordance with section 22a-6 of the General Statutes, pursuant to section 53a-157b of the General Statutes, and in accordance with any other applicable statute."

**(h) *Date of Filing***

For purposes of this general permit, the date of filing with the commissioner of any document is the date such document is received by the commissioner.

**(i) *False Statements***

Any false statement in any information submitted pursuant to this general permit may be punishable as a criminal offense, in accordance with section 22a-6, pursuant to section 53a-157b of the General Statutes, and in accordance with any other applicable statute.

**(j) *Correction of Inaccuracies***

Within fifteen (15) days after the date a permittee becomes aware of a change in any of the information submitted pursuant to this general permit, becomes aware that any such information is inaccurate or misleading, or that any relevant information has been omitted, such permittee shall correct the inaccurate or misleading information or supply the omitted information in writing to the commissioner. Such information shall be certified in accordance with Section 5(g) of this general permit. The provisions of this subsection shall apply both

while a request for approval of registration is pending and after the commissioner has approved such request.

**(k) *Transfer of Authorization***

An approval of registration under this general permit is non-transferable.

**(l) *Other Applicable Law***

Nothing in this general permit shall relieve the permittee of the obligation to comply with any other applicable federal, state and local law, including but not limited to the obligation to obtain any other authorizations required by such law.

**(m) *Other Rights***

This general permit is subject to and does not derogate any present or future rights or powers of the State of Connecticut and conveys no rights in real or personal property nor any exclusive privileges, and is subject to all public and private rights and to any federal, state, and local laws pertinent to the property or activity affected by such general permit. In conducting any activity authorized hereunder, the permittee may not cause pollution, impairment, or destruction of the air, water, or other natural resources of this state. The issuance of this general permit shall not create any presumption that this general permit should or will be renewed.

**Section 6. Commissioner's Powers**

**(a) *Abatement of Violations***

The commissioner may take any action provided by law to abate a violation of this general permit, including the commencement of proceedings to collect penalties for such violation. The commissioner may, by summary proceedings or otherwise and for any reason provided by law, including violation of this general permit, revoke a permittee's authorization hereunder in accordance with sections 22a-3a-2 through 22a-3a-6, inclusive, of the Regulations of Connecticut State Agencies. Nothing herein shall be construed to affect any remedy available to the commissioner by law.

**(b) *General Permit Revocation, Suspension, or Modification***

The commissioner may, for any reason provided by law, by summary proceedings or otherwise, revoke or suspend this general permit or modify it to establish any appropriate conditions, schedules of compliance, or other provisions which may be necessary to protect human health or the environment.

(c) ***Filing of an Individual Permit Application***

If the commissioner notifies a permittee in writing that such permittee must obtain an individual permit if the permittee wishes to continue lawfully conducting the activity authorized by this general permit, the permittee may continue conducting such activity only if the permittee files an application for an individual permit within thirty (30) days of receiving the commissioner's notice. While such application is pending before the commissioner, the permittee shall comply with the terms and conditions of this general permit and the subject approval of registration. Nothing herein shall affect the commissioner's power to revoke a permittee's authorization under this general permit at any time.

Issued Date: June 2, 2011

AMEY W. MARRELLA

Deputy Commissioner

This is a true and accurate copy of the general permit executed on June 2, 2011 by the Deputy Commissioner of the Department of Environmental Protection.

## General Permit for Storage and Processing of Asphalt Roofing Shingle Waste (ARSW) for Beneficial Use and Recycling

### Appendix A: Beneficial Use and Recycling Requirements

*Approval of the beneficial use of Recycled Asphalt Shingles (RAS) as required pursuant to this general permit is not an endorsement of RAS for their advertised benefits as asserted by the permittee. This Beneficial Use Determination means when RAS is used in accordance with the Beneficial Use Requirements of this Determination then this solid waste is not subject to a permit under Chapters 446d and 446k of the General Statutes.*

The permittee shall notify, in writing, all recipients of the RAS of the permitted Beneficial Use and Recycling Requirements for this material as identified in this appendix.

- (1) **RAS shall only be used according to industry standards (a) in the manufacturing of new shingles, (b) in the construction of roads and parking lots, (c) as an ingredient in sub-base and/or aggregate base, (d) in bituminous concrete for patching (cold patch) applications, and/or (e) in hot mix binder applications.**
- (2) RAS shall only be used in areas where it can be placed at least 18 inches above the seasonal high ground water table.
- (3) Should the RAS be intended for use as an ingredient in the production process at a hot mix asphalt plant, than prior to RAS use, the owner or operator of such hot mix asphalt plant shall determine if such usage constitutes a license modification or revision pursuant to section 22a-174-2a of the Regulations of Connecticut State Agencies.
- (4) All recipients of RAS must comply with section 22a-174-29 of the Regulations of Connecticut State Agencies, and may be subject to air emissions compliance demonstration monitoring or testing.