

Site Management Plan Requirements
Asphalt Shingle Recycling
August 1, 2008

Asphalt shingles produced by shingle manufacturers or generated in the construction or demolition of residential buildings (Shingles) are a solid waste pursuant to Part 115, Solid Waste Management, of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended (NREPA). However, Shingles that are recycled into hot mix asphalt are granted a site/source separated exemption from the definition of solid waste (Section 324.11506(6) of Part 115 of the NREPA) if they are handled in accordance with the provisions of the Asphalt Shingle Exemption (Exemption), dated September 7, 2007.

Condition 6 of the Exemption states that Shingle processing and storage must be done either in a building, in an area meeting the waste pile containment rules of R299.4130 of the Part 115 of the NREPA rules, or in a manner approved in writing by the district supervisor of the Department of Environmental Quality (DEQ), Waste and Hazardous Materials Division. In order to obtain this approval, a detailed, comprehensive site management plan must be submitted and approved. This plan must contain the following:

1. Legal name of the company collecting and processing Shingles, location of business, and name and telephone number of contact person.
2. Name and address of asphalt plant intending to use the Shingles, and name and telephone number of contact person, along with a written commitment to take a volume of Shingles, contingent upon the DEQ's approval to use the Shingles in the plant's process.
3. Documentation of compliance with local zoning.
4. A statement that all other applicable permits, including local and state storm water permits, and an air permit, have either been applied for or obtained.
5. A statement that vehicles used to transport the Shingles shall comply with the Michigan Vehicle Code, 1949 PA 300, as amended, and the rules promulgated under that act, and that the Shingles will be contained in a manner that prevents loss to the environment during transport and delivery.
6. A narrative description of the source of the Shingles, specifically indicating that they will come from either shingle manufacturers or from the construction or demolition of residential buildings of four units or less, and that this will be certified by each driver that delivers Shingles to the site.
7. Collection details, including specific procedures for Shingle staging and inspection to ensure that no more than ten percent solid waste is accepted into the facility. This shall include procedures for refusal of loads. Details regarding the inspection and testing of Shingles for asbestos material will be specified in the air permit.
8. Storage piles of both the unprocessed and processed Shingles must be contained within three-sided shelters, or some other structure that will provide equivalent containment. Additionally, the processed shingle piles must be tarped at the end of the day and during precipitation events. This will keep the piles from spreading, and avoid leachate generation and runoff. A narrative describing the materials and a sketch of the design for these structures, as well as procedures for their use and a plan view map of their location, must be included in the site management plan.

Site Management Plan Requirements

Asphalt Shingle Recycling

2 of 2

August 1, 2008

9. Processing details, including a narrative and schematic of the grinding process. The Shingles must be ground so that 95 percent of the product is less than ½ inch by ½ inch in size. Only minimal water that is consumed by the process must be used, so that no runoff is generated. Nails and other metals must be recovered and either disposed of or recycled. An estimate of the annual processing volume for the facility must also be included.
10. Handling details, including a statement that at least 75 percent of the Shingles accepted at the site each calendar year will be recycled or removed by the end of that year. Additionally, procedures for recycling or proper disposal of any solid waste must be included. Recyclable materials must be stored in the same manner as the Shingles: within a three-walled structure with a tarp cover after hours or during precipitation events. Solid waste intended for the landfill must be stored in covered roll-off boxes and removed from the site within one week of separation from the Shingles. The plan must state that disposal of solid waste will be in compliance with Part 115 of the NREPA, the county solid waste plan, and local flow control agreements.
11. Temporary storage and disposal procedures for shingle loads tested and found to contain asbestos.
12. Record keeping and reporting details, with a description of the site's method for keeping records of the material accepted at the facility, including its source, volume or weight, and percentage of solid waste. The plan must state that copies of records showing compliance with Condition 5 (no speculative accumulation) and Condition 11 (proper disposal of solid waste) of the Exemption must be submitted by January 31st of each year, in accordance with Condition 13 of the Exemption.
13. Dust control plan, in accordance with DEQ, Air Quality Division requirements.
14. Storm Water Pollution Prevention Plan (SWPPP), specific to the site, and designed to ensure that storm water runoff from the site will not contain contaminants associated with the processing or storage of Shingles.
15. Certified Storm Water Operator shall have supervision over the facility's storm water treatment and control measures identified in the SWPPP.
16. No collection, storage, or processing of Shingles shall occur until the following is received:
 - Proof that the DEQ, Air Quality Division has issued the required air permit(s).
 - Proof that the asphalt plant is approved by the DEQ, Air Quality Division to use the processed Shingles in their process.
 - Proof that the DEQ, Water Bureau has issued an industrial storm water permit.
 - Site construction is completed in accordance with the approved plan, and inspected and approved by the DEQ.