



Beneficial Use of Scrap Tires

Purpose

This educational guideline addresses the beneficial use of scrap tires and is intended to guide readers through some of the major requirements of the scrap tire rules. However, it is only a guide and the appropriate sections of the Ohio Administrative Code should be read in their entirety.

The information presented in this document is intended to explain when Ohio EPA authorization in accordance with Ohio Administrative Code Rule 3745-27-78 is required prior to the beneficial use of whole, cut, and processed scrap tires, and if so, how authorization can be obtained. Other governmental restrictions, such as building and fire codes may require additional approvals.

The director of Ohio EPA is responsible for approving beneficial use project plans based on criteria in Ohio Administrative Code Rule 3745-27-78(J). These criteria include determining whether or not the use of whole, cut, or processed scrap tires will provide a sound engineering or financial benefit over the material normally used in each type of project.

The storage and use of 100 or fewer scrap tires is not regulated by law unless such storage or use is likely to cause a public nuisance, health or fire hazard. If the scrap tires are determined by Ohio EPA or the local health department to not be a beneficial use, the tires will be classified as open dumped and will need to be moved to a licensed scrap tire facility.

Applicable Rules and Statutes

- Ohio Revised Code 3734
- Ohio Administrative Code 3745-27-78

Pre-Approved Uses of Whole Scrap Tires, Cut Scrap Tires and Scrap Tire Pieces

All pre-approved beneficial uses of whole, cut, and processed scrap tires are listed in paragraphs (D) and (E) of Ohio Administrative Code Rule 3745-27-78 and, therefore, do not require a project plan to be submitted and approved by Ohio EPA. However, prior notification is required to the appropriate Ohio EPA district office and local health department.

The pre-approved beneficial uses of whole or cut scrap tires listed in Ohio Administrative Code Rule 3745-27-78(D) include:

- agricultural and landfill use to hold down tarps and covers (250 whole tires and 5,000 sidewalls maximum);
- crash barriers around race tracks (1,500 tires maximum); and
- backstops for rifle ranges (1,500 tires maximum).

Pre-approved uses of processed scrap tires include several different civil engineering uses such as a drainage aggregate (i.e., sand and gravel) substitute in:

- solid waste landfill leachate collection systems and other civil engineering uses in the landfill as authorized in the landfill's permit;
- construction and demolition debris landfill leachate collection systems and other civil engineering uses in the landfill as authorized in the facility license or permit;
- on-site residential septic system leach fields;
- drainage around building foundations and building foundation insulation;
- covering material for playgrounds if all wire is removed;
- construction material and lightweight fill in the construction of public roadways, public parking, and public road embankment construction, if the use of shredded scrap tires is specifically approved by a government official responsible for the engineering and construction of the public roads and the public construction projects.

The benefits of processed scrap tire in civil engineering uses have been studied and evaluated by the American Society of Testing and Materials (ASTM). The most recent results and design guidelines are described in ASTM publication D6270-17. Historical ASTM publications related to the use of processed scrap tires in civil engineering applications include ASTM D6270-98, D6270-98 (2004), D6270-08, D6270-08e1 and D6270-08(2012). ASTM Publications can be obtained by calling (610) 832-9500 or visiting ASTM's website at: www.astm.org.

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The use of processed tires as a construction material in landfills must be authorized in the solid waste landfill's permit or the construction and demolition debris landfill's license. This authorization must be obtained before using the processed scrap tire material.

All beneficial use projects require that a report of project completion be made to Ohio EPA-DMWM's Scrap Tire Unit within 60 days of project completion. This information is intended for informational purposes to record the number of scrap tires used in all successfully completed beneficial use projects in Ohio. For landfills with ongoing uses of scrap tires, annual reporting is requested.

Ohio Beneficial Use Project Plans

Beneficial use projects of whole, cut, and processed scrap tires which are not pre-approved in Ohio Administrative Code Rule 3745-27-78 (D) or (E) require a project plan to be submitted to and reviewed by Ohio EPA, usually the appropriate Ohio EPA district office where the project is to be built. Information to be included in project plans is listed in Ohio Administrative Code Rule 3745-27-78 (G) and (H). Paragraph (J) of this same rule describes the criteria to be considered by the director of Ohio EPA prior to beneficial use approval.

Beneficial use project plans may be submitted by individual landowners (of the property where the project is proposed) or by the company proposing to complete the project.

Additional Authorizations

Depending on the specific beneficial use proposed, authorizations may be required by other local and/or state regulatory offices such as local building code enforcement offices, zoning authorities, local health departments, etc.

Some uses which may also require other (non-Ohio EPA) office approvals include, but are not limited to, the following types of uses: 1) drainage material for residential on-site septic system leach fields will require additional approval coordination through the local health department; 2) drainage material in building foundations may require a building code variance, etc.

Who can haul scrap tires to a beneficial use site?

If the whole, cut or processed scrap tire material measures 4 inches or larger in any dimension, the material must be hauled and delivered by an Ohio EPA registered scrap tire transporter. The list of currently registered scrap tire transporters can be viewed online at:

http://epa.ohio.gov/portals/34/document/facility_lists/scrap_tire_transporters.pdf or you may call Ohio EPA's Division of Materials and Waste Management in Central Office at (614) 644-2621 to receive a current list of registered scrap tire transporters.

For authorized beneficial uses of processed scrap tires measuring 4-inches or less in all dimensions, any hauler may be used.

Storage Prior to Beneficial Use

Whole, cut, and processed scrap tires must be properly stored prior to beneficial use. If the whole, cut, or processed scrap tires are not placed into the beneficial use project on the day they are delivered, storage must be in accordance with paragraph (C) of Ohio Administrative Code Rule 3745-27-78.

Disposal After a Beneficial Use

If the tire material is removed from a beneficial use site, the tire material may be recycled at a scrap tire facility, reused at another approved beneficial use project, or disposed as a solid waste.

Contact

If you have questions regarding this document or would like more information, please contact the Scrap Tire Unit located in the Division of Materials and Waste Management at (614) 644-2621.

Central District Office (614) 728-3778

Northeast District Office (330) 963-1200

Northwest District Office (419) 352-8461

Southeast District Office (740) 385-8501

Southwest District Office (937) 285-6357

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