Division of Materials and Waste Management
August 2023

Guidance Document #671

Beneficial Use of Scrap Tires

Purpose

This educational guideline addresses the beneficial use of scrap tires and is intended to guide readers through the major requirements of the scrap tire rules.

The information presented in this document is intended to explain when Ohio EPA authorization in accordance with Ohio Administrative Code Rules 3745-580-801 and 580-802 are required prior to the beneficial use of whole, cut, and shredded scrap tires, and if so, how authorization can be obtained. 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, fire departments and local health departments.

The director of Ohio EPA is responsible for approving beneficial use projects based on criteria in Ohio Administrative Code Rule 3745- 580-803. These criteria include determining whether or not the use of whole, cut, or shredded 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.

What are the pre-approved beneficial uses for scrap tires?

Pre-approved beneficial uses of whole, cut, and shredded scrap tires do not require a project 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 3745-580-801(B) 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);
- backstops for rifle ranges (1,500 tires maximum); and
- tire-derived cylinder that performs as an aggregate confining system in roads, driveways, or parking lots (1,500 tires maximum);

The pre-approved beneficial uses for shredded scrap tires and other uses for whole, sidewalls and shredded scrap tires that are required to meet the standards as specified in the latest version of the applicable ASTM identified in Ohio Administrative Code Rule 3745-580-801(C) include:

- shredded scrap tires used for landscaping mulch and equestrian surfacing;
- shredded scrap tires used as a bulking agent for compost
- whole and side wall scrap tires used in the construction of retaining walls, drainage culverts, and road-base reinforcement;
- shredded scrap tires in solid waste landfill leachate collection systems and other civil engineering uses in the landfill as authorized in the landfill's permit;
- shredded scrap tires in construction and demolition debris facility leachate collection systems and other civil engineering uses in the landfill as authorized in the facility license or permit;
- shredded scrap tires used as light weight fill or construction material in public roadways, public parking, and public road embankment construction; shredded scrap tires used as light weight fill or construction material in private roadways and private parking;
- shredded scrap tires used as gravel substitute in septic system leach fields;

Beneficial Use of Scrap Tires

- shredded scrap tires used as drainage around building foundations and building foundation insulation;
- shredded scrap tires used as a gravel substitute around drainage tiles and pipes;
- shredded scrap tires used as vibration damping layers for rail lines
- shredded scrap tires used for playground surfacing

The benefits of scrap tires in civil engineering uses have been studied and evaluated by the American Society of Testing and Materials (ASTM). The latest version is ASTM publication D6270-20. ASTM Publications can be obtained by calling (610) 832-9500 or visiting ASTM's website at: ***www.astm.org***.

The use of shredded scrap 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 shredded scrap tire material.

What if the scrap tire beneficial use is not pre-approved in rule?

Beneficial use projects of whole, cut, and shredded scrap tires which are not pre- approved in OAC Rule 3745-580-801 require a project application to be submitted to and reviewed by the appropriate Ohio EPA district office where the project is to be performed. Information that is required to be included in the project application is listed in Ohio Administrative Code Rule 3745-580-802. OAC Rule 3745-580-803(B) describes the criteria to be considered by Ohio EPA prior to beneficial use approval.

Beneficial use projects may be submitted by individual landowners (of the property where the project is proposed) or by the individual or company proposing to complete the project. When projects are not submitted by the property owner, written authorization from the property owner to beneficially use the scrap tires on the property is required.

Who can haul scrap tires to a beneficial use site?

If the whole, cut or shredded 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: ***List of Registered Scrap Tire Transporters*** 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. Written permission to have scrap tires transported by an unregistered scrap tire transporter for a beneficial use can be sought from Ohio EPA.

How do scrap tires have to be stored prior to placement in the beneficial use application?

Whole, cut, and shredded scrap tires must be properly stored prior to beneficial use. If the whole, cut, or shredded scrap tires are not placed into the beneficial use project on the day they are delivered, storage must be in accordance with OAC Rule 3745-580-810(B).

How do I dispose of scrap tires once removed from 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.

References

- Ohio Revised Code 3734
- Ohio Administrative Code Rules 3745-580-800 through 3745-580-825

Contact

For more information, contact the Central Office Scrap Tire Unit at 614-644-2621.