

Beneficial Uses 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/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;

Beneficial Uses of Scrap Tires

- 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 results and design guidelines are described in ASTM publication D6270-98 (2004), Standard Practice for Use of Scrap Tires in Civil Engineering Applications, which can be obtained by calling (610) 832-9555 or visiting ASTM's Web site at: <http://www.astm.org>.

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-DSIWM'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 EPA 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 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://www.epa.state.oh.us/dsiwm> or you may call Ohio EPA's Division of Solid and Infectious Waste Management in Central Office at (614) 644-2621 to receive a current list of registered scrap tire transporters.

Beneficial Uses of Scrap Tires

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.

POINT OF CONTACT

Northeast District Office DSIWM Supervisor at
Twinsburg: 330-963-1200

Northwest District Office DSIWM Supervisor at
Bowling Green: 419-352-8461

Central District Office DSIWM Supervisor at
Columbus: 614-728-3778

Southeast District Office DSIWM Supervisor at
Logan: 740-385-8501

Southwest District Office DSIWM Supervisor at
Dayton: 937-285-6357

Central Office-Scrap Tire Unit at Columbus:
614-644-2621

DISCLAIMER

The procedures set out in this document are intended solely for guidance. The procedures are not intended and cannot be relied upon to create rights, substantive or procedural, enforceable by any party against Ohio EPA. While this guidance document is not legally binding, all statutes and rules referenced herein are binding and enforceable. Ohio EPA reserves the right to vary this guidance or to change it at any time without public notice and also reserves the right to deviate from this guidance on a case-by-case basis.