

Used Antifreeze

Why is used antifreeze a concern?

Antifreeze is a common engine coolant used in automobiles. It usually contains ethylene glycol or propylene glycol. Small amounts of ethylene glycol can cause health problems if swallowed by people or pets. Environmental contamination can occur when antifreeze is improperly disposed of or handled. Spent antifreeze poured onto the ground or into septic systems may eventually contaminate the groundwater. Antifreeze poured into storm drains, ditches, streams, lakes, etc., will contaminate surface water. Improper disposal may also result in drinking water supplies becoming contaminated.

How is used antifreeze regulated?

Used antifreeze that is generated by businesses, institutions or public agencies is subject to applicable state and federal hazardous waste management requirements. Under these requirements generators must determine if their wastes are hazardous. Refer to DEQ's Waste Determination Fact sheet. Management of used antifreeze produced by household "Do-It-Yourselfers" is not subject to these management requirements, and is discussed at the end of this fact sheet.

Oregon's antifreeze guidance

The Oregon Department of Environmental Quality (DEQ) has determined that used antifreeze that is recycled and properly managed according to the following "Best Management Practices" (BMPs) generally will not exhibit hazardous waste characteristics. Waste antifreeze managed according to the following practices will not be considered to be hazardous waste by the DEQ.

Used antifreeze Best Management Practices

Generators that use the following Best Management Practices and legitimately recycle their used antifreeze are presumed by DEQ, to comply with hazardous waste management requirements. Make sure that:

- Used antifreeze is stored in containers that are in good condition and labeled with the words "Used Antifreeze."
- Used antifreeze is not mixed with any waste or other material (e.g., solvents, cooling system flushes, used oil, motor fuels). Used antifreeze must be managed according to applicable hazardous waste regulations if it

has been mixed with listed or characteristic hazardous waste.

- Antifreeze collection, storage and transport containers or tanks are dedicated solely to the transfer and storage of antifreeze, to prevent the risk of cross-contamination.
- Used antifreeze containers are kept closed, except when emptying or filling, to minimize the potential for spillage.
- Used antifreeze containers are located in a secure area and properly maintained so that they do not leak, rupture, or tip over when being opened, handled, or stored.
- Spills of used antifreeze are cleaned up immediately and appropriately managed. (Non-recyclable spill cleanup wastes must undergo a hazardous waste determination before disposal.)
- Volumes of accumulated used antifreeze are minimized by routinely recycling to reduce the potential for environmental harm.
- The used antifreeze generator and the recycling facility maintain proof of recycling (e.g., a log for on-site recycling or an invoice or bill of lading for off-site recycling).
- Employees who handle or otherwise manage used antifreeze know proper handling and spill response procedures.

Used antifreeze that is not legitimately recycled according to the above Best Management Practices is subject to management as a potential hazardous waste. Used antifreeze mixed with other waste or material, such as caustic radiator flushing chemicals or used oil, reduces the recyclability of the antifreeze and is not considered legitimate recycling under this guidance.

Antifreeze management options

Acceptable methods for managing used antifreeze include: recycling; disposal at a hazardous waste treatment, storage, or disposal (TSD) facility; or discharge to a wastewater treatment plant (with prior approval of the operator). Please note that many wastewater treatment plant operators prohibit the disposal of used antifreeze to their systems because of the possibility of damaging the treatment system.

Antifreeze should not be disposed of by throwing it in the trash, pouring it down the storm sewer, or putting it into septic systems. Many storm sewers discharge directly to surface waters, such as ponds or streams. If poured into a



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Hazardous Waste
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septic system, the antifreeze may damage the system by killing the microorganisms necessary for waste decomposition.

Recycling used antifreeze is the preferred option.

Not only is recycling the most environmentally safe and responsible option, but it may also be more cost efficient than disposing of the waste and buying new product. Widely available antifreeze recycling options include distillation, ion exchange and filtration.

Used antifreeze may be recycled at the generator's facility, or it may be transported to a recycling facility for reclamation.

A hazardous waste determination must be made on all wastes produced by the recycling process, such as filters and sludges, produced by the recycling process and the waste managed appropriately.

Used antifreeze generated by household do-it-yourselfers

Used antifreeze from households should be taken to a hazardous waste collection facility or collection event for proper recycling or disposal.

If you live in the Portland metropolitan area, contact the Metro Recycling Information Center at (503) 234-3000 for used antifreeze disposal/recycling locations. If you live outside the Portland metro area, contact the toll-free hotline at 1-800-732-9253 for facilities that accept used antifreeze for recycling or upcoming household hazardous waste collection events. If collection is not available in your community, contact the local sewer district to see if disposal of small amounts of used antifreeze to the sanitary sewer is permitted. **Never** pour used antifreeze on the ground, down a dry well or storm drain, or in your septic system.

Used antifreeze recycling services

The following companies recycle or dispose of used antifreeze. This list is neither a DEQ endorsement nor a guarantee that the used antifreeze will be managed according to federal or state regulations. It is not a complete list of companies managing used antifreeze in Oregon.

Many of the companies listed also sell recycled antifreeze. When choosing a management company be sure that you know how the used antifreeze is managed and recycled. Not all companies claiming to recycle antifreeze produce a useable recycled product that can be used as a glycol feedstock or antifreeze product. Unusable materials end up being disposed, frequently in a manner that can adversely affect the environment. It is the responsibility of the generator to ensure their waste is managed properly.

Emerald Services

(Vancouver, WA) (888)832-3008

Industrial Oils

(Klamath Falls) (541) 884-9124

MSE Environmental

(Washougal) (206) 767-7990

Oil Re-refining

(Portland) (800) 367-8894

Onyx Environmental Services

(Vancouver, WA) (360) 607-3097

Philip Services Corporation

(Washougal, WA) (800) 547-2436

Romic Environmental / Antifreeze Environmental Service Corp.

(Clackamas) (888) 242-8592

Safety Kleen Systems, Inc.

(Clackamas) (503) 655-5798

(Springfield) (541) 747-5804

Thermo Fluids

(Portland) (503) 788-4612

Univar, USA

(Portland) (503) 222-1721

For more information

For additional information on specific hazardous waste management requirements, contact DEQ's Waste Reduction Assistance Program at the location nearest you:

Northwest Region Office: 700 NE Multnomah St, Suite 600, Portland, OR 97232-4100, 503-229-5696

Bend office: 475 NE Bellevue, Suite 110, Bend, OR 97701, 541-388-6146

Pendleton office: 800 SE Emigrant, Suite 330, Pendleton, OR 97801, 541-276-4063

Salem office: 4026 Fairview Industrial Dr, SE, Salem, OR 97302, 503-378-8240

Eugene office: 165 E. 7th Ave., Suite 100, Eugene, OR 97401, 541-686-7838

Alternative formats

Documents can be provided upon request in an alternate format for individuals with disabilities or in a language other than English for people with limited English skills. To request a document in another format or language, call DEQ in Portland at 503-229-5696, or toll-free in Oregon at 1-800-452-4011 or email deqinfo@deq.state.or.us.