



# Florida Department of Environmental Protection

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## **BEST MANAGEMENT PRACTICES FOR MANAGING USED ANTIFREEZE AT VEHICLE REPAIR FACILITIES**

### ***Introduction***

The Department encourages the proper recycling of used antifreeze at vehicle repair facilities. In order to promote the collection and recycling of used antifreeze by generators and handlers, the Department has developed best management practices (BMPs) for antifreeze that is destined for recycling. Used antifreeze may be recycled on-site or off-site using the BMPs detailed below. Used antifreeze generated from vehicle repair facilities is exempt from hazardous waste regulation if it is recycled according to the BMPs outlined in this fact sheet.

If you don't recycle antifreeze, a hazardous waste determination must be made as required by Title 40, Code of Federal Regulation (CFR), Section 262.11. For more information on used antifreeze disposal refer to the section entitled "Management of Used Antifreeze Destined for Disposal".

*The BMPs outlined in this fact sheet apply to used antifreeze generated from vehicle repair facilities that repair vehicles including passenger cars, trucks, motorcycles, off road vehicles, heavy duty on or off road vehicles.*

### ***Background***

Improper disposal of antifreeze can cause environmental problems. Antifreeze is made up of water and ethylene or propylene glycol. Neither of these unused ingredients would be regulated as a hazardous waste in Florida. However, heavy metal contaminants such as lead and organics such as benzene, tetrachloroethylene (PERC) or trichloroethylene have been found in used antifreeze from passenger vehicles at levels that would identify the used antifreeze as hazardous waste. Under the federal and state hazardous waste regulations, any waste containing regulated levels of certain heavy metals or organics would be hazardous waste.

The Department believes that most hazardous waste constituents found in used antifreeze generated from vehicle repair facilities are the result of cross contamination from other sources that can be eliminated through best management practices designed to segregate used antifreeze from other sources of hazardous waste contamination.

## **Management of Used Antifreeze Destined for Recycling**

- The mixing of used antifreeze with used oil for the purpose of burning this commingled material for energy recovery is NOT considered to be used antifreeze recycling under these BMPs.
- Treatment of used antifreeze at a wastewater treatment plant is NOT considered to be “recycling” under these BMPs.
- You SHOULD ENSURE that the used antifreeze is recycled at the recycling facility.

### ***Container or Tank Management, Handling and Storage***

- Use dedicated antifreeze collection equipment. This would include collection funnels, transfer pans or buckets, and storage containers (drums or tanks). Transfer used antifreeze immediately to a dedicated storage container.
- Keep stored antifreeze free from cross-contamination by oil, fuels and degreasers by providing a separate, well-labeled storage container meeting DOT specifications/UN performance criteria.
- Storage containers must be in good condition. Replace leaking containers immediately.
- Storage containers must be compatible with the antifreeze stored in them.
- Keep antifreeze storage containers closed at all times except when emptying or filling.
- Inspect storage containers at least weekly to check for signs of leaks or deterioration caused by corrosion or other factors.
- Storage containers should be protected from the elements and located in a secured area.

### ***Labeling/Marking***

- Label used antifreeze collection equipment and storage containers with the words “Used Antifreeze”.
- Label reconditioned or recycled antifreeze storage containers with the words “Reconditioned Antifreeze” or “Recycled Antifreeze”.

### ***Accumulation Volume Limits***

- Never accumulate more than 2,200 pounds (or five fifty-five gallon full drums) of used antifreeze.

### ***Filter Management***

It is the Department’s experience that used antifreeze filters generated by the facility operator (generator) will generally not fail the Toxicity Characteristic Leaching Procedure (TCLP) test. Therefore, generators may recycle their used antifreeze filters with the facility’s used oil filters, if the used oil filter recycler agrees in writing. However, when the antifreeze filters are generated by processors or vendors who service

generators of used antifreeze filters, the processor or vendor should make a hazardous waste determination.

### ***Record Keeping***

Keep all receipts of used antifreeze shipments and filter management for at least three years. The written receipts or records must include:

- Name and address of the generator and the recycling facility for off-site shipments;
- The amount of used antifreeze shipped off-site or recycled on-site;
- The amount of used antifreeze filters shipped off-site; and the
- Date of shipment or recycling.

### ***Recycling and the Resale of Reconditioned/Recycled Antifreeze***

- Currently, the Florida Department of Agriculture and Consumer Services does not register “recycled” antifreeze/coolant products. However, you are subject to registration if your antifreeze/coolant product is marketed and distributed by brand name in a sealed package unit. Contact the Florida Department of Agriculture and Consumer Services, Division of Standards at (850) 488-9740 for additional information.

## **Management of Used Antifreeze Destined for Disposal**

### ***Make a Hazardous Waste Determination***

1. Make a hazardous waste determination by testing the used antifreeze using the Toxicity Characteristic Leaching Procedure (TCLP), Test Method 1311, or by applying knowledge of the waste in light of the materials or the processes used. Since the quality and nature of used antifreeze can be dependent upon conditions not in the control of the generator of the used antifreeze (e.g., type of radiator, maintenance, additives, etc.), it may not be possible to use product or process knowledge without first testing to make a hazardous waste determination. A generator can establish product knowledge by initially testing to determine whether the used antifreeze is, or is not, hazardous waste. Product knowledge (based on initial testing) may be used until the process changes.
2. Testing can be limited to the contaminants that are most likely to be found in the used antifreeze. These include lead, benzene, tetrachloroethylene (PERC) and trichloroethylene.
3. Copies of all notices, certifications, waste analysis data, and other documentation must be retained for three years.

### ***Managing Your Hazardous Waste***

1. Facilities generating 220 pounds per month or greater of all hazardous waste are subject to the requirements of 40 CFR, Parts 262 through 268, 270 and the notification requirements of Section 3010 of RCRA. Small Quantity Generators (SQGS) and Large Quantity Generators (LQGs) of hazardous waste cannot offer

used antifreeze that is hazardous waste to an unregistered hazardous waste transporter.

2. Facilities generating less than 220 pounds of hazardous waste per month and accumulating no more than 2,200 pounds of hazardous waste at any time are not subject to the requirements of 40 CFR, Parts 262 through 268, 270 and the notification requirements of Section 3010 of RCRA provided they comply with 40 CFR, Section 261.5, "Special requirements for hazardous waste generated by conditionally exempt small quantity generators (CESQGs)" of hazardous waste.
3. CESQG facilities must ensure delivery of hazardous waste to a proper recycling or treatment, storage, or disposal facility. They do not have to use a registered hazardous waste transporter. CESQGs which choose to send their hazardous waste to a recycling facility or an off-site treatment, storage or disposal facility shall document delivery of the hazardous waste through written receipts or other records which are retained for at least three years. The written receipts or other records shall include names and addresses of the generator and the recycling, treatment, storage or disposal facility, the type and amount of hazardous waste delivered, and the date of shipment.
4. The generator or recycler must comply with Florida's pretreatment standards and any applicable local discharge limits for discharges to the sewer. Hazardous waste discharges greater than 15 kg per calendar month must be reported to the local utility authority and the Department's hazardous waste and pretreatment authorities in writing. Additional information on discharges of hazardous waste to the sewer can be found in Rule 62-625.600 (15), Florida Administrative Code.
5. Never dispose of used antifreeze to septic systems or the ground, whether hazardous or non-hazardous.

The Department encourages the proper recycling of used antifreeze. There are used antifreeze service companies that will service and recycle your antifreeze.

For additional information or to receive a copy of "Summary of Hazardous Waste Regulations" or "Florida's Handbook for Small Quantity Generators of Hazardous Waste" contact:

**Hazardous Waste Regulation Section**  
**Florida Department of Environmental Protection**  
**2600 Blair Stone Road, MS 4560**  
**Tallahassee, Florida 32399-2400**  
**(850) 245-8707**

<http://www.dep.state.fl.us/waste/categories/hwRegulation/default.htm>

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