Focus on Spent Antifreeze

from Ecology’s Hazardous Waste and Toxics Reduction Program

A Generator’s Guide

For the purposes of this publication, the term “antifreeze” means ethylene glycol-based coolant, which is used as a heat exchange medium in motor vehicle radiators, motorized equipment, or other industrial processes. Spent antifreeze is regulated as a dangerous waste because it may contain lead and other hazardous contaminants and because ethylene glycol in itself is toxic.

Hazardous-waste generators need to “count” their dangerous wastes each month to determine generator status. “Counting” means calculating the total weight of dangerous waste generated during a calendar month.

If spent antifreeze is recycled, it won’t affect your generator status and it doesn’t need to be counted as dangerous waste. If sent off-site to be reclaimed, it doesn’t need to be manifested as a dangerous waste and generators aren’t required to report it on the Dangerous Waste Annual Report.

There are three basic options for recycling antifreeze:
1. **On-Site Recycling** - spent antifreeze is recycled using equipment purchased by the facility. The equipment is located on-site and is operated by facility employees.
2. **Mobile Recycling Service** - a van or truck equipped with a recycling unit visits your facility and recycles spent antifreeze on-site.
3. **Off-Site Recycling** - spent antifreeze is transported to a specialized recycling company, which also supplies facilities with recycled antifreeze.

In any case, you must keep all receipts of spent antifreeze shipments and filter management for at least five years from the time of generation. For on-site recycling, your paperwork must include the amount of antifreeze recycled, and the date it was recycled. For off-site recycling you will need the name and address of the generator and recycling facility, the amount of spent antifreeze and waste-filters shipped off-site, and the date of the shipment.

To make sure other wastes have not been mixed with antifreeze, recycling companies may ask generators how they manage their other wastes. The waste generator needs to be able to show that their wastes are being properly designated, counted, managed, and disposed.

Find companies that recycle spent antifreeze and sell on-site recycling equipment, at: [www.ecy.wa.gov/programs/hwtr/hwsd/index.html](http://www.ecy.wa.gov/programs/hwtr/hwsd/index.html).
If spent antifreeze is not recycled or if it is mixed with used oil, solvents, brake fluid, or anything else, the generator is subject to full regulation under the **Dangerous Waste Regulations** (Chapter 173-303 WAC), including counting and manifesting - unless the generator can document that the spent antifreeze is not hazardous. The **Washington State Dangerous Waste Regulations** can be viewed at [http://www.ecy.wa.gov/programs/hwtr/reg_comp_guide/173-303.htm](http://www.ecy.wa.gov/programs/hwtr/reg_comp_guide/173-303.htm)

### General “do’s and don’ts” for antifreeze

**Do’s:**
- ✔ Drain antifreeze from radiators and heater cores into a recycling container as soon as possible.
- ✔ Place labels on the container that identify the contents of the container and list any risks the waste poses to employees, emergency response personnel, and the public.
- ✔ Use two separate containers for your spent antifreeze. Write "TOXIC" on both containers:
  - Label one “Usable Antifreeze Only,” for antifreeze that can be reused in your shop without further treatment.
  - Mark the other “Spent Antifreeze Only,” for antifreeze that cannot be reused without recycling.
- ✔ Avoid spills by keeping containers closed except when adding or removing waste. Maintain containers so they do not leak, rupture, or tip over when being opened, handled, or stored.
- ✔ Store containers on a non-porous concrete surface.
- ✔ Use secondary containment for containers of liquid waste.
- ✔ Keep spill-control equipment in a central location, accessible to employees. Train employees to use it.
- ✔ Keep volumes of spent antifreeze low by properly and routinely recycling the waste.
- ✔ Spent antifreeze filters and any particulate matter generated from recycling antifreeze must be counted and managed as dangerous waste, unless it can be shown to be non-hazardous through laboratory analysis. Visit [www.ecy.wa.gov/programs/hwtr/hwsd/index.html](http://www.ecy.wa.gov/programs/hwtr/hwsd/index.html) for help in finding a laboratory.

**Don’ts:**
- ✔ Don't dispose of spent antifreeze into a sewer.
- ✔ Don’t dispose of antifreeze to a storm drain, septic tank, or dry well. Never pour antifreeze on the ground.
- ✔ Don't mix spent antifreeze with any other waste. Keep it separate.
Spent antifreeze questions and answers

Are there any requirements for storage at my site? Yes. Spent antifreeze must be managed in a way that does not pose any potential threat to human or environmental health.

Am I required to have a valid RCRA ID number? Businesses that generate less than 220 pounds of dangerous waste per month (not counting spent antifreeze to be recycled), and always have less than 2,200 pounds of dangerous waste on-site (again, not counting spent antifreeze that will be recycled), are not required to have a RCRA ID number.

If I have shipped antifreeze on a manifest, should I keep the manifest? Since the document serves as your proof of recycling that waste, you should keep it.

How should I label my accumulation drums or tanks? You do not need a dangerous waste label, but must identify what is in the drum and its major risk. The requirements would be met by placing the labels “SPENT ANTIFREEZE” and “TOXIC” on the drum.

If I have been accumulating antifreeze to send off-site, does a dangerous waste label need to be on the drum? No. You can simply place a “SPENT ANTIFREEZE” label on it.

Do the small-quantity generator (SQG) rules apply to the accumulation of antifreeze? Not if you are recycling it.

Transporting spent antifreeze to a recycling facility

Do generators that haul antifreeze to a reclamer need to be authorized dangerous-waste transporters and have a special license from the State or Department of Transportation? No. Spent antifreeze can be self-transported for reclamation without the need for a RCRA Site Identification number or license.

Are there any requirements for language on a bill-of-lading or invoice? The shipping papers will need to include the following language: “Material not regulated by DOT (Washington State Dangerous Waste Only, Toxic).”

If I’m transporting my spent antifreeze and some spills, who should I notify?
1. The State Emergency Management Division 24-Hour Spill Number: (800) 258-5990.
2. The nearest Ecology Regional Office (see map on the last page).
3. Everyone you would call according to your company’s Standard Operating Procedures.

When transporting spent antifreeze containers, what kind of label is needed? The container requires a label that states: “Washington State Dangerous Waste state law prohibits improper disposal. If found contact the nearest police or public safety authority, and the Washington State Department of Ecology.” In addition, the generator’s name and address must also be included.
If my county has a collection area for recycling dangerous waste, can I send my antifreeze to the site? Check with your county to determine your best options.

Can I do the transporting? If you are an SQG, you can transport the antifreeze yourself.

Where can I get information regarding rules for transporting hazardous materials? The Federal Department of Transportation’s rules can be found at http://www.access.gpo.gov/nara/cfr/waisidx_02/49cfrv2_02.html

- General

In regulatory terms, how is spent antifreeze classified? Spent antifreeze is a regulated dangerous waste. If it is recycled, it can be managed as a conditionally exempt waste.

If spent antifreeze is not going to be recycled, but otherwise disposed, is a manifest required? Yes, unless the generator chooses to demonstrate that the spent antifreeze is not a dangerous waste, it is fully subject to Chapter 173-303 WAC.

For more information, refer to “What is a Small Quantity Generator?,” Ecology publication #96-404. Access it online at http://www.ecy.wa.gov/biblio/96404.html or call (360) 407-6752 to request a copy.

Thank you for your interest in managing spent antifreeze. If you have questions about safely managing spent antifreeze, contact the nearest Ecology regional office and ask to speak with a hazardous-waste specialist.

If you require this publication in an alternative format, please contact the Hazardous Waste and Toxics Reduction Program at (360) 407-6700 or TTY at 711 or (800) 833-6388.