Antifreeze

Potential Environmental Impacts

Antifreeze can pollute groundwater, surface water and drinking water supplies if dumped, spilled or leaked, and is a serious health hazard to humans and animals if ingested. While in an engine, antifreeze can become contaminated with lead or benzene to the point where it must be managed as a hazardous waste. There are two types of antifreeze commonly in use today - ethylene glycol and propylene glycol. The most common is ethylene glycol antifreeze, which is odorless, sweet tasting, and usually greenish-yellow in color. Propylene glycol antifreeze, usually pink, is less toxic than ethylene glycol. Extended life antifreeze, usually orange, contains additional additives and is available in both ethylene and propylene bases.

Legal Requirements

- ♦ Antifreeze may not be discharged to the ground, storm drains, septic systems or sanitary sewers or to surface waters. [CGS Section 22a-430]
- ♦ A <u>hazardous waste determination</u> must be conducted in order to determine whether your used antifreeze is hazardous or non-hazardous waste. Keep records of testing for at least 3 years. See Appendix A for more information on testing requirements. [40 CFR 262.11; RCSA Section 22a-449(c)-102(a)(2)(A)]
- ◆ If the antifreeze has been determined to be non-hazardous, it is considered a Connecticutregulated waste and must be either recycled or disposed of via a permitted waste hauler.

 There are no specific storage requirements for non-hazardous used antifreeze [CGS Section 22a-454]. However, in order to prevent spills and releases to the environment, antifreeze should be stored in a secure tank or container, preferably located indoors, and should be provided with secondary containment, such as a berm or double-walled tank.
- ♦ Antifreeze which has been determined to be hazardous waste must either be recycled or disposed of via a permitted hazardous waste hauler. While stored on-site, it must be managed in accordance with hazardous waste storage requirements. See Appendix A for more information. [40 CFR 261.5 and RCSA Section 22a-449(c)-101and -102.]
- ♦ If you recycle hazardous antifreeze on-site, you must file a Recycling Registration with DEEP at least 30 days prior to recycling. For a copy of the registration form, contact DEEP's Waste Engineering and Enforcement Division at 860-424-3023. [RCSA Section 22a-449(c)-101(c)(2)(A)]
- ♦ A hazardous waste determination must be conducted on any used filters from recycling antifreeze and on any contaminated materials that were used to clean up antifreeze spills. Keep records of testing for at least 3 years. See Appendix A for more information.

 [40 CFR 262.11; RCSA Section 22a-449(c)-102(a)(2)(A)
- ◆ Report antifreeze as part of your hazardous and toxic chemical inventory and notifications required under the Emergency Planning and Community Right-to-Know Act of 1986 (EPCRA) [40 CFR 355] if over 10,000 pounds of ethylene glycol (about 1250 gallons) is stored on-site. See Appendix B for more information for EPCRA reporting requirements.

Legal References

- Criteria for listing hazardous waste 40 CFR 262.11
- Emergency Planning and Notification 40 CFR 355
- Discharge CGS Section 22a-430
- Storage requirements <u>CGS Section 22a-454</u>
- Recyclable Materials RCSA Section 22a-449(c)-101(c)
- Hazardous Waste Determination RCSA Section 22a-449(c)-102(a)(2)(A)

Best Management Practices

- ★ Segregate used antifreeze from other wastes. Label the container "Waste Antifreeze."
- ★ Use the less toxic propylene glycol antifreeze where appropriate. Check with the car manufacturer or owner's manual to determine the recommended type(s) of antifreeze.
- ★ Recycling options for antifreeze include:
 - 1. Contract with a hauler that recycles the antifreeze off-site. If recycling off-site, use a DEEP <u>permitted transporter</u> to have your waste antifreeze hauled to a permitted facility for recycling, treatment, storage or disposal. Or
 - 2. Purchase on-site recycling equipment and recycle at your facility.
- ★ If recycling antifreeze on site, make sure to keep the different types separated.
- ★ Use drip pans and funnels when transferring antifreeze to minimize spills and drips.
- ★ Store antifreeze in a container that can be completely drained with a wide opening. Keep antifreeze storage containers closed at all times.
- ★ Provide secondary containment to prevent spills from entering ground water or stormwater.
- ★ Wear eye protection, clothing that covers exposed skin and rubber gloves when transferring antifreeze. Pour slowly and carefully to avoid splashing.
- ★ Never mix antifreeze with other chemicals.



Used antifreeze, labeled and stored on secondary containment

For more information, call DEEP's Waste Engineering and Enforcement Division at 888-424-4193.

Pollution Prevention Checklist

- ✓ Do you recycle used antifreeze?
- ✓ Do you promote the use of less toxic, propylene glycol antifreeze?
- ✓ Do you provide secondary containment for your used antifreeze containers to prevent spills from entering groundwater or stormwater?



Did You Know?

Recycling waste antifreeze may reduce your monthly hazardous waste totals and can minimize the regulations that you are required to comply with by reducing your hazardous waste generator status.

DISCLAIMER: This guidance is a tool to help you evaluate compliance at your facility. It is not a complete list of all regulations and requirements that may apply to your business. You are responsible for knowing and complying with all updated applicable state, federal, local and tribal requirements. Please be aware that environmental laws and regulations, as well as process technology may have changed significantly since these were published. Please do not rely on them for current information, but rather to provide background information.

Connecticut Department of Energy and Environmental Protection, Office of Pollution Prevention, 860-424-3297. Published 2014, Links updated January 2023

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