# **Antifreeze**

## Potential Environmental Impacts:

Antifreeze can pollute groundwater, surface water and drinking water supplies if dumped, spilled or leaked, and is harmful to marine and aquatic life. While in an engine, antifreeze can become contaminated with lead or fuel to the point where it must be managed as a hazardous waste. There are two types of antifreeze. Antifreeze with ethylene glycol, a greenish-yellow, odorless, sweet-tasting chemical, poses a serious health hazard to humans and animals if ingested. Antifreeze with propylene glycol, which is less toxic, and is marketed as nontoxic, is recommended for use.

## Legal Requirements:

- Waste antifreeze can be either hazardous or non-hazardous, depending upon the levels of contaminants it contains (the most common contaminants are lead and benzene). In order to determine which is the case, the generator must either have their waste tested, or utilize reliable "knowledge of process" information for the waste (if available) [40 CFR 262.11; RCSA §22a-449(c)-102(a)(2)(A)]. Such information could include testing by haulers, or studies by industry trade groups (such as CMTA). For more information on waste testing requirements, see Appendix B.
- Antifreeze which is 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 [40 CFR 262.11; RCSA §22a-449(c)-102(a)(2)(A)]. See Appendix B for more information.
- Antifreeze which is not hazardous waste is still considered a non-hazardous Connecticut-regulated waste, and must be either recycled or disposed of via a permitted waste hauler. There are no specific storage requirements for Connecticut-regulated waste [CGS §22a-454].
- Antifreeze may not be discharged to storm drains, septic systems or sanitary sewers or to surface waters without authorization from CT-DEP [CGS §22a-430].
- A hazardous waste determination must be conducted on any materials used to clean antifreeze spills [40 CFR 262.11; RCSA §22a-449(c)-102(a)(2)(A)]. See Appendix B for more information.
- If there is a stormwater discharge from your facility, you may have to register for a *General Permit for the Discharge of Stormwater Associated with Industrial Activity* ("Stormwater General Permit"). See Appendix F for more information.

### **Best Management Practices:**

- Segregate used antifreeze from other wastes. Label the container "Waste Antifreeze."
- ❖ Use propylene glycol antifreeze (usually pink) which is less toxic than ethylene glycol (usually green) where appropriate. Sell propylene glycol in your ships store.

- Recover antifreeze used to winterize systems.
- Recycling options for antifreeze include:
  - 1. Purchase on-site recycling equipment and recycle at your facility. Conduct a RCRA hazardous waste determination (i.e., test the residue or filter cartridge) at least one time to verify that the waste is not hazardous before recycling on-site. Keep a copy of the test results in your files;
  - 2. Contract with an on-site mobile recycling service that is permitted by CT-DEP to recycle antifreeze;
  - 3. Contract with a hauler that recycles the antifreeze off-site. If recycling off-site, use a CT-DEP permitted hauler for transportation to a permitted facility for recycling, treatment, storage or disposal. A list of permitted transporters can be obtained from the CT-DEP by calling (860) 424-4193.
- Provide well-marked, coverable containers which are in good condition to collect antifreeze from customers.
- 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 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.

## Checklist for Clean Marina Certification:

✓ Do you recycle used antifreeze?

YES NO N/A

✓ Do you promote the use of less toxic, propylene glycol antifreeze for winterization?

YES NO N/A

✓ Do you store used antifreeze in separate, labeled and coverable containers and provide containment to prevent spills from entering groundwater or stormwater?

YES NO N/A



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