
ENVIRONMENTAL Fact Sheet



29 Hazen Drive, Concord, New Hampshire 03301 • (603) 271-3503 • www.des.nh.gov

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Guidelines for Marinas: Proper Engine Winterization Procedures

Marine engines stored in cold regions require winterization procedures to eliminate internal water freezing that results in the expansion of metal parts within the engine. This usually involves flushing/filling engines with antifreeze. Marinas usually perform this function on all boats each year, even for the customer that takes the boat home with them each winter. However, all boat engines containing antifreeze must be drained prior to the spring launch to avoid an illegal discharge of antifreeze directly to surface water. Surface water discharges are regulated by the U.S. Environmental Protection Agency and New Hampshire Department of Environmental Services (DES). The state is committed to keeping our public waters clean. DES's authority to enforce discharges into state waters is provided for in the following RSA:

Section 485-A:13

I. (a) "It shall be unlawful for any person or persons to discharge or dispose of any sewage or waste (antifreeze or propylene glycol) to the surface water or groundwater of the state (of New Hampshire) without first obtaining a written permit from the department of environmental services..."

This means that all activities must be conducted in a manner that prevents discharge of waste water to surface or ground water.

Winterization Products

There are two main types of engine winterization products: the traditional ethylene glycol, and the preferred, less toxic propylene glycol. Although propylene glycol is the preferred product, it still has an impact on water quality and cannot be discharged into surface water or to the ground.

If you must winterize with one of the products above, utilize these dry storage techniques:

- Use propylene glycol instead of ethylene glycol.
- Rinse or flush engines with antifreezing agent.
- Thoroughly drain and collect antifreezing agent, making sure that none is discharged to the ground.
- Properly store reusable antifreezing agents according to state regulations (found online at <http://www.des.state.nh.us/factsheets/hw/hw-4.htm#2>).
- Reuse winterization products next year.

Do **not** mix the antifreeze with other liquid wastes. If the antifreeze is contaminated with a

hazardous material such as gasoline, the mixture must be disposed of as a hazardous waste. If the antifreeze is too dilute to reuse, it can be sent off for recycling at a commercial recycling facility.

Educate Boaters

Both the boater and marina operator must become environmentally aware of the products used in their boats and engines. They must be made aware of the No Discharge Policy for public waters of the state. Marina operators can help customers understand they have the following winterization choices:

1. It is not essential that engine winterization products be added as long as proper procedures are followed to remove all water from the engine, OR
2. If engine winterization products are used, the added material must be removed manually before the boat can go back into the water.

Owners who store their boats at home during the winter months must also adhere to these guidelines. If winterization products are added to engines and allowed to remain throughout the winter months, the boat owner is responsible for the removal of the winterization products prior to the first spring launch.

Ultimately, it is the marina's responsibility to make sure there are no winterization products in the engine prior to putting a customer's boat into the water at their facility.

For more information, visit the New Hampshire Pollution Prevention Program web pages at www.des.nh.gov/nhppp, or call (800) 273-9469.