

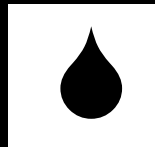


POLLUTION PREVENTION FACT SHEET

Pollution Prevention Program - Federal Programs Division

Fact Sheet

#20:



Clean Marinas: Boat Engine Maintenance

This Pollution Prevention Fact Sheet is one in a continuing series prepared under the Pollution Prevention Program of the Federal Programs Division of Environment Canada, Ontario Region. This Program is intended to help federal departments in Ontario become model environmental citizens by managing beyond compliance. This Fact Sheet presents the following:

- Possible environmental threats encountered in the maintenance of marine engines
- Practices that may be employed to prevent pollution during engine maintenance



The Problem:

Spills of engine oil, grease, antifreeze and fuel during marine engine maintenance and service can result in harmful releases to the marine environment. Such releases, characterized by their typical “rainbow” sheen, seriously degrade water quality and may harm resident marine organisms!



The Objective:

Perform engine maintenance carefully and prevent the needless pollution of marina waters.



The Process:

Use the following guidelines to prevent pollution during engine maintenance:

- ❑ Keep engines properly tuned to maintain fuel efficiency as well as cleaner exhaust.
- ❑ Keep your engine clean so you can spot and fix small leaks before they cause a big problem!
- ❑ Keep an oil absorption pad in the vessel’s bilge or below the engine to capture small spills.



- ❑ Wipe up spills during maintenance to prevent them from being pumped overboard with any bilge water.
- ❑ Spill proof your oil change! Use no-spill pump systems that remove crankcase oils through the dipstick tube.
- ❑ To catch oil spilled during oil filter changes, slip a plastic bag over the filter prior to its removal.
- ❑ Keep the use of harsh engine cleaners to a minimum. Part cleaning should not be done in the bilge or over open ground- wash over catchpan or use a water based parts washer, where the dirty fluids can be collected and recycled.
- ❑ Avoid ethylene glycol antifreeze! It is toxic and can harm the marine environment. Propylene glycol antifreeze is less toxic and widely available for marine engines. It can also be used in hoses and holding tanks. If your marina doesn’t have one already, why not initiate a used anti-freeze recycling program!
- ❑ Preparing boats for winter? Add fuel stabilizer to fuel tanks to preserve fuel quality and to avoid dumping stale fuel in the spring. Fuel tanks



should be filled prior to winter to prevent condensation and corrosion.

- ❑ Don't discharge oil or fuel into the water: it is a violation of the Fisheries Act and hence, illegal!
- ❑ Never dump waste oils and engine coolants on the ground, into storm drains, dumpsters, or especially open waters! Marinas should have disposal facilities for waste oils and related products such as filters and absorbents. Avoid contaminating recyclable waste chemicals. Uncontaminated fluids are easier to recycle and cheaper to discard.
- ❑ Frozen battery cells represent a hazard. Keep cells filled with distilled water and be sure that the battery is fully charged. Store batteries on a wooden board in a cool garage. Recycle, don't discard batteries when they become unusable.

This Pollution Prevention Fact Sheet for Clean Marinas was adapted from guidelines originally published by Sea Grant University of Rhode Island.

Further Sources of Information

For more information on the benefits of Pollution Prevention at Marinas, please contact:

Ontario Marina Operators' Association
Box 105, 2 Poyntz Street
Penetanguishene, ON, L9M 1M2
1-888-579-BOAT and www.letsgoboating.com

For further information about the Pollution Prevention Program for federal facilities in Ontario, please contact:

Environment Canada
Ontario Region - Environmental Protection Branch
Federal Programs Division
49 Camelot Drive
Nepean, Ontario, K1A 0H3
phone: (613) 952-8675
fax: (613) 952-8995
e-mail: fpd@ec.gc.ca

All Fact Sheets can be found on the Internet at:
www.on.ec.gc.ca/epb/fpd
(aussi disponible en français)