



Clean Boater Tip Sheet



Engine Maintenance

Occasionally one may see a small fuel sheen on the water surface near boats. Although it may be only a tiny amount from some boats, the cumulative impacts can be damaging. Once in the aquatic environment, oils and fuels have a tendency to accumulate in bottom sediments and concentrate in aquatic organisms. These harmful substances commonly enter the aquatic environment through improper engine maintenance techniques and waste fluids disposal practices.

You can play an important role in protecting water quality while performing routine engine maintenance by following the simple tips.

Routine Engine Maintenance

- Keep engines properly tuned for efficient fuel consumption, clean exhaust, and economy.
- Keep your engine clean. It makes it easier to spot and correct small leaks before they become big problems.
- Keep an oil absorption pad in the bilge or below the engine to collect spilled products.
- When undertaking maintenance, wipe up spills so that they do not get pumped overboard with bilge water.
- For spill-proof oil changes, use non-spill pump systems that remove crankcase oils through the dipstick tube. Many marinas have these systems available for your use; check with them.
- In order to catch the oil traditionally spilled during filter removal, slip a plastic bag over the filter and then remove it.
- Keep the use of engine cleaners to a minimum. Parts cleaning should not be done in the bilge or over open ground. It should be done in a container or parts washer where the dirty fluids can be collected and recycled.
- Do not discharge oil into the water - it is prohibited by law. All boats 25 feet or longer are required to have a sign regarding oil pollution control regulations posted in the engine compartment. These signs are available at most marine supply stores.

Winterizing your boat

- Use the orange-pink colored propylene antifreeze, which is less toxic, rather than the blue-green colored ethylene glycol, which is highly toxic and can kill animals that ingest it.
- Fill fuel tanks to 90 percent of capacity during winter storage to reduce condensation buildup.
- Consider adding a fuel stabilizer so that you will not have problems disposing of stale fuel in the spring.



- Flush winterizing agents and antifreeze from the engine prior to launch each season and recycle or dispose of properly.

Recycle Regularly

- Recycle used oil, oil filters, antifreeze and lead acid batteries.
- Bring used solvents and waste gasoline to local hazardous waste collection days.
- Never dump waste oils and engine coolants on the ground or into storm drains, dumpsters, or open waters.
- When disposing of petroleum-based products, such as fuels and engine oils, keep them separate from each other and from other substances, such as antifreezes, solvents, and water. This lowers the disposal cost charged to your collection facility by preventing the creation of "hazardous wastes".
- Become knowledgeable about disposal procedures for waste oils, filters, absorptive materials and other hazardous materials at your marina.
- For additional information on recycling, contact Ohio EPA, Office of Pollution Prevention at (614) 644-3469 or Division of Hazardous Waste Management at (614) 644-2917, or visit the Ohio EPA web site at www.epa.state.oh.us/opp/wastex.html.

Be a Conscientious Consumer

- Read product labels. Labels convey information about the degree of hazard associated with a particular product. For example, DANGER equates to extremely flammable, corrosive or toxic; WARNING indicates that the material is moderately hazardous; and CAUTION signals a less hazardous product. Select products that contain no warnings or which merely CAUTION consumers.
- Be wary of unqualified general claims of environmental benefit, e.g., "ozone friendly." A better, more meaningful label would read, "This product is 95 percent less damaging to the ozone layer than past formulations that contained chlorofluorocarbons (CFCs)."