Petroleum Control: Fueling, Bilge Maintenance & Spill Response

Oil is harmful and sometimes fatal to aquatic plants and wildlife, including fish, birds and invertebrates. Oil can enter water intakes and affect drinking water. A gasoline spill poses a significant fire and explosion hazard. Gasoline and oil may also contain carcinogens, including benzene and PCBs. In addition, spilled oil is unsightly and can stain the shoreline.

The Law

The Federal Water Pollution Control Act of 1972, as amended by the Clean Water Act of 1977, and the Oil Pollution Act of 1990 prohibit the discharge of oil of any kind into or upon the navigable waters of the United States. This includes any discharge that causes a film, sheen, discoloration, sludge, or emulsion on or beneath the surface of the water. Any such discharge may result in a civil penalty.

In Case of a Spill

- Stop the flow.
- Contain the spill.
- Call the U.S. Coast Guard National Response Center at (800) 424-8802.
- Call the Ohio EPA (800) 282-9278 and the local fire department.
- Do not use emulsifiers or dispersants (soaps) to treat a spill; this is prohibited by federal law.

Fueling Practices

Gas or diesel may be spilled during the act of fueling: as backsplash out the fuel intake or as overflow out the vent fitting. Spills of this sort harm aquatic life, waste money, and can result in stains on the hull and damage to the gel coat and striping. Follow these tips to avoid problems:

- Fill tanks to no more than 90 percent capacity - gas that is drawn from cool storage tanks will expand as it warms up onboard your vessel.
- To determine when the tank is 90 percent full, listen to the filler pipe, use a sounding stick, and be aware of your tank’s volume.
- Rather than filling your tank upon your return to port, wait and fill it just before leaving on your next trip. This practice will reduce spills due to thermal expansion because the fuel will be used before it has a chance to warm up.
- Fill portable tanks on shore where spills are less likely to occur and easier to clean up.
• Place an absorbent pad or container over the fuel fill or under the fuel vent to collect accidental overflow.
• Slow down at the beginning and end of fueling.

Bilge Maintenance
Engine oil tends to accumulate in bilges. If no precautions are taken, the oil is pumped overboard along with the bilge water. Discharging oily water is illegal. To avoid fines and to protect water quality, follow these tips:
• Keep your engine well tuned to minimize the amount of oil that is released. Be sure there are no leaking seals, gaskets, or hoses.
• Keep an oil absorption pad in the bilge or below the engine to absorb spilled oil.
• Replace oil absorbent materials regularly.
• Look for contractors or marinas that offer a bilge pumpout service.
• Do not treat oily water with detergents. Soaps pollute and make clean up impossible. You may be fined up to $25,000 for using soaps to dissipate oil.

Disposal of Oil Absorbent Materials
The disposal of used oil absorbent material depends on what type of product it is and how it was used:
• Become knowledgeable about disposal procedures for oil absorbent materials at your marina.
• Standard absorbents saturated with oil or diesel may be wrung out over oil recycling bins (if they are saturated with oil or diesel only!) and reused.
• Alternatively, they can be tossed in your regular trash after being drained or wrung out over oil recycling bins to the extent that there are no visible signs of free-flowing liquid in or on the material.

Emissions Control
Marine engines — especially 2-stroke outboard motors — produce the highest average level of hydrocarbon exhaust emissions after lawn and garden equipment. Hydrocarbon emissions contribute to ground level ozone, a known health risk. Follow these tips to help your engine operate as efficiently as possible:
• Use the gas to oil ratio recommended by the engine manufacturer. Too much oil can foul spark plugs and too little can lead to increased engine wear or even failure.
• Use premium two-cycle engine oil (TC-W3 or TC-W4). Premium oils improve engine performance and reduce pollution because they burn cleaner, contain more detergents, and prevent formation of carbon deposits.
• Use gasoline with the octane level recommended by the engine manufacturer.

Preventive Equipment
Products are available commercially which can help you prevent spills and reduce emissions:
• Install a fuel/air separator along your vent line. These devices allow air, but not fuel, to escape through a vent opening.
• Attach a safety nozzle to portable gas cans used to fill outboard engines. These nozzles automatically stop the flow of fuel when the receiving tank is full.
To prevent oily bilge water from being discharged, install a bilge pump switch that leaves an inch or two of water in the bilge. Alternatively, connect a bilge water filter to your vessel’s bilge pump. Filters will remove oil, fuel, and other petroleum hydrocarbons from the water.

When it is time to buy a new engine, select a fuel efficient, low emission model.

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).”