

## CLEAN BOATER TIP SHEET ENGINE MAINTENANCE

The general maintenance of boat engines can generate pollutants and waste products that can be harmful to the environment. Some of these potential pollutants include solvents, paints, lubricants, oil, antifreeze, fuel, batteries, and bilge switches that contain mercury. Proper use, storage, and disposal practices are crucial to keeping these pollutants out of the environment. As a boater on Wisconsin waters, you can be an active steward of this valuable resource by implementing these engine-maintenance practices:

## **Routine Engine Maintenance**

Routine engine servicing often requires the handling of toxic substances such as oil and solvents. Care must be taken while the cleaning is done.

- & Check with marina staff to find out where engine maintenance is allowed at the marina.
- Clean the work area with absorbent materials and a broom, instead of hosing the work area down.
- Ask if your facility has a collection area for boat maintenance waste from boaters (used oil filters, waste oil, lead-acid batteries, etc.). If not, take them to a household hazardous waste facility or used oil recycling center.
- Pre-clean engine parts with a wire brush to eliminate the need for solvents.
- If you must use solvents, use volatile organic compound-free (VOC-free) solvents.
- Weep the use of engine cleaners to a minimum. Parts cleaning should not be done in the bilge or over open ground or water. It should be done in a container or parts washer where the dirty fluids can be collected and recycled.
- In order to catch the oil spilled during filter removal, slip a plastic bag over the filter and then remove it.
- Drain oil filters for at least 24 hours, and take them to an oil recycling or hazardous waste center. A new Wisconsin law prohibits disposing of oil filters in the trash.

- Dispose of all used oil and materials that have been soaked with oil at the marina's hazardous waste disposal area.
- Keep engines properly tuned for efficient fuel consumption, clean exhaust, and lower operating costs.
- Keep your engine clean. It makes it easier to spot and correct small leaks before they become big problems.
- When undertaking maintenance, wipe up spills so that they do not get pumped overboard with bilge water.
- Keep an oil absorption pad in the bilge or below the engine to collect spilled products.
- For spill-proof oil changes, use systems that remove crankcase oils through the dipstick tube. Ask your marina manager if the marina has this service available.
- Do not discharge oil into the water—it is prohibited by law. All boats 26 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

- Do not use the green-colored ethylene glycol antifreeze, which is highly toxic and can kill animals that ingest it. Instead, choose the blue, pink, or clear-colored propylene glycol antifreeze, which is less toxic.
- Fill fuel tanks to 90 percent of capacity during winter storage to reduce condensation buildup and prevent leaks as tank contents expand during warmer weather in spring.
- Consider adding a fuel stabilizer so that you will not have problems disposing of stale fuel in the spring.
- Flush and collect winterizing agents and antifreeze from the engine prior to launch each season and recycle or dispose of them properly. Check with marina management for recycling/disposal containers. It is illegal to "blow out" antifreeze into the water