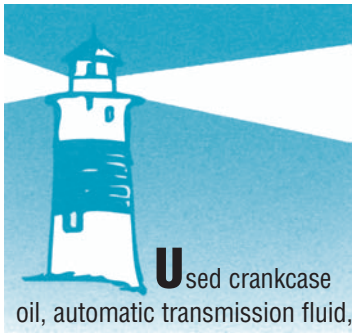
Upland Engine Operations



Used crankcase oil, automatic transmission fluid, power steering fluid and hydraulic fluid are all considered used oil and can be mixed and recycled together.

Potential Environmental Impacts:

Working on boat engines has potential environmental impacts. If engine fluids are not well managed, they may be transported by stormwater into the marina basin, where they can harm fish and other aquatic life. If certain fluids are mixed; they may become subject to hazardous waste requirements and be more expensive to dispose. Waste fluids from upland engine operations may include: engine oil, transmission fluid, power steering fluid, brake fluid, hydraulic fluid and antifreeze, all of which are recyclable liquids. Many of these fluids can be hazardous, and may pick up contaminants (e.g., lead from bearings) during use in an engine.

Legal Requirements:

- A hazardous waste determination must be conducted to establish whether or not disposal of waste fluids is subject to hazardous waste regulations [40 CFR 262.11; RCSA §22a-449(c)-102(a)(2)(A)]. A hazardous waste determination must also be conducted on any materials used to clean a spill. Manage hazardous waste as described in Appendix B.
- Emissions from gasoline powered motor vehicles must not be visible, and must be less than 40% opacity for diesel powered engines [RCSA §22a-174-18(a)(2)(i) and (ii)]. This does not apply to boat engines that are being repaired [RCSA §22a-174-18(a)(4)(iii)].
- If there is a stormwater discharge from your facility, you may have to register for a *General Permit for the Discharge of Stormwater Associated with Industrial Activity* ("Stormwater General Permit"). See Appendix F for more information.
- Manage used oil as described in the "Used Oil" fact sheet.
- Manage antifreeze as described in the "Antifreeze" fact sheet.
- Manage soiled rags as described in "Rags" fact sheet.

Best Management Practices:

✪ Never pour waste fluids down the drain.

✪ Recycle fluids whenever possible. In general, the purer the waste stream, the higher the value to the recycler. Never mix gasoline, antifreeze, or chlorinated solvents into used oil because it may cause the used oil to become a hazardous waste, therefore requiring higher disposal costs.

Checklist for Clean Marina Certification:

No Clean Marina certification criteria specific to upland engine operations.