

## **A7.4 Boat Building, Mooring, Maintenance, and Repair**

**Description of Pollutant Sources:** Sources of pollutants at boat and ship building, repair, and maintenance facilities at boatyards, shipyards, ports, and marinas include pressure washing, surface preparation, paint removal, sanding, painting, engine maintenance and repairs, and material handling and storage, if conducted outdoors.

Potential pollutants include spent abrasive grits, solvents, oils, ethylene glycol, washwater, paint over-spray, cleaners/detergents, anti-corrosive compounds, paint chips, scrap metal, welding rods, resins, glass fibers, dust, and miscellaneous trash. Pollutant constituents include total suspended solids, oil and grease, organics, copper, lead, tin, and zinc. Related activities are covered under the following activity headings in this volume, and other BMPs provided in this volume:

**A1.3** Washing, Pressure Washing, and Steam Cleaning of Vehicles/Equipment/Building Structures

**A2.2** Fueling at Dedicated Stations

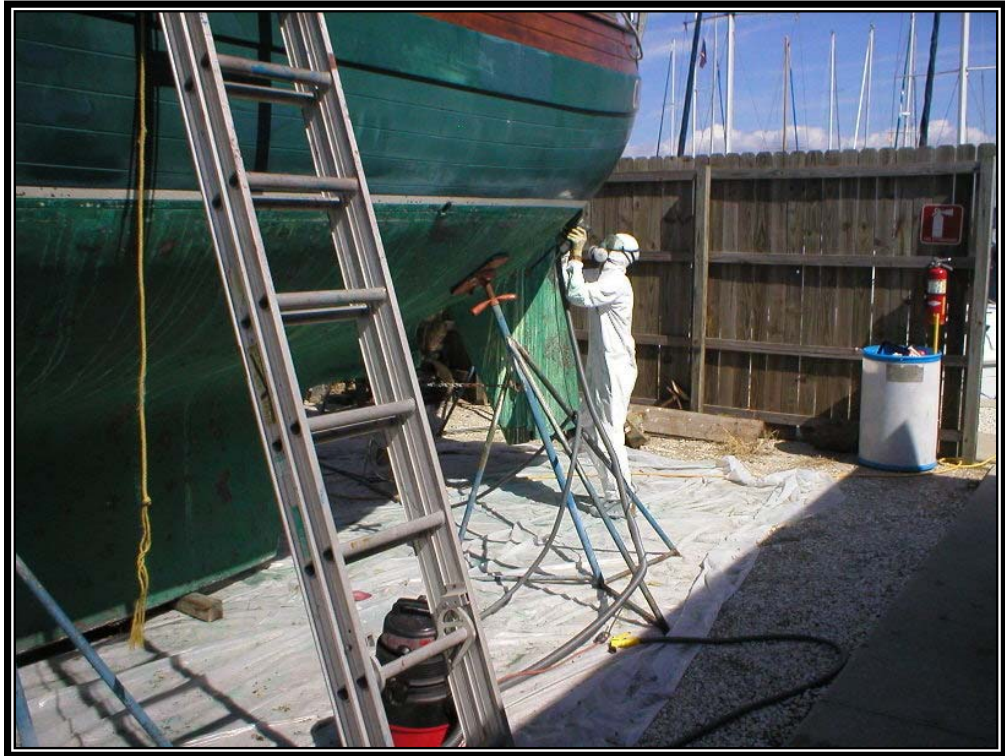
**A7.15** Spills of Oil and Hazardous Substances

**Pollutant Control Approach:** Apply good housekeeping, preventive maintenance, and cover and contain BMPs in and around work areas.

### ***Required BMPs***

The following BMPs or equivalent measures are required of all businesses, public agencies, and private boat owners engaged in boat building, mooring, maintenance and repair that are not covered by Ecology's NPDES Boatyard General Permit:

- Maintenance and repair activities that can be moved onshore must be moved accordingly. This action reduces some of the potential for direct pollution impact on water bodies.
- Blasting and spray painting activities must be sheltered by hanging tarps to block the wind and prevent dust and overspray from escaping. Move the activity indoors if possible. See Chapter 6 for details on Puget Sound Clean Air Agency limitations.
- Ground cloths must be used for collection of drips and spills in painting and finishing operations, and paint chips and used blasting sand from sand blasting (Figure 4.22).
- Collect spent abrasives regularly and store under cover to await proper disposal.
- Dispose of greasy rags, oil filters, air filters, batteries, spent coolant, and degreasers properly.



**Figure 4.22. Drop Cloth Used During Hull Sanding.**

- Drain oil filters before disposal or recycling.
- Bilge water must be collected for proper disposal rather than discharged on land or water. See BMP S.2 in Chapter 5 for detail on disposal options. Several companies are available for bilge pumpout services. The problem can be avoided if oil-absorbent pads are used to capture the oil in the bilge water before or during pumping. If pads are used, they must be recycled or properly disposed of.
- Ballast water that has an oily sheen on the surface must be collected for proper disposal rather than discharged on land or water. See BMP S.2 in Chapter 5 for details on disposal options.
- Maintenance yard areas must be swept and cleaned, without hosing down the area, at least once per week or as needed. This prevents sandblasting materials, scrapings, paint chips, oils, and other loose debris from being carried away with stormwater. The collected materials must be disposed of properly. See BMP S.2 in Chapter 5 for disposal options.
- Docks and boat ramps must be swept at least once per week or as needed, and the collected materials must be disposed of properly. Dry docks must be swept before flooding.

- Paint and solvent mixing, fuel mixing and similar handling of liquids shall be performed on shore, or such that no spillage can occur directly into surface water bodies.
- Routine cleanup materials such as oil-absorbent pads, brooms, dustpans, mops, buckets, and sponges must be stocked near docks.
- When washing, no pollutants, including soaps, may enter the stormwater drainage system or receiving water.
- Comply with BMP A2.3 and A4.2 if engine repair and maintenance are conducted.
- In the event of an accidental discharge of oil or hazardous material into waters of the state or onto land with a potential for entry into state waters, immediately notify the yard, port, or marina owner or manager, Ecology, and the National Response Center at 1-800-424-8802 (24-hour). If the spill can reach or has reached marine waters, contact the U.S. Coast Guard at (206) 217-6232.

#### ***Suggested BMPs***

- Boat construction and structural repair activities should be covered.
- Avoid the use of soaps, detergents, and other chemicals that need to be rinsed or hosed off in the water. If necessary, consider applying sparingly so that a sponge, towel, or rag can be used to remove residuals. Consider instead washing the boat in a suitable controlled area (see BMP A1.3 Washing, Pressure Washing, and Steam Cleaning of Vehicles/Equipment/Building Structures) while it is out of the water.
- Materials such as paints, tools, and ground cloths should be stored indoors or in a covered area when not in use.
- Select the least toxic anti-fouling paint available.
- Boat interiors should be routinely cleaned, with proper disposal of collected materials, so that accumulations of water drained from them are not contaminated.
- Use sanders that have dust containment bags and avoid sanding in windy conditions.
- All used oil should be recycled if feasible. Most marinas now offer used oil recycling services. To dispose of filters, let drain 24 hours, then double wrap in plastic and dispose of in the regular garbage, or take them to the Tacoma Landfill Household Hazardous Waste facility for recycling.

Pending state legislation may make disposal in the garbage illegal, so call the Hazardous Waste Line at 1-800-287-6429 for current information.

- Citizens for a Healthy Bay, a local environmental group, provides “Clean Bay Boating Kits.” Call them at (253) 383-2429 to obtain a free kit.
- Use one of the following treatment BMPs when paint chips or blasting grit are prevalent in the work area:
  - Infiltration basin
  - Wet pond or vault
  - Constructed wetland
  - Vegetated biofilter
  - Filtration with media designed for the pollutants that are present
  - Equivalent BMP (see Volume V).