



**FF-1**

## **BAY/HARBOR ACTIVITIES**

Bay/Harbor activities typically occur at boat and ship repair yards and marinas. The discharge of pollutants to receiving waters during these activities can be prevented or reduced by minimizing maintenance, keeping wastes out of the water, cleaning up spills and wastes immediately, and educating employees. Activities may include one or more of the following:

1. **On Board and General Maintenance**
2. **Disposal of Wastewater and Ballast Water**
3. **Cleaning, Chipping, and Painting**

### **POLLUTION PREVENTION:**

Pollution prevention measures have been considered and incorporated in the model procedures. Implementation of these measures may be more effective and reduce or eliminate the need to implement other more complicated or costly procedures. Possible pollution prevention measures for bay/harbor activities include:

- Move maintenance and repair activities on-shore if possible.
- Perform paint and solvent mixing, fuel mixing, and similar handling of liquids on-shore, to avoid spillage directly in surface water bodies.
- Once per year, educate municipal staff on pollution prevention measures.

### **MODEL PROCEDURES:**

#### 1. On Board and General Maintenance

- ✓ Post signs to indicate proper use and disposal of residual paints, rags, used oil, and other engine fluids.
- ✓ Used antifreeze should be stored in a separate, labeled drum and recycled.
- ✓ Fuel tank vents should have valves to prevent fuel overflows or spills.
- ✓ Boats with inboard engines should have oil absorption pads in bilge areas and they should be changed when no longer useful or at least once a year.

- ✓ Carefully fueling boat engines, recycling used oil, and discarding worn motor parts into proper receptacles can prevent needless petroleum spills.
- ✓ Draining water out of all waterlines and tanks during winter freezes eliminates the possibility of bursting pipes.
- ✓ Keep boat motors well-tuned to prevent fuel and lubricant leaks and improves fuel efficiency.
- ✓ Immediately clean up spills on docks or boats. Have spill containment and cleanup materials readily available and educate employees on spill prevention and cleanup and responsibilities

## 2. Disposal of Wastewater and Ballast Water

- ✓ Properly dispose of domestic wastewater and ballast water. DO NOT ALLOW discharge of treated or untreated sewage from vessels to harbors.
- ✓ Fecal matter and other solid waste should be contained in a U.S. Coast Guard-approved marine sanitation device (MSD).
- ✓ Portable toilets should be emptied into approved shoreside waste handling facilities and MSDs should be discharged into approved pump out stations.

## 3. Cleaning, Chipping, and Painting

- ✓ Use secondary containment on paint cans.
- ✓ Limit over-water hull surface maintenance to sanding and minor painting. Use sanders that have dust-containment bags.
- ✓ Major hull resurfacing should occur on land.
- ✓ Use ground cloths when painting boats on land.
- ✓ Paint mixing should not occur on the dock.
- ✓ Replace paints containing lead or tributyltin with less toxic alternatives.
- ✓ Shelter any blasting and spray painting activities by hanging wind blocking tarps to prevent dust and overspray from escaping.
- ✓ A tarp should be placed above the water surface underneath the work area on boats or docks to collect drips, spills, paint chips, and loose solids when work is performed over water.
- ✓ Vacuuming up loose paint chips and paint dust can help to prevent paint and other chemical substances from entering waters.
- ✓ Properly dispose of surface chips, used blasting sand, residual paints, and other materials. Use temporary storage containment that is not exposed to rain.
- ✓ Use phosphate-free and biodegradable detergents for hull washing. No soaps or detergents of any kind should be used to wash the topsides of

boats where the wash water will enter a lake or the ocean.

- ✓ Select nontoxic cleaning products that do not harm humans or aquatic life.

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## LIMITATIONS:

Even biodegradable cleaning agents have been found to be toxic to fish. Air authority policies on fugitive dust and outside painting may apply.

## REFERENCES:

*California Storm Water Best Management Practice Handbooks. Municipal Best Management Practice Handbook. Prepared by Camp Dresser & McKee, Larry Walker Associates, Uribe and Associates, Resources Planning Associates for Stormwater Quality Task Force. March 1993.*

Model Urban Runoff Program: A How-To Guide for Developing Urban Runoff Programs for Small Municipalities. Prepared by City of Monterey, City of Santa Cruz, California Coastal Commission, Monterey Bay National Marine Sanctuary, Association of Monterey Bay Area Governments, Woodward-Clyde, Central Coast Regional Water Quality Control Board. July. 1998.