

## IC13. OVER WATER ACTIVITIES

### Pollution Prevention

Consider pollution prevention measures at all times for improving pollution control. Implementation of pollution prevention measures may reduce or eliminate the need to implement other more costly or complicated procedures.

The following pollution prevention principles apply to most industries:

- Affirmative Procurement - Use alternative, safer, or recycled products.
- Redirect storm water flows away from areas of concern.
- Reduce use of water or use dry methods.
- Reduce storm water flow across facility site.
- Recycle and reuse waste products and waste flows.
- Move or cover potential pollution from storm water contact.
- Provide on-going employee training in pollution prevention.

1. Move maintenance and repair activities on-shore, if feasible.
2. Use ground cloths and/or secondary containment when painting boats on land.
3. Shelter any blasting and spray painting activities.
4. Post signs to indicate proper use and disposal of residual paints, rags, used oil, and other engine fluids.
5. Boats with inboard engines should have oil absorption pads in bilge areas that are changed when no longer useful or at least once a year.
6. Keep boat motors well-tuned to prevent fuel and lubricant leaks.
7. Recycle used motor oil, diesel oil, and other fluids and parts whenever possible.
8. Maintain a clean working environment.
9. Properly dispose of bilge water, ballast water, and wastewater.
10. Minimize impacts of cleaning products.
11. Train employees on these BMPs, storm water discharge prohibitions, and wastewater discharge requirements.

### Best Management Practices

1. **Move maintenance and repair activities on-shore if feasible.**
  - Perform paint and solvent mixing, fuel mixing, and similar handling of liquids on-shore, to avoid spillage directly to surface water bodies.
  - Limit over-water hull surface maintenance to sanding and minor painting. Major hull resurfacing should occur on land.
2. **Use ground cloths and/or secondary containment when painting boats on land.**
3. **Shelter any blasting and spray painting activities.**
  - Hang wind-blocking tarps to prevent blasting dust and overspray from escaping.
  - Do not conduct these activities when wind conditions are such that containment is rendered ineffective.
4. **Post signs to indicate proper use and disposal of residual paints, rags, used oil, and other engine fluids.**
5. **Boats with inboard engines should have oil absorption pads in bilge areas that are changed when no longer useful or at least once a year.**
6. **Keep boat motors well-tuned to prevent fuel and lubricant leaks.**
7. **Recycle used motor oil, diesel oil, and other fluids and parts whenever possible.**
8. **Maintain a clean working environment.**
  - Utilize dry cleaning methods (e.g. sweeping). If washing is unavoidable, collect wash water for treatment and/or proper disposal.
  - Vacuum loose paint chips and paint dust 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.
  - Sweep dry docks before flooding.
- 9. Properly dispose of bilge water, ballast water, and wastewater.**
- Collect bilge and ballast water that has an oily sheen for proper disposal.
  - Collect and properly dispose of wash water from washing painted boat hulls.
  - Pump bilge water into storage tanks on shore for analysis, treatment and proper disposal.
  - **DO NOT** discharge treated or untreated sewage from vessels to harbors.
  - Empty portable toilets into approved shore side waste handling facilities and MSDs should be discharged into approved pump out stations.
  - Use as fine a filter as is practical on the ballast water intake ports to eliminate as many organisms and as much particulate matter as possible.
  - Carry out physical or chemical sterilization or neutralization of ballast water *in situ*, and subsequent neutralization of the sterilant, if required, before discharge.
  - Dump estuarine or harbor ballast water at sea and take in fresh high salinity water to eliminate both pollutants and estuarine organisms.
- 10. Minimize impacts of cleaning products.**
- Clean parts without using solvents whenever possible.
- OPTIONAL:
- Use nontoxic chemicals that do not harm humans or aquatic life.
  - Use phosphate-free and biodegradable detergents for hull washing.
  - Choose cleaning agents that can be recycled.

## 11. Training

- 1. Train employees on these BMPs, storm water discharge prohibitions, and wastewater discharge requirements.**
- 2. Train employees on proper spill containment and cleanup.**
  - Establish training that provides employees with the proper tools and knowledge to immediately begin cleaning up a spill.
  - Ensure that employees are familiar with the site's spill control plan and/or proper spill cleanup procedures.
  - BMP IC17 discusses Spill Prevention and Control in detail.
- 3. Establish a regular training schedule, train all new employees, and conduct annual refresher training.**
- 4. Use a training log or similar method to document training.**

## References

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 (Revised February 2002 by the California Coastal Commission).

Stormwater Management Manual for Western Washington. Volume IV Source Control BMPs. Prepared by Washington State Department of Ecology Water Quality Program. Publication No. 99-14. August 2001.