

Environmentally Responsible Best Management Practices

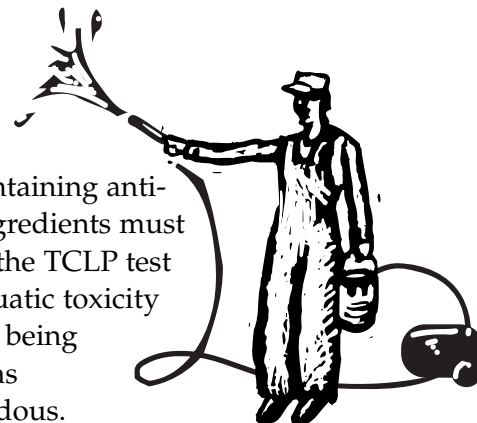
10 Sandblasting and Painting Operations

Sandblasting and painting operations use materials and produce waste, both during operations and afterwards, that are potentially harmful to human health and the environment.

- Overspray of paints, blasting without adequate containment, and uncovered grit piles all contribute to what can result in serious water pollution from toxic metals and highly toxic materials found in anti-fouling paints.
- This pollution can lead to irreversible and lethal effects for a broad spectrum of aquatic organisms.
- Dumping of paints, solvents, adhesives, oils, detergents, grit material, etc. not only damages the environment but is a violation of the Federal Clean Water Act and Oregon Administrative Rules.
- If materials classified as hazardous wastes are discharged, the dumping also violates hazardous waste regulations.

Generators of grit waste may be required to characterize, handle, and dispose of sandblast waste according to state and federal regulations. This means that generators are responsible for determining if their waste is hazardous.

- The Toxicity Characteristic Leaching Procedure (TCLP), corrosivity, reactivity, and flammability tests are used to determine if wastes are hazardous.
- Wastes which fail any test must be managed, stored and disposed of as hazardous waste. This includes making sure the waste does not enter state waters.



- Wastes containing anti-fouling ingredients must pass both the TCLP test and an aquatic toxicity test before being classified as non-hazardous.
- Of particular concern are paint, grit or water waste containing anti-fouling ingredients, such as tributyl tin (TBT) or cuprous oxide, which require special handling because of their impact on the environment.
- Studies indicate that some abrasive material, before blasting, can be harmful to marine life.

The following guidelines are general recommendations for blasting and painting operations:

- 1 Prevent paint chips, abrasive blast material (before blasting) and grit waste from coming in contact with stormwater runoff and surface water bodies. Outdoor blasting and painting should be done in designated areas that provide adequate protection to prevent overspray and fugitive emissions to ensure compliance with state and federal air quality regulations.
- 2 Operate all designated sites for blasting and painting operations with containment doors and ventilation filtration equipment in good working order.
- 3 When operating outside permanent blasting facilities, use portable containment such as tarps,

continued



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shrouds or portable containment structures to minimize airborne fugitive emissions. All operations should be conducted on paved surfaces to facilitate cleanup.

- ④ Do not operate in windy conditions.
- ⑤ Provide a thorough cleaning of spent paint, paint chips, protective coatings, grit waste, etc. to prevent discharge of these wastes into state waters.
- ⑥ Segregate waste whenever possible to reduce treatment, disposal and management costs. It is particularly important to separate non-hazardous wastes from hazardous wastes because of different regulatory requirements and different treatment and disposal cost. Dispose of waste appropriately.
- ⑦ Recycle solvents and any other materials where recycling opportunities exist.
- ⑧ Maintain an Emergency Spill Response and Cleanup Plan. Directions are outlined in BMP 4.