

Best Management Practices (BMPs)



Adopted by Resolution 2021-08

CONTENTS

Introduction

BMP 1.0	Vessel Maintenance and Repair – General (Including Engines)
BMP 1.1	Vessel Cleaning
BMP 1.2	Scraping and Sandblasting
BMP 1.3	Vessel Painting
BMP 2.0	Vessel Storage
BMP 3.0	Fuel Handling
BMP 4.0	Storage, Handling and Disposal of Hazardous Materials and Waste
BMP 5.0	Solid Waste Handling, Disposal and Recycling
BMP 6.0	Stormwater Management
BMP 6.1	Stormwater Management – Maintenance of Oil and Sediment Trapping Devices
BMP 7.0	Maintenance of Physical Structures
BMP 8.0	Prevention of Abandoned and Derelict Vessels in Year-Round Moorages

INTRODUCTION

This document discusses Best Management Practices (BMP's) for minimizing water quality impacts. Operations and maintenance activities at Boat Yards are potential sources of a wide range of pollutants including sediments, heavy metals, antifoulants, hydrocarbons, solvents, antifreeze, acids and alkalis, surfactants, nutrients, bacteria, floatables and plastics. Some of these pollutants – particularly heavy metals, solvents and hydrocarbons – may be toxic to aquatic life at low concentrations.

It is the responsibility of the Port Staff to enforce the contents of this document.

Environmental Concerns:

Operations and maintenance activities at the Port of Brookings Harbor Boat Yard facility include vessel maintenance and repair, vessel storage, waste disposal, fuel handling, solid waste handling, structural maintenance, vessel work areas and storm water management. These activities are potential sources of a wide range of pollutants. It is the intent of Port staff to operate this facility under Best Management Practices (BMP's) and in an environmentally responsible manner. It is the responsibility of every user of the Port of Brookings Harbor Boat Yard facility to comply with published operating BMP's.

BMP 1.0 Vessel Maintenance and Repair – General (Including Engines):

The purpose of this BMP is to govern potential discharges of contaminants associated with the routine maintenance of vessels, including engine maintenance and repair.

- 1) The following activities may be conducted on board vessels while in the water, unless the vessel can be taken out of the water by trailer:
 - Routine engine tune-ups, oil changes and other minor servicing and repair;
 - Routine care and cleaning of rigging and fittings, interior surfaces, and “bright work”, provided these activities do not produce wastewater;
 - Painting and maintenance of sanitary wastewater facilities;
 - Bilge pump repair;
 - Removal and replacement of an engine, when such activities are conducted so as to contain any discharges or spills of engine fluids; and
 - Similar activities for which an accidental spill can be contained on deck or within the vessel.
- 2) The following activities should be conducted with the vessel out of the water and as appropriate, within an area specifically designed for the following purposes:
 - Repairs requiring the disassembly of the outboard or lower drive unit;

- Bilge repairs requiring opening or penetrating the hull;
- Scraping, sandblasting or painting the hull exterior or drive units;
- Interior or on-deck painting or similar activity involving aerosol application with a risk of overspray or drippage beyond the confines of the vessel;
- Cleaning of the hull exterior with cleaning agents other than fresh water or natural seawater. Wastewater from such cleaning should be collected and treated or discharged into a community sewage system. Discharge from wash water into waters of the State is prohibited; and
- Any other activities involving the potential risk of an uncontained discharge of oil, chemical, nutrients or other contaminants to waters of the State.

BMP 1.1 Vessel Cleaning:

The purpose of this BMP is to minimize the risk of a discharge of cleaning compounds, paint and varnish. The only authorized site at the Port of Brookings Harbor for vessel pressure washing is in the Boat Yard. Boat rinse only (pressure washing prohibited) is available in the retail parking lot. All other boat washing on Port property is prohibited. The following guidelines also apply:

- 1) Do not use heavy duty detergents containing ammonia, sodium hypochlorite, chlorinated solvents, petroleum distillates, acids or lye.
- 2) In water hull cleaning by divers is not permitted.
- 3) Do not discharge liquid wastes, including solvents, detergents and rinse water onto the ground, or allow them to enter the storm drains.
- 4) Do not dispose of liquid wastes, including solvents, detergents and rinse water onto the ground, or allow them to enter the storm drains.
- 5) Do not dispose of liquid wastes in dumpsters.
- 6) Hydro blast (high pressure washing) operations should be conducted in accordance with the following practices:
 - Hydro blast wastewater must be contained by directing it to a holding tank or treatment unit. This prevents paint chips and oil from being discharged to State waters;
 - Cleaning processes that use chemical additions such as solvents or degreasers must be conducted in self-contained systems that prevent any discharge to storm drains or sanitary sewers;
 - Permission will be required to discharge these wastes to local municipal sanitary sewer systems. Pre-treatment is required.

BMP 1.2 – Scraping and Sandblasting:

The purpose of this BMP is to minimize the risk of discharge of paint or varnish residues and contaminated blast grit to the environment, either by direct discharge to water, conveyance via storm water or conveyance by air.

- 1) Sandblasting is prohibited.
- 2) Dustless blasting will be allowed as permitted by the Port.
- 3) Dustless blasting media type must be environmentally approved.
- 4) Dustless blasting must be contained within the immediate work area by controls approved by the Port.
- 5) Dustless blasting cleanup including tarp must be removed prior to any forecast rains.
- 6) Dustless blasting cleanup including tarp must be disposed of immediately after haul-in.
- 7) Scraping should only be conducted in designated vessel work areas.
- 8) Vessels in gravel work areas must sit on a tarp to prevent dust, paint chips and other materials from accumulation in the soil or sand.
- 9) Hand sanding is allowable, but all power sanders must have a dust collection unit attached.
- 10) Work areas must be kept clean of debris and grit from scraping and sanding operations so that runoff and wind will not carry any waste into the water.
- 11) Tarps and sheeting should be used in the gravel lot to collect debris and spent materials for appropriate disposal. All vessel work areas must be cleaned at the end of each work day.
- 12) As new, environmentally safe products become available which minimize the need for scraping and sanding, their use will be encouraged.
- 13) Scrapings and debris should be stored under cover in a manner that minimizes contact with processed water or storm water. Scrapings may be classed as a special waste or hazardous waste if soluble metals or antifoulant chemicals are present in large amounts.

BMP 1.3 – Vessel Painting:

The purpose of this BMP is to minimize the risk of a discharge of paint, solvents, and associated materials to the environment by either airborne or waterborne mechanisms.

- 1) The use of non-toxic, high bonding, easily cleaned hull coatings is encouraged, more alternative coatings are anticipated to become available as the technology advances.
- 2) Painting and varnishing of vessels in water should be generally limited to the interior surfaces and to “bright work”, where paint materials and spills can be contained and prevented from entering the water.
- 3) PAINTING USING AREOSOLS OR SPRAY EQUIPMENT IS PROHIBITED.
- 4) The bottom edges of tarps and plastic sheeting should be weighted to keep them in place.
- 5) Drip pans, tarps, and sheeting should be used to contain droppings and spilled material.
- 6) The mixing of paints and solvents should be carried out in locations and under conditions such that no spill enters State waters.

- 7) Drip pans or other protective devices should be used for all paint mixing, solvent transfer, or equipment cleanup operations unless the operations are conducted in controlled areas away from storm drains, surface waters, shorelines, piers, docks or floats.
- 8) Paint and solvent mixing, brush cleaning and similar activities should not be conducted on open floats or on structures over water, but should be done in an on-shore work area. Paints mixed in a separate work area and transferred to an outdoor work area for application should be carried in a tightly covered container and re-opened at the work site.
- 9) When painting open floats or lighters, paints should be kept in cans of one gallon or less. Paint cans should be kept in drip pans with drop cloths or tarps underneath the drip pans.
- 10) All materials in the drip pan should be properly disposed.
- 11) Do not discharge paints, solvents, or other related materials onto the ground or allow them to enter storm drains.
- 12) Do not dispose of liquid waste in dumpsters.
- 13) Paint and solvent spills present a threat to waters of the State and, therefore, must be prevented from reaching storm drains or deck drains and subsequent discharge into waters.

BMP 2.0 – Vessel Storage:

The purpose of this BMP is to govern potential discharge of contaminants associated with vessel storage.

- 1) Do not perform other vessel maintenance and repair activities in dry storage areas unless the other management measures are fully implemented.
- 2) Bilges should be inspected and cleaned prior to extended vessel storage. All water, oil or foreign materials found in the bilge shall be cleaned utilizing approved absorbent materials to remove contaminated bilge water. Used absorbents should be disposed of properly. Contaminated bilge water must not be allowed to enter waters of the State.
- 3) Fuel tanks should be emptied and purged as required for storage.
- 4) Tarps shall be placed under the footprint of each stored vessel.

BMP 3.0 – Fuel Handling:

This BMP deals with operation and maintenance practices for fuel handling. Its purpose is to minimize the potential for a release of petroleum products to the environment and to deal with spills if they occur.

- 1) Fuel delivery, storage and dispensing all pose a potential for accidental releases. Each operator is responsible for the prompt containment and clean-up of any spills or releases of hazardous materials. Any spill or release must be reported immediately to the Oregon Emergency Response System (OERS) at 1-800-452-0311; or the National Response Center at 1-800-424-8802.

- 2) All containment berms or devices should be inspected weekly for their physical integrity and maintained in good condition. Signs of leakage or spillage of contained material should be investigated and cleaned up immediately.
- 3) Fueling facilities and storage areas must be secured when not in use by appropriate shut down devices or security locks. Licensed operators with Port approved spill plans are allowed to fuel vessels over the Public Hoist Dock only.
- 4) Appropriate containment and control materials should be stored in a clearly marked location, readily accessible to work and storage areas, emergency phone numbers should be posted in a conspicuous location.

BMP 4.0 – Storage, Handling & Disposal of Hazardous Materials and Waste:

The purpose of this BMP is to govern the storage, handling and disposal of hazardous materials and waste at the Port of Brookings Harbor.

- 1) Re-use or recycle anti-freeze, storing of waste anti-freeze should be in a container clearly marked “Waste Anti-Freeze Only”.
- 2) A number of substances used in Boat Yard operations may be considered “hazardous materials” or “hazardous waste” and subject to “cradle to grave” management measures specified under Federal and State statutes and regulations. The waste generator, be it the Port, vessel owner, or Port lessee, is responsible for determining whether materials handled at the facility are subject to regulated management and for complying with applicable regulations for handling, storage, transportation and ultimate disposal of these materials, including any manifesting and reporting requirements.
- 3) In addition to the above requirements, and unless suspended by the above requirements, this BMP identifies some housekeeping practices for outdoor hazardous materials storage from the point of view of non-point source control.
- 4) This BMP addresses substances that fall within the definitions of hazardous materials or hazardous waste under State and Federal statutes. Always check with the local Department of Environmental Quality (DEQ) office with questions concerning information or hazardous materials or hazardous waste. Where feasible, minimize the use and storage of hazardous materials on-site.
- 5) Solid chemicals, chemical solutions and waste materials, including used batteries, when stored outside, should be stored in a manner which will prevent in the inadvertent entry of these materials into receiving waters, including ground waters. Storage should be in a manner that will prevent spillage by overfilling, tipping or rupture. In addition, the following practices should be followed:
 - All hazardous liquid products stored outside should be stored on durable impervious surfaces and within berms or impoundments. Impoundments should contain capacity equal to 110 percent volume of the largest tank or container.
 - Waste liquids should be stored under cover in closed containers.
 - Incompatible or reactive materials should be segregated and securely stored in separate areas and closed containers that prevent mixing of chemicals.

- Concentrated waste or spilled chemicals must be transported off-site, in accordance with State law. These materials must not be discharged to any sewer or State waters.
 - Storage of the above listed materials must be done in accordance with State regulations, local codes and fire regulations.
- 6) Paints and solvents should be prevented from entering waterways by use of drip pans, drop cloths or tarps. Wherever possible, paints and solvents should be mixed in bermed areas, away from storm drains, surface waters, shorelines and piers. Only one gallon or less of paint should be opened at one time when working on floats and should be contained within drip pans or tarps. Paint and solvent spills should be prevented from reaching storm or deck drains, cleaned up and disposed of properly. Clean up materials soaked with solvent or paint must be handled as hazardous waste.
- 7) In the event that a spill occurs, the following steps should be performed as quickly as possible:
- a) Stop the source of the spill if possible.
 - b) Contain the spill.
 - c) Cover the spill with absorbent material, such as kitty litter, sawdust or oil absorbent pads. Do not use straw.
 - d) For small spills of flammable liquids, the absorbent can be aired out; check with the local fire department. When dry, put in dumpster. Keep area well ventilated.
 - e) Deploy containment booms, if any spill may reach the water.
 - f) Comply with State and Federal regulations to contain and clean up the spill and dispose of materials at an approved facility.

BMP 5.0 Solid Waste Handling, Disposal and Recycling:

This BMP applies to routine disposal of non-hazardous solid waste at Boat Yard sites.

- 1) Encourage the use of recyclable materials and provide for collection of recyclables.
- 2) Waste disposals and/or collection bins, dumpsters and containers should be clearly marked and accessible to patrons.
- 3) Signs should be posted directing patrons to solid waste disposal areas.
- 4) Solid waste disposal areas should have signs clearly spelling out rules and regulations for disposal, including materials which are not acceptable for disposal.
- 5) The area surrounding solid waste collection facilities should be inspected daily or more frequently by Boat Yard personnel and any waste should be cleaned up immediately.
- 6) Dumpsters containing solid waste from repair areas should be covered.
- 7) Waste disposal areas should be conveniently located with respect to repair and maintenance areas.
- 8) Any waste receptacles placed on docks or near water's edge should be secured.

- 9) Disposal of liquid waste in solid waste receptacles will not be permitted.
- 10) Provide separation of solid and liquid waste for recycling. Furnish containers for separation of recyclable material and other recyclables in clearly marked, accessible locations. Post notices to inform users of required separation practices.
- 11) Appropriate receptacles for waste oil and antifreeze should be provided.
- 12) Use tarps and vacuums to contain and collect paint chips, sandings and other debris from boat maintenance areas. Dispose of non-hazardous solids in a covered dumpster or other covered solid waste receptacle. Dispose of hazardous wastes in accordance with BMP 4.0.
- 13) Dustless sanders are the approved method for sanding during boat work.
- 14) After the contents of a drum or container are used, it should be flattened and made unusable. If possible, re-use or recycle empty drums rather than dispose as solid waste.
- 15) Cleaning must be done to prevent debris from falling into the water and to prevent the accumulation of waste materials that may get blown onto surface water. Cleaning with a vacuum is the preferred method for collecting sandings and trash. Hosing of decks and docks should not be done when it might cause debris to be washed into the drains or directly into receiving waters.
- 16) Boat Yard operators are responsible for the contents of their dumpsters and hazardous waste should never be put in them. Dumpsters may be locked to prevent “midnight dumping”.

Demolition of Buildings on Port Grounds

The Port Manager and/or Harbormaster must ensure that, in conformance with all local, state and federal laws and ordinances, all utilities, alarms, fire suppression systems, battery backups, pumps, wells, heating/cooling, above/underground storage, wastewater treatment, asbestos-containing building materials, hazardous materials, hazardous wastes, solid wastes and lead-painted surfaces will be disconnected, decommissioned and/or removed prior to building demolition.

BMP 6.0 Stormwater Management:

The purpose of this BMP is to address stormwater management.

- 1) Stormwater runoff from parking lots as well as other facility areas represents a significant mode of transportation of contaminants from land-based Boat Yard facilities and activities to Boat Yard waters. The runoff water quality constituents from parking areas and other impervious surfaces include pollutants typical of urban runoff (e.g. nutrients, metals, suspended solids, hydrocarbons, bacteria, etc.). However, depending upon the nature of specific activities within the Boat Yard, (boat scrapings and painting, boat cleaning, fueling, engine repair, commercial fisheries, etc.) runoff may contain higher concentrations of some pollutants. Pollutants generated from these activities may, in some cases, not be adequately treated in stormwater treatment devices without design modifications.

- 2) All areas of the Port of Brookings Harbor Boat Yard should be cleaned on a regular basis to prevent oils, paints, dust, grinding residues and other materials from being washed into surface waters, storm drains, ditches, swales, sloughs and other water courses.
- 3) Cleanup of Boat Yard areas should be accomplished by mechanical or manual methods to sweep up or collect debris. Debris in work areas should not be allowed to accumulate and should be cleaned up after each job.
- 4) Dispose of material in accordance with BMP 4.0 Hazardous Waste, or BMP 5.0 Solid Waste.

BMP 6.1 Stormwater Runoff Quality Management: Maintenance of Oil and Sediment Trapping Devices.

The purpose of this BMP is to address stormwater management as it relates to maintenance of oil and sediment trapping devices.

- 1) Structural measures may be employed at Boat Yards to direct stormwater runoff from parking lots, roofs, and other facility areas to oil/grit separation devices and other sediment trapping facilities.
- 2) Rinse water from boat washing operations should be directed into an oil and silt trapping device as part of the treatment system, but not into a common device. To maximize the performance of these devices, this BMP deals with the maintenance and cleaning of oil/grit separator devices, catch basins and other sediment traps.
- 3) All sediment traps and oil/grit separators in the stormwater drainage system should be inspected on a monthly basis and after each major storm event, and cleaned as necessary to ensure the interception and retention of oils and solids entering the drainage system. At a minimum, stormwater cartridges will be replaced annually as records of those replacements are maintained.
- 4) Sediment and grit traps associated with pressure washing should be inspected after each use to ensure the retention of solids.
- 5) Inspections can be done visually. Clean out can be done manually, or by using a vacuum device. Wastes should be disposed of appropriately as solid waste after de-watering.
- 6) Oil may be removed by a skimming device and disposed as waste oil or by using absorbent pads and disposed as a solid waste.

BMP 7.0 Maintenance of Physical Structures:

Physical structures within the Port of Brookings Harbor may contribute pollutants to the marine environment as materials degrade or through leaching. Maintenance activities for these structures can be a source of pollution. The purpose of this BMP is to minimize these potential sources through the selection of suitable repair or replacement materials as well as through appropriate maintenance practices. This BMP deals with maintenance and repair practices for waterfront and

in-water structures, as well as shore-side structures. This BMP addresses pollutants deriving from the following sources:

- 1) Treated timber used for waterfront and in-water structures.
- 2) Paints, solvents, paint chips and related materials from scraping and painting operations.
- 3) Floatable debris from deteriorating waterfront structures, such as broken and degraded styrofoam from floats. Source Reduction:
 - Natural vegetation should be used for shoreline stabilization whenever feasible and maintained in a good condition by prompt repair and reseeded of washouts and other losses of vegetation.
 - Riprap revetments are generally encouraged over vertical bulkheads, because sloping rip rapped embankments provide greater habitat and reduce wave reflections. Permits are required through the Oregon Division of State Lands and the U.S. Army Corps of Engineers.
 - Timber which has been pressure treated with a preservative such as chromated copper arsenate (CCA) is generally preferred over creosote treated materials for construction and replacement. Where appropriate, steel piling should be used.
 - Scraping of in-water structures and land-side structures should be conducted according to the same management principles as for vessels. Refer to BMP 1.2.
 - Painting of structures should be conducted according to the same management principles as for vessels, refer to BMP 1.3.
 - Where feasible, floating structures should be removed to shore. Line facilities for scraping, painting and major repairs.
 - All styrofoam floats must be encapsulated.

BMP 8.0 Prevention of Abandoned and Derelict Vessels in Year-Round Moorages:

In the past decade, Oregon has seen an increase in the number of abandoned and derelict vessels (ADV's) that are present on waterways and moored at marinas and public ports. These vessels can become very expensive for a marina to dispose of when an owner abandons it and leaves the clean-up for others to manage. In addition, these ADV's pose a serious threat of environmental pollution in most cases so it's vital that all parties involved with managing recreational boating (government agencies and marina managers) take significant steps to curb the problem. Due to the increase in the severity of the issue, the Oregon State Marine Board (OSMB) and other partners have developed some guidance for port and marina management that will help to mitigate the ongoing issue of abandoned boats. Listed below are the best management practices (BMP's) that, if fully implemented, should alleviate some of the problems currently faced by marina managers. The three main elements to this strategy are: (1) an adequate vessel insurance policy to cover salvage and clean-up of oil/fuel spills, (2) requirements that all vessels moored at

Z:\POBH\ADMINISTRATION\Policies and Procedures\Policies\Approved Policies\2022 Approved Policies\Best Practices Management - APPROVED.docx

marinas are kept in a seaworthy condition at all times, and (3) requirements that all moored recreational vessels must meet registration requirements prescribed by Oregon state law.

Marina policies should:

Insurance

- Require proof of adequate vessel insurance from customers and verify that the policy covers the cost of salvage (sometimes referred to as coverage for the boat hull and equipment) in the event of a sinking at the docks, in addition to environmental clean-up activities for an oil or fuel spill.
- Require that a customer's insurance policy name the marina as a third-party designee and that they provide a copy of the policy declarations page to the marina. This ensures the marina is made aware of any lapses or changes in a policy.

AND/OR

- Ensure that the marina's insurance policy covers the salvage of sunken vessels and cleanup of oil/fuel spills for *any* vessel moored at their facility.
 - As a certified Clean Marina, you might be eligible for a discount on your facility's environmental liability insurance, so make sure to investigate this with your insurance company.

Seaworthiness:

- Require all owners to keep their vessels in a seaworthy condition. Any vessel of concern as identified by either the marina management, a State agency, or local law enforcement shall be required to perform a seaworthiness demonstration. This can be as simple as having a vessel leave the marina under its own power and then return to the docks.
- If seaworthiness cannot be proven, then a vessel owner shall be given no more than 90 days to complete any necessary maintenance to return it to a seaworthy condition. If this cannot be completed, the vessel will need to be removed from the water at the owner's expense.
 - No vessel should be allowed to become derelict at the docks. Vessels should not have multiple tarps covering them unless they are kept adequately secured and in good condition. Accumulation of growing moss topside should not be allowed, and any heavy underwater hull fouling should be addressed (out-of-the-water work). Vessel propulsion systems shall always be maintained in working order and bilge pumps shouldn't have to run continuously to keep vessels afloat.

State Registration:

POBH Best Management Practices

- Marina staff shall perform regular checks on the docks for compliance with state registration requirements. No vessels shall have expired stickers displayed.
 - All owners are required to maintain state registration if their vessel is in Oregon waters, even if the boat is not in use. Additionally, all federally documented recreational boats are required to maintain a valid state registration and display a sticker on the stern of the vessel.
 - Marinas should always maintain a minimum 90% registration compliance rate on the docks and strive for 100% compliance. Delinquent vessel owners should be contacted regularly for compliance follow-up and be given a deadline to comply.
- Marina managers should ensure that the moorage lessee is the owner listed on the vessel title. If a discrepancy is noted, the marina manager should determine whether there is a valid reason or if the lessee should be referred to the OSMB to properly title the vessel.
- If boaters remain noncompliant then it's recommended that your County Sheriff's Marine Patrol be contacted and that you ask them to perform an enforcement action.

Moorage Rules:

- Update moorage rules and customer agreements to include the above items if they are not already part of your current package.
- Ensure moorage agreements provide the marina with the authority to require an owner to remove the vessel from the water if the boat is not in compliance with required moorage rules and give authority to the marina to remove a vessel of concern at the owner's expense if they don't comply with a marina order to do so.
- Actively enforce all established moorage rules and complete required follow-up activities for vessels deemed not-in-compliance in a timely fashion.
- Require tenants to notify marina management immediately if a vessel is sold and remains at the marina.