



Environmental Resource Guide

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Maine Clean Boatyards & Marinas Program

Environmental Resource Guide

Introduction

During the Casco Bay Clean Boatyards and Marinas Project, it occurred to us that a list of resources and products relating to BMP improvements, along with additional tips and techniques and sample language for signage and contracts would make a useful tool for anyone seeking to reduce pollution and achieve or exceed environmental compliance at their yard or marina. This document is intended to complement the Maine Department of Environmental Protection's BMP manual "*Brightwork: A Best Management Practices Manual for Maine's Boatyards and Marinas*" by helping to eliminate the barrier between the idea and the action.

The Environmental Resource Guide is not meant to be an endorsement of any products, technologies, or services. Some of the products and businesses listed are tried and true; others we heard about or found in telephone directories or on the web. We have tried to exclude any well-meaning but useless products or ideas. We encourage you to let us know which products, services, or technologies you have employed as well as your level of satisfaction with them.

Acknowledgements

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The Maryland Clean Marina Guidebook, Maryland Clean Marina Initiative
The Massachusetts Clean Marina Guide, Massachusetts Office of Coastal Zone Management
The Florida Clean Marina Resource Book, Florida Clean Marina Program
The Connecticut Clean Marina Guidebook, Connecticut Clean Marina Program

This guide is intended as an educational tool for marina and boatyard operators and boaters. It does not constitute a reference of state, federal, or local laws. Relying on the information in this guide will not protect you legally.

AREA 1

STORMWATER RUNOFF MANAGEMENT, EROSION & SEDIMENTATION CONTROL

Topics addressed in this chapter:

- Stormwater runoff management
- Storm drains & catch basins
- Vegetated areas & wetland systems
- Pavement alternatives
- Resources and links
- List of native plants

Goal: To minimize the amount of pollutants reaching the waterbody and watershed and protect shorelines from erosion.

For specific regulatory information, please refer to the Maine DEP's "Brightwork: A Best Management Practices Manual for Maine's Boatyards and Marinas".

Stormwater Pollution Planning & Facility Improvements

- **Create a Stormwater Pollution Prevention Plan.** Beginning in 2005, all waterfront facilities will be obligated by law to create and file with the State this comprehensive site plan (commonly referred to as a SWPPP). This exercise is an extremely effective tool for identifying pollution and potential pollution pathways, thereby ensuring that your investment in pollution prevention measures will be effective. For a SWPPP template and/or model plan, please refer to the Stormwater Chapter in "Brightwork: A Best Management Practices Manual for Maine's Boatyards and Marinas". Alternatively, the manual also offers information on creating a less comprehensive (but still quite useful) Site Plan
- **Consider retrofitting any existing site drainage systems with traps or filters** that will clean runoff flowing from the marina/boatyard. (Please see the storm drain section in this chapter for more information).
- **Consider landscaping techniques to improve drainage issues.** If you plan to make major facility modifications, consider hiring a civil engineering firm with experience in site development to design filtration systems into your site. Some of these systems can be expensive, so start by creating a specific account for this improvement and consider developing a dedicated environmental fee to pay for the cost. While these improvements need to be planned and funding mechanisms developed, they will be investments in your business.
- **Seek Professional Assistance:** Depending on the scope of your needs, you may consider seeking expert advice and/or services. Civil engineering firms, environmental consultants, and landscape design firms may be your best avenue to ensuring comprehensive and enduring solutions to site planning and pollution prevention. Make sure that they have experience and expertise in the task(s) that you have envisioned for them. Please see the "Resources and Links" section at the end of this chapter.

- **Designate specific work areas for specific tasks:** Perform as much boat repair and maintenance as practical inside work buildings. Where buildings or enclosed areas are not available, provide clearly designated work areas as far from the waterbody as possible. While hull sanding may be best done on an impervious surface for ease of clean up, a porous surface (crushed stone or a water permeable hard top) would be better for most other tasks.
- **Minimize pavement areas:** The less impervious area you have on site, the less runoff you will have to manage because gravel and various porous materials allow rainwater to infiltrate into the ground. Consider alternatives to asphalt and concrete for parking lots and vessel storage areas. Please see examples described in this chapter.
- **Protect shorelines and banks from erosion** by using natural shoreline features to the extent possible. For detailed information on Sedimentation and Erosion Control BMPs, please see *Brightwork: A Best Management Practices Manual for Maine’s Boatyards and Marinas*”
- **When performing any new construction project(s)**, use devices such as hay bales, silt fences, storm drain filters, sediment traps, and earth dikes to prevent sediments from leaving construction areas.

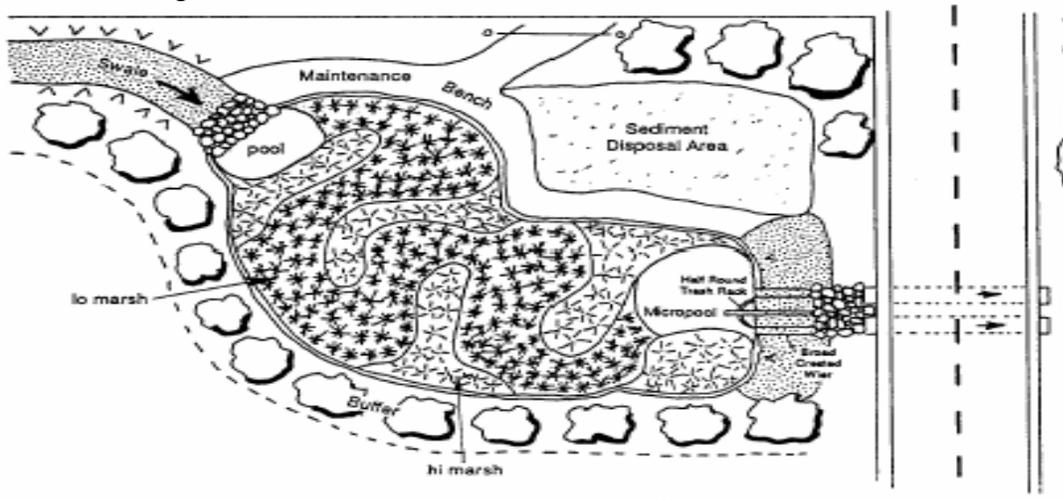
Storm Drains and Catch Basins

- **Filters in storm drains:** Simple filter systems for storm drains are relatively inexpensive, easy to install and easy to maintain. Filter screens can be placed under storm drain grates to remove pollutants. Alternatively, you may be able to construct your own system with absorbent materials and/or textile fabric. These need to be maintained twice yearly and should be inspected after every storm.
- **Oil/Grit Separators** are placed in the drain line to remove oil and sediment. Water passes through several chambers, trapping oils that float on top of the water and sediments that fall out. These devices should be inspected and cleaned out periodically and after every rain storm.
- **Sand Filters** collect runoff and filter it through a sand medium, which is effective in removing sediments and oils. Numerous designs are available. Some use small check dams to slow surface flow and promote infiltration. Others are underlain by a perforated PVC drain pipe wrapped in geotextile fabric to move the treated runoff off-site. Where soils are porous, the runoff will infiltrate into the subsoils.
- **Leaching basins** generally replace or modify your existing catch basin by adding an area of crushed stone to help filter stormwater. Leaching basins need to be maintained annually.
- **Stencil Storm Drains.** Stencil or paint storm drains with the words “Don’t Dump” and “Drains to Bay” (or appropriate watershed). If they are not your own storm drains, be sure to get permission from the county or municipal department that maintains the storm drains. Generally, it is the Department of Public Works.

Vegetated Areas & Wetland Systems

While the following methods can be implemented to absorb pollutants and divert the flow of water, keep in mind that they may also improve the “look” of your boatyard or marina. Your customers will probably appreciate this improvement.

- **Vegetated buffer or filter strips:** A swath of grassy or wooded vegetation will filter and slow the flow of surface water runoff, stabilize the shoreline, and provide wildlife habitat, flood protection, and visual diversity. A 25 foot strip between all impervious areas (e.g., parking lots, boat storage areas) and the water is optimum; however, any vegetative strip is an improvement.
- **Bioretention areas** take advantage of a site’s natural features, including low-lying areas and vegetation, and minimize the need to build expensive stormwater control devices. It can be incorporated into green spaces, parking lot islands, or any low spot where stormwater is likely to flow and/or collect. Water, nutrients, and pollutants are taken up by soil and plants within 24 to 48 hours after a storm. The following Cooperative Extension web site has detailed information about planning and planting a bioretention area: University of Wisconsin <http://clean-water.uwex.edu/pubs/raingarden/gardens.pdf>.
- **Vegetated swales** are narrow grassed areas that collect stormwater, slow its flow and collect sediments, and then allow stormwater to discharge off-site or just to soak into the earth. They can be designed with deep sandy beds underlain by a perforated pipe, which promotes infiltration of water into the swale and then quickly drains the clean water. In sandy soil, underground pipes may be unnecessary. The benefit of the vegetated swale is that it can be squeezed along the margins of work sites and incorporated into landscaping improvements that help make the facility more attractive to customers.
- **Stormwater wetland systems** (or pocket wetlands) are more elaborate but effective systems that will collect stormwater, then release most of it over a period of a few days, slowly returning to its normal depth of water. Several mechanisms in wetland systems remove pollutants including: settling of suspended particulates; biological uptake, or consumption of pollutants by plants, algae and bacteria in the water; and decomposition of some pollutants. The pocket wetland in the figure below is created by excavating to the high water table elevation. Pocket wetlands can serve drainage areas of 5 to 10 acres.



Source: Schueler, T.R. 1992. *Design of Stormwater Pond System*. Washington, DC: Metropolitan Washington Council of Governments.

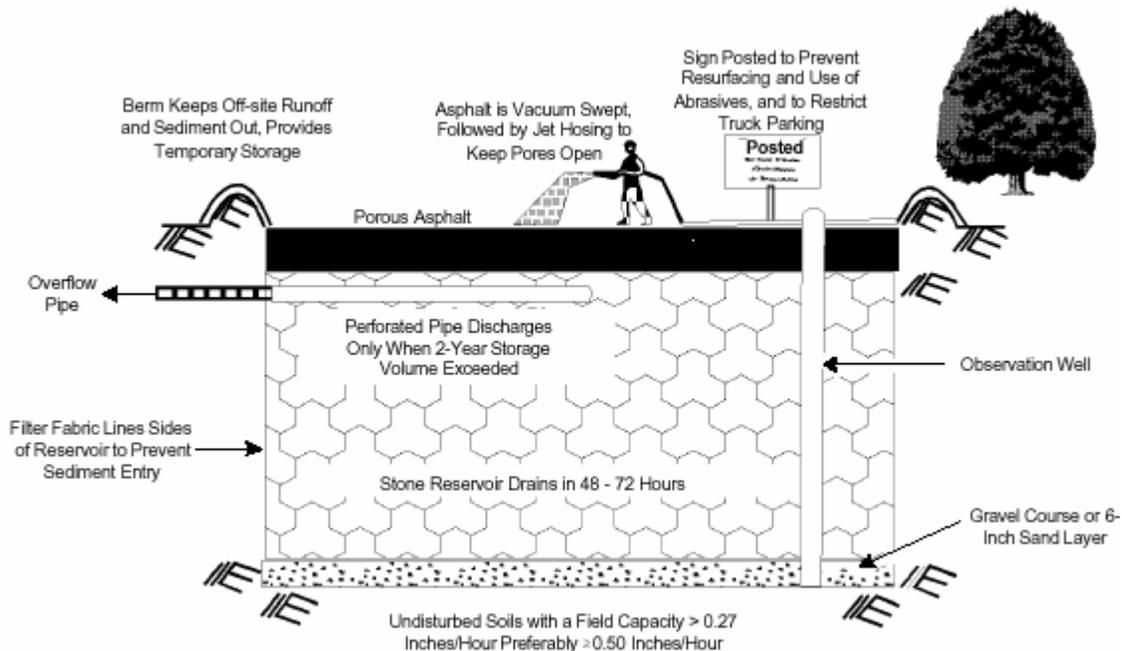
Alternatives To Conventional Pavement

Porous pavement is a special type of pavement that allows rain and snowmelt to pass through it, thereby reducing the runoff from a site and surrounding areas. In addition, porous pavement filters some pollutants from the runoff if maintained.

There are two types of porous pavement:

- Porous asphalt pavement consists of an open-graded coarse aggregate, bonded together by asphalt cement, with sufficient interconnected voids to make it highly permeable to water.
- Pervious concrete consists of specially formulated mixtures of Portland cement, uniform, open-graded coarse aggregate, and water. It has enough void space to allow rapid percolation of liquids through the pavement.

Both designs typically include a reservoir of coarse aggregate stone beneath the pavement for stormwater storage prior to infiltration into surrounding soils. The void spaces in the aggregate layers act as a storage reservoir for runoff. A filter fabric is placed beneath the gravel and stone layers to screen out fine soil particles. See drawing below for a depiction of porous pavement. The common modifications made in designing porous pavement systems are varying the amount of storage in the stone reservoir beneath the pavement and adding perforated pipes near the top of the reservoir to discharge excess stormwater after the reservoir has been filled.



Source: Storm Water Technology Fact Sheet: Porous Pavement. EPA, September 1999.

Organic soil binder: another option is a non-toxic, organic soil binder derived from the Plantago plant family. When this binder is combined with crushed aggregate (e.g., gravel, shells) and soil, it creates a somewhat permeable surface that will not erode. This resilient material costs the same or less than asphalt and will not crack during winter freeze/thaw cycles. It can be repaired by adding more material and tilling the surface, and can be dug up with a shovel to plant trees and shrubs.

Resources and Links

- When choosing a contractor (excavation, landscaping, building, or environmental consultant), keep in mind that the DEP's Nonpoint Source Training and Resource Center has a training program on effective erosion control techniques to help contractors comply with erosion control law and protect Maine waters. To become certified, a contractor must complete basic and advanced courses on Erosion Control BMPs which include sections on erosion and sediment control materials, vegetative stabilization, slope stabilization, culvert installation, ditch stabilization and erosion control planning. There are many benefits to hiring a certified contractor to conduct your project, not the least of which is having some assurance that the excavation work will be done in an environmentally sound manner. In some cases, certified contractors may be able to get your project completed more quickly since the department has afforded them the ability to forgo the 14-day waiting period for Soil Disturbance and Stream Crossing Projects under the Permit-by-Rule program. The DEP maintains a list of certified contractors: to obtain this list, contact the Department's Nonpoint Source Training and Resource Center (287-7726) or visit the DEP's web site <http://www.state.me.us/dep/blwq/training/ccec.htm>.
- Your county's Soil and Water Conservation District may give assistance and advice concerning stormwater and erosion issues. For a list of county offices and addresses, visit <http://www.me.nacdnet.org>. In Casco Bay, contact Wayne Munroe at the Natural Resources Conservation Service (207)883-0159.
- For great tips on landscape and lawn care that benefit the environment while mitigating negative environmental impacts, contact Friends of Casco Bay at (207) 799-8574 or the Maine Board of Pesticides Control at (207) 287-2731 or visit the Bayscaper Program website at <http://www.state.me.us/agriculture/pesticides>.
- For a variety of landscaping and gardening information, contact the Maine Cooperative Extension at <http://www.umext.maine.edu>.
- For a list of landscape designers and contractors, contact the Maine Landscape and Nursery Association (MeLNA) at <http://www.melna.org> or (207) 225-3767.
- For a list of civil and environmental engineers in Maine contact the American Council of Engineering Companies Maine at (207) 623-1218 or <http://www.acecmaine.com/members.html>.
- Conduct additional research through your local yellow pages or the internet.

Native Plant Recommendations For Maine

Alphabetized by Common Name

TREES

- | | | |
|---|--|---|
| <ul style="list-style-type: none"> • American Hophornbeam • American Hornbeam • American Mountainash • Balsam Fir • Basswood • Bigtooth Aspen • Black Cherry • Black Gum • Black Spruce • Black Willow • Eastern Hemlock • Gray Birch • Green Ash • (Champlain) Hawthorn • Jack Pine • Mountain Maple | <ul style="list-style-type: none"> • Pagoda Dogwood • Paper Birch • Pin Cherry • Quaking Aspen • Red Maple • Red Oak • Red Pine • Sugar Maple • Tamarack • White Ash • White Oak • White Pine • White Spruce • Yellow Birch • White Cedar | <ul style="list-style-type: none"> • Chokeberry • Bog Rosemary • Bush Cinquefoil • Buttonbush • Canadian Yew • Carolina Rose • Chokecherry • Common Juniper • Common Witchhazel • Downy Serviceberry • Gray Dogwood • Highbush Blueberry • Nannyberry • Northern Bayberry • Red Osier Dogwood • Rhodora • Scarlet Elder • Shadblow Serviceberry • Staghorn Sumac • Sweetfern • Sweetgale • Virginia Rose • Winterberry • Highbush Cranberry |
|---|--|---|

VINES and GROUND COVERS

- | | |
|---|--|
| <ul style="list-style-type: none"> • Bearberry • Bunchberry • Checkerberry • Cranberry • Creeping Juniper • Fox Grape | <ul style="list-style-type: none"> • Lowbush Blueberry • Partridgeberry • Running Serviceberry • Virginbower • Woodbine |
|---|--|

SHRUBS

- | | |
|---|--|
| <ul style="list-style-type: none"> • Allegheny Serviceberry • American Elder • American Filbert • Arrowwood Viburnum • Beach Plum • Black | <ul style="list-style-type: none"> • Hobblebush • Labrador Tea • Lambkill • Leatherwood • Mapleleaf Viburnum • Meadow Rose |
|---|--|

PERENNIALS: FLOWERING PLANTS

- [Baneberry](#)
- [Bloodroot](#)
- [Blue Cohosh](#)
- [Blue Flag](#)
- [Bluebead-Lily](#)
- [Boneset](#)
- [Columbine](#)
- [Downy Yellow Violet](#)
- [Foam Flower](#)
- [Harebell](#)
- [Indian Cucumber-Root](#)
- [Jack-in-the-Pulpit](#)
- [Joe-Pye Weed](#)
- [Labrador Violet](#)
- [Marsh Blue Violet](#)
- [Marsh Marigold](#)
- [Milkweed](#)
- [New England Aster](#)
- [New York Aster](#)
- [Obedient Plant](#)
- [Round-Leaved Violet](#)
- [Silvery Cinquefoil](#)
- [Solomon's Seal](#)
- [Spikenard](#)
- [Sweet White Violet](#)
- [Trout-Lily](#)
- [Turtlehead](#)
- [Wild-Oats](#)

PERENNIALS: FERNS

- [Christmas Fern](#)
- [Cinnamon Fern](#)
- [Hay-Scented Fern](#)
- [Interrupted Fern](#)
- [Lady Fern](#)
- [Long Beech Fern](#)
- [Maidenhair Fern](#)
- [Marginal Wood Fern](#)
- [Ostrich Fern](#)
- [Royal Fern](#)
- [Sensitive Fern](#)
- [Spinulose Wood Fern](#)

Maine Natural Areas Program Department of Conservation
93 State House Station
Augusta, ME 04333-0093
(207) 287-8041
<http://www.state.me.us/doc/nrimc/mnap/hom>

Topics addressed in this chapter:

- Boat washing
- Hull preparation
- Painting
- Engine maintenance
- Cleaning products and alternatives
- Resources and links

Goal: To reduce the amount of pollutants from boat maintenance and to contain them at the source.

For specific regulatory information, please refer to the Maine DEP's "Brightwork: A Best Management Practices Manual for Maine's Boatyards and Marinas".

Boat Washing Tips and Techniques

- **Bottom washing:** Please refer to "Brightwork: A Best Management Practices Manual for Maine's Boatyards and Marinas"
- **Properly dispose organic debris from bottom washing:** Most organic debris (i.e. grass/seaweed, barnacles, mussels) from bottom washing should be collected and disposed of as solid waste or it can be composted and used for fertilizer. If it is attached to paint chips, etc., it should be disposed of with other paint debris.
- **Prohibit underwater hull cleaning:** The process of cleaning a hull while it is in the water can cause a release of copper and other pollutants which contaminate water and sediments. Prohibit in-water hull cleaning. Offer mid-season cleaning service at discounted rate to reduce the need for in-water hull cleaning.
- **Encourage use of non-toxic detergents:** Most cleaners, soaps, and detergents are harmful to the environment if released untreated. More often than not, they are unnecessary and/or overused, and in some cases can destroy the protective coatings on the boat. Cleaners containing ingredients such as ammonia, sodium, chlorinated solvents, petroleum distillates, and lye are among the most harmful. There are many commercially available non-toxic or low-toxic cleaners that are more safe and just as effective. Encourage your customers to try some of the "homemade" cleaners using readily available ingredients. "Recipes" can be found in the Alternative Cleaners chart in Appendix A Educating Your Customers.
- **Wax your boats:** A good coat of wax, where appropriate, will prevent surface dirt from becoming ingrained.

Hull Preparation Tips and Techniques

- **Encourage the use of vacuum sanders:** Use vacuum sanders to automatically collect and store paint, varnish or wood dust before it can get into the marine environment (or eyes or lungs).

Many boatyards have more than paid for the cost of purchasing vacuum sanders by renting them to their customers.

- **Investigate alternatives to traditional media blasting:** Hydroblasting and mechanical peeling essentially eliminate air quality problems. Debris must still be collected, however. For specific regulatory information, please refer to “Brightwork: A Best Management Practices Manual for Maine’s Boatyards and Marinas”.
- **Dispose of used solvents and paint waste properly.** Refer to Chapter 4 in this guide or for specific regulatory information, as well as a waste disposal reference chart, please refer to “Brightwork: A Best Management Practices Manual for Maine’s Boatyards and Marinas”.

Painting Tips and Techniques

- **Use and recommend antifouling paints which contain the minimum amount of toxin necessary for the expected conditions.** Most antifouling paints work by continuously releasing small quantities of active toxic substances which discourage organisms from settling and growing on the painted surfaces. Concentrated amounts of these materials released from hull maintenance areas are damaging to aquatic life.
- **Use water-based/or low VOC (Volatile Organic Compounds) paints** whenever practical.
- **Stay informed** about antifouling products, like Teflon, silicone, polyurethane, and wax that have limited negative impacts. Pass the information along to your customers.
- **Use brushes and rollers whenever possible.** Reduce paint overspray and solvent emissions by minimizing the use of spray equipment.
- **Limit in-water painting to small jobs.** Substantial painting should be done on land in vessel maintenance area and/or over a ground cloth.

Engine Maintenance Tips and Techniques

- **Parts Washing:** Solvent use creates environmental, worker health, and fire liabilities for your shop. Minimize your costs and liabilities by switching to aqueous solutions or by investing in a parts washer that can recycle your solvent. For more information on parts washers and aqueous solutions, please see Appendix A of this guide.
- **Engine Test Tanks:** Reduce liability and liquid waste hauling costs by treating your engine test tank with oil-eating microbes.

- **Antifreeze:** Use propylene glycol (commonly referred to as “non-tox”) antifreeze for all systems as it is much less toxic than ethylene glycol antifreeze. Once it has run through an engine, it is no longer “non-toxic,” so take care with it, and recover and recycle it when possible. If you must use ethylene glycol-based antifreeze, recover and recycle it. To learn more about a simple process for recovering antifreeze, please see Area 4 in this guide.
- **Filters and Absorbents:** Keep absorbent pads and rags within reach to wipe up spills. All absorbents are not created equal: make sure to use the correct pad for the material spilled. For more information, please refer to the “Know Your Absorbents” fact sheet in Area 3 in this guide.

Resources and Links

This chapter contains references to many types of products, from paints to parts washing equipment to non-toxic cleaners to vacuum sanders. Because products are changing every day, the best way to research products is through personal recommendations, a search engine on the web, your local vendors, and by calling us at the Maine Clean Boatyards & Marinas Program at 207-773-8725.

KNOW YOUR PAINTS

Most antifouling paints work by continuously releasing small quantities of active toxic substances discouraging organisms from settling and growing on the painted surfaces. These substances can be detrimental to aquatic life. Concentrated amounts of these materials released from hull maintenance areas are damaging to the environment. Solvents, thinners, and brush cleaners, often used in sanding and painting, can also harm the environment if handled improperly. When applying bottom paint keep in mind the following techniques: choose the right bottom paints, read the paint can label, use only what you need, and mix paint far away from the water.

General Categories of Paints

Bottom paints can be separated into three general categories:

- **Antifouling hard:** When hard or “contact leaching” paints dry they create a porous film on the hull. Once the boat is in the water, the biocides closest to the surface dissolve, but the paint itself does not. When the particles dissolve, there is a “hole” in the paint film which lets the water dissolve the toxins further inside the paint until the biocide is gone.
- **Ablative or “sloughing”** paints are designed to be soft-sloughing – that is, both the paint and the biocide are water soluble and begin to dissolve when immersed in water. Copper or organotin compounds are primarily used as the biocide or antifouling agent in these paints and, when released, they directly contribute to the contamination of shellfish beds and bottom sediment. When active ingredient is leached out, the underlying film weakens and is polished off as the boat moves through the water.

-
- As marine paint manufacturers have recognized the need to supply more environmentally friendly bottom coatings, boaters have an increasing number of alternative choices to these conventional antifouling paints. Here are some of the alternatives available:
 - **Epoxiated vinyls** offer good adhesion to many traditional paints and still contain antifouling properties to control marine growth.
 - **Copper co-polymer** or “hard copper” paints are effective and long lasting.
 - **New coatings**, such as Silicon and Teflon produce hard, slick surfaces to which fouling growth cannot firmly attach.

Choose the Right Bottom Paint

Your choice of paint will depend on a number of factors such as frequency of boat use; time, distance and speed of travel; hull repair frequency and method and present type of coating on the hull. The following table describes advantages and disadvantages of different bottom paints. Depending on your circumstances, the chart will help you to find a paint that will accommodate your needs and will have less negative impacts on environment. **Maine’s boating season can be short and water temperatures here are/can be cooler than in other parts of the country. Keep these factors in mind when helping your customer choose the appropriate bottom paint for their boat.**

Maintenance Need	Ablative Paint	Hard Paint	Environmental Issue
Frequency of repainting	Every 1 to 3 years depending on the thickness of the original application and use of boat.	A single coat is applied annually.	Air Quality: Fumes (VOC) that are harmful to human health and air quality are released whenever solvent-based paints are used. Use water-based paints whenever practical.
Hull preparation	Light sanding is generally all that is needed prior to application of new paint.	Annual heavy sanding is suggested to improve adhesion & prevent build up. If you choose light sanding instead, the resulting build up will need to be blasted or stripped off periodically.	Debris: Use the following techniques to keep debris out of the water: Collect dust created by sanding with a vacuum sander or in tarps. Blast or strip in an enclosed area where debris can be easily captured. Test collected debris to determine appropriate waste handling method (special or hazardous).
Pressure washing	Pressure washing will remove some ablative paint.	Pressure washing will remove fouling growth and possibly paint chips.	Release of Biocides: Pressure washing releases pollutants which need to be managed. Use minimal water pressure so that, to the greatest extent possible, just slime is removed.

Adapted from: Maryland Clean Marina Guidebook

AREA 3

FUELING ACTIVITIES / PETROLEUM CONTROL

Topics addressed in this chapter:

- Preventing spills at the pump
- Preventing spills from the boat
- Minimizing spills and leaks from machinery
- Spill clean up techniques & emergency planning
- Absorbent fact sheet
- Sample sign-out sheet
- Resources and links

Goal: To reduce the risk of fuel leaks and spills and to strengthen recovery efforts in the event of a spill.

- *For specific regulatory information, please refer to the Maine DEP's "Brightwork: A Best Management Practices Manual for Maine's Boatyards and Marinas".*

Prevention, Prevention, Prevention

- **Locate fuel docks in areas protected from wave action and boat wakes** when constructing new or upgrading existing facilities. For safety reasons, all fueling stations should be accessible by boat without entering or passing through the main berthing area.
- **Remove fuel nozzle locks** that are used to keep the nozzle open without being held.
- **Install an automatic back pressure shut off system on fuel nozzles** to automatically stop the flow of fuel into a boat's fuel tank when sufficient reverse pressure is created.
- **Install a leak detection system such as a high-level alarm or restrictor valve on the fuel lines as well as an emergency shutoff valve that is accessible and clearly marked.**
- **Turn down the flow pressure:** problems with backsplash and vent-line overflow are often due to the high pressure flow of fuel from the pump. Ask your fuel company representative to set the delivery rate to 10 gallons per minute, especially if you cater to small boats.
- **Supervise fueling:** Train employees to give information and direction to customers before they begin fueling. Always have a trained employee at the fuel dock to oversee or assist with fueling. Encourage customers to fill their tanks to no more than 90 percent of capacity.
- **Hang nozzles vertically when not in use** so that fuel remaining in hoses does not drain out. If this is not practical, rest nozzles on absorbent pads in a leak-proof container.
- **Keep an impervious containment tray on the dock for placement of portable fuel tanks when filling.**

Place a plastic drip tray lined with oil absorbent material beneath fuel connections at the dock to prevent fuel leakage from reaching the water.

Prevention, Prevention, Prevention

- **Prevent fuel vent spills by promoting and installing permanent or temporary fuel recovery systems.**
 - Fuel/air separators attached to fuel tank vent lines separate air from fuel forced into the line. Air is vented and all fuel is returned to the tank, rather than spilling overboard.
 - Temporary devices, such as spill catchers, are placed over the fuel tank vent when fueling to capture spills from the vent. Similar permanent systems can be installed as well.
- **Automatically install a bilge sock or pillow when commissioning or servicing boats.** Please see “Know Your Absorbents” at the end of this chapter.
- **Use a drip pan under the engines during maintenance.**
- **Avoid pumping any bilge water that is oily or has sheen.** Use oil absorbents to sop up any excess oil and dispose according to manufacture instructions before materials are fully saturated.
- **Invest in a portable or stationary oil/water separator** to draw contaminated water from bilges, capture hydrocarbons in a filter, and discharge clean water. The cost of an oil/water separator (\$400-\$1000 depending on capacity) can be recovered through an environmental fee or fee per use system.
- **Do not treat oily bilge water with detergents or dispersing agents,** because rather than cleaning, this process will only exacerbate the ill-effects of petroleum. If oily bilge water cannot be sufficiently cleaned for legal discharge, make arrangements with a waste hauler to properly dispose of the bilge water.

Minimizing Spills & Leaks from Machinery

- **Use non-water-soluble grease on travelifts, forklifts, cranes, and winches.**
- **Place containment berms around fixed pieces of machinery:** containment volumes should equal 110 % of the capacity of the machinery’s fuel tank. The machinery should be placed on an impervious pad.
- **Keep a sign-out sheet posted on doors of buildings** stating that doors are locked, there are no spills, odd smells, etc.
- **Keep a log for each piece of machinery** to record daily or weekly inspections. If a leak is discovered, control the leak and take the piece of machinery out of service until the leak has been repaired.

Spill Clean Up & Emergency Planning

- **Display a sign at each pump detailing what to do in the event of a fuel spill.** This sign should also indicate the location of oil absorbents. For examples of appropriate signage, please see Appendix A.
- **Keep Oil Absorbent Materials Handy:** Offer a supply of oil absorbent pads and pillows at the fuel dock to mop up spills on the dock and on the water. Please see “Know Your Absorbents” on the following page.
- **Maintain and Store Spill Response Equipment Smartly:** Maintain enough spill response equipment to contain the greatest potential spill at your facility. Look for oil absorbent booms that are sturdy enough to stand up to regular contact with the dock and boats. Store the equipment where the greatest threat of an oil spill exists: fuel receiving and fuel dispensing areas. Mark the storage site(s) with a sign reading “Oil Spill Response Kit.”
- **Prohibit the use of detergents, emulsifiers and disbursing agents on even the smallest spills.**
- **Develop a Spill Prevention, Control and Countermeasure Plan (SPCC)** and share it with your Harbormaster and Fire Department. Keep a copy in an accessible location and another within the spill response kit. Please refer to “Brightwork: A Best Management Practices Manual for Maine’s Boatyards and Marinas” for a SPCC plan template.
- **Train Employees:** Review plans and response procedures with staff at the beginning of each boating season. Run emergency response drills at least twice annually. Keep a log of all trainings and have your staff sign and date it every time they train. Invite the U.S. Coast Guard and local fire department to demonstrate emergency response procedures at your marina.

Know Your Absorbents

The characteristics of absorbents and oil types must be considered when choosing absorbents for cleaning up oil spills:

Rate of absorption – The absorption of oil is faster with lighter oil products (e.g., gasoline, diesel fuel, benzene). Once absorbed the oil cannot be re-released. The thicker oils adhere to the surface of the adsorbent more effectively.

Oil retention – The weight of recovered oil can cause a sorbent structure to sag and deform, and when it is lifted out of the water, it can release oil that is trapped in its pores causing secondary contamination.

Ease of application and ease of disposal.

Oil absorbent pads, booms, and pillows are useful for capturing spurts at the fuel dock, cleaning bilge water, and wiping up spills in engine maintenance areas.

Bioremediating sorbents contain microbes that digest the petroleum, converting oil to carbon dioxide and water. These can be effective in certain applications, however, this technology is ill-suited for use on moving water and requires specific authorizations. Bioremediating cleaners, which are disbursing agents, should **never** be used for a spill in the water or to clean the bilge of a boat that is in the water.

Bioremediating cleaners come in liquid and powder forms and can be effective cleaners in certain applications. However, because they are disbursing agents they should **never** be used for a spill in the water or to clean the bilge of a boat that is in the water.

Haz-mat absorbent pads, booms and pillows absorb corrosive liquids such as acids and bases. Make sure to keep haz-mat absorbents in areas where hazardous materials are stored and used.

Loose materials, such as clay, vermiculite, sawdust, kitty litter, peat moss, straw, and ground corncobs, can be used in a variety of settings, as well, but be aware that they can be dusty, difficult to apply in windy conditions, and potentially hazardous if inhaled.

Disposal of Used Sorbents

For specific regulatory information, please see “Brightwork A Best Management Practices Manual for Maine’s Boatyards & Marinas” for Fuel Storage BMPs and Fueling BMPs.

How you dispose of used absorbent material depends on what type of product it is and how it was used:

If the pad/boom is saturated with **gas**, store it in a covered, explosion-proof container until ready to dispose of properly as a hazardous waste.

If the pad/boom is saturated with **diesel or oil**, double bag it in plastic--one bag sealed inside another. Dispose in your regular trash.

If the pad is saturated with **hazardous** or questionable materials it should be stored and disposed of appropriately as a hazardous waste.

government, Maine Marine Trade Association, and your local environmental consultant.

For up-to-date Oil Spill Response Information, visit the National Oceanic and Atmospheric Administration's Office of Response and Restoration web site at <http://response.restoration.NOAA.gov>.

AREA 4

WASTE RECYCLING, DISPOSAL & STORAGE

Topics addressed in this chapter:

- Solid Waste Recycling, Disposal and Storage
- Liquid & Hazardous Recycling, Disposal, and Storage
- Universal Waste
- Emergency Planning
- Chart: Recommended Disposal Methods
- Resources and Links

Goal: Properly contain, recycle and dispose of solid waste, liquid waste and hazardous waste generated by facility and its customers.

- *For specific regulatory information, please refer to the Maine DEP's "Brightwork: A Best Management Practices Manual for Maine's Boatyards and Marinas".*

Solid Waste Recycling, Disposal, & Storage

- **Set up a recycling program for solid waste:** A recycling program is an easy, inexpensive, highly visible means to demonstrate environmental stewardship. You may even realize cost savings due to less frequent tipping of your dumpster due to the reduced volume of trash. Contact your waste hauler or your local waste recycling facility to learn what materials are collected in your area. Some municipalities and many waste haulers will provide containers.
- **Make sure your recycling area is well defined, well marked, and user-friendly.** Make sure to advertise your recycling service and clearly identify your recycling bins with what can (and cannot) go in them. Offer instructions for what to do with the materials that cannot go in bins. Keep in mind that it may take some time to properly train your customers and staff – making sure that the bins are properly sorted and emptied may require patience and persistence for the first couple of years but the better your signage the less upkeep you will have. For examples of language for signs, please see "*Éducating your Customers*" section in this guide.
- **Pet waste management:** Pet waste contains bacteria that are as detrimental to the aquatic environment as human waste. In addition to requiring pet owners to stoop-and-scoop, offer dog waste disposal bags and a place to put the full bags. A variety of companies now sell pet waste bags and canisters.
- **Reduce shrink wrap waste:**
 - Use and encourage customers to use reusable or recyclable boat covers.
 - Reuse used plastic covers when possible.

- Check with your shrink wrap manufacturer to see if they will recycle their used product. If they don't, ask them to.
- Coordinate a regional recycling pickup of used shrink wrap with your waste hauler.
- Ask your municipal or county recycling centers to include a shrink wrap recycling program.

Liquid and Hazardous Waste Recycling, Disposal, & Storage

- *For specific regulatory information, please see “Brightwork: A Best Management Practices Manual for Maine’s Boatyards and Marinas” and the DEP’s “Hazardous Waste Generators Handbook”.*
- **Minimize Waste:** By minimizing your use of hazardous products, you can lower disposal costs, decrease liability, limit chances that you will be responsible for a costly clean-up of inappropriately disposed material, and reduce health and safety risks to your staff, tenants, and contractors.
- **Recycle Whenever Possible:** used oil, gasoline, antifreeze, and solvent may be recyclable. Contact your waste hauler or your local waste recycling facility to learn what materials can be collected in your area.
- **Develop a process for recovering and re-using antifreeze:** a simple and cost-effective method for recycling propylene glycol (non-toxic) antifreeze from the lower units of outboards and inboard/outboards will put the antifreeze from the lower unit right back into the original 55 gallon antifreeze container. You will need something to catch the antifreeze which can be, a 55 gallon drum, cut in half lengthwise to make a trough, a reversible electric pump, and a yoke-type earmuff attachment. Place the 55 gallon trough underneath the lower unit, attach the earmuff to the lower unit, start the pump, run the engine, and allow the antifreeze to be collected in the trough. When winterizing is completed, turn off pump turn off the Engine unscrew the earmuff from the hose, reverse the pump and suck the antifreeze from the trough and put it back into the 55 gallon drum. If you place an oil absorbent pad in the trough it will absorb any oil discharged during the winterization process. Keep this recycled antifreeze clean and check it prior to use to make sure it is not diluted.
- **Install a furnace that is designed to burn used oil.** With a savings of between \$1000 and \$2500 per year, the initial cost (they average \$10,000) can pay off in a short time.
- **Encourage your customers to exchange excess paints, thinners, varnishes, etc.** amongst themselves. To facilitate this type of activity, provide a bulletin board where boaters can post notices that they are seeking particular materials or have an excess of a substance.
- **Stock smaller containers of solvents and thinners.** If spilled there is less to clean up and inventory control is easier.
- **Direct marina patrons to properly dispose of all liquid and hazardous wastes through the use of signs, mailings, and other means.** Disposal facilities for these wastes should be clearly

marked. Instructions for using the facility should be posted on a sign in or near the collection and storage site (even if that means the sign says “Please check in at the office before disposing of waste”).

- **Supervise Waste Disposal:** Assign control over hazardous supplies to a limited number of people who have been trained to handle hazardous materials and understand the first-in first-out policy. Post sign-in and sign-out sheet at hazardous materials storage locations.
- **Label Containers Properly:** Plainly label all stored and containerized material. For hazardous waste, mark the date accumulation begins and ends on each container. Ask your waste hauler or environmental consultant to provide you with labels or you may purchase labels from a variety of industrial and/or environmental products companies.
- **Use Secondary Containment:** See “Brightwork: A Best Management Practices Manual for Maine’s Boatyards and Marinas” and the “Hazardous Waste Generators Handbook” for specific requirements. Attach funnels to containers to reduce chances of spills. Funnels should be large enough to drain portable containers and oil filters.

Universal Waste Management Tips

- **Minimize the use of products containing mercury.** Use longer lasting fluorescent lamps or sodium lamps when appropriate. Although fluorescent lamps contain mercury a longer lasting lamp will cut down your need to replace lamps frequently. When replacing bilge pump float switches use non-mercury switches.
- **Remember that some office equipment contains heavy metals such as mercury** and other hazardous materials that are subject to regulation. Cathode ray tubes which can be found in computer monitors and television sets, mercury thermostats, some types of batteries must all be treated as Universal Waste and is subject to collection, storage and shipping rules. See the Maine DEP’s “Universal Waste Handbook” for more information.

Emergency Planning Tips & Techniques

- **Develop and Share Your Hazardous Material Spill Response Plan** for containment and cleanup. Develop written procedures describing actions to be taken under given circumstances. The plans should be clear, concise, and easy to use during an emergency. Keep copies of all Emergency Response Plans in readily accessible locations. Place an additional copy in the hazardous material spill response kit(s). Share your plan with municipal first responders.
- **Assess Hazards and Maintain Material Safety Data Sheets:** Consider and plan for likely threats, such as: fuel spill, spill of hazardous materials at the storage area, fire, health emergency, etc. Keep a file of Material Safety Data Sheets (MSDS) for all products used at your facility, as required by the Occupational Safety and Health Act of 1970 (29 USC Sec. 657).
- **Train Employees:** Review plans and response procedures with staff at the beginning of each boating season. Run emergency response drills at least twice annually. Invite the U.S. Coast Guard and local fire department to demonstrate emergency response procedures at your marina.

- **Maintain and Store Spill Response Equipment Smartly:** Make sure that your response equipment is appropriate to the type of materials stored, maintain enough spill response equipment to contain the greatest potential spill at your facility, keep the equipment where the greatest threat of spill exists, and mark the storage site with a sign reading “Hazardous Materials Spill Response Kit.”

Resources & Links

For a list of **Hazardous Waste Transporters**, contact DEP at (207)287-2651 or http://www.state.me.us/dep/rwm/data/pdf/active_haz.pdf

For information about **Universal Waste** visit the Maine DEP’s Bureau of Remediation and Waste Management Hazardous/Universal Waste pages at <http://www.maine.gov/dep/rwm/hazardouswaste/index.htm#uw> or call (207) 287-2651. You may also access the online version of the Universal Waste Handbook at <http://www.maine.gov/dep/rwm/hazardouswaste/pdf/uwhandbook2004.pdf>.

For a list of **Universal Waste Transporters**, contact DEP at (207)287-2651 or <http://www.state.me.us/dep/rwm/hazardouswaste/pdf/uwtran.pdf>

For a list of **Special Waste Facilities**, contact the DEP at (207) 287-2651 or <http://www.maine.gov/dep/rwm/data/landfillactive.htm>

For a list of **certified underground tank installers and inspectors**, contact DEP at (207) 287-2651 or <http://www.maine.gov/dep/rwm/ustast/pdf/certifiedinstallers.pdf>

For questions and answers about the **transportation of non-hazardous waste** (i.e., solid, special, septage), contact DEP at (207)287-2651 or <http://www.maine.gov/dep/rwm/solidwaste/nonhaztrans.htm>

The **DEP’s Small Business Technical Assistance Program** helps small businesses comply with environmental regulations. The intent of their Small Business Compliance Incentives Policy is to provide small businesses with an opportunity to work with the Department to solve environmental problems while avoiding the threat of enforcement action for discovered violations.

The Department is implementing and interpreting the policy in a flexible manner so that businesses can correct environmental violations without being penalized. The Department has already worked with small businesses under a similar interim policy that enabled these companies to correct environmental violations, such as operating without a required license, without a penalty being assessed.

The Department will not take enforcement action against small businesses for violations that are

discovered as a result of a business voluntarily requesting assistance from the Department, as long as the violations are corrected within specified time frames.

The policy applies to violations discovered for the first time at a facility that has requested assistance and is working with the Department to correct the violations. It does not cover violations that are discovered as a result of DEP initiated compliance inspections, complaint investigations, or mandatory self reporting.

For more information, contact DEP at <http://www.maine.gov/dep/oia/sbta/index.htm> (800)789-9802.

RECOMMENDED DISPOSAL METHODS

Waste	Recycling and Disposal Options
Antifreeze <ul style="list-style-type: none"> • Propylene glycol • Ethylene glycol 	Recycle <ul style="list-style-type: none"> • Hire a waste hauler to collect and dispose. • Purchase an on-site recovery unit. Distillation systems are more expensive than filtration systems but are more efficient at renewing used antifreeze.
Waste Oil <ul style="list-style-type: none"> • Engine oil • Transmission fluid • Hydraulic oil • Diesel • Kerosene 	Recycle <ul style="list-style-type: none"> • Use waste oil for space heating or have it taken by someone who recycles it. • There are services that will “polish” dirty diesel fuel by pumping it through a filter and back in again. Alternatively, chemical additives and frequent changing of the fuel filter might do the trick.
Quart Oil Cans	Drain completely and dispose in regular trash. They cannot be recycled.
Oil Filters	Recycle <ul style="list-style-type: none"> • Puncture and completely hot drain for at least 12 hours. • Recycle the oil and the metal canister. • Crush filters to recover maximum amount of oil and minimize waste volume Dispose <ul style="list-style-type: none"> • If you do not recycle the canister, double-bag it in plastic and place it in your regular trash.
Gasoline	Recycle <ul style="list-style-type: none"> • Add stabilizer in the winter to prevent it from becoming stale or an octane booster in the spring to rejuvenate it. • Mix with fresh fuel and use. • Chemical additives, along with frequent change of fuel filter, may be effective at cleaning gasoline. • Use in small, less “sensitive” equipment such as lawn mowers, weed wackers, etc. Dispose <ul style="list-style-type: none"> • Hire a hazardous waste hauler to collect and dispose of.
Kerosene	Filter and reuse for as long as possible then recycle.
Gas Filters	Dispose <ul style="list-style-type: none"> • Store in an explosion-proof canister and dispose of as a hazardous waste.
Used Oil Absorbent Material	Reuse <ul style="list-style-type: none"> • If it is saturated with gasoline, store it in an explosion-proof canister and dispose of as a hazardous waste. Dispose

	<ul style="list-style-type: none"> If it is saturated with oil or diesel, double bag it in plastic and discard in trash (as long as no petroleum is leaking).
<p>Solvents</p> <ul style="list-style-type: none"> Paint thinners Engine cleaners 	<p>Recycle</p> <ul style="list-style-type: none"> Reuse as long as possible and then recycle Parts washing cabinets that recycle solvent may be a cost-effective alternative to sending out solvent waste. <p>Dispose</p> <ul style="list-style-type: none"> Dispose of as hazardous waste
<p>Paints and Varnishes</p> <ul style="list-style-type: none"> Latex Water-based Oil-based 2 part paint systems 	<p>Dispose</p> <ul style="list-style-type: none"> Allow empty canisters to dry completely. Dispose in regular trash. Use leftover material for other projects. Encourage tenants to swap unused material. Cans with some paint: Treat as hazardous or special waste if paint contains heavy metals above regulatory levels. Check manufacturer's labels and/or MSDS for proper waste handling
<p>Paint Brushes</p>	<p>Dispose</p> <ul style="list-style-type: none"> Allow to dry completely. Treat as special waste or hazardous waste if paint contains heavy metals above regulatory levels.
<p>Paint Filters</p>	<p>Dispose</p> <ul style="list-style-type: none"> Allow to dry completely prior to disposal. Treat as hazardous or special waste if paint contains heavy metals above regulatory levels.
<p>Rags soaked with hazardous substances</p> <p>Maine DEP is reviewing BMPS for solvent soaked rags</p>	<p>Reuse</p> <ul style="list-style-type: none"> As many times as possible, but air-drying is illegal. <p>Dispose</p> <ul style="list-style-type: none"> Keep in covered, explosion-proof, container until ready to dispose. Dispose of the solvent that collects in the bottom of the container as hazardous waste.
<p>Dried Paint Waste</p>	<p>Dispose</p> <ul style="list-style-type: none"> Perform TCLP, store and dispose of as a hazardous or special waste, according to test results.

AREA 5

BOAT PUMPOUTS & SEWAGE

Topics addressed in this chapter:

- Sewage discharge prevention
- Live-aboards
- Resources and links

Goal: To reduce the release of sewage into the waterbody.

For specific regulatory information, please refer to the Maine DEP's "Brightwork: A Best Management Practices Manual for Maine's Boatyards and Marinas".

Sewage Discharge Prevention

- **Promote your pump-out!** When customers come to fill up their gas tanks, have staff automatically ask if they'd like a pump-out.
- **Offer to check your customers' Y valve settings.** Incorrect settings are a common source of illegal sewage discharge.
- **Use and sell environmentally-friendly holding tank additives.** Holding tank chemicals can be problematic for septic systems and municipal sewer systems and can be detrimental to the environment no matter which system they enter. Additives should not contain formaldehyde or other harsh chemicals and they should not be petroleum products (like pine oil). Make sure to get permission from your municipality before using their system, and be sure to let them know if you are using the greener products.
- **Work with your Harbor Master to promote proper disposal of sewage.** The role of the Harbor Master varies from harbor to harbor, but yours is likely charged with the job of educating the public about sewage discharge and MSDs. Make sure your Harbor Master knows about your pumpout service, if you have one, and make sure you know the hours of any other pumpout services in the area.

Addressing the Needs of Live-aboards

- Provide year-round, 24/7 bathroom, shower, and laundry facilities. They should be heated, lighted, and a path shoveled out in winter.
- Ask your slip-holders to identify their form of MSD in their application form.
- Make sure your live-aboard customers are aware of your "no-discharge" policy.

Resources and Links

Products and services change every day. To get information on pumpout products, do an internet search using the keyword “pumpout systems.” For information on environmentally-friendly holding tank additives, contact your local marine supplier or do an internet search on “green holding tank additives.” If you do not have internet service, contact Maine Clean Boatyards & Marinas Program (207) 773-8725 for ideas, or the DEP’s Small Business Technical Assistance Program or the Office of Pollution Prevention at (800)789-9802.

Pumpout Grants: For information on the Maine DEP Pumpout Grant Program contact Pam Parker at (207) 287-7905 or via e-mail at pamela.d.parker@maine.gov. You may also access pumpout grant information and the application form on the web at <http://www.state.me.us/dep/blwq/docgrant/pumpout.htm>.

EDUCATING YOUR CUSTOMERS

Topics addressed in this chapter:

- Ways to spread the message
- Sample language for signs
- Examples of operator/customer and operator/contractor agreements
- Sample letter to Marina/Boatyard patrons
- List of clean boating brochures

Ways to Spread the Message

To succeed in implementing effective and lasting pollution prevention measures at your boatyard or marina, you will need to take on the role of educator. Your students are your staff and your customers. Of course, changes in habits and attitudes do not occur overnight; sometimes people need to be convinced several times over before they are willing to alter their own habits, and some folks simply think that they are automatically grandfathered in, therefore environmental stewardship applies only to the new generation of boaters. On the other hand, many people are becoming more aware and more willing to make an effort to preserve their treasured places.

People generally remember only:

- 10% of what they read
- 20% of what they hear
- 30% of what they see
- 50% of what they see and hear
- 70% of what they say and write
- 90% of what they say as they do something

Use a variety of educational methods to yield greater participation and stronger retention. If you talk with your customers about environmental stewardship, provide good signage, provide pollution prevention fact sheets, and implement a clearly worded contract or list of rules, your message will be heard. Keeping in touch and providing updates through a newsletter will help keep pollution prevention on the front burner in your customer's minds. Your customers will be impressed with your efforts, and they will follow your example.

The purpose of this section is to provide you with some tools to assist your educational efforts.

Signs

Signage is one of the most effective ways to get your message out. In addition, you will find that signs make rule enforcement easier, as all you have to do is point to the sign and your customer can read for themselves. Some folks think of signs as obtrusive, ugly, and/or preachy. If you are one of them, make sure your signs are unobtrusive (but visible), attractive, and positively worded. Obviously, if you have too many signs they will be ignored.

- Post signs at fuel docks and pumpout stations, along piers, in vessel maintenance areas, and at dumpsters and recycling stations.
- Be sure signs are visible.
- Signs must be durable, eye catching, and appropriately sized.
- Hire your local sign-maker or sign painter to do all your signs so the design is consistent.
- Keep the “tone of voice” used in your signage consistent.
- Post your facility’s environmental policy in a conspicuous location.
- The following language is offered as examples for you to use when creating signs.

Sample Language For Signs

FUELING PROCEDURES

KEEP FUEL OUT OF THE WATER

- Do Not Top Off Tank
- Listen to Anticipate When Tank is Full
- Wipe-up Spills Immediately

FILL DON’T SPILL*

Help keep our water clean when fueling your boat.

- Pay attention
- Be Fire Safe
- Don’t Top Off
- Use Spill Catchers and Bilge Socks
- Respond to Spills Immediately
- Call Attendant. (If no attendant call ME DEP Spill Line 800-482-0777 – all spills must be reported)

*This sign may be available from Maine DEP (287-7905) and/or MMTA (773-8725)

FILL DON’T SPILL*

When Responding to a Fuel Spill

- Stop the Source of the Spill
 - Contain the Spill with Booms
 - Cover the Spill with Absorbent Pads
 - Call the Maine DEP Spill Line (800)428-0777
 - and Local Fire Department _____
- All Spills Must be Reported

*This sign may be available from Maine DEP (287-7905) and/or MMTA (773-8725)

SPILL REPSONSE

OIL SPILL RESPONSE KIT

(Include name and number of person to contact at the marina in case of a spill. Be sure that a copy of the Spill Response Plan is clearly visible inside the Spill Response Kit)

If A Spill Occurs

- Block spill access to water with buckets, sorbent pads, whatever you have.
- Notify staff **immediately**.
- If no attendant call ME DEP Spill Line 800-482-0777

Notice

The Federal Water Pollution Control Act prohibits the discharge of oil or oily waste into or upon the navigable waters of the United States or the waters of the contiguous zone if such discharge causes a film or sheen upon, or discoloration of, the surface water. Violators are subject to a penalty of \$5,000. The use of soaps to disperse oil is illegal. Violators may be fined up to \$25,000 per incident.

IN WATER ACTIVITIES

So We Can Do Our Part To Keep The Water Clean...

- Hull cleaning at marina slips is prohibited.
- In water bottom cleaning is prohibited.

SEWAGE - PET WASTE

Scoop the Poop

**Dog owners- please pick up your dogs' waste.
-or- please use dog waste bags provided.**

Discharge of holding tanks in this marina is strictly prohibited!

Pumpout Station*

- Instructions for use
- Hours of operation
- Fee
- Name and number of person to call in case of malfunction

* Pumpout Signage available from Maine DEP 287-7905

Do Not Discharge Sewage

- Please use our clean, comfortable restrooms while you are in port
- Nutrients and pathogens in sewage make water unhealthy and unsafe for humans and critters alike.

Discard Fish Scraps Appropriately

- Please do not discard fish scraps in the bay/cove/river
- Bag the scraps and dispose in dumpster or at home
- Save and dispose over deep water

BOAT MAINTENANCE/REPAIR

Boat Work Area

- All major repairs (e.g., stripping, fiberglassing) must be performed in the Boat Work Area
 - All blasting and spray painting must be performed within the enclosed booth or under tarps
- Use tarps or filter fabric to collect paint chips and debris. Clean up immediately after use.
- Use vacuum sander (include rental information if appropriate)
 - Use high-volume low-pressure spray guns (include rental information if appropriate)
 - Use drip pans under all liquids
 - Reuse solvents
 - Store waste solvents, rags, and paints in

WASTE HANDLING/RECYCLING

Recycle Antifreeze

This container is for:

- Propylene glycol antifreeze (pink)

Gasoline, diesel, kerosene, and all other materials are STRICTLY PROHIBITED.

(If container is locked, include information about where to find the key or leave the antifreeze).

Recycle Antifreeze

This container is for:

- Ethylene glycol antifreeze (green/blue)

Gasoline, diesel, kerosene, and all other materials are STRICTLY PROHIBITED.

(If container is locked, include information about where to find the key or leave the antifreeze).

This container is for:

- Engine oil
- Transmission fluid
- Hydraulic fluid
- Gear oil
- #2 Diesel
- Kerosene

Gasoline is STRICTLY PROHIBITED

(If container is locked, include information about where to find the key or leave the oil).

WASTE HANDLING/RECYCLING

Think Before You Throw: The following items may not be placed in this dumpster

- Oil
- Antifreeze
- Paint or varnish
- Solvents
- Pesticides
- Lead batteries
- Transmission fluid
- Distress flares
- Loose polystyrene peanuts
- Hazardous waste

PLEASE DO NOT PLACE HAZARDOUS OR LIQUID MATERIALS IN TRASH CANS (i.e. paint, solvents, flares, oil, lead batteries, fluorescent bulbs).

We Recycle!

- Oil
- Paper
- Antifreeze
- Lead batteries
- Solvents
- Glass
- Steel
- Plastic
- Scrap metal
- Aluminum
- Tin
- Corrugated cardboard
- Tires
- Shrinkwrap

(Indicate which items you recycle and where the collection sites are. Include information about local recycling services for materials that you do not collect).

GENERAL POLICY

Marine Sanctuary

This marina provides food and shelter for young fish. (or other statement appropriate to your facility).

Please help us to protect the ecology of this fragile area by:

- Preventing oil spills
- Keeping your bilge clean
- Using oil sorbent pads
- Using non-toxic cleaners
- Recycling or properly disposing of used oil, antifreeze, solvents, cleaners, plastics, and other wastes.

Environmental Policy

It is the policy of this marina/boatyard to protect the health of our patrons, staff, and the environment by minimizing the discharge of pollutants to the water and air.

Yard Rules and Agreements

In addition to being a legal document, contracts and agreements are very effective educational tools because they can be used to inform boaters and contractors how to minimize their environmental impacts. Use the following examples and or language to design a document that suits the needs of your facility.

Sample Contract #1: For Dockage/Slip Rental

Tenant Responsibilities

1. The Tenant shall at all times ensure that his boat is registered, identified, marked, equipped and maintained as required by law and safe boating practices.
2. The Tenant shall at all times keep his boat insured for complete marina coverage, including liability, at such terms and in such amounts acceptable to the Marina. The Tenant shall provide proof of their insurance policy with their initial dockage payment.
3. The Tenant shall be responsible for any and all damage, which he or his boat may cause to other boats, persons, structures and or facilities in the Marina and shall identify and hold the Marina harmless from all such damage.
4. By signing this Agreement, the Tenant and his boat become subject to the posted rules and regulations of the Marina.
5. At all times while on the property of the Marina or on any boat moored therein, the Tenant and his guests shall conduct themselves so as to create no annoyance, hazard or nuisance to the Marina and its ecosystem or to the following specific rules:
 - A. As mandated by federal law, the Tenant shall not engage in overboard discharges of marine heads, septic, oily or contaminated bilge, or any contaminated substance. This is cause for automatic loss of slip without reimbursement.
 - B. It is the Tenant's responsibility to ensure that proper fueling procedures are practiced. The tenant is responsible for any spills that may occur. The tenant shall follow all posted instructions on signs while refueling.
 - C. The Tenant must report any spills to the marina office as soon as they occur.
 - D. The Tenant is encouraged to use only cleaning products that will not degrade the environment. The Tenant shall use non-toxic detergents (no phosphate, bleach or other harsh ingredients) for cleaning boats and other equipment within the facility.
 - E. The Tenant shall place all garbage and other refuse in the dumpster or appropriate recycling bin. Trash shall not be left at the head of the ramp, in dock carts, finger piers, or in common areas.
 - F. *The Tenant is encouraged to make use of our recycling facility. The tenant may request a list of the items that may be recycled from the marine store.***
 - G. To dispose of any hazardous or questionable waste, tenant must check in at the marina office for further direction.

Accepted By: _____
(please sign, then print name)

DATE: _____

Accepted By: _____
(--- Marina/Boatyard)

Date: _____

Sample Contract #2: For Tenants and Sub-contractors

The following text is based on the Marine Trades Association of New Jersey's Best Management Pledge. The language may be incorporated into lease agreements.

FOR TENANTS:

I, _____, understand that _____
(name) (marina/boatyard)

subscribes to and enforces pollution prevention procedures. I further understand and agree that in return for the privilege of performing work on a boat at this facility such as hull cleaning, washing, sanding, polishing and/or painting; bottom cleaning, sanding, scraping, and/or painting; opening the hull for any reason, *e.g.* installation of equipment or engine work; engine or stern drive maintenance, repair, painting; etc., it is my responsibility to comply with, at a minimum, the following pollution prevention practices. I understand that this list may not be complete and pledge that I will exercise my common sense and judgment in my actions to insure that my activities will not deposit pollution residues in surface waters or elsewhere where they may be conveyed by stormwater runoff into the surface waters. I understand that failure to adopt pollution prevention procedures may result in expulsion from the marina/boatyard (*insert name of facility*) and forfeiture of rental fees. I understand that I may elect to employ the facility to perform potential pollution producing activities on my behalf in which case the responsibility for compliance with best management practices is entirely theirs.

Signed _____ Date _____

FOR SUB-CONTRACTORS ONLY:

I understand and agree to have my proposed work first authorized by this facility and that I will adhere, at a minimum, to the contents of this document. I further understand that because of the nature of my proposed work, the facility may require that I be supervised by an employee of said facility for which I will pay the normal existing rate.

Signed _____ Date _____

POLLUTION PREVENTION PRACTICES:

- 1) REPAIRS AND SERVICE (to hull and engine: painting, cleaning, washing, sanding, scraping, etc.)
 - a. Work on hulls and engines only in designated areas or use portable containment enclosures with approval of marina management.
 - b. Use tarps and vacuums to collect solid wastes produced by cleaning and repair operations-especially hull cleaning, sanding, scraping, and painting.
 - c. Conduct all spray painting within an enclosed booth or under tarps.
 - d. Use non-toxic, biodegradable solvents.
 - e. Capture and properly dispose of organic debris from bottom washing.
 - f. Use only minimal amounts of phosphate-free, non-toxic, and biodegradable cleaners.
 - g. Use drip pans for oil transfers, grease operations, and when servicing I/Os and outboard motors.
 - h. Obtain management approval before commencing any repair which will open the hull. Clean and pump bilges free of contaminated materials before and after repairs which open the hull.
 - i. Use spill proof oil change equipment.

2. VESSEL MAINTENANCE WASTE

- a. Non-toxic residue of sanding, scraping, and grinding: bag and dispose of in regular trash.
- b. Toxic or questionable residue of sanding, scraping, and grinding: seek specific directions from marina/yard management or dispose with licenced agency.
- c. Toxic and non-environmentally safe solvents and cleaning liquids: seek specific directions from marina management or dispose of with licensed agency.

3. FUEL OPERATIONS

- a. Install fuel/air separator on fuel tank vent line(s) to prevent overflow of fuel through vent.
- b. Keep petroleum absorbent pad(s) readily available to catch or contain minor spills and drips during fueling.

4. WASTE OIL AND FUEL

- a. Recycle used oil and antifreeze.
- b. Add a stabilizer to fuel tank in the fall or an octane booster to stale fuel in the spring. Use the fuel or bring it to a household hazardous waste collection site.
- c. Absorbent materials soaked with oil or diesel: drain liquid and dispose of in used oil recycling container; double bag absorbent material in plastic and dispose in regular trash receptacle.
- d. Absorbent materials soaked with gasoline (flammable): contact staff immediately to for directions regarding proper disposal.
- e. f. Oil filters: drain and recycle the oil; recycle the filter or double bag and put in regular trash.

5. ONBOARD PRACTICES

- a. Maintain oil absorbent pads or socks in bilge. Inspect no less than annually.
- b. Do not discharge bilge water if there is a sheen to it.
- c. Use only low-toxic antifreeze (propylene glycol). Recycle used antifreeze (even low-toxic anti-freeze will contain heavy metals once it has been used).

6. SEWAGE HANDLING

- a. Never discharge raw sewage within Maine waters.
- b. If you have an installed toilet, you must have an approved Marine Sanitation Device (MSD).
- c. Do not discharge Type I or Type II marine sanitation devices within the marina basin.
- d. Use marina restroom facilities when at slip.
- e. Do not empty port-o-potties in the restrooms. Use marina dump facility.
- f. Do not discharge holding tanks overboard; use pump-out facility.
- g. If you must use a holding tank additive, use an enzyme-based product. Avoid products that contain quaternary ammonium compounds (QACs), formaldehyde, formalin, phenal derivatives, alcohol bases, or chlorine bleach. .
- h. Liveaboards, place a dye tablet in holding tank after each pumpout. The dye will make any illegal discharges clearly visible.

7. ORGANIC WASTE

- a. Clean fish only in designated areas.
- b. Grind, compost, or double bag fish scraps (*depending on the services offered by your marina*)
- c. Walk pets in specified areas and dispose of their wastes, double bagged, in the dumpster.

8. SOLID WASTE

- a. Recycle plastic, glass, aluminum, newspaper, and used lead batteries (*tailor this section to fit your facilities practices*).
- b. Place trash in covered trash receptacles; replace covers.

Sample Letter To Marina/Boatyard Patrons

A letter sent out in your winter mailing will help explain any changes that there may be to the contract and/or appearances and practices at the facility the following season. If you have a website, post it there as well. In addition, annual, bi-annual, or quarterly newsletters can be an excellent way to communicate pertinent improvements, changes, and news to your patrons. Many boatyards and marinas designate a section or column of their newsletter to environmental topics.

Pollution Prevention Materials For Boaters

The following is a list of pollution prevention publications that are well suited for boaters and can be ordered in quantity by calling/emailing the contacts listed below. They may be put together with other materials regarding tides, weather, boat safety, wildlife information, or news about your facility to create a “ditty bag” as a service to your customers.

Casco Bay Pumpout Stations, Pumpout Boat Info, & Sewage Pollution Info

Friends of Casco Bay

(207) 799-8574

www.cascobay.org

Cost: free

Coast of Maine Pumpout Stations

Maine Department of Environmental Protection

(207) 287-7905

www.state.me.us/dep/blwq

Cost: free

Good Mate Boater Educational Brochures

The Ocean Conservancy’s Good Mate Program

(757) 496-0920

GoodMate@oceanconservancyva.org

“Oil & Fuel Pollution,” “Sewage Pollution,” “Vessel Maintenance Pollution,” “Stormwater Runoff,” “Solid Waste & Debris,” “Vessel Operation Damage”

Cost: \$3.00/set of six (\$.50 single copy) + 5% shipping and handling - (\$.30/copy in bulk)

BoatUS Foundation Educational Brochures

BoatU.S. Foundation

(800) 334-BOAT

www.BoatUS.com/foundation

“Help Stop the Drops” (fuel spill prevention)

“Stash Your Trash”

“21 Steps to Make Your Boating Waters Cleaner” (general pollution prevention)

Cost: free

Maine Inland Fisheries and Wildlife Brochures

(207) 287-8000 or www.state.me.us/ifw

“Boating Regulations & Safe Boating Practices”

“Invasive Plants”

Cost: free

Coast Guard 24 hour hotline for reporting an oil or hazardous material spill:
(207) 780-3251 or www.uscg.org.

PRODUCT INFORMATION

The following is a partial list of pollution prevention equipment and products that may be helpful as you implement pollution prevention measures. Because the list is not complete we suggest that you use it as an information guide to the types of products available and conduct additional research into product options and prices.

A comprehensive list of pollution prevention technologies is available at VendInfo, the US EPA's National Database of Pollution Prevention Products and Services at <http://es.epa.gov/vendors/>.

Please call (207) 773-8725 if you know specific product and/or vendors that should be added to our list.

Sell Environmentally Preferable Products

Selling environmentally preferable products at the marina will help your customers practice clean boating, while at the same time supporting your environmental efforts. There is really no end to these products, if you are so motivated. Consider setting up a promotional display of environmentally-friendly products and place it in a prominent place with clean boating materials.

The following examples are products that could be sold at your chandlery:

- glycol antifreeze
- environmentally preferable cleaners
- biodegradable soaps
- low nitrogen/ phosphate-free detergents
- “green” holding tank additives
- absorbents
- bilge socks
- boat-sized spill kits
- absorbent donut or container for fuel tank vents
- nontoxic, water-based paints
- filters
- baking soda!

ABSORBENT PRODUCTS	
Product	Description
Oil absorbents <ul style="list-style-type: none"> • Roll • Pad • Mat • Booms, Socks, Pillows, Sweeps • Oil Drip Mat 	<p>Absorbent mats, pads, rolls and booms are perfect for oil spill cleanup, contamination removal, land protection and a lot more.</p> <p>Lower a bilge boom into your bilge or tank to remove petroleum-based spills. They will float without breaking down or sinking. Sweeps designed with built in straps, can be drawn over the water surface to absorb broad sheens or surface spills.</p> <p>Use oil mat under fleet vehicles as an inexpensive, easy to use BMP</p>
Universal/Hazmat Pads & Rolls	<p>Specially developed chemical hazmat absorbents with properties that make it ideal for hazardous liquid cleanup.</p>
Stormwater Products <ul style="list-style-type: none"> • Passive Skimmer • Catch Basin Drain Insert • 	<p>Fits most catch basins and storm drains. Floats on water surface - continuously absorbs oil.</p> <p>Held in place by the metal grate, it effectively removes coarse sediments, oil, grease, litter and debris from storm water.</p>
Spill Response Kits <ul style="list-style-type: none"> • Emergency Spill Kit (various sizes) • Portable Spill Kit • Spill Truck 	<p>Kits generally contain sorbent pads and socks, plus a safe plastic disposal bag, all in a sealed bag.</p> <p>Spill trucks – large polyethylene boxes, wheel mounted for maximum mobility, provide highest level of readiness.</p>
Spill Response Products <ul style="list-style-type: none"> • Spill Blocker Dikes • Drain Cover Seal • Loose Particulate • Organic Granule Absorbent 	<p>Confines and diverts deeper pools of liquid: build-in keystone connectors.</p> <p>Reusable drain cover seal, seals drains tightly to prevent spills from entering drain.</p> <p>Absorbs oil, water and chemical-based liquids. Easy to dispense directly from the bag or with a mechanical blower for larger areas.</p> <p>Includes: plants, sawdust, paper, corn cob. Limited chemical resistance. Absorbs up to 6 times its own weight.</p>
Spill Containment Products <ul style="list-style-type: none"> • Secondary Containment Pallets • Drum Containment Platform • Spill Berm Dikes 	<p>These and similar products are designed to contain spills at or near the source. Some are intended to be used in a stationary situation, others can be “portable” allowing you to easily move the containment device.</p> <p>Don't forget to check with your local marine wholesalers for their recommendations – or to ask them to carry an environmentally preferable product that you have used with success.</p>

ABSORBENT PRODUCTS	Manufacturers & Vendors
Company Name	Contact Information
AbsorbentsOnline.com	800-869-9633 http://www.absorbentsonline.com
A&A Industrial Supply	888-892-2694 http://www.spillkit.com
Ben Meadows Co.	888-892-2694 http://www.benmeadows.com
DAWG	888-892-2694 http://www.dawginc.com
Enviro Marine Inc.	888-892-2694 http://www.enviromarine.com
Hamilton Marine	800-639-2715 http://hamiltonmarine.com
Kellogg Marine Supply	800.243.9303 http://www.kelloggmarine.com
Lewis Marine Supply of Maine	800-322-6500 http://www.lewismarine.com
MYCELX Technologies Corporation	800-753-3278 http://www.controlmastersinc.com
New Pig Corporation	888-892-2694 http://www.newpig.com
Spill 911	888-892-2694 http://www.spill911.com
Spilldam, Inc.	508-583-7850 http://www.spilldam.com
StormTech, Inc.	888-892-2694 http://www.stormtech.com
Stormdrain Solutions	877-687-7473 http://www.stormdrains.com
Universal Remediation, Inc.	877-788-2444 http://petrolrem.com/aboutus.htm
Vortech Inc.	877-907-8676 or 207-885-9830 http://www.vortech.com

BILGE WATER FILTERS and FILTER PRODUCTS

Product	Description
Filter Products	Filters remove hydrocarbons out of water in a single pass including mixed emulsions, MTBE, PCB's and organically bound metals.
Bilge Water Filters	Bilge water filters instantly removes all hydrocarbons from your bilge water discharge so you will never have to worry about fines and you will be doing your part to help keep the environment clean!
Oil/Water Separators	Equipment separates oil and water. Production lubricants can be recovered virtually water-free and reused. Aqueous cleaning chemicals can be formulated to displace the oils and grease, without absorbing the soils, so the cleaner can have a much longer life
Air/Fuel Separators	Prevents fuel from sloshing out of the deck fitting, while at the same time, increasing the pressure inside the tank (by impeding air flow through the vent line), which triggers modern fuel pumps to automatically shut off when the tank is full.
Company Name	Contact Information
Environmental Products Sales Corp.	315-298-3247
Environmental Recovery Resources, Inc.	814-684-0133
Highland Tank	814/893-5701 http://www.highlandtank.com
Martin Walter Co., Inc.	81-878-1216 http://www.walterco.com
Master Chemical Corporation	419-874-7902 http://www.masterchemical.com
MYCELX Technologies Corporation	904-260-9756 http://www.controlmastersinc.com
New Pig Corporation	800-468-4647 http://www.newpig.com
Pan America Environmental	847-882-5855 http://www.panamenv.com
Parker Hannifin Corporation	800-272-7537 http://www.parker.com/racor/fas.html
Shuster Corp.	800-343-8409
W.H. Shurtleff Company	207-874-6371 or 800-663-6149 http://www.whshurtleff.com
Wave International Ltd.	800-554-8299 http://www.tidesmarine.com

BIODEGRADABLE SOAPS AND NON-TOXIC CLEANING AGENTS

Product	Description
All Purpose Cleaners Bilge Cleaner Holding Tank Deodorant Hull Cleaner Metal Cleaner/Degreaser Oxidation Remover Polish and Sealant	<p>Most of the more commonly used cleaning products are now available in a more environmentally preferable formulation – sometimes from the manufacturers that you already know, sometimes from a new manufacturer. Whenever, possible use these products and encourage your customers to do the same. Below is a partial listing of manufacturers and vendors.</p> <p>Don't forget to check with your local marine wholesalers for their recommendations – or to ask them to carry an environmentally preferable product that you have used with success.</p>
Company Name	Contact Information
Bactain	360-379-4787 http://www.bactain.com
Bio-Kleen Products	800-240-5536 http://www.biokleen.com
Bio Concepts	800-828-5124
Biosolve	800-225-3909 http://www.wsbiosolve.com/marine.htm
Captain John's Boat Brite	585-943-6111 http://www.captainjohnsboatbrite.com
Environmental Chemical Corp.	800-262-0458 http://www.ecconline.net
EnviroSystems, Inc.	800-374-0017 http://www.ecotru.com
Fluid Environmental Services, Inc.	773-262-8888 http://www.fluidenvironmental.com
Hamilton Marine	800-639-2716 http://hamiltonmarine.com
Kellogg Marine Supply	800.243.9303 http://www.kelloggmarine.com
Lewis Marine Supply of Maine	800-322-6500 http://www.lewismarine.com
Mary Kate Boat Care	215-674-4300 http://www.crcindustries.com
Safe Cleaning Products, LLC	715-369-2000 http://www.safecleaningproducts.net
Tri Synergy Inc.	800-446- 6076 Dept. 21 http://trisyn.com/
WORX Environmental Products Inc.	800-424-9679 http://www.worx.com

BOAT PUMPOUT	
Product	Description
	The discharge of untreated sewage into the coastal and inland waters of Maine is illegal. In addition, facilities that have 18 or more slips and/or moorings for boats 24 ft. or larger are required to have a sewage pumpout or contractual agreement to provide pumpout services. Providing "painless" pumpouts will make your customers happier and will help to enforce for them, your staff and the general public, your commitment to a clean environment. Cost share assistance grants are available from Maine DEP to help with the cost of installation as well as operations and maintenance. For more information contact Pam Parker at 207-287-7905 or e-mail: Pamela.D.Parker@maine.gov.
Pumpout Systems <ul style="list-style-type: none"> • Portable • Stationary • Pumpout Boat 	Pumpout systems are available in a number of different configurations. Your application should determine your choice of a system. When dealing with a pumpout manufacturer/distributor ask that they come to your facility and quote a site appropriate system. Depending on your situation you can choose from portable (trailer or cart mounted) systems, stationary systems that are mounted on a dock or float or a pumpout boat (a small stable vessel that is equipped with a pump and holding tank)
Company Name	Contact Information
Bay Sails Marine Sanitation, Inc. *	508-349-3840 http://www.baysailsmarine.com
Edson International	508-995-9711 http://www.edsonpumps.com
EMP Industries, Inc	800-355-7867 http://www.empind.net
Exstar International	800-500-4434 http://www.exstarintl.com
Gowen Marine Inc.*	800-564-6936 http://www.gowenmarine.com
Keco Pumps, Inc.	800-900 - 7867 http://www.pumpahead.com
Martin Walter Co.	781-878-1216 http://www.walterco.com

PAINT-RELATED PRODUCTS	
Product	Description
Solvents	We are beginning to see the introduction of less toxic solvents into the marketplace. There are viable alternatives to conventional paint strippers and solvents such as acetone and MEK.
Paint Stripper	"Environmentally-Sensitive" chemical paint strippers can eliminate paint chips and dust associated with sanding, scraping and blasting. There are now less toxic and less hazardous alternatives to strippers that use methylene chloride and other organic solvents. New products are non-chlorinated, biodegradable, have low volatility and are not listed as hazardous. (look for dibastic esters, semi-aqueous terpene-based products, detergents and C9 to C12-based hydrocarbon strippers, new soy-based products are also available)
Paint Spray Equipment	HVLP (High Velocity Low Pressure) and HELP (High Efficiency Low Pressure) spray guns with a 65% or greater paint transfer efficiency rating will help you use less paint/solvent and allow for easier clean up at the end of the job.
Vacuum Sanders	Dustless vacuum sanders are attached to a vacuum system that starts automatically when the sander is turned on. These units can trap up to 98 % of the dust generated by hull sanding, making them particularly suitable for situations where work must be done near the water.
Company Name	Contact Information
Apollo Sprayers, International Inc.	888-900-4857 http://www.hvlp.com
Bix Manufacturing Co.	800-251-1098 http://www.bixmfg.com/
Captain John's Boat Brite	585-943-6111 http://www.captainjohnsboatbrite.com
E Paint Company	800-258-5998 http://www.epaint.net
Fluid-Air Products Inc.	800-365-7565 http://www.fluidair.com/marine.htm
Hutchins Manufacturing Co.	626-792-8211 http://www.hutchinsmfg.com
Martin Walter Co.	781-878-1217 http://www.walterco.com
The Paint Project, Inc.	508-359-8003 http://www.paintproject.com
SprayTech Systems, Inc.	800-777-7729 http://www.spraytechsys.com
Solvent Kleene, Inc.	508-531-2279 http://www.solventkleene.com

WASTE OIL BURNERS

Product	Description
<ul style="list-style-type: none"> • Furnaces • Heaters • Boilers 	<p>There are a number of heating units on the market today that can help you deal with the large quantities of waste oil generated by oil changes and similar activities in the boatyard/marina. These heaters burn a variety of oils including engine oil and gear lube. Burning waste oil can significantly reduce your heating costs and eliminate your waste hauling costs and liabilities. Depending on your heating demands and the amount of waste oil that you generate return on investment can be realized in as little as 12 – 18 months, but probably more realistically in the neighborhood of 3 – 5 years.</p>
Company Name	Contact Information
Clean Burn	800-331-183 http://www.cleanburn.com
Firelake Mfg, LLC	866-252-3757 http://www.usedoilheaters.com
Kagi Heating Supplies and Manufacturing	888-866-5244 http://www.kagiheat.com
Lanair Waste Oil Heaters	800-753-1601 http://www.lanairusa.com
Omni Waste Oil Fired Equipment	800-255-1363 http://www.econoheat.com
Reznor	800-695-1901 http://www.reznorheaters.com/prod_line.htm
Siebring Manufacturing	888- 475- 3317 http://www.commercial-greenhouse-equipment.com

WASTE STORAGE	
Product	Description
Containment Products <ul style="list-style-type: none"> • Drum Containment Platform Secondary Containment • Drum Containment Units • Drum Toppers/Covers 	In general these products can be used to contain spills from drums and/or smaller containers either in the workspace or in storage areas. Drum toppers, covers and funnels can help keep the drums, barrels and the surrounding area clean by allowing for easy filling.
Pet Waste Products <ul style="list-style-type: none"> • Dog toilets • Waste disposal bags 	Pet waste carries harmful bacteria and should be managed accordingly. These products offer creative ways to handle pet waste. Some units are free-standing, others can be placed in the ground. In ground units may require the use of chemicals to aid in the breakdown of waste. At a minimum, pet waste bags and a disposal unit or some kind (trash can, dumpster, etc.) should be available for your customers use.
Shrink Wrap	Shrink wrap has become the method of choice at most boatyards for winter covers. While it certainly has its benefits, there are some drawbacks – the biggest being the storage and disposal of the used wrap. There is limited availability of shrinkwrap recycling at the manufacturer/distribution level. Talk with your local municipality to see if they can help with recycling. Most wraps are safe to burn at “trash to energy” facilities such as MERC in Biddeford or PERC in Portland.
Company Name	Contact Information
Absorbents Online	800-869-9633 http://www.absorbentsonline.com
Composters.com	877-204-7336 http://www.composters.com/docs/petdigester.html
Dr. Shrink	800-968-5147 http://www.dr-shrink.com
LIPA USA, Inc.	800-211-5472 http://www.dogtoilet.com
Pet Street Mall	800-957-5753 http://www.petstreetmall.com
Spill 911	800-474-5911 http://www.spill911.com/