

SAN MATEO COUNTY HARBOR DISTRICT

Small Vessel Maintenance & Discharge Guidebook September 2017

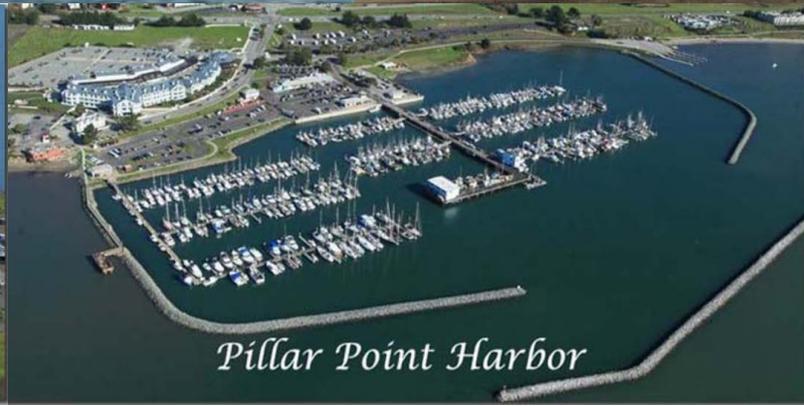
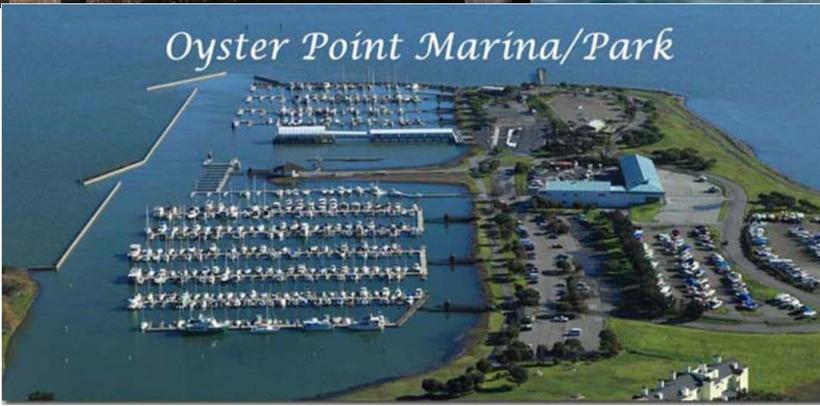




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ACRONYMS AND ABBREVIATIONS

BMP	Best Management Practice
CF&G	California Fish and Game
CMCP	Clean Marinas California Program
CVA	Clean Vessel Act
CWA	Clean Water Act
CZARA	Coastal Zone Air Reauthorization Amendments
DBW	Department of Boating and Waterways
EEZ	Exclusive Economic Zone
EPA	Environmental Protection Agency
HWCL	Hazardous Waste Control Law
MARPOL	International Convention for the Prevention of Pollution from Ships
MPPRCA	Marina Plastic Pollution Research and Control Act
MSDs	Marine Sanitation Devices
NPDES	National Pollutant Discharge Elimination System
PAHs	Polycyclic aromatic hydrocarbons
PCBs	Polychlorinated biphenyls
OPM/PPH	Oyster Point Marina / Pillar Point Harbor (Marinas)
RCRA	Resource Conservation and Recovery Act
RWQCB	Regional Water Quality Control Board
SWRCB	State Water Resources Control Board



I. INTRODUCTION

As with harbors and marinas nationwide, Oyster Point Marina and Pillar Point Harbor waters may be affected by particular recreational and commercial boating activities. Improper hull cleaning and painting procedures can release metals into the water. Oil changes and bilge water discharges may release PAHs into the water. Bacteria can enter marina water from illegal holding tank dumping, and trash can enter the water from illegal and inadvertent disposal of solid waste from harbor docks and boat decks. Although some boating activities can contribute to marina pollution, responsible boaters can easily help curb the pollution problem by following applicable regulations and selecting and applying the appropriate best management practices from the lists recommended in this guidebook.

PURPOSE

The purpose of this guidebook is to provide recreational and small commercial vessel operators a quick reference guide on the allowable and prohibited maintenance activities and discharges within the waters of OPM and PPH. In general, vessels covered under this guidebook are those that do not fall under the Environmental Protection Agency's Vessel General Permit (VGP). This includes all recreational boats and small commercial vessels that operate or berth in OPM and PPH that are under 79 feet of length (note: ballast water discharge for commercial vessels under 79 feet of length requires coverage under the VGP).

For those activities and discharges that are allowed in the Marinas, Best Management Practices (BMPs) will be identified. This guidebook is not assumed to cover all maintenance activities or discharges that can occur within the Marinas. Further, following the BMPs recommended in this manual does not necessarily authorize vessel operators to discharge within the Marinas or state or federal waters. Instead, this guidebook focuses on the most common activities by small vessel operators that may occur in the Marinas and can cause environmental harm. Through this guidebook, the Marinas hope to ensure compliance with established regulations and initiate clean boating practices.



WHY YOU SHOULD CARE

Everyone wants a clean ocean to live near and play and/or work in that contains unpolluted water and healthy marine life. However, as the populations of coastal areas and resulting boating activity continue to increase, the combined impact of individual actions on coastal waters is also growing. Many people feel that because the ocean is so immense, what they discard into it is diluted and becomes insignificant. However, coastal waters cannot be expected to absorb the impact of unrestricted sources of pollution without affecting water quality and marine life. Contaminants found in the water column and marine sediment may accumulate in the tissues of marine organisms. If enough contaminants find their way into the water and marine sediment, they may accumulate in the food chain to concentrations that can cause human health concerns. It is important for each individual to do his or her part to prevent pollution and protect harbor waters and the people using this resource from toxic and harmful substances.



II. ALLOWABLE & PROHIBITED DISCHARGE & MAINTENANCE ACTIVITIES

The following table outlines general discharges and vessel-based maintenance activities that may occur in the Marinas with appropriate BMPs or permit approval. Each discharge is identified as allowable or prohibited within the Marinas, with reference to the section identifying regulations and BMPs that must be put in place for each discharge.

Discharge/Activity	Allowable?	Summary	Page
Graywater and Sewage Discharge			
Sewage (Blackwater)	NO	The discharge of untreated sewage is prohibited in the Marinas.	7
Graywater	RESTRICTIONS	Graywater discharge may contain oil and high levels of bacteria and must be minimized while in the Marinas.	7,8
Trash Discharge			
Marine Debris	NO	Trash, including garbage and plastics must not be discharged into Marina	8
Oil and Fuel Pollution			
Engine Maintenance	RESTRICTIONS	Engine work in the Marinas should be limited to essential work only. All scheduled maintenance should occur in a certified boatyard and drydock.	8,9,10
Bilgewater	NO	Bilgewater is prohibited from being discharged into the Marinas.	10
Spill Prevention and Cleanup	N/A	See BMP section for a list of prevention and cleanup BMPs.	11
Oil and Fuel Disposal	NO	No oil or other material shall be discharged into the Harbor. Refer to Section IV for a list of disposal locations.	8,9,10
Deck Washdown and Maintenance			
Sanding/Sandblasting	NO	Sanding and sandblasting are not allowed on vessels that are in-water.	11
Painting	RESTRICTIONS	Painting is allowed in the Marinas but must follow specific BMPs.	12
Deck Cleaning	RESTRICTIONS	Deck cleaning is allowed in the Marinas as long as materials are disposed of properly and do not enter the harbor. See section for specific BMPs.	12
Fish Hold Effluent	RESTRICTIONS	Fish hold effluent (where applicable) can contain nutrient levels similar to raw sewage, with high levels of nitrogen. These high levels of nutrients can be toxic to marine life. See section for specific BMPs.	13
In-water Activities			
Underwater Hull Cleaning and Maintenance	RESTRICTIONS	Underwater hull cleaning and maintenance is allowed in the Marinas assuming all required BMPs, as identified by the appropriate regulatory agencies, are followed.	13,14
Hazardous Waste Disposal	NO	Any hazardous waste generated as part of underwater cleaning activities must be disposed of properly, off-site.	17



III. VESSEL DISCHARGE, MAINTENANCE, & BEST MANAGEMENT PRACTICES

Discharges from and maintenance activities for recreational vessels and small commercial vessels within the Marinas contribute to water and sediment pollution. By following the the specified requirements and required/recommended best management practices (BMPs) outlined in this guidebook, recreational boaters and small commercial vessel operators can assist the Marinas in maintaining a healthy harbor.

BMPs are environmentally friendly alternatives to common activities that may cause pollution or contamination to the environment. BMPs can be alternative operating methods that prevent pollution or alternative products that can be used to reduce the source of pollution. In the case of everyday vessel operation, maintenance, and discharge, there is no *one* BMP that can be followed that has the ability to significantly reduce or eliminate polluted discharge. Often, a combination of several BMPs can provide the best defense against polluted discharge from recreational and small commercial vessels. While BMP implementation can reduce the potential for polluted discharge to leave the vessel, it does give the vessel or operator the authority to discharge, and does not guarantee compliance with required discharge permits.

CLEAN BOATING TIPS, REGULATIONS, AND BMPs

Preventing pollution can be as simple as using good maintenance practices and less caustic or toxic products. It is a way to keep our boating environment clean, promote healthy marine life, and reduce environmental cleanup costs. The following clean boating tips and BMPs were developed to correspond with the existing regulations by Sea Grant, the National Ocean and Atmospheric Administration's (NOAA) network of coastal resource groups. More information can be found at <http://www.seagrants.noaa.gov/>.

For those activities and discharges that are covered by a specific regulation, the following outlines the required limitations and BMPs. For a list of the regulations and Marinas tariffs relating to small vessel maintenance and discharge activities, see Appendix A.

While various discharges and activities may be allowed under specific regulations or BMPs, it is important to note that **any discharge or activity that generates pollutants or materials that can be harmful to water quality, fish, plant life, mammals, or bird life is a violation and must be terminated immediately (California Department of Fish and Game Code 5650)**. This includes the release of trash, oil, plastic, paint, and used anodes, among other items.



GRAYWATER AND SEWAGE (BLACKWATER) DISCHARGE

SEWAGE (BLACKWATER) POLLUTION

The discharge of sewage is prohibited within the Marinas (CWA). Human sewage (blackwater) discharged from vessels contains bacteria, chemicals, and nutrients that can degrade water quality and can overload confined, poorly flushed waterways.

- **Do not discharge untreated (raw) and treated sewage (Marine Sanitation Device (MSDs) I or II) in the marinas**
- Store sewage in holding tanks. Dispose regularly at pump-out stations, or hire a mobile pump-out service. For pumpouts throughout the state, please visit:
 - <http://www.dbw.ca.gov/Pumpouts>.
 - For a list of statewide mobile services, please visit:
http://dbw.parks.ca.gov/pages/28702/files/MobileServices_Feb2017.pdf
- In addition, the Pillar Point Harbor Pumpout is located at the fuel dock (free open, 24 hours), and at the guest dock at Oyster Point Marina (free open, 24 hours). Ensure MSD Type II systems work properly and discharge only when underway and a sufficient distance offshore. Refer to the Coast Guard or the California Lands Commission for rules on offshore discharge. **MSDs should not be discharged in the Marinas**. For general recommendations, please visit:
http://dbw.parks.ca.gov/?page_id+29209
- Always use shore side restrooms when docked and before casting off.

GRAYWATER

Graywater is wastewater from the galley drains, sinks, and showers onboard a vessel. Graywater can contain oil and high levels of bacteria and nutrients that threaten the health of the harbor. While there are no specific regulations focused on graywater discharge from small vessels, the following BMPs must be followed to minimize potential for discharge of pollutants.

Please visit http://dbw.parks.ca.gov/?page_id+29206

- For vessels with graywater storage capacity, graywater must remain onboard when in Marinas and discharged either further than 1 mile from shore, or at a pump-out station.
- Minimize the production of graywater while in the Marinas.
- Reduce the impact of graywater, please visit http://dbw.parks.ca.gov/?page_id+29206
 - Use environmentally sensitive cleaning supplies that drain to graywater.
 - Do not drain cooking or kitchen oils to your graywater system.
 - Scrape and wipe food and oil residue from dishes as much as possible before placing in wash or rinse water that will discharge with graywater.
 - Use shore side facilities such as showers, sinks, and laundry
 - Use only biodegradable, non phosphate, and less toxic laundry detergents, soaps, drain openers, cleaners etc.
 - If not available, save showers, laundry, and dishwashing for home
 - If possible, install holding tanks for grey water
 - Use water saving devices such as low pressure showerheads to conserve water (Continued on next page))



GRAYWATER (Continued)

Please visit http://dbw.parks.ca.gov/?page_id+29206

- Use more elbow grease and as little cleaning product as possible
- Try to skip the boat wash. Unless you need to need to rinse the salt water, wiping the boat down with a damp cloth will suffice
- Use tarps or canvas boat covers to keep boat clean between trips and you reduce the amount of cleaning you need to do
- Conserve water and use water saving devices such as low volume showerheads

TRASH DISCHARGE

MARINE DEBRIS (GARBAGE & PLASTICS)

No materials or refuse (e.g. garbage, plastic) shall be discharged into the Marina waters.

- All trash should be kept onboard the vessel and discharged in covered trash cans once at berth.

Fishing line recycling stations:

Please visit http://dbw.parks.ca.gov/pages/28702/files/Station_LocationsCAJune2017.pdf

Pillar Point Harbor Public Fishing Pier - West End

7 Johnson Pier, Half Moon Bay, CA 94019

(650) 726-5727

Pillar Point Harbor Boat Launch Information Kiosk - Public Boat Launch

20 Pillar Point Harbor Blvd., Half Moon Bay, CA 94019

(650) 726-5727

Pillar Point Harbor Outer Jetty approximately 4000 Cabrillo Highway North,

Half Moon Bay, CA 94019

(650) 726-5727

OIL & FUEL POLLUTION ENGINE MAINTENANCE

Engine maintenance must not generate or release oil or other materials into the Marinas waters (Fish and Game Rule 5650).

- Non-essential engine work should occur in dry dock whenever the potential for material leak into the harbor is present.
- Keep special oil-absorbent pads, pillows, etc. in the bilge and a containment pan or tray under the engine.
- Regularly inspect and fix small leaks.
- Inspect lines and hoses for deterioration; prevent lines from chafing.
- Don't wash parts over the water or allow runoff to reach the harbor. **All parts should be washed in a parts washer, on-land. Garden hoses should not be used to wash any vessel or equipment in the Marinas.**



CLEAN FUELING PRACTICES

The discharge of fuel, oil, oily wastes and hazardous substances is absolutely prohibited 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 of the water, or causes a sludge or emulsion beneath the surface of the water (40 CFR 110.3)

- Violators could be liable for up to three times the cost of the clean up and are also subject to substantial civil and/or criminal penalties, including fines and imprisonment for unlawful discharges.
The maximum criminal penalties range from:
One to 15 years imprisonment and/or,
Fines between \$2,500 to \$500,000.
Civil penalties of up to \$40,000 per incident can be imposed for unlawful discharges (33 USC 1321).
In addition, understate law F&GC §5650 prohibits discharges of petroleum and other substances harmful to fish, plants, mammals, and birds. Violators can receive up to a year in jail and pay a penalty up to \$25,000 per discharge.
- Follow these steps **prior to fueling**:
 - Always remember SAFETY first! Ensure your vessel is securely moored to the fuel dock, shut off the engine, turn off all electronic equipment and heat sources, and send all other passengers ashore.
 - Close all hatches, doors and ports.
 - Extinguish all burning tobacco and make sure no one is on board before fueling.
 - Make sure your fire extinguisher is within reach.
 - Know how much fuel your boat holds and how much you need. Verify the flow rate for the fuel source you are utilizing. Your knowledge of your boat tank capacity and tank fuel level will assist you to have a better understanding of how long the fuel nozzle should be on.
 - Use the right type of fuel and check that the fuel is going in properly.
 - Make sure you check with the marina or fuel dock staff about their fueling policies. If you have any questions contact your marina or fuel dock operator.
- Follow these steps **while fueling**:
 - While fueling, make sure the fuel nozzle is in contact with the metallic fuel tube or pipe to prevent static sparks. Attend the fuel nozzle at all times.
 - Always use an oil absorbent, fuel donut or fuel bib around the deck filler (available at some marinas and marine supply stores) to catch spills and overflow. Be sure to properly dispose of fuel-soaked absorbents as hazardous waste.
 - Use a properly vented fuel spill container to cover the air vent and catch spills and overflows from the vent and prevent them from reaching the surface of the water.
 - Consider installing a fuel spill prevention device, such as a fuel/air separator or whistle in the vent line, to prevent overfilling.
 - Fill tank slowly and listen for a change in tone as the tank gets full.
 - Do not rely on the automatic shut-off nozzle to prevent spills; they often do not shut off in time.
 - Fuel the boat at the start of trips and only to 90% of tank capacity. Remember fuel expands as it heats. If you leave your boat with a full tank on the water your boat may vent fuel overboard. (Continued on next page)



CLEAN FUELING PRACTICES (Continued)

Never turn on the switch for fuel gauge (or any switch) while refueling. Turning on any electronics while fueling is dangerous and can increase the risk of sparking.

- Follow these steps **after fueling**:
 - After fueling screw the cap on tight to keep vapors from escaping
 - Clean any drops off the nozzle and boat deck with an absorbent.
 - And for gasoline systems, before starting the engine, open hatches, doors and ports to ventilate and operate the blower for 3-5 minutes.
 - Check bilge and engine compartment for fuel odors and make sure there is no odor of gasoline anywhere in the boat.
 - The same rules apply when fueling a personal watercraft in the water.
- **Additional fueling safety tips**:
 - At the end of the season or during long periods of inactivity, leave the tank full to reduce corrosion and condensation. Add fuel stabilizer to prevent stale gas.
 - Always fill portable tanks ashore where spills are less likely to occur and easier to clean up. Portable tanks should be on the ground when filled- to prevent risk of static sparks, never fill plastic portable tanks with tanks in the back of a truck with a non-metallic bed liner Use funnels to fill portable tanks, or spill-proof portable containers, and keep oil-only absorbents on hand to catch spills. .
 - If a spill occurs, do not apply detergents or soaps, it is illegal. Use absorbents

BILGEWATER

Bilgewater can contain oil or other engine byproducts that can be harmful to the Marinas environment. **Please refer to Appendix A, Page A-3.**

- Per Marina berth rental agreement, bilge pump shall be maintained in a clean and orderly fashion
- No person shall dump or discharge any oil, spirits, flammable liquids or contaminated bilge water into the waters of the District
- Soak up oil that enters the bilge with special oil-absorbent pads, pillows, etc. Secure them to prevent clogging or fouling the bilge pump and sensor. Check saturation of the absorbent periodically. When fully saturated, remove the absorbent, place it in a leak-proof bag or container and dispose of it as hazardous waste
- Since bilges can be humid, some vessels will experience mildew and algae growth therefore the following may be used as alternatives to toxic products: Create a paste of equal parts of either lemon juice or vinegar and salt. Let the paste sit, scrub, and the clean with a rag
For advanced mildew and algae problems, scrub spots/bilge with a borax/ water mix. Please visit link below for additional alternative cleaning products
https://www.parks.ca.gov/?page_id=29184



SPILL PREVENTION AND CLEANUP

- If fuel nozzles do not have automatic shutoff, hold the dispenser by hand; do not insert a clip to keep fuel flowing freely.
- Install a “whistle” in the line to warn when fuel tank is nearly full; do not top off.
- Contain spills and stop the source.
- Use dry clean-up methods such as oil absorbents. Do not use straw.
- Clean up spills and leaks immediately. **Do not hose down spills or leaks.**
- Report all spills of oil and chemicals immediately to the **National Response Center (800)424-8802, California Office of Emergency Services (800) OIL911, and Harbor Patrol [OPM (650) 952-0808, PPH (650) 726-4382] and Coast Guard at [Golden Gate Emergency Sector (415)-331-0162 or (415) 331-8247, or San Francisco Emergency Sector (415) 399-3530 or (415) 556-2103] or VHF/FM Radio Channel 16 immediately.**
It is illegal to apply soap or detergents to an oil spill in the water.

OIL AND FUEL DISPOSAL

Oil is prohibited from discharge within the Marinas. Per California Fish and Game Code 5650, any discharge (fuel, hazardous material, etc.) that contains pollutants or materials that can be harmful to water quality, fish, plant life, mammals, or bird life, is prohibited.

- New or used engine oil and oil filters are hazardous wastes. Used engine oil and filters should be disposed of at a designated recycling facility. Refer to Section 3 (Resources) for information on local oil recyclers.
- Oil filters must be drained into a pan for 24 hours before being recycled.
- Never contaminate used oil with another toxic substance such as engine cleaner, gasoline, diesel, or transmission fluid. Contaminated oil is more expensive to dispose.
- Oil absorbent materials should be disposed as hazardous waste.
For information regarding disposal sites at either Oyster Point Marina / Park and/ or Pillar Point Harbor, please contact Harbor Patrol; [OPM (650) 952-0808, PPH (650) 726-4382]

DECK WASHDOWN & MAINTENANCE

Under general circumstances, the Marinas request that recreational and small commercial vessel owners and operators not engage in boat cleaning and maintenance while in the Marinas. In the event that such activities are necessary, the following procedures for small to moderate sized projects must be followed. Larger maintenance and repair projects (generally covering more than 25 percent of the vessels topside) should be taken to a certified boatyard. See following section for underwater hull cleaning BMPs.

SANDING, SANDBLASTING, AND PRESSURE WASHING

Sanding, sandblasting, and pressure washing are not allowed on vessels that are in-water in the Marinas. If sanding or sandblasting is required, it must be done on-land in a certified boatyard (dry dock) where proper containment can ensure that runoff does not enter Marina waters. (Continued on next page)



DECK WASHDOWN & MAINTENANCE (Continued)

PAINTING

Painting is allowed in the Marinas but must follow specific BMPs established by the Marinas. If painting of the topside of the vessel is required within the Marinas, the vessel owner or operator must first contact Marina Harbormaster for approval and a list of the required BMPs. These BMPs may include, but are not limited to:

- No spray equipment is to be used.
- Painting shall occur in dry conditions only.
- Perform paint and solvent mixing in a contained location either onshore or on the vessel so that nothing can spill directly into the water or storm drains.
- Store materials such as paints, tools, and ground cloths indoors or in a covered area when not in use.
- There must be protective canvas overhanging the sides of the boat and over all exposed waters or land should any drops fall from the rollers.
- Task shall be carried out by fully qualified, experienced, able seamen only.
- Do not wash-down boats with deteriorating paint unless all wash water can be collected and properly treated. Paint eroding from boat hulls is particularly hazardous due to metal and possible biocide content.
- Wash water from routine cleaning of boats (above water line cleaning) if mixed with detergents and/or other cleaning agents should be contained and/or directed to sewer drains instead of rinsing into surface waterways.
- When washing boats by hand, keep two containers available- one for clean water, one for waste water. Rinse cleaning rags into buckets instead of directly into waterways.

DECK CLEANING

Cleaning the deck of your vessel is allowed. **However, cleaning products and debris shall not be discharged into the harbors (Fish and Game Code 5650).** This includes trash, oils, metals, and paint.

- Use dry sweeping methods to ensure trash and debris (metal shavings, sediment, etc.) are removed prior to deck washdown.
- Use or ask your topside maintenance servicer to use environmentally friendly cleaning products. Avoid those containing ammonia, lye, sodium hypochlorite, chlorine, or petroleum products.
- Use only phosphate free and biodegradable soaps. Even these soaps may be harmful to the environment; carefully read labels on products. Also ask marine supply dealers for more information.
- Use soap in moderation.

Purchase alternative for less toxic products (page 19) or Purchase greener alternatives that are approved by EcoLabels such as Green Seal (<http://www.greenseal.org/>), Ecologo, or the US EPA Design for the Environment (DfE)

<https://www.epa.gov/saferchoice/learn-about-safer-choice-label>



EXTERIOR TEAK AND TRIM

- Keep all cleaners (caustic and varnishes) out of Marina waters. Dispose them as hazardous waste.
- For San Mateo residents: <http://www.smchealth.org/hhw>
Use teak cleaners and soaps sparingly. Solvents in the cleaners eat away at the soft grain of the teak and damage seam compounds.
- Oil your teak trim? Minimize or eliminate the use of caustic cleaners before oil.

FISH HOLD EFFLUENT

For those small commercial fishing vessels that operate within the Marinas, fish hold effluent can contain high levels of nutrients toxic to marine life. This is increased when discharged in areas of low tidal influence. The following BMPs are recommended to reduce the potential for water quality pollution from fish hold effluent.

- Minimize the discharge of fish hold effluent while in Marinas.
- Fish hold effluent should remain onboard while in Marinas and be discharged either further than 1 mile from shore or be pumped/vacuumed out.
- When cleaning fish holds, use environmental cleaning projects and detergents.
- Avoid the use of chlorine or bleach whenever possible.
- A discharge of chlorine would be a violation of two CA water quality laws, the Fish and Game Code (Fish and Game Code 5650: "It is unlawful to deposit in, permit to pass into, or place where it can pass into the waters of this state any of the following: ... (6) Any substance or material deleterious to fish, plant life, or bird life. ...") and the Porter-Cologne Water Quality Act.
- Boaters need to make sure chlorine does not get into the water
http://www.waterboards.ca.gov/sanfranciscobay/water_issues/programs/planningtmdls/basinplan/web/tab/tab_4-02.pdf
http://www.swrcb.ca.gov/water_issues/programs/state_implementation_policy/docs/rvsd_cl_sed_063006_accept.pdf (Page 11 for the Bay)

IN-WATER ACTIVITIES - UNDERWATER HULL CLEANING

The use of anti-fouling paint containing TBT or other organotins is prohibited (IMO Resolution A.928(22)). If underwater hull cleaning is required on recreational or small commercial vessels in the marina harbors, the following BMPs must be followed:

- **Anti-fouling paint containing TBT or other organotins is prohibited.**
- **Consider using hull paints that are nontoxic or have a minimal copper content and a hard or slick surface.** This will reduce the release of toxicant into the water.
- Vessels with soft, rapid sloughing or ablative hull paints should not be cleaned underwater.
- Regular underwater hull cleaning using BMPs will help control fouling growth between haul-outs.
 - Only use soft cloth or fleece mitt only, never use: Scrapers (metal/plastic/wood), Abrasives, (sandpaper/cleanser/soft scrub), Scotchbrite®/3M® pads, Powered Rotary Brushes. (Continued on next page)



UNDERWATER HULL CLEANING (Continued)

The use of anti-fouling paint containing TBT or other organotins is prohibited (IMO Resolution A.928(22)). If underwater hull cleaning is required on recreational or small commercial vessels in the marina harbors, the following BMPs must be followed:

- Please visit: <http://dbw.parks.ca.gov/pages/28702/files/Boaters-Guide-to-Using-Hull-Paint.pdf>
- Use a sponge, soft cloth, or piece of carpet to wipe off soft marine growth. Regular cleaning can prevent hard growth from forming.
- Use stainless steel pads or brushes only on unpainted metal areas, never on bottom paint.
- Colored “plumes” should not occur in the water during underwater hull cleaning. They indicate paint has been rubbed off your hull. Return zinc anodes to shore and recycle. It is recommended that recreational and small commercial vessels use aluminum or magnesium in place of zinc anodes, due to lower water toxicity levels.



IV. RESOURCES

STATE & FEDERAL AGENCIES Emergency Contact and Clean Boating Information

Group	Contact Purpose	Phone / Website
EMERGENCIES and OTHER IMPORTANT NUMBERS		
San Mateo County	ALL EMERGENCIES	911
Harbor Patrol	Report emergencies, derelict boats and polluters	OPM (650) 952-0808-24 Hr VHF 16,69 PPM (650) 726-4382, 24Hr Cell: (650) 228-8347, VHF 16,74
U.S. Coast Guard (USCG)	Report spills	Golden Gate Emergency Sector (415)-331-0162 or (415) 331-8247, or San Francisco Emergency Sector (415) 399-3530 or (415) 556-2103
National Response Center (NRC)	If Harbor Specific, Harbor Patrol & USCG Will Contact	(800) 424-8802
California Governor's Office of Emergency Services (CalOES)	If Harbor Specific, Harbor Patrol & USCG Will Contact	(800) 852-7550
Department of Boating & Waterways (DBW)	Clean Boating information	1-888-326-2822 http://www.BoatingCleanandGreen.com
U.S. Environmental Protection Agency (EPA)	149 #A Main Street Half Moon Bay, CA 94019	http://www.epa.gov/region9/
EPA Non-Point Source Pollution Control	In-depth information for controlling non-point source pollution from marinas and recreational boating	http://www.epa.gov/nps/mmsp/index.html
U.S. Fish and Wildlife Service, Clean Vessel Act Grant Program	Information on the CVA program, which provides grants for pump-out and dump stations for boaters to dispose of human waste in an environmentally safe manner.	http://dbw.parks.ca.gov/?page_id=28820
California Coastal Commission	Clean Boating information; CA Non-Point Source Program information	http://www.coastal.ca.gov/nps/npsndx.html
Recreational Boating Association of California		http://www.rbo.org/
California Sea Grant	Literature about Clean Boating Best Management Practices	(858) 534-2867 http://www-csgc.ucsd.edu
Occupational Health and Safety Administrations OSHA	Information regarding hazardous waste training	http://www.osha.gov/html/faq-hazwoper.html#faq2
Regional Water Quality Control Board (RWQCB)	Information regarding NPDES permits	http://www.waterboards.ca.gov/losangeles/water_issues/programs/



OTHER RELATED CONTACTS

Agency	Topic	Phone Number/ Web Address
Marina Recreation Association	Active association of marina owners and operators; links to boating info and marine boating sites	www.marina.org
NOAA	Weather information; ocean conditions	http://www.noaa.gov/
California State Parks and Recreation		http://www.parks.ca.gov/
NOAA - National Marine Fisheries		http://www.nmfs.noaa.gov/
California Department of Fish and Wildlife	Hunting, Fishing, Education, Biological Resources, News, Surveys, Studies, Programs	https://www.wildlife.ca.gov/
U.S. Fish and Wildlife (Bay Area Region)		(916) 445-0411 http://www.dfg.ca.gov/
Monterey Bay National Marine Sanctuary (Peninsula Humane Society)	Injured or Dead Animal Recovery (Marine Mammals, Sea Turtles, Sea Birds)	SMC (650) 340-8200
The Marine Mammal Center	Seal and Sea Lion Rehabilitation and Release	(415) 289-SEAL(7325) http://www.marinemammalcenter.org/what-we-do/rehabilitation-release/
California Dept. of Health Shellfish Advisory	Seasonal shellfish advisory	(800) 553-4133 https://www.wildlife.ca.gov/Fishing/Ocean/Health-Advisories
San Francisco Bay Keeper	Nonprofit environmental advocacy organization that works to protect, preserve, and enhance the health of the ecosystems and communities that depend upon the San Francisco Bay	https://baykeeper.org/
San Francisco Bay Restoration Authority	Raises/allocates local resources for the restoration, enhancement, protection, and enjoyment of wetlands and wildlife habitat in San Francisco Bay and along its shoreline, and associated flood management and public access infrastructure	http://sfbayrestore.org/sf-bay-restoration-authority-faq.php
Dockwalkers	Additional information for Dockwalkers Program (via CCC website)	www.BoatingCleanandGreen.com (Dockwalker Program)
Household Hazardous Waste Hotline		http://www.smchealth.org/hhw



USED OIL RECYCLERS

(drop off during business hours only)

Recycler	Address	Cross Street	Phone Number
Oyster Point Marina / Park	95 Harbormaster Rd #1 South San Francisco, CA 94080	Marina Blvd	(650) 952-0808
O'Reilly Auto Parts #2743 CalRecycle #: 41-C-02651	1059 El Camino Real South San Francisco, CA 94080	Chestnut	(650) 589-8102
O'Reilly Auto Parts #3138 CalRecycle #: 41-C-04587	3541 Callan Boulevard South San Francisco, CA 94080	Sharp Park	(650) 827-9081
Pillar Point Harbor	1 Johnson Pier Half Moon Bay, CA 94019	Capistrano Blvd	(650) 726-4382
Half Moon Bay Auto Repair CalRecycle #: 41-C-11369	149 #A Main Street Half Moon Bay, CA 94019	San Mateo Rd.	(650) 726-0711
Ox Mountain Landfill CalRecycle #: 41-C-07627	12310 San Mateo Road Half Moon Bay, CA 94019	HWY 92	(650) 713-3621

HAZARDOUS WASTE DISPOSAL

- All the San Mateo County certified used oil recycling centers are found at <http://www.calrecycle.ca.gov/UsedOil/Reports/CenterSearch/Default.aspx?lang=en-US>
- <http://www.calrecycle.ca.gov/UsedOil/Reports/CenterSearch/Default.aspx?lang=en-US>
- **Never dispose of hazardous waste into the Harbor waters (Fish and Game Code 5650).**
- All hazardous waste must be handled and disposed of properly, in accordance with all relevant regulations.
- For Household Hazardous Waste information and locations call 1-800-CLEANUP or visit www.earth911.org
- Report spills to the Harbor Master Patrol at [OPM (650) 952-0808 or PPM (650) 726-4382] and to the Coast Guard at [Golden Gate Emergency Sector (415)-331-0162 or (415) 331-8247, or San Francisco Emergency Sector (415) 399-3530 or (415) 556-2103] or VHF/FM Radio Channel 16 immediately.



CLEAN BOATING MAINTENANCE

Service	Specialty	Address	Phone
Sewage Pumpout Stations			
Oyster Point Marina / Park	Public Sewage Pumpout	95 Harbormaster Rd South San Francisco, CA 94080	(650) 952-0808
Pillar Point Harbor		1 Johnson Pier Half Moon Bay, CA 94019	(650) 726-4982
Sewage Mobile Pumpout Services			
BayGreen Marine Sanitation Services (San Francisco/San Mateo)	Sanitation system installation consultation/troubleshooting, maintenance and repair. Holding tank odor control, treatment and enzymatic cleaning. Full marina services and factory certified KECO pump-out station repair. Online scheduling and payment available	1067 Market St. Ste. 1029, San Francisco, CA 94103	(415) 621-1393
Tim Keeler Company (San Francisco/San Mateo)	Mobile Pump Out	2350 Marinship Way Sausalito, CA 94965	(415) 465-0149
Bilge Pumpout / Cleaning			
Marine Lube (San Francisco/San Mateo)	Oil change, Filters,transmission fluid, anti-freeze coolant change, oil analyses, steam cleaning, fuel polishing and fuel tank cleaning, spill containment and recovery.	PO Box 830 Alameda, CA 94501	(877) 744-0149
Seashine Boat Cleaning and Maintenance (San Francisco/San Mateo)	Bilge Pumpout / Cleaning	3871 Piedmont Avenue Ste 47 Oakland, CA 94611	(510) 428-2522
Fuel Tank Cleaning			
Marine Lube (San Francisco/San Mateo)	Oil change, Filters,transmission fluid, anti-freeze coolant change, oil analyses, steam cleaning, fuel polishing and fuel tank cleaning, spill containment and recovery.	PO Box 830 Alameda, CA 94501	(877) 744-0149
Oil Changes			
Marine Lube (San Francisco/San Mateo)	Oil change, Filters,transmission fluid, anti-freeze coolant change, oil analyses, steam cleaning, fuel polishing and fuel tank cleaning, spill containment and recovery.	PO Box 830 Alameda, CA 94501	(877) 744-0149

The businesses referenced in this document are not necessarily endorsed by the San Mateo County Harbor District



ALTERNATIVE PRODUCTS

Holding Tank Additives	
Bio Bilge	Used for oil degreasing and oil removal in bilges and for deck spills
Alternative Cleaners	
Bleach	Borax or hydrogen peroxide
Detergent & soap	Elbow grease
Floor cleaner	Baking soda
Window cleaner	¼ cup white vinegar in 1 ¾ cups of water
General cleaner	1 cup white vinegar in 1 qt. Warm water; rinse and squeegee
Head cleaner	Baking soda and brush
Shower cleaner	Wet surface, sprinkle baking soda and brush
Aluminum cleaner	2 tablespoons cream of tartar in 1 qt. Hot water
Brass cleaner	Worcestershire sauce paste made from equal parts salt, vinegar and water
Copper cleaner	Lemon juice and salt
Fiberglass stains	Baking soda paste
Chrome cleaner	Apple cider vinegar, baby oil to polish
Mildew remover	Paste using equal parts of either lemon juice and salt or vinegar and salt
Rusty bolt/nut removal	Carbonated beverage
Rug/carpet cleaner	Club soda
Wood polish	Almond or olive oil (on interior wood only)
Bottom Paints	
Copper free bottom paints are preferred.	
Neptune II	Antifouling paint by Woolsey paints
Z-Spars Varnish	Water based gloss varnish, by Z-Spars
Veridian	Silicone based antifouling paint by Interlux, biocide-free www.yachtpaint.com
Aquaply M	Bottom coating replacing TOXIC antifouling paints

ALTERNATIVE DEGREASERS	
EnviroLogic Biodegradable Cleaner	By Terrasolve www.terrasolve.com
Hydro-sol	By Lubrication Products www.lubricationproducts.com
ECO-ZYME®	by Neozyme Products
Bilge Cleaner	by BIO-KLEEN www.biokleen.com
CL-202 Multi-Purpose Cleaner & Stain Remover	by Kem-O-Pro www.jbchemical.com
Bio T FOAMAXX	By BioChem Systems
B52 Brown Bomber Degreaser	Organic degreaser by Hollander Corporation
Bio Bilge	Used for oil degreasing and removal in bilges and for deck spills
Alternative Paint Strippers	
Soy Strip™	By Franmar Chemical www.soysolvents.com
Remove All™	By Napier www.biowash.com

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APPENDICIES

APPENDIX A: FEDERAL, STATE, AND LOCAL REGULATIONS

1. Clean Water Act (CWA): In 1977, the Federal Water Pollution Control Act of 1972 was amended and became known as the Clean Water Act. The CWA, implemented by EPA, outlaws the discharge of pollutants to the waters of the United States from any point source unless the discharge is in compliance with a National Pollutant Discharge Elimination System (NPDES) permit. Amendments to the CWA in 1987 and 1990 added provisions for the regulation of municipal and industrial stormwater discharges. Permit requirements include prevention of sediment loading from construction sites, implementation of BMPs to reduce or eliminate the input of sediment or pollutants into stormwater, and prevention of water quality degradation.
2. Porter-Cologne Water Quality Control Act (1970): This law allows California to administer its own clean water regulations. It is at least as stringent as the federal CWA. The Porter-Cologne Act established the State Water Resources Control Board as the ultimate authority over water quality policy, and the Regional Water Quality Control Boards to oversee water quality on a day-to-day basis at the local/regional level. One important function of the Regional Boards is to develop regional Basin Plans, which establish beneficial uses of protected waters, water quality standards, and measures to control non-point and point sources of pollution to California's waters.
3. Resource Conservation and Recovery Act (RCRA): RCRA was enacted in 1976 and is implemented by the EPA. RCRA requires the EPA to develop regulations to implement its provisions and provides the general framework of the national hazardous and solid waste disposal program. This program includes the determination of whether hazardous wastes are being generated, requirements for safe management of wastes, and procedures for tracking wastes from generator to disposal.
4. Hazardous Waste Control Law (HWCL): This law, Chapter 6.5 of Division 20 of the Health and Safety Code, is implemented/enforced by



- the Department of Toxic Substances Control (DTSC). The HWCL is a California law that implements the federal RCRA as a “cradle-to-grave” waste management system in California. The HWCL specifies that generators have the primary responsibility to determine if their waste is hazardous and to ensure its proper management. The HWCL also establishes criteria for the reuse and recycling of hazardous waste used or reused as raw materials.
5. Oil Pollution Act (1990): This Act is enforced by the EPA. Any hazardous waste spill from a vessel must be reported by the owner of the vessel. Owners are responsible for cleanup and any damages. Marinas are responsible for any oil contamination resulting from activities at their facilities including dumping or spilling oil or oil-based paint and the use of chemically treated agents.
 6. Coastal Nonpoint Pollution Control Program (1990): Enforced by NOAA and the EPA this program was developed as a more comprehensive solution to the problem of polluted runoff in coastal areas. It was established by Congress under Section 6217 of the Coastal Zone Act Reauthorization Amendments (CZARA).
 7. California Department of Fish and Game Code 5650: Under Fish and Game Code 5650, it is unlawful to deposit in, permit to pass into, or place where it can pass into the waters of California any of the following:
 - Any petroleum, acid, coal or oil tar, lampblack, aniline, asphalt, bitumen, or residuary product of petroleum, or carbonaceous material or substance.
 - Any refuse, liquid or solid, from any refinery, gas house, tannery, distillery, chemical works, mill, or factory of any kind.
 - Any sawdust, shavings, slabs, or edgings.
 - Any factory refuse, lime, or slag.
 - Any cocculus indicus.
 - Any substance or material deleterious to fish, plant life, mammals, or bird life.
 8. Clean Vessel Act (1992): The Clean Vessel Act was established by Congress to provide funding for pump-out stations and waste reception



- facilities for recreational boaters. Originally it was to be funded for 5 years but was reauthorized in 1998 for more funding. The facilities would provide recreational boaters with alternatives to overboard waste dumping.
10. International Convention for the Prevention of Pollution from Ships (MARPOL 1973/1978): The International Maritime Organization, a group originally established in 1948 to promote maritime safety, adopted the MARPOL treaty as a reaction to oil spills in international waters. Eventually it was recognized that further measures needed to be addressed regarding pollution of the marine environment by ships from operational or accidental causes. After the addition of another treaty in 1978 the convention now covers pollution by oil, chemicals, harmful substances in packaged form, sewage, and garbage.
- A. IMO Resolution A.928(22): The International Convention on the Control of Harmful Anti-fouling Systems on Ships prohibited the use of harmful organotins in anti-fouling paints used on ships. Beginning on January 1, 2008 (effective date), ships either:
- Shall not bear such compounds on their hulls or external parts or surfaces; or
 - Shall bear a coating that forms a barrier to such compounds leaching from the underlying non-compliant anti-fouling systems.
- This IMO resolution called for a global prohibition on the application of organotin compounds that act as biocides in anti-fouling systems on ships, including TBT.
11. Marine Plastic Pollution Research and Control Act (MPPRCA 1987): This is the United States version of MARPOL. It applies to foreign vessels in U.S. waters and U.S. vessels anywhere in the world. It states that it is illegal to throw plastic off any vessel within the U.S. Exclusive Economic Zone (EEZ) – within 200 miles of the U.S. Shoreline. It also states that it is illegal to throw any garbage overboard in U.S. waters or within 3 nautical miles. This act is enforced by the Coast Guard.

PERTINENT TO MARINAS OF THE SAN MATEO COUNTY HARBOR DISTRICT

Section 3.30.140 (D) to read: “No person shall dump or discharge any oil, spirits, flammable liquids or contaminated bilge water into the waters of the District. All vessels berthed, moored or operating in the waters of the District must have a BIO-SOK, or a generic equivalent oil absorb pad/pillow, installed in its bilge in order to prevent oil or fuel from being pumped overboard. Dispersing agents or emulsifying soaps may not be used, as they cause oil to sink and are worse for the environment than if the oil had been left alone. Vessel operators are responsible for inspecting the condition of the bilge prior to the activation of a bilge pump. Proper precautions must be taken when performing mechanical work on any vessel. Used engine oil, oil filters and oil absorbent materials must be taken to the oil recycling center. Oil, oil filters or used oil absorbent materials cannot be disposed of by dumping them either on the ground, in a dumpster, into a drain or overboard. Vessel owners are responsible for their contractors and any failure of their contractors to comply.”



APPENDIX B: US EPA REQUIREMENTS FOR HAZARDOUS WASTE

The EPA may regulate chemical wastes as hazardous if they exhibit any of the following characteristics:

IGNITABILITY

A waste exhibits the characteristic of ignitability if a representative sample of the waste has any of the following properties:

1. It is a liquid, other than an aqueous solution containing less than 24% alcohol by volume, and has a flash point less than 60°C (140°F) as determined by a Pensky-Martens Closed Cup Tester or a Setaflash Closed Cup Tester, or as determined by an equivalent test method approved by the EPA.
2. It is not a liquid and is capable, under standard temperature and pressure, of causing fire through friction, absorption of moisture, or spontaneous chemical changes and, when ignited, burns so vigorously and persistently that it creates a hazard.
3. It is ignitable compressed gas.
4. It is an oxidizer.

CORROSIVITY

A waste exhibits the characteristic of corrosivity if a representative sample of the waste has any of the following properties:

1. It is aqueous and has a pH less than or equal to 2, or greater than or equal to 12.5, as determined by a pH meter using either an EPA test method or an equivalent test method approved by the EPA.
2. It is a liquid and corrodes steel (SAE 1020) at a rate greater than 6.35 mm (0.250) per year at a test temperature of 55°C (130°F), or in an equivalent test method approved by the EPA.

REACTIVITY

A waste exhibits the characteristic of reactivity if a representative sample of the waste has any of the following properties:

1. It is normally unstable and readily undergoes violent change without detonating, e.g., explosive polymerization.
2. It reacts violently with water.
3. It forms potentially explosive mixtures with water.



4. When mixed with water, it generates toxic gases, vapors, or fumes in a quantity sufficient to present a danger to human health or the environment.
5. It is a cyanide or sulfide bearing waste which, when exposed to pH conditions between 2 and 12.5, can generate toxic gases, vapors, or fumes in a quantity sufficient to present a danger to human health or the environment.
6. It is capable of detonation or explosive reaction if it is subjected to a strong initiating source or if heated under confinement.
7. It is readily capable of detonation or explosive decomposition or reaction at a standard temperature and pressure.
8. It is a forbidden explosive, a Class A explosive, or a Class B explosive.

TOXICITY

A waste exhibits the characteristic of toxicity if a representative sample of the waste has any of the following properties:

1. Any chemical at the right dose could be toxic to humans; however, there are some chemicals that are known to be hazardous at very low concentrations, over a very short exposure time, or after repeated exposures. These chemicals are the toxins, poisons, and carcinogens.
2. A toxin may be mutagenic and cause a heritable change in the gene structure or may also be teratogenic and cause a malformation of an embryo. Pregnant women and persons in their childbearing years should not work with, or at minimum, should use extreme caution while handling these materials.
3. The toxicity of a material due to its ability to interfere with the metabolism of living tissue. An acute toxin can cause an adverse effect after a single or short duration exposure. A chronic toxin causes an adverse effect after repeated exposures, after a long duration single exposure, or after a long latency period. Carcinogens are examples of chronic toxins that have a long latency period before the effects of the exposure are observed.



Pillar Point Harbor
1 Johnson Pier
Half Moon Bay, CA
94019



Oyster Point Marina / Park
95 Harbor Master Rd #1
South San Francisco, CA
94090