

Petroleum Control

Environmental Concerns

Petroleum in or on the water is harmful and, in some cases, fatal to aquatic life. Gasoline contains benzene which can cause cancer. Oil contains zinc, sulfur, and phosphorous. Petroleum products introduced into the environment are a chronic problem. Cumulative small incremental discharges of petroleum products have significant environmental consequences. A gallon of fuel can contaminate over a million gallons of water. Once petroleum is introduced into the water, it may float at the surface, evaporate into the air, become suspended in the water column, or settle to the water's bottom. Floating petroleum is particularly noxious because it reduces light penetration and the exchange of oxygen at the water's surface. Floating oil also contaminates the microlayer the uppermost portion of the water column, home to thousands of species of plants, animals, and microbes. Blue crab larvae almost exclusively feed in the microlayer, which also serves as a nursery for striped bass. The abundance of life in the microlayer attracts predators including seabirds and fish. Consequently, a polluted microlayer may poison much of the aquatic food web.

Pertinent Laws and Regulations

Federal Water Pollution Control Act (Clean Water Act)

Because of the harm associated with petroleum, the discharge of oil is absolutely prohibited. The Federal Water Pollution Control Act (Clean Water 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 of the water, or causes a sludge or emulsion beneath the surface of the water. Violators risk significant monetary penalties and major violations are punishable by imprisonment.

The Interagency National Response Center must be notified anytime a spill produces a sheen on the water. Call the National Response Center at 1-800-424-8802. Report the location, source, size, color, substance, and time of the spill. Failure to report a spill may result in fines.

The Clean Water Act (33 CFR 153.305) also prohibits the use of soaps or other dispersing agents to dissipate oil on the water or in the bilge without Coast Guard authorization. Soaps, emulsifiers, and dispersants cause the petroleum to sink in the water column and mix with sediments where they remain for years. Also, the soaps themselves are pollutants. You may be fined up to \$25,000 per incident for the unauthorized use of soap or other dispersing agents on the water or in the bilge.

Community Right to Know

Emergency Planning and Community Right-to-Know Act of 1986 (EPCRA) or Superfund Amendments and Reauthorization Act of 1986 (SARA Title III) is a federal law enforced by EPA and managed by state and local authorities. EPCRA requires that facilities report to state and local authorities the storage of certain chemicals in quantities that exceed specified thresholds. This information is used by the public, emergency planners, and first responders to determine the chemical hazards in their community.

New Jersey State Law

State law prohibits the discharge of oil. New Jersey's Spill Compensation and Control Act (N.J.S.A. 58:10-23.11) states:

The Legislature finds and declares that the discharge of petroleum products and other hazardous substances within or outside the jurisdiction of this State constitutes a threat to the economy and environment of this State. The Legislature intends by the passage of this act to exercise the powers of this State to control the transfer and storage of hazardous substances and to provide liability for damage sustained within this State as a result of any discharge of said substances, by requiring the prompt containment and removal of such pollution and substances, and to provide a fund for swift and adequate compensation to resort businesses and other persons damaged by such discharges, and to provide for the defense and indemnification of certain persons under contract with the State for claims or actions resulting from the provision of services or work to mitigate or cleanup a release or discharge of hazardous substances.

All spills must be reported immediately to the NJDEP at 1-877-WARN DEP and your county health department.

Stormwater Permit

A marina or boatyard must have a NJPDES stormwater permit (N.J.A.C. 7:14A) to perform fueling activities of any kind (dispensed from either aboveground or underground storage tanks), mechanical or engine repair activities, or boat maintenance activities (sanding, scraping, and power washing).

Air Permit

An air permit (N.J.A.C. 7:27) is required if a marina dispenses gasoline or other volatile fuel products from an aboveground or underground storage tank greater than 2,000 gallons in capacity. An air permit is also required if the marina uses equipment in a surface coating operation such as spray painting in which the quantity of coating or cleaning material used in any one hour is equal or greater than one half gallon of liquid.

A General Permit (GP-014) is available for Storage and Transfer of Service Station Fuels at Small Gasoline Distributors using stage 1 vapor recovery.

Underground Storage Tanks

A regulated underground storage tank (UST) with more than 2,000 gallons in capacity and more than 10% of its volume below the ground surface containing motor fuel, non-petroleum hazardous substances or heating oil, must have spill, overfill, and corrosion protection (N.J.A.C. 7:14B). A UST must also have a verifiable leak detection method and a current registration with NJDEP. Also required are routine testing for cathodic protection, investigation of suspected releases, routine inspection of spill catchment basins, dispenser sumps and piping sumps, permits for repairs, and various record-keeping regarding testing, leak detection, and repairs. All work performed that is required by regulation must be conducted by an individual certified by the state.

Best Management Practices for Preventing Spills at the Source







Protect Petroleum Storage Tanks.

Fuel storage tanks at marinas typically hold from 1,000 to 10,000 gallons of fuel. If a tank ruptures or develops a leak, the consequences can be devastating.

- ___ ✓ (5) Install double-walled or vaulted aboveground fuel tanks. Tanks must meet the following criteria (National Fire Prevention Association, NFPA 30, Standard for Flammable and Combustible Liquid):
- The capacity of the tank may not exceed 12,000 gal (45,420 L).
 - All piping connections to the tank must be above the normal maximum liquid level.
 - Provision must exist to prevent the release of liquid from the tank by siphon flow.
 - Provision must exist for determining the level of the liquid in the tank that is accessible to the delivery operator.
 - Measure tank fluid levels regularly
 - Provisions must exist to prevent overfilling by sounding an alarm when the liquid level in the tank reaches 90 percent of capacity and by automatically stopping delivery of liquid to the tank when the liquid level reaches 95 percent of capacity. These provisions must not restrict or interfere with the proper functioning of the normal or emergency vent.
 - Provide at least 3-ft (0.9m) of space between adjacent tanks.
 - The tank must be capable of resisting the impact of a motor vehicle or suitable collision barriers must be provided.
 - Where the interstitial space is enclosed, the enclosure must provide emergency venting. Alternatively, locate aboveground fuel tanks within a dike or over an impervious storage area with a containment volume equal to the capacity of the largest tank within the containment area, plus sufficient volume to contain precipitation.

- Keep the containment area free from collecting precipitation. Provide spigots to drain collected materials from the containment areas. If possible, cover the tank and containment area with a roof to prevent rainwater from filling the containment area. The control of any stormwater that collects in the diked area must be addressed as a condition of your Basic Industrial Stormwater General Permit.

The following requirements pertain to underground storage tanks (UST):

-  USTs existing prior to December 1998 were to be upgraded by that date to provide corrosion protection and spill and overfill prevention equipment (N.J.A.C. 7:14B). Double walled and piping tanks do not require an NJDEP permit. Only a local permit and inspection is needed.
-  All new USTs must include corrosion protection and spill and overfill prevention equipment such as a high level alarm or restrictor valve (N.J.A.C. 7:14B).
-  All new and existing USTs must have a leak detection system (N.J.A.C. 7:14B).
-  Install a readily accessible shut-off valve on shore to halt, when necessary, the flow of fuel through a pipeline from the oil storage facility to a wharf, pier, or dock.
-  All motor fuel USTs must meet Federal financial responsibility requirements (i.e., insurance) for environmental pollution liability.
-  All USTs must be registered with NJDEP.
- (1) Contact the NJDEP’s Bureau of Underground Storage Tanks for guidance documents on the installation of fuel tanks, or visit the NJDEP website at <http://www.state.nj.us/dep/srp/bust> to review a 24 page booklet, “Tank Care” that provides various operational and maintenance requirements.

(6) Total Points for BMP

Total N/A Points

Avoid Waves and Wakes.

- (5) Locate fuel docks in areas protected from waves and boat wakes when constructing new or upgrading existing facilities. For safety reasons, fueling stations should be accessible by boat without entering or passing through the main berthing area.
- (5) Provide a stable platform for fueling personal watercraft (PWC). You may purchase prefabricated drive-on docks or modify an existing dock by cutting a v-shaped berth and covering it with outdoor carpeting.
- (5) Locate the PWC fueling area at the end of the gas dock or at another strategic location in order to reduce conflicts with larger boats.

(15) Total Points for BMP

Total N/A Points

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Maintain Fuel Transfer Equipment.

- ___ ✓ (5) Inspect transfer equipment regularly and fix all leaks immediately.
- ___ ✓ (5) Maintain transfer equipment and hoses in good working order. Replace hoses, pipes, and tanks before they leak.
- ___ ✓ (1) Hard connect delivery nozzles.
- ___ ✓ (5) Hang nozzles vertically when not in use so that fuel remaining in hoses does not drain out.

(16) Total Points for BMP

Total N/A Points

Install Environmental Pump Controls.

- ___  (5) Disable or remove fuel nozzle holding clips. The use of holding clips to keep fuel nozzles open is illegal at marina fuel docks.
- ___ ✓ (5) Install automatic backpressure shut-off nozzles on fuel pump discharge hoses to automatically stop the flow of fuel into a boat's fuel tank when sufficient reverse pressure is created.
- ___ ✓ (1) Install fuel nozzles that redirect blowback into a vessels' fuel tank or vent attachments that capture fuel overflow.
- ___ ✓ (5) Maintain a supply of oil and fuel absorbent pads and pillows at the fuel dock to mop up spills on the dock and on the water.
- ___ ✓ (1) Place plastic or nonferrous drip trays lined with fuel absorbent material beneath fuel connections at the dock to prevent fuel leakage from reaching the water.
- ___ ✓ (5) Post instructions at the fuel dock directing staff and patrons to immediately remove spilled fuel dock and water with fuel absorbent material. Provide the location of the absorbents.
- ___ ✓ (1) Place small gas cans in fuel absorbent-lined drip pans when filling.
- ___ ✓ (5) Secure fuel absorbent material at the waterline of fuel docks to quickly capture small spills. Select sufficiently sturdy fuel absorbent booms that will withstand regular contact with the dock and boats.
- ___ ✓ (5) Offer your service to install fuel/air separators on boats to eliminate vent line overflow during refueling.

(28) Total Points for BMP

Total N/A Points

Supervise Fueling: Environmental Recommendations.

- ___ ✓ (5) Always have a trained employee at the fuel dock to oversee or assist with fueling.

- (1) Train employees to clarify what the boater is asking for. For example, as your employee passes the fuel nozzle to the boater, have him or her say, “This is gasoline. You asked for gasoline.”
- (1) Train employees to hand boaters fuel absorbent pads with the fuel nozzle. Request that the boaters use them to capture backsplash and vent line overflow.
- (5) Attach a container to the external vent fitting to collect overflow. There are products available that attach to the hull with suction cups. A rubber seal on the container fits over the fuel vent and collects any overflow. Fuel captured in this manner can be added to the next boat to fuel.
- (1) Instruct fuel dock personnel and boaters to listen to filler pipes to anticipate when tanks are nearly full.
- (1) Encourage boaters to fill their fuel tanks just before leaving on a trip to reduce spillage due to thermal expansion and rocking, i.e., if the fuel is used before it warms up, it cannot spill overboard as a result of expansion.
- (1) If boaters prefer to refuel upon their return to port, encourage them to fill their tanks to no more than 90 percent of capacity.
- (1) Instruct boaters to slow the fuel flow at the start and end of fueling.
- (1) Require boaters to stay with their craft during fueling.

(17) Total Points for BMP

Total N/A Points

Supervise Fueling: Safety Recommendations.

- (5) Always have a trained employee at the fuel dock to oversee or assist with fueling.
- (1) Remind boaters that gasoline vapors are heavier than air; they will settle in a boat’s lower areas.
- (1) Require all passengers to disembark from gasoline powered vessels before fueling.
- (5) Instruct boaters to:
 - Stop all engines and auxiliaries
 - Shut off all electricity, open flames, and heat sources
 - Extinguish all cigarettes, cigars, and pipes
 - Close all doors, hatches, and ports
 - Maintain nozzle contact with the fill pipe to prevent static spark
 - Inspect bilge after fueling for leakage or fuel odors
 - Run bilge blowers for at least four minutes before starting engine
 - Ventilate all compartments after fueling until fumes are gone
- (1) Train dock staff to carefully observe fueling practices; make sure fuel is not mistakenly put into the holding tank, water tank, or rod holder.

(13) Total Points for BMP

Total N/A Points

Box 2: Oil Absorbent Material

Oil and fuel absorbent pads, booms, and pillows absorb petroleum products and repel water. Depending upon the type, they may hold up to 25 times their weight in oil. These types of products are useful for capturing spurts at the fuel dock, cleansing bilge water, and wiping up spills in engine maintenance areas.

There are a number of new twists on basic oil absorbent materials. One new variety of oil absorbent boom captures oil from the bilge and solidifies into a hard rubber bumper. Other types contain microbes that digest the petroleum. The oil is converted to carbon dioxide and water. Because the microbes take 2 to 3 weeks to digest a given input of oil, it is inappropriate to use these types of products for a spill of any significant size. Rather, they are intended to control the minor drips associated with routine operations. Care must still be taken to ensure that free-floating oil is not discharged overboard.

Yet another type of oil absorbent product is a boom constructed out of oil absorbent polypropylene fabric and filled with dehydrated microbes. These booms hold the petroleum in the fabric until microbes digest it. Harm associated with free-floating petroleum is thereby minimized.

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

- Standard absorbents that contain gasoline may be air dried and reused.
- Standard absorbents saturated with only oil or diesel may be wrung out over oil recycling bins and reused. Alternatively, double bag the absorbents - one plastic bag sealed inside of another - and discard in your regular trash.
- Bioremediating bilge booms may be discarded in your regular trash if they are not dripping. Because the microbes need oxygen to function, do not seal them in plastic bags.

Turn Pressure Down.

Backsplash and vent-line overflow may be caused by high-pressure fuel flow from the pump.

- ___ ✓ (5) Ask your fuel company representative to set the delivery rate to 10 gallons per minute or less, especially if you cater to small boats.

(5) Total Points for BMP

Total N/A Points

Advocate Use of Oil Absorbent Materials.

- ___ ✓ (5) Distribute pads, pillows, or booms to your tenants.
- ___ ✓ (5) Require tenants to use oil absorbent materials as part of your lease agreement.

(10) Total Points for BMP

Total N/A Points


Pump Contaminated Bilge Water.

- ___ ✓ (5) Draw contaminated water from bilges into a holding tank and have the holding tank pumped out by an authorized waste hauler.

(5) Total Points for BMP

Total N/A Points

Offer Spill-Proof Oil Changes.

- ___  (5) Drain the filter by punching a hole in the dome end. Recycle the collected oil. Recycle the metal canister if practical. If not, double bag and discard in your regular trash.
- ___ ✓ (1) Purchase a non-spill pump system to draw crankcase oils out through the dipstick tube. Use the system in the boat shop and rent it to boaters who perform their own oil changes.
- ___ ✓ (1) Slip a plastic bag over the used oil filter prior to removal to capture any drips.
- ___ ✓ (1) Encourage the use of spill-proof oil change equipment as a condition of your slip rental agreement.

(3) Total Points for BMP

Total N/A Points

Minimize Spills and Leaks from Machinery.

- ___ ✓ (1) Use non-water-soluble grease on Travelifts, fork lifts, cranes, and winches.
- ___ ✓ (5) Place containment berms with containment volumes equal to 1.1 times the capacity of the fuel tank around fixed pieces of machinery that use oil and gas. Place the machinery on an impervious pad. Design containment areas with spigots to drain collected materials. Dispose of all collected material appropriately. Refer to the Waste Containment and Disposal section of this guidebook. If possible, cover the machinery with a roof to prevent rainwater from filling the containment area.
- ___ ✓ (1) Place leak-proof drip pans beneath machinery. Empty the pans regularly, being conscientious to dispose of the material properly (uncontaminated oil and anti freeze may be recycled).
- ___ ✓ (1) Place oil-absorbent pads under machinery.

(8) Total Points for BMP

Total N/A Points

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Educate Boaters.

- (1) Photocopy the Clean Boating Tip Sheet included at the end of this chapter and distribute it to your tenants. There is room to add your marina's name and logo.

(1) Total Points for BMP

Total N/A Points

Best Management Practices for Emergency Planning

Prepare a Spill Prevention, Control, and Countermeasure Plan.

The Environmental Protection Agency's Oil Pollution Prevention Regulation requires marinas to prepare and implement a Spill Prevention, Control, and Countermeasure Plan (SPCC) to prevent discharge of oil into navigable waters or adjoining shorelines if the facility has:

- an aggregate aboveground storage capacity greater than 1,320 gallons, or one container greater than 660 gallons (containers of less than 55 gallons and/or permanently closed storage tanks are exempt from the total) or
- a total underground storage capacity greater than 42,000 gallons (except for permanently closed storage tanks).


Oil is defined in the SPCC regulations (40 CFR 112) as "oil of any kind or in any form, including but not limited to petroleum, fuel oil, sludge, oil refuse, and oil mixed with wastes other than dredged spoil and oily mixtures."



The plan must include:

- A site plan that depicts the marina layout and drainage patterns,
- A list of all storage tanks and areas,
- All quantities of oil that could be released with predicted rate and path of flow,
- The procedures for receiving oil from supplier, transfer of oil within the marina, end point uses of the oil, and waste oil disposal,
- The effects of a spill at the marina, including fire hazards, employee evacuation, customer/neighbor considerations,
- The capacity for a secondary containment. If secondary containment is not practicable, (i.e. fuel dock), you must explain why and provide a strong spill contingency plan, describing commitment of manpower, equipment, and materials to control and remove any harmful quantity of discharged oil,
- The countermeasures to contain, cleanup, and mitigate the effects of an oil spill,
- A notification list,
- The marina security for prevention of internal sabotage, external vandalism,
- The employee training for spill prevention, oil handling, and spill clean-up. Only oil handling personnel must be trained in operation and maintenance of equipment to prevent oil discharge. Discharge


prevention briefings for oil handling personnel must occur at least once a year and other Occupational Safety and Health Administration (OSHA) considerations.

- (1) Post copy of the SPCC plan in plain view at oil storage location.
-  (1) The SPCC plan must be certified by a professional engineer and kept onsite for EPA review. If a single spill of greater than 1,000 gallons occurs or two discharges of more than 42 gallons of oil each occur within one year, a copy of the SPCC plan must be submitted to EPA Region II.

(1) Total Points for BMP

Total N/A Points

Community Right to Know.

-  A marina must report storage of gasoline, diesel fuel, propane or fuel oil (all of which require Material Data Safety Sheets) in excess of 10,000 lbs to the appropriate authorities. This does not include the fuel in boats dockside. Gasoline weighs about 6.19 lbs. per gallon, diesel weighs about 7.05 lbs. per gallon, and propane weighs about 4.23 lbs. per gallon at 60 degrees Fahrenheit (see Laws and Regulations).

Develop Emergency Response Plans.

- (5) Develop plans for likely emergencies including:
 - fuel spill
 - holding or water tank filled with gas
 - spill at the storage area: used oil, antifreeze, solvents, etc.
 - fire
 - health emergency
 - hurricane, etc.
- (5) Develop written procedures describing actions to be taken under given circumstances. The plans should be clear, concise, and easy to use during an emergency, e.g., use a large type size. Each emergency response plan should contain the following information:

Where:

- In the very front of the plan, insert a laminated 11 by 17-inch site plan of the facility showing valves, pipes, tanks, structures, roads, hydrants, docks, power and fuel shutoffs, hazardous material storage locations, and telephones.
- Describe where response material is located.

Who:

- Identify who is responsible for taking what action, e.g., deploying equipment, contacting emergency agencies, etc.
- Designate one person on the marina staff as the official spokesperson for the facility.

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- Include a list of emergency phone numbers: National Response Center (800) 424-8802, NJDEP's Emergency Hotline 1-877 WARN DEP, county health department, local fire and police departments, owner, and neighboring marinas that have emergency response equipment.
- Include a brief description of each agency's jurisdiction and information about what type of equipment and services are available from neighboring marinas and spill response firms.

What:

- State the actions to take during emergencies that could reasonably occur and identify what equipment should be deployed. Include information about the types of equipment on site and their characteristics and capabilities.
- Characterize the marina's waterfront and vessels.
- Describe the type, amount, and location of materials stored on site, e.g., petroleum and hazardous materials.

How:

- Explain how the equipment is used and discarded.

When:

- Indicate when to call for assistance.

(1) Update the plans annually to include any new technology or equipment and to confirm phone numbers.

(11) Total Points for BMP

Total N/A Points

Make Plans Accessible.

(1) Keep copies of all Emergency Response Plans in a readily accessible location.

(1) Place a second copy of the Oil Spill Response Plan (SPCC) in the oil spill response kit.

(2) Total Points for BMP

Total N/A Points

Train Employees.

(5) Review plans and response procedures with staff at the beginning of each boating season and provide interim training for newly hired untrained staff.

(5) Train employees in the use of containment measures.

(5) Run emergency response drills at least twice annually.

(1) Invite the U.S. Coast Guard and local fire department to demonstrate emergency response procedures at your marina.

(16) Total Points for BMP

Total N/A Points

Share Your Emergency Response Plans.

✓ (1) Inform your local fire department and harbormaster about your emergency response plans and equipment.

✓ (1) Inform neighboring marinas about the resources that are available at your marina.

(2) Total Points for BMP **Total N/A Points**

Maintain Oil Spill Response Equipment.

✓ (5) Maintain sufficient oil spill response equipment to contain the largest potential spill at your facility.

✓ (5) Store sufficient boom to encircle the largest vessel in your marina.
Vessel length x 3 = required length of boom.

(10) Total Points for BMP **Total N/A Points**

Store Oil Spill Response Equipment Smartly.

✓ (1) Store the equipment where there is the greatest risk of an oil spill, such as fuel receiving and fuel dispensing areas.

✓ (1) Store materials in an enclosed container or bin that is readily accessible to all staff- especially those who handle the fueling operations.

✓ (1) Mark the storage site with a sign reading “Oil Spill Response Kit.” Include instructions for deploying pads and booms and notification that all spills must be reported to the National Response Center at (800) 424-8802, NJDEP at 1-877 WARN DEP, and county health department.

✓ (1) Unlock the storage container so that it is available to patrons, as well as to staff. If it is impractical to always leave the bin unlocked, unlock it on weekends and holidays when activity, and thus risk, is greatest.

✓ (1) Check the bin inventory regularly.

(5) Total Points for BMP **Total N/A Points**

Box 3. Fuel Spill

What do you do when oil, gas, or diesel is spilled?

1. Stop the flow.
2. Contain the spill.
3. Call the National Response Center at (800) 424-8802, NJDEP’s Discharge Response Unit at 1-877-WARN DEP, and the local county health department.

Failure to report spills to the National Response Center and NJDEP may result in civil administrative penalties.

If less than a gallon is spilled and you clean it up immediately, the Coast Guard will probably not visit your facility. The spill is still a violation, however.

Call the National Response Center if a slick floats into your marina from an unknown source. The spill cleanup will be undertaken with their own resources. They will also investigate and try to eliminate the source of the spill. You will not be held liable for a slick that did not originate at your facility.

Be Prepared for a Fire.

- ✓ (5) Meet the National Fire Protection Association’s standards for marinas: NFPA 303, Fire Protection Standards for Marinas and Boatyards; NFPA 302, Fire Protection Standards for Pleasure and Commercial Motor Craft; NFPA 30A, Automotive and Marine Service Station Code; NFPA 307, Standard for the Construction and Fire Protection of Marine Terminals, Piers, and Wharves; and NFPA 33, Standard for Spray Application Using Flammable and Combustible Materials.
- ✓ (1) Be sure hydrants are available for fighting fires throughout your facility.
- ✓ (1) Install smoke detectors.
- ✓ (5) Provide and maintain adequate, readily accessible, and clearly marked fire extinguishers throughout the marina, especially near fueling stations.
- ✓ (1) Inspect and test all fire fighting equipment and systems regularly. Test fire extinguishers annually.
- ✓ (1) Train personnel on fire safety and response: who to call, location of hydrants, use of portable extinguisher, etc.
- ✓ (1) Provide ready access to all piers, floats, and wharves for municipal fire fighting equipment.
- ✓ (1) Invite the local fire marshal to visit your marina annually to train employees. These annual visits will also help the fire department to become familiar with your facility.

(16) Total Points for BMP

Total N/A Points

Maintain Material Safety Data Sheets.



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). Store the file in an office away from material storage areas. Keep in mind that during an emergency the file will not reflect either the quantities of materials on site or even whether all the listed materials are present.



Inform the local Emergency Planning Committee what materials you store and what is released when they burn.

(1) Total Points for BMP

Total N/A Points

Chapter Total:

___ (191)

Chapter Total N/A Points:

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PETROLEUM IN OR ON THE WATER IS HARMFUL. Floating petroleum is particularly harmful because it reduces light penetration and the exchange of oxygen at the water's surface, potentially affecting thousands of species of microbes, plants and animals such as larval blue crab and striped bass. The abundance of life in the microlayer attracts predators: seabirds from above and fish from below. Thus, petroleum pollution can potentially poison the entire aquatic food web.

FUELING PRACTICES

Gas or diesel that spills during fueling as backsplash out of the fuel intake or as overflow out of the vent fitting can harm aquatic life, wastes money, and can result in stains on the hull and damage to gel coat and striping. Follow these tips to avoid problems:

- Fill tanks to no more than 90 percent capacity - gas that is drawn from cool storage tanks will expand as it warms up aboard your vessel.
- Do not rely solely on the fuel gauge. To determine when the tank is 90 percent full, listen to the filler pipe, use a sounding stick, and be aware of your tank's volume.
- Fill portable tanks ashore where spills are less likely and easier to clean up.

THE LAW

Both state and federal law, prohibit the discharge of petroleum products into the water.

The Federal Water Pollution Control Act (also called the Clean Water 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 of the water, or causes a sludge or emulsion beneath the surface of the water.

The U.S. Coast Guard may fine violators up to \$5,000. The NJDEP may levy additional fines.

- Use oil absorbent pads to catch all drips.
- Slow down at the beginning and end of fueling.
- Fill your tank just before leaving on your next trip. This practice will reduce spills resulting from thermal expansion because the fuel will be used before it warms up.



BILGE MAINTENANCE

Engine oil tends to accumulate in the bilge. Without precautions, the oil may be pumped overboard along with the bilge water.

To avoid fines and to protect

water quality, follow these tips:

- Keep your engine well-tuned to minimize the amount of oil that is released. Be certain that no seals, gaskets, or hoses leak.
- Place oil absorbent materials or a bioremediating bilge boom in the bilge.
- Place an oil absorbent pad under the engine.
- Replace oil absorbent materials regularly.
- Look for contractors or marinas that offer a bilge pumpout service.
- Do not treat oily water with detergents. Soaps pollute and make cleanup impossible. You may be fined up to \$25,000 for using soaps to disperse oil.

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DISPOSAL OF OIL ABSORBENT MATERIALS

The disposal of used oil absorbent material depends on the type of product and how it was used:

- Standard absorbents saturated with only oil or diesel may be wrung out over oil recycling bins and reused. Alternatively, they should be double bagged with one plastic bag sealed inside of another and discarded in your regular trash.
- Bioremediating bilge booms may be discarded in your regular trash as long as they are not dripping. Because the microbes need oxygen to function, do not seal them in plastic bags.

EMISSIONS CONTROL

Marine engines produce high levels of hydrocarbon exhaust emissions which contribute to ground level ozone, a known health risk. Follow these tips to help your engine operate as efficiently as possible:

- Use the gas-to-oil ratio recommended by the engine manufacturer. Too much oil can foul spark plugs and too little can lead to increased engine wear or failure.
- Use premium two-cycle engine oil. Premium oils improve engine performance and reduce pollution because they burn cleaner, contain more detergents, and prevent formation of carbon deposits.
- Use gasoline with the octane level recommended by the engine manufacturer.

PREVENTIVE EQUIPMENT

Products are available that can help prevent spills and reduce emissions:



- Install a fuel/air separator along your vent line. These devices allow air, but not fuel, to escape through a vent opening.
- Attach a safety nozzle to portable gas cans used to fill outboard engines. These nozzles automatically stop the flow of fuel when the receiving tank is full.
- To prevent the discharge of oily bilge water, install a bilge pump switch that leaves an inch or two of water in the bilge.
- Alternatively, connect a bilge water filter to your vessel's bilge pump. Filters will remove oil, fuel, and other petroleum hydrocarbons from the water.
- When it is time to buy a new engine, select a fuel efficient, low emission model.

IN CASE OF A SPILL

- Stop the flow.
- Contain the spill.
- Call the National Response Center at **1-800-424-8802**.
- Call the NJDEP's Discharge Response Unit at **1-877-WARN DEP**.
- Call the local county health department.

For more information about the Clean Marina Program
visit www.njcleanmarina.org