Waste Containment and Disposal

Environmental Concerns

All boatyards generate some waste; waste that may threaten human health, be hazardous to wildlife, and be costly to coastal communities.

Solid waste, particularly plastics, must be contained. There are many well-documented instances of marine mammals, fish, turtles, and seabirds becoming entangled or choking on plastic marine debris. Plastics also represent a hazard to navigation because they can snare propellers and clog engine intake systems. Divers may also become entangled. Furthermore, solid waste that washes up on shore is unattractive and may be costly to remove.

In addition to solid waste, boatyard operators must be concerned with the proper collection and disposal of liquid wastes and of corrosive, reactive, toxic, and/or ignitable materials, i.e., hazardous wastes.

Best Management Practices to Properly Contain and Dispose of Waste

Hazardous Waste

Conditionally Exempt Facilities

Most boatyards deal with limited quantities of "non-acute" hazardous waste and thus are considered
"conditionally exempt small quantity generators." Facilities that generate less than 100 kg (about 220 pounds or 30 gallons) of hazardous waste per month and which do not accumulate more than 1,000 kg (2,200 lbs.) of waste at any one time are considered "conditionally exempt small quantity generators." Conditionally exempt small quantity generators are not required to register with the EPA and do not need a hazardous waste generator identification number. Send hazardous waste from conditionally exempt small quantity generators to a disposal facility that is permitted, licensed, or registered by the state to manage municipal or industrial solid waste.

Hazardous Waste Generators

If your facility exceeds the thresholds of a conditionally exempt small quantity generator you are considered a hazardous waste generator and are subject to the requirements discussed below. Hazardous waste "generators" are those individuals or companies that produce greater than 100 kilograms (about 220 lbs. or 30 gallons) (2,200 lbs.) at any one time. The following requirements apply to all hazardous waste

of hazardous waste during one calendar month or who store more than 1,000 kg (2,200 lbs.) at any one time. The following requirements apply to all hazardous waste generators.

___ ⚖ All generators and transporters of hazardous waste must have an Environmental Protection Agency (EPA) identification number provided by the NJDEP. To apply for an identification number, use EPA Form 8700-12 (available from NJDEP).

___ ⚖ Store hazardous waste in UL listed or Factory Mutual approved containers labeled and marked according to Department of Transportation regulations. Refer to 49 CFR 178. Mark the date accumulation begins on each container. Store containers on pallets to prevent corrosion and in an area able to contain any leaks. Keep containers closed when not adding or removing waste. Inspect containers weekly.

___ ⚖ Store quantities of waste greater than 100 kg (220 lbs.) but less than 1,000 kg (2,200 lbs.) for a maximum of 180 days. Any quantity of waste greater than 1,000 kg may be stored for a maximum of 90 days.

___ ⚖ Prepare a written emergency contingency plan if you generate more than 100 kg (220 lbs.) of hazardous waste per month or accumulate more than 1,000 kg at any one time. Copies must be given to NJDEP and local agencies.

___ ⚖ Document all hazardous waste training in each employee's personnel file. All personnel who handle hazardous waste must receive training to ensure compliance with the state regulations.

___ ⚖ Transporters must be registered and are listed on the NJDEP web page.

___ ⚖ Anyone who sends hazardous waste offsite for treatment, storage, or disposal must prepare a manifest. Ensure that all of the information on the manifest is correct. The hazardous waste manifest must accompany all hazardous wastes "from cradle to grave." It is your responsibility to ensure that the driver and the vehicle are certified to handle hazardous waste. Each hazardous waste transporter must sign the manifest, as should the operator of the treatment, storage, or disposal facility. A final copy must be returned to the generator once the waste is properly treated, stored, or disposed of.

___ ⚖ Every two years, submit a report to NJDEP that summarizes hazardous waste activities during odd-numbered years. It is recommended, but not mandatory, to also report figures for even-numbered years.

___ ⚖ Retain all records, including manifests and waste analysis and annual reports, for at least three years. The files must be available for inspection by NJDEP.

Universal Waste

Universal waste includes hazardous wastes that are managed under the universal waste requirements (see N.J.A.C. 7:26A-7): batteries, pesticides, thermostats, lamps, mercury containing devices, oil-based finishes, and consumer electronics. A facility that generates universal waste is probably a "small quantity handler of universal waste," since the accumulated universal waste at a boatyard is unlikely to exceed the accumulation threshold of 11,000 lbs. or more at any time.

The following discussion relates to facilities that are small quantity handlers of universal waste and is presented in two parts: general requirements for handling any universal waste and requirements and recommendations for handling specific categories of universal waste.

___ ⚖ The waste must be managed in a manner that prevents releases of any universal waste or component of universal waste to the environment. This involves containing any universal waste that shows evidence of leakage, spillage, or damage that could cause leakage under reasonably foreseeable conditions;

___ ⚖ It must be clearly labeled either individually or by closed container with the required phrasing as illustrated in the following examples: "Universal Waste – Oil-based Finish", "Universal Waste Mercury Containing Devices";

___ ⚖ Universal waste may not be accumulated for longer than a year from the date the waste is generated unless it can be demonstrated that the additional length of accumulation is necessary solely to facilitate proper recovery, treatment, disposal of the waste;

___ ⚖ You must be able to clearly demonstrate the length of time that the universal waste has been accumulated from the date that it became waste;

___ ⚖ All facility employees who handle or have responsibility for managing universal waste must be informed of the proper handling and appropriate emergency procedures pertaining to the type(s) of universal waste occurring at the marina;

___ ⚖ Any release of universal waste or other residues from universal waste must be immediately contained;

___ ⚖ If the material resulting from a release is hazardous waste, the material must be managed as hazardous waste in compliance with all applicable requirements;

To determine your best disposal option, visit the NJDEP website at www.nj.gov/dep/dshw/lrm/uwaste.

Batteries

___ ⚖ Clearly label a battery storage area as "Used Batteries", "Universal Waste – Batteries", or "Waste Batteries."

___ ⚖ Store batteries with caps in place.

___ ⚖ Store used batteries with either missing caps or cracked casings in a sheltered area or container.

Mercury Containing Devices and Thermostats

Mercury poisoning affects the central nervous system of vertebrates, including humans. Mercury in the environment moves up the food chain and bio-accumulates in carnivores. Mercury in the environment has been documented in freshwater and estuarine fish species has led to health advisories warning people not to consume certain fish under certain circumstances.

Certain float switches that turn bilge pumps and shower water storage tank pumps on and off contain as much mercury as 100 fluorescent lamps. Most air conditioning/heating thermostats do also. Many boats have one or more of these mercury containing devices. Bilge pump float switches fail (sometimes in less than a year) because marine bilgewater corrodes exposed wires. Some boat owners may not know that these switches, typically encased in white or colored plastic, contain mercury and the boat owner may unknowingly discard these switches as regular trash. Thermostats wear out much less frequently but boat owners and repairers may be unaware that they also contain mercury.

___✓ (5) Establish a designated secure area where mercury switches can be stored for recycling.
- Provide watertight containers for unusable mercury switches
- Ensure that leaking mercury switches are placed in heavy sealable plastic bags before they are placed in the container.

___✓ (1) Post signs alerting the public to the environmental concerns regarding mercury. Encourage them to recycle bilge pump switches and AC/heater thermostats.

___✓ (1) Periodically place flyers in customers' bills or other correspondence reminding them of the legal disposal procedures for mercury bilge pump float switches and AC/heating thermostats and provide information regarding local household hazardous waste programs and industry sponsored take-back programs.

☐ **(7) Total Points for BMP** ☐ **Total N/A Points**

Reduce Waste.

In addition to the suggestions offered elsewhere in this Guidebook, employ the following recommendations to further reduce waste. Keep in mind that less waste means lower disposal costs.

___✓ (1) Avoid having leftover materials by carefully considering the job, evaluating your actual needs, and buying just enough product for the job. Encourage boaters to do the same.

___✓ (1) Minimize office waste: make double-sided copies, use scrap paper for notes and messages, purchase recycled office paper, and reuse polystyrene peanuts or give them to small scale packing and shipping companies that will reuse them.

___✓ (1) Request that your vendors use alternative packing material such as paper, potato starch peanuts, popcorn, etc.

___✓ (1) Discourage the use of plastic and styrofoam cups, food containers, utensils, and other non-biodegradable products.

☐ **(4) Total Points for BMP** ☐ **Total N/A Points**

Manage Trash.

___✓ (5) Develop your waste management strategy based on the number of patrons, the types of waste generated, the layout of your facility, and the amount of staff time you can devote.

___✓ (5) Promote your image as a responsible business by having adequate and reasonably attractive trash and recyclables receptacles, e.g., cans, bins, dumpsters for staff use.

___✓ (1) Place trash and recyclables receptacles in convenient locations. Select high traffic areas such as at the landward end of the dock, near bathrooms and showers, alongside vending machines, adjacent to the marina office, or along the path to the parking lot.

___✓ (1) Select containers that will hold the expected volume of trash.

___✓ (1) Provide lids or restricted openings to secure the waste inside and to prevent animals, birds and rainwater from getting in.

___✓ (5) Post signs clearly indicating what may and may not be placed in a specific container: engine oil, antifreeze, paints, solvents, varnishes, pesticides, lead batteries, transmission fluid, distress flares, and polystyrene peanuts (loose peanuts tend to blow away).

___✓ (1) Require all employees to police the facility for trash and vessel maintenance wastes. Do not allow litter to mar your grounds.

___✓ (1) Post signs directing people to trash/recyclables receptacles if the containers are not in plain view.

___✓ (1) Plant or construct a windscreen around the dumpster to make the area more attractive and to prevent trash from blowing away. Use native shrubs such as red chokeberry (*Aronia arbutifolia*), spicebush (*Lindera benzoin*) or mountain laurel (*Kalmia latifolia*).

☐ **(21) Total Points for BMP** ☐ **Total N/A Points**

Recycle Whenever Possible.

Divert reusable materials out of the waste stream. A recycling program is an easy, highly visible means to demonstrate environmental stewardship. Recycling programs are also a good way to introduce patrons to pollution prevention practices. In fact, many may practice recycling at home and may expect to see recycling bins. The added cost of providing for recycling may be offset by income derived from the sale of some high quality recyclable items such as office paper, aluminum, and cardboard.
In addition, you may realize cost savings due to less frequent tipping of your dumpster(s) because of the reduced volume of trash.

___✓ (1) Contact a waste hauler or your local solid waste recycling coordinator to identify what materials are collected in your area. The following materials may be recycled: antifreeze, oil, metal fuel filter canisters, solvents, glass, shrink wrap, type 1 and 2 plastics, aluminum, steel, tin, newspaper, corrugated cardboard, mixed paper, scrap metal, tires, and white goods (appliances).

☐ **(1) Total Points for BMP** ☐ **Total N/A Points**

Recycle Solid Waste.

___⚖ Provide containers to collect, at a minimum, plastic, glass, aluminum, cardboard, and newspaper.

___⚖ Store used tires under cover so that they do not collect rainwater.

___⚖ Do not store solid waste for more than six months without a permit from NJDEP.

___⚖ Only employ solid waste haulers that are registered with NJDEP.

___✓ (1) Clearly mark each container so people know what may and may not be put in it.

___✓ (1) Provide lids or some type of restricted opening to prevent the collected material from being lifted out by the wind and to prevent rainwater from collecting inside.

___✓ (1) Place the collection bins for solid recyclables in convenient high traffic locations.

___✓ (1) Use a different color or material to distinguish recycling bins from the standard trashcans.

☐ **(4) Total Points for BMP** ☐ **Total N/A Points**

If you can not locate a collection service for the marina, call NJDEP's Recycling Hotline at (609) 984-3438 and report the problem.

☐ **(4) Total Points for BMP** ☐ **Total N/A Points**

Recycle Liquid Waste. (N.J.A.C. 7:26A)

___ ⚖ Provide containers to collect oil and antifreeze. Also collect solvents according to hazardous waste regulations.

___ ⚖ Provide separate containers for oil and antifreeze.

___ ⚖ Aboveground tanks are preferable to drums that are unsuitable for long-term storage or to withstand repeated handling. Cylindrical, horizontal tanks with supports that keep the tank sufficiently above the ground to permit visual inspection are preferable. Double-walled tanks with a screened and covered drainage area are recommended. Tanks should be constructed of material that meets the American Petroleum Institute and the American Society of Lubricating Engineers Standards for flammable and combustible liquids (UL No. 142 Standard). Equip the tank with a wide-mouthed, long-necked funnel, or other similar apparatus, in order to minimize spillage when transferring used liquid waste into the tank. Funnels should be sufficiently large to drain portable containers and oil filters. The tank should also be equipped with a pressure relief valve or vent to provide tank ventilation to prevent a build-up of potentially volatile fumes.

___ ⚖ Label used oil collection tank with "Used Oil" (N.J.A.C. 7:26A-6.4(d)4i).

___ ⚖ Maintain tanks in good condition, free of rust or corrosion (N.J.A.C. 7:26A-6.4(d)3i).

___ ✓ (5) Surround tanks with impervious, secondary containment that is capable of holding 110 percent of the volume of each tank. If some liquid spills within the containment area, and wiped up or dried with absorbent materials, it is not considered a "release", thus avoiding the need to report the incident to NJDEP and incurring cleanup costs.

___ ✓ (1) Shelter the tanks from the elements.

___ ✓ (1) Check with your recycler to determine what materials may be mixed. Generally engine oil, transmission fluid, hydraulic fluid, and gear oil may be placed in the same container. Some haulers will also take diesel and kerosene. Ethylene glycol and propylene glycol antifreeze are often collected in the same used antifreeze tank. As a precaution, CHECK WITH YOUR RECYCLER BEFORE MIXING ANY MATERIALS.

___ ✓ (5) Post signs indicating what may and may not be placed in each tank.

___ ✓ (1) Have available absorbent materials, such as sawdust, sorbent granules or sorbent pads to soak up minor spills.

___ ✓ (5) Do not allow patrons to pour gasoline, solvents, paint, varnishes or pesticides into the oil or antifreeze recycling containers. The introduction of these materials creates a "hazardous waste." The whole tank must be disposed of as hazardous waste, which is an expensive undertaking.

___✓ (1) Lock the intake to all recycling tanks to prevent contamination. Instruct your patrons to get the key from the appropriate staff person or to leave their oil or antifreeze next to the collection tank. If you select the second option, assign a member of your staff to inspect the collection site daily for any material that may have been dropped off. Keep all tanks sealed when not actively using them.

___ ⚖ Be aware that recycling liquid materials is a long-term obligation. Investigate waste haulers to ensure that they are licensed and actually recycle the collected material. Maintain shipping manifests for solvents and other hazardous wastes for a minimum of 3 years (although not required, it is a good business practice to also retain receipts for used oil and antifreeze that is recycled).

If you have difficulty finding a collection service in your area, contact the NJDEP at (609) 984-3438.

☐ **(19) Total Points for BMP** ☐ **Total N/A Points**

Minimize Hazardous Product Use.

By minimizing your use of hazardous products, you can reduce health and safety risks to your staff, tenants, and contractors; lower disposal costs; decrease liability; and limit chances that you will be responsible for a coastly cleanup of inappropriately disposed material.

___✓ (1) Avoid using corrosive, reactive, toxic, or ignitable products, to the greatest extent possible. The use of these materials is likely to generate hazardous waste.

___✓ (5) Adopt an inventory control plan to minimize the quantity of hazardous material that you purchase, store, and dispose of.

___✓ (1) Do not store large amounts of hazardous materials. Purchase hazardous materials in quantities that you will use up quickly.

___✓ (1) Establish a “first-in first-out” policy to reduce storage time. Dispose of excess material every 6 months.

___✓ (1) Use alternatives such as a botanical-based cleanser parts washer or cyclonic parts washer.

☐ **(9) Total Points for BMP** ☐ **Total N/A Points**

Box 3. How Do You Know if a Substance is Hazardous?

All waste generators must determine whether or not their refuse is hazardous. Use the following steps to determine if you have hazardous waste.

1. It is listed as a hazardous waste as defined in N.J.A.C. 7:26g
2. The waste exhibits one or more of the characteristics of hazardous materials: ignitability, corrosivity, reactivity, or toxicity. A generator may either test the waste to determine if it exhibits a hazardous characteristic or use knowledge of the waste, e.g., first hand experience or information gathered from a Material Safety Data Sheet. The test for toxicity is called the Toxicity Characteristic Leaching Procedure (TCLP) and is performed by industrial laboratories.

Store Solvents and Hazardous Materials with Care.

___ ⚖ Store solvents and other hazardous materials in fire-safe containers that are UL listed or Factory Mutual approved. Containers must meet U.S. Department of Transportation standards for protecting against the risks to life and property inherent in the transportation of hazardous materials. Approved containers will carry specification markings (e.g., DOT 4B240ET) in an unobstructed area. Refer to 49 CFR 178 for additional packaging specifications.

___ ⚖ Plainly label all stored and containerized material. For hazardous waste, mark the date accumulation begins and ends on each container.

___ ⚖ Store containers on pallets in a protected, secure location away from drains and sources of ignition. Routinely inspect the storage area for leaks.

___ ⚖ To minimize air pollution, cap solvents and paint thinners when not in use. Store rags or paper saturated with solvents in tightly closed, clearly labeled containers.

___ ⚖ Separate hazardous chemicals by hazardous class. Call NJDEP at (609) 292-6714 for the Bureau of Chemical Release Information and Prevention to determine the classes of your chemicals.

___ ✓ (5) 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.

___ ✓ (1) Routinely check the date of materials to prevent them from exceeding their shelf life.

☐ **(6) Total Points for BMP** ☐ **Total N/A Points**

Follow Recommended Disposal Methods.

The following table contains recommendations for the proper disposal of wastes typically found at boatyards and similar facilities.

Table 1. Recommended Disposal Methods

Waste	**Disposal Options** **If multiple options are listed, the first option (✓) is the preferred method**
Antifreeze • Propylene glycol • Ethylene glycol *Contact your waste hauler to confirm that they will accept mixed antifreeze*	✓ Recycle • Hire a waste hauler to collect and dispose of. • Purchase an on-site recovery unit. Distillation systems are more expensive than filtration systems but are more efficient at renewing used antifreeze.
Waste Oil • Engine oil • Transmission fluid • Hydraulic oil • Gear oil • #2 Diesel • Kerosene *Contact your waste hauler to confirm that they will accept mixed oil.*	✓ Recycle • Hire a waste hauler to collect and dispose of. • Take small quantities to a household hazardous waste collection event. • Use waste oil for space heating (subject to regulations under N.J.A.C. 7:26A. Call 609-984-6985 for assistance.)
Quart Oil Cans	✓ Drain completely and dispose of in regular trash. They cannot be recycled.
Non-terneplated Oil Filters	✓ Puncture and completely hot drain all free-flowing oil. Recycle the oil and the metal canister. • If you do not recycle the canister, double-bag it in plastic and place it in your regular trash.
Terneplated Fuel Filter (used in heavy equipment and heavy-duty trucks)	✓ Dispose of as hazardous waste (contains lead).
Stale Gasoline	✓ Add stabilizer in the winter to prevent it from becoming stale or an octane booster in the spring to rejuvenate it. Use the fuel. • Mix with fresh fuel and use. • Hire a hazardous waste hauler to collect and dispose of. A hazardous waste manifest is required. • Take small quantities to a household hazardous waste collection event.

Table 1. Recommended Disposal Methods, page 2 of 4

Waste	Disposal Options **If multiple options are listed, the first option (✓) is the preferred method**
Kerosene	✓ Filter and reuse for as long as possible then recycle. • Hire a waste hauler to collect and dispose of.
Mineral Spirits	✓ Filter and reuse. • Hire a waste hauler to collect and dispose of.
Solvents • Paint and engine cleaners such as acetone and methylene chloride	✓ Use non-toxic alternatives such as botanical-based cleanser parts washer or cyclonic parts washer. ✓ Reuse as long as possible employing a solvent still and then recycle. • Dispose of as hazardous waste
Sludge Recovered from a Solvent Listed as a Hazardous Waste Under N.J.A.C. 7:26g	✓ Dispose of as hazardous waste
Sludge Recovered from a Solvent Not Listed as a Hazardous Waste Under N.J.A.C. 7:26g and Which Does Not Exhibit Hazardous Characteristics	✓ Let sludge dry in a well-ventilated area, wrap in newspaper, and dispose of in garbage.
Paints and Varnishes: • Latex • Water-based • Oil-based	✓ Use leftover material for other projects, i.e., as an undercoat for the next boat. • Encourage tenants to swap unused material. • Dispose of as hazardous waste.
Paint Brushes	✓ Dry completely. Discard in regular trash.
Paint Filters	✓ Dry completely prior to disposal. Treat as hazardous waste if paint contains heavy metals above regulatory levels.
Rags Soaked with Hazardous Substances	✓ Keep in covered container designed for flammable materials until ready to discard. Dispose of the solvent that collects in the bottom of the container as hazardous waste. ✓ Wring rags out over a collection receptacle and have laundered by an industrial laundry. • If rags fail Toxicity Characteristic Leaching Procedure (TCLP) test, dispose of as hazardous waste.
Used Oil Absorbent Material	✓ If it is saturated with oil or diesel, double bag it in plastic and discard in trash (as long as no petroleum is leaking). ✓ If it is saturated with gasoline, dispose of as hazardous waste.
Used Bioremediating Bilge Booms	✓ Dispose of in regular trash as long as no liquid is dripping. Because the microbes need oxygen to function, do not seal in plastic.
Epoxy and polyester resins	✓ Catalyze and dispose of as solid waste.

⚖ : Law or Regulation ✓ : Recommended

Table 1. Recommended Disposal Methods, page 3 of 4

Waste	**Disposal Options** **If multiple options are listed, the first option (✓) is the preferred method**
Glue and Liquid Adhesives	✓ Catalyze and dispose of as solid waste.
Empty Containers • Paint cans • Buckets • Spent caulking tubes • Aerosol cans	✓ Recycle empty drums. ✓ May be put in trash can as long as: • All material that can be removed has been. Be sure no more than 1'' of residue is on the bottom or inner liner. • Containers that held compressed gas are at atmospheric pressure. • Containers that held acute hazardous waste have been triple rinsed with solvent. Properly dispose of the solvent.
Residue from Sanding, Scraping, and Blasting	✓ Dispose of as solid waste. ✓ If residue contains lead or other hazardous waste, dispose of as hazardous waste.
Residue from Pressure Washing	✓ Dispose of as solid waste.
Lead Batteries	✓ Handle as "universal waste" Recycle or sell to scrap dealers. Store on an impervious surface, under cover. Protect from freezing. Check frequently for leakage. • Inform boaters that if they take their old battery to a dealer, they will receive a $5 refund on a new battery.
Expired Distress Signal Flares	✓ Encourage boaters to keep onboard as extras. ✓ Store in well-marked, fire safe container. Use expired flares to demonstrate to boaters how they are used. Be sure to notify the fire department and Coast Guard ahead of time-especially if using aerial flares. Conduct the demonstration over water. • Encourage boaters to take to local fire department or household hazardous waste collection event.
Scrap Metal	✓ Recycle.
Light Bulbs • Fluorescent bulbs • Mercury vapor lamps • High-pressure sodium vapor lights • Low-pressure sodium vapor lights • Metal halide lamps	✓ Recycle if you have more than 10 to dispose of. ✓ If fewer than 10, check with your county coordinator and take to a county recycling facility if they will accept. • If fewer than 10, treat as solid waste. ✓ If facility is a generator, dispose of mercury containing lamps and fluorescent bulbs as universal waste.
Refrigerants	✓ Recycle. Contact your county coordinator to identify certified handlers for CFC recovery. • Use alternative refrigerants: HCFC-22 (for ACS and electric chillers), HCFC-123 (replaces CFC-11), HFH-134A (replaces CFC-12).

Table 1. Recommended Disposal Methods, page 4 of 4

Waste	Disposal Options **If multiple options are listed, the first option (✓) is the preferred method**
Monofilament Fishing Line	✓ Recycle through a manufacturer or tackle shop.
Scrap Tires	✓ Recycle. Register with NJDEP if you will be collecting more than 50 tires. Contact the Bureau of Recycling and Planning at (609) 984-3438 for additional information. Store according to National Fire Protection Association Standards.
Pesticides	✓ Dispose of as hazardous waste. • Triple rinse empty containers before disposing of in trash.
Plastic Shrink Wrap	✓ Recycle.
Fish Waste	✓ Prohibit disposal of fish waste in confined marina waters. Establish a fish cleaning station and adopt one of the following disposal methods: • Equip the cleaning station with a garbage disposal connected to municipal sewer. • Compost the scraps. • Instruct boaters to bag scraps in plastic and place in a dumpster or take home.

Track Pollution Incidents.

___✓ (5) Copy and use the Pollution Report and Action Log included at the end of this chapter to track pollution incidents and actions taken.

___✓ (1) Post the Log on a clipboard in the maintenance area or another easily accessible location.

___✓ (1) Consult the Pollution Report and Action Log daily.

☐ **(7) Total Points for BMP** ☐ **Total N/A Points**

Proper Disposal of Sanitary Waste

If you have a septic system, be alert for signs of trouble: wet areas or standing water above the absorption field, toilets that run slowly or back up, and odor. Septic failures can contaminate drinking water and shellfish. The following tips will help you to avoid the health risks and nuisance associated with an overburdened system:

___✓ (5) Post signs in the restrooms informing patrons not to place paper towels, tissues, cigarette butts, disposable diapers, or feminine hygiene products in the toilets. These items can clog the septic system.

___✓ (1) Do not dump solvents such as paint thinner or pesticides down the drain and post signs prohibiting customers from doing the same.

___✓ (1) Do not pour fats and oils down drains.

___✓ (1) Do not use a garbage disposal. Disposals increase the amount of solids entering the system. Capacity is reached more quickly. As a result, more frequent pumping is necessary.

___✓ (1) Use small amounts of drain cleaners, household cleaners, and other similar products.

___✓ (1) Do not use "starter enzyme" or yeast. These products can damage the system by causing the infiltration bed to become clogged with solids that have been flushed from the septic tank.

___✓ (1) Direct downspouts and runoff away from the septic field in order to avoid saturating the area with excess water. For stormwater management reasons, do not direct the flow toward paved areas.

___✓ (1) Do not compact the soil by driving or parking over the infiltration area.

___✓ (5) Have a licensed septic inspector inspect your system yearly. The inspector can help you determine the pumping frequency your tank requires. Hire a licensed professional to pump the tank at least every 3 years.

___✓ (5) Convert from septic to sewer if available in your area.

___✓ (5) Service patrons' MSDs annually to ensure that their Type I and II systems function properly.

___✓ (1) Encourage boaters to run dye tablets through their Type I or Type II systems. If a system is operating properly, no dye will be visible. Maintenance is required if dye can be seen in the discharge.

☐ **(28) Total Points for BMP** ☐ **Total N/A Points**

As the generators and conveyors of sewage, boaters need to be informed about the proper disposal of sewage. They must also be encouraged to properly maintain their MSDs and to purchase environmentally friendly treatment products for their heads and holding tanks.

Sewage - Environmental Concerns

Raw or poorly treated sewage discharged from boats is harmful to human health. Typhoid, hepatitis, cholera, gastroenteritis, and other waterborne
diseases may be passed directly to people who swim in contaminated waters. People may also become infected by eating shellfish contaminated with viruses and other microorganisms contained in sewage discharge.

Sewage is also harmful to water quality. The heavy nutrient load in sewage promotes excessive algal growth. As the algae multiply, they prevent life-sustaining sunlight from reaching submerged vegetation. When the algae die, decomposition by bacteria further reduces levels of dissolved oxygen.

Pertinent Laws and Regulations

No Discharge Areas

A No Discharge Area (NDA), sometimes referred to as No Discharge Zones, is an area of water that requires greater environmental protection and where even treated sewage may not be discharged from a boat. The Federal Clean Water Act defines all freshwater lakes, reservoirs, and rivers incapable of interstate vessel traffic as No Discharge Areas. With U.S. Environmental Protection Agency approval, states may establish NDAs in other state waters.

Vessels with an installed toilet typically have a “Y” valve or other means to bypass the sanitation system. Within the state’s No Discharge Areas, all pathways for discharge of raw sewage must be secured. The “Y” valve may be secured with a padlock or a non-reusable nylon tie known as a wire tie. Alternatively, the valve handle can be moved to the closed position and removed.

The following rivers are NDAs: Navesink River, Shrewsbury River, Shark River, Manasquan River and Barnegat Bay. As New Jersey continues its efforts to cleanup state waters, certain areas may be considered for NDA designation.

Safeguard and Maintain Septic Systems to Protect Water Quality and Public Health.

If you have a septic system, be alert for signs of trouble: wet areas or standing water above the absorption field, toilets that run slowly or back up, and odor. Septic failures can contaminate drinking water and shellfish. The following tips will help you to avoid the health risks and nuisance associated with an overburdened system:

___✓ (5) Post signs in the restrooms informing patrons not to place paper towels, tissues, cigarette butts, disposable diapers, or feminine hygiene products in the toilets. These items can clog the septic system.

___✓ (1) Do not dump solvents such as paint thinner or pesticides down the drain and post signs prohibiting customers from doing the same.

___✓ (1) Do not pour fats and oils down drains.

___✓ (1) Do not use a garbage disposal. Disposals increase the amount of solids entering the system. Capacity is reached more quickly. As a result, more frequent pumping is necessary.

___✓ (1) Use small amounts of drain cleaners, household cleaners, and other similar products.

___✓ (1) Do not use "starter enzyme" or yeast. These products can damage the system by causing the infiltration bed to become clogged with solids that have been flushed from the septic tank.

___✓ (1) Direct downspouts and runoff away from the septic field in order to avoid saturating the area with excess water. For stormwater management reasons, do not direct the flow toward paved areas.

___✓ (1) Do not compact the soil by driving or parking over the infiltration area.

___✓ (5) Have a licensed septic inspector inspect your system yearly. The inspector can help you determine the pumping frequency your tank requires. Hire a licensed professional to pump the tank at least every 3 years.

___✓ (5) Convert from septic to sewer if available in your area.

☐ **(22) Total Points for BMP** ☐ **Total N/A Points**

Offer MSD Inspections.

___✓ (5) Service patrons' MSDs annually to ensure that their Type I and II systems function properly.

___✓ (1) Encourage boaters to run dye tablets through their Type I or Type II systems outside of the marina. If a system is operating properly, no dye will be visible. Maintenance is required if dye can be seen in the discharge.

☐ **(6) Total Points for BMP** ☐ **Total N/A Points**

Chapter Total: ____ (110)

Chapter Total N/A Points: ____