

**Department of Legislative Services**  
Maryland General Assembly  
2010 Session

**FISCAL AND POLICY NOTE**

House Bill 1257

(Delegate Holmes, *et al.*)

Environmental Matters

---

**Natural Resources - Vessels - No-Discharge Designation for Maryland Waters**

---

This bill requires the State to initiate the process with the U.S. Environmental Protection Agency (EPA) to designate Maryland waters as a no-discharge zone (NDZ) by July 1, 2010. Contingent on EPA's determination that adequate facilities for the safe and sanitary removal and treatment of sewage from all vessels are reasonably available for all Maryland waters, the bill makes various changes to existing provisions regarding allowable marine sanitation devices and related requirements for vessel owners to effectuate the NDZ status. Also contingent on the EPA determination, the bill increases the existing penalty for violations of these provisions from a maximum of \$2,000 to a maximum of \$10,000 *per occurrence*.

The bill takes effect June 1, 2010, subject to the stated contingencies.

---

**Fiscal Summary**

**State Effect:** The bill does not have a significant direct effect on State finances. However, State expenditures may increase, potentially significantly, to better position the State for EPA NDZ designation. Contingent on NDZ designation, State general fund revenues may increase due to higher penalty fines for violations.

**Local Effect:** The bill is not anticipated to have a significant effect on local operations or finances.

**Small Business Effect:** Potential meaningful.

---

## Analysis

**Bill Summary:** Contingent on a specified EPA determination, the bill makes various changes to existing provisions regarding allowable marine sanitation devices and related requirements for vessel owners. Among other things, the changes modify the definition of “marine sanitation device” to require such devices to be certified in accordance with a specified section of the federal Clean Water Act (CWA); replace the use of the term “Y valve” with the term “valve” and modify that definition to relate to any type of sewage, not just raw sewage; and require vessel owners to ensure that vessels with any of the three allowable types of marine sanitation devices prevent the overboard discharge of treated or untreated sewage or any waste from sewage into State waters. Taken together, these changes effectively make Maryland waters an NDZ.

Effective June 1, 2010, the bill authorizes the Department of Natural Resources’ (DNR) Natural Resources Police (NRP), any sworn State or local law enforcement officer (LEO) with specified jurisdiction, and U.S. Coast Guard (USCG) personnel to enforce the marine sanitation device provisions in the Natural Resources Article. DNR’s regulations relating to enforcement of the State Boat Act must include provisions that (1) authorize routine inspections of vessel equipment to ensure that marine sanitation devices have been secured; (2) authorize periodic color dye flush tests of marine sanitation devices; (3) allow authorized LEOs to issue citations for illegal discharges; and (4) help educate boaters and the boating community about the State Boat Act.

### **Current Law:**

#### *Federal Clean Water Act*

CWA addresses a wide spectrum of water pollution problems, including marine sewage from boats in navigable U.S. waters (including coastal waters up to three miles offshore). The Act further provides for “no-discharge” by boats operated in enclosed lakes and reservoirs or in rivers not capable of interstate navigation. EPA or states may establish NDZs in which the discharge of sewage from all vessels is prohibited in specified waters. A state may designate portions of its waters as NDZs if the state determines that the protection and enhancement of water quality require greater protection than current federal standards allow; in this instance, EPA must determine if there are adequate sewage facilities available to support the NDZ status. A state may also make a written application to EPA for the issuance of a regulation prohibiting discharge from a vessel of any sewage into specified waters that have environmental importance or that serve as drinking water intakes.

Under CWA, USCG, or any other federal or state government entity under agreement with USCG, and the state in which the NDZ has been designated can enforce vessel sewage provisions in the NDZ.

Under CWA, boats with installed toilets must have an operable USCG-approved marine sanitation device designed to either (1) hold sewage for pump out ashore or for discharge in the ocean beyond the three-mile limit, or (2) treat the sewage to federal standards prior to discharge. Vessels operating in waters designated as an NDZ must retain all sewage, treated or not, for disposal ashore.

### *Maryland Law*

A “marine sanitation device” is any equipment on board a vessel that is designed to receive, retain, treat, or discharge sewage and any process to treat sewage on board. The definition specifies differences in Type I, II, and III marine sanitation devices. Type I devices treat sewage so that the discharged effluent meets specified standards for bacteria content and contains no visible floating solids; Type II devices are similar, but must meet a higher standard of sewage treatment; and Type III devices retain sewage for shore-based disposal or discharge beyond the three-mile offshore limit.

“Sewage” is human body wastes and the wastes from toilets and other receptacles intended to retain body waste.

Vessels 65 feet in length or shorter that are equipped with an installed toilet must have a Type I, II, or III device, while longer vessels with installed toilets must have a Type II or III device. Type III devices are automatically certified, while Type I and II devices must have a certification label affixed that shows specified information. Vessel operators and lessees must ensure that:

- all pathways for overboard discharge of vessel sewage from any vessel with a Type III device are blocked or secured in such a way as to prevent any accidental or intentional sewage discharge by taking specified actions; and
- any installed in-line “Y valve” (*i.e.*, a device capable of diverting the flow of marine sewage so that a vessel’s marine sanitation device is bypassed and raw sewage is discharged directly into the water) must be secured to prevent the overboard discharge of sewage from any vessel with a Type III device by taking specified actions that totally eliminate the possibility of overboard vessel sewage discharge while in Maryland waters.

According to DNR, both USCG and NRP can enforce marine sanitation device requirements. A person who violates these provisions of State law is subject to a civil penalty of up to \$2,000.

**Background:** Sewage wastes discharged from boats can contain microorganisms, nutrients, and chemical products that may have harmful effects upon aquatic life and water quality. Even small amounts of microorganisms from sewage waste can introduce diseases like hepatitis to people in contact with the water. Bacteria can contaminate shellfish and make them unsuitable for human consumption.

#### *DNR's Marine Sewage Program for Recreational Vessels*

DNR's Marine Sewage Pumpout Program uses State and federal funding to install waste pumpout units at marinas for recreational vessels. Since 2000, DNR has funded the installation of 129 waste units. The Governor's proposed fiscal 2011 budget includes \$376,994 in federal funds and \$150,000 in special funds for the program. DNR advises that the fiscal 2011 funds *should* be sufficient to ensure adequate facilities exist for *recreational vessels* in the State.

DNR is not certain that all pumpout units in the State are still operational or whether all marinas that must have units are in compliance with the law. To address these issues, DNR plans to conduct field inspections this spring and summer of all State and federally funded pumpout units and mark them with an inspection sticker, similar to the inspection stickers posted on motor fuel pumps by the State. DNR also plans to gather updated data this spring from the approximately 600 marinas in Maryland on, among other things, their boat slip capacity and sewage services. In addition, DNR is working more closely with the Maryland Department of the Environment to pursue those marinas that are not in compliance with marine sewage requirements. DNR notes that these efforts should provide reliable data about the availability of marine sewage services for recreational boaters in the State.

#### *No-discharge Zones*

According to EPA, seven States – Michigan, Missouri, New Hampshire, New Mexico, Rhode Island, Vermont, and Wisconsin – have all (or nearly all) of their surface waters designated as NDZs. In addition, 20 other states have segments of their surface waters designated as NDZs. On the U.S. East Coast, specific NDZ areas include Boston Harbor and all of Cape Cod Bay in Massachusetts and parts of the Hudson River in New York. Approximately 50% of the NDZs are in fresh water, and the other 50% are in salt or estuarine waters.

There are two NDZs in portions of Maryland waters. The Herring Bay NDZ is a 3,145-acre area of water located along the western shore of the Chesapeake Bay in southern Anne Arundel County. The Northern Coastal Bays NDZ is a 12,780-acre area of water that includes all tidal waters north of the Ocean City inlet to the Delaware state line.

To initiate the NDZ process, an interested party, group, or local government can discuss their concerns with the appropriate state agency that addresses vessel sewage discharges. If the state determines an area of water is appropriate for NDZ designation, the state can submit an application to the EPA Regional Administrator to have the waters designated. The application and designation process varies depending upon the type of NDZ that the state is seeking. DNR advises that the NDZ application process takes approximately 18 months to complete and must apply to both recreational and commercial vessels.

### *Commercial Marine Sewage*

Most of the very large ships coming into the Chesapeake Bay have the capacity to hold a significant amount of waste, which they can pump out or release three miles offshore. However, most smaller commercial vessels such as tug, pilot, dredge, and tour boats are equipped with Type II devices and do not have storage tanks. If Maryland waters are designated as an NDZ, these vessels would have to be retrofitted with Type III devices (holding tanks). Since many commercial vessels are old and cannot be easily retrofitted with holding tanks due to a lack of available space, vessel owners may incur significant costs to comply with this requirement. According to the American Waterways Operators (AWO) trade association, it costs approximately \$20,000 to \$60,000 to retrofit a vessel with Type III devices; sewage services cost the average tugboat or manned tank barge approximately \$250 per service which must occur several times per week. If retrofitting a vessel is not possible, a new tug boat costs \$5.0 million to \$9.0 million.

**State Fiscal Effect:** While the bill does not have a significant immediate impact on State finances, expenditures may increase, potentially significantly, to better position the State for EPA NDZ designation.

### *Immediate Impact*

Effective June 1, 2010, the State must initiate the NDZ application process by July 1, 2010, and specified LEOs are authorized to enforce and inspect marine sanitation device provisions in the Natural Resources Article. Initiating the NDZ application process with EPA by July 1 will not result in additional State expenditures. DNR advises that this cost could be absorbed by existing staff and budgeted resources, barring no unforeseen circumstances. In addition, the bill is not expected to have a significant

impact on State law enforcement expenditures. DNR advises that NRP officers would not randomly stop vessels for the sole purpose of testing waste systems, but that inspections would occur when there is reason to believe that a vessel has discharged illegally.

### *Potential Fiscal Impact*

At this time, while a network of recreational marine sewage facilities exists, a similar network does not appear to exist for commercial vessels. DNR and the Maryland Port Administration (MPA) do not have reliable information about the number and distribution of commercial marine sewage systems in Maryland. However, they are not aware of any dockside commercial marine sewage facilities. Currently, State vessels with Type III devices must be emptied via a truck pulled up to a deep water dock. Since commercial marine sewage services appear quite limited, the likelihood of EPA designating Maryland waters as an NDZ at this time is uncertain.

While the bill alone does not require expenditures, initiating the EPA designation process could result in significant State expenditures associated with better positioning the State for NDZ designation. For example, since all State-owned vessels are not equipped with Type III devices, these vessels could be retrofitted with Type III devices. Also, the State could provide financial assistance to the commercial sector for development of a more robust network of commercial marine sewage services.

If EPA does designate Maryland waters as an NDZ, general fund revenues may increase since the penalty for State Boat Act violations would increase from a maximum of \$2,000 to a maximum of \$10,000 *per occurrence*.

**Small Business Effect:** Although the bill does not have a direct, immediate impact on small businesses, to the extent small businesses with commercial vessels are required to upgrade vessels to Type III devices and utilize marine sewage services, the bill has a significant effect.

---

## **Additional Information**

**Prior Introductions:** None.

**Cross File:** SB 513 (Senator Conway, *et al.*) - Education, Health, and Environmental Affairs.

**Information Source(s):** Howard, Montgomery, and Prince George's counties; Baltimore City; American Waterways Operators; Association of Maryland Pilots; Department of Natural Resources; Department of State Police; Maryland Department of the Environment; Maryland Department of Transportation; U.S. Environmental Protection Agency; Department of Legislative Services

**Fiscal Note History:** First Reader - March 15, 2010  
ncs/lgc

---

Analysis by: Amanda Mock

Direct Inquiries to:  
(410) 946-5510  
(301) 970-5510