Department of Legislative Services

Maryland General Assembly
2010 Session

FISCAL AND POLICY NOTE
Revised

Senate Bill 513 (Senator Conway, *et al.*)
Education, Health, and Environmental Affairs Rules and Executive Nominations

Natural Resources - No-Discharge Designation for Maryland Waters - Reports

This bill requires the Department of Natural Resources (DNR), by December 1, 2010, to submit an interim report to the Governor and the General Assembly that provides recommendations for initiating a no-discharge zone (NDZ) in all State waters. A final report on the establishment of an NDZ in all State waters is due by December 1. 2011.

The bill takes effect June 1, 2010.

Fiscal Summary

State Effect: The bill's requirements can be absorbed within existing DNR resources.

Local Effect: None.

Small Business Effect: None.

Analysis

Bill Summary: The final report must include (1) an analysis of the environmental impact of pollution from Type I and Type II marine sanitation devices on State waters; (2) an analysis of the adequacy and availability of pump-out facilities for recreational and commercial vessels in and along State waters; (3) recommendations on the enforcement actions, including penalties, necessary to implement an NDZ in all State waters; (4) information regarding the costs associated with the installation of holding tanks on recreational and commercial vessels; and (5) a review of relevant federal law related to establishing an NDZ in all State waters.

Current Law:

Federal Clean Water Act

The 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. The U.S. Environmental Protection Agency (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, the U.S. Coast Guard (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 the Natural Resources Police (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 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.

Additional Information

Prior Introductions: None.

Cross File: HB 1257 (Delegate Holmes, *et al.*) - Environmental Matters.

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

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Analysis by: Amanda Mock

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