HB 537

Department of Legislative Services

Maryland General Assembly
2017 Session

FISCAL AND POLICY NOTE
First Reader

House Bill 537 (Delegate Parrott, *et al.*)
Environment and Transportation

Environment - On-Site Sewage Disposal Systems and Funding for Wastewater Treatment Facilities and Sewerage Systems

This bill authorizes a person who owns property *outside* the Chesapeake and Atlantic Coastal Bays Critical Area (Critical Area) to (1) install an on-site sewage disposal system (OSDS) that does not utilize the best available technology for nitrogen removal (BAT) to service a newly constructed building (which is generally consistent with current regulations) or (2) replace an existing OSDS with a system that does not use BAT. The Maryland Department of the Environment (MDE) may not adopt regulations that contradict this authorization. The bill requires MDE or the local approving authority to impose specified fees on the installation of OSDS on residential and nonresidential sites and directs the fee revenue to the existing Water Pollution Control Fund. The bill authorizes the Board of Public Works (BPW), in consultation with MDE, to award financial assistance from the fee revenue for specified purposes.

Fiscal Summary

State Effect: General fund expenditures for MDE increase by $194,967 in FY 2018 to oversee OSDS permitting under the bill's changes. Future year estimates are annualized. Special fund revenues for the Water Pollution Control Fund increase by at least $105,500 beginning in FY 2018 and by at least $150,000 annually thereafter from fees; special fund expenditures increase correspondingly for the uses specified in the bill.

(in dollars)	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022
SF Revenue	$105,500	$150,000	$150,000	$150,000	$150,000
GF Expenditure	$195,000	$219,300	$229,300	$239,900	$251,100
SF Expenditure	$105,500	$150,000	$150,000	$150,000	$150,000
Net Effect	($195,000)	($219,300)	($229,300)	($239,900)	($251,100)

Note:() = decrease; GF = general funds; FF = federal funds; SF = special funds; - = indeterminate increase; (-) = indeterminate decrease

Local Effect: Local government expenditures may increase for local approving authorities to permit/review OSDS under the bill's authority and collect the required fees. Local revenues and expenditures increase from additional funding provided by the Water Pollution Control Fund for specified projects or reimbursements for specified costs incurred.

Small Business Effect: Potential meaningful.

Analysis

Bill Summary: MDE or a local approving authority must impose a fee on an OSDS authorized under the bill at the time the installation is approved. For an OSDS approved for a residential site, the fee is $200. For an OSDS approved for a nonresidential site, the fee is $100 per 1,000 square feet of the building to be served by the OSDS. A nonprofit organization is exempt from the fee.

Fee revenue is distributed to the existing Water Pollution Control Fund. BPW is authorized to award financial assistance from the fee revenue, on the recommendation of the Secretary of the Environment, for (1) projects to construct or upgrade wastewater treatment facilities; (2) reimbursement for costs incurred by a county or municipality for projects to construct or upgrade wastewater treatment facilities; and (3) projects to reduce inflow and infiltration to a sewerage system, including projects to replace or coat sewage pipes.

Current Law: MDE's Onsite Systems Division provides technical assistance and direction to county health departments and local approving authorities for the implementation of delegated programs for OSDS and individual wells.

On-site Sewage Disposal Systems in the Chesapeake and Atlantic Coastal Bays Critical Area

Chapter 280 of 2009 generally prohibits a person from newly installing or replacing a septic system on property in the Critical Area unless the installed system uses BAT. MDE is required to assist homeowners in upgrading a septic system with money authorized for this purpose from the Septics Account of the Bay Restoration Fund, if sufficient funds are available. Current regulations detail the requirements for BAT in OSDS, including requirements relating to operation and maintenance.

Permit Required to Construct or Alter On-site Sewage Disposal Systems

Pursuant to current regulations, a person may not construct or attempt to construct an OSDS without first obtaining a permit from the appropriate approving authority. A person also

may not alter an OSDS or cause it to receive any increase in flow or change in the character of wastewater unless permitted. A person must obtain an appropriate OSDS permit, well construction permit, public or private water supply system permit, or public or private sewerage permit before constructing or altering any structure, residence, floating home, or commercial establishment that is served or planned to be served by an OSDS or a private water supply system.

An approving authority must consider specific site evaluation criteria when determining whether to approve a lot or parcel for OSDS. In most cases, local requirements are the same as those outlined in State regulations; however, a county with delegated authority may choose to impose more stringent requirements than the State requirements.

Current regulations contain specific technical design and construction requirements for conventional OSDS based on the use of a property, wastewater design flow, and site characteristics such as topography, geology, hydrology, soil descriptions, and soil permeability.

Delegation of Approval Authority

MDE delegates the authority to issue permits to construct conventional OSDS to local approving authorities. However, MDE advises that conventional OSDS are not universally acceptable for all properties. Nonconventional OSDS are required when the specific site characteristics mean that a conventional OSDS, if installed, would not meet requirements for the protection of groundwater and public health. MDE must review applications for any nonconventional system, jointly, with the local approving authority. BAT is a component of a nonconventional system. MDE advises that, while it maintains oversight regarding the installation of BAT systems, there is less direct oversight than when BAT was first used, because both MDE and the local approving authorities have significant experience reviewing BAT systems.

As with new construction, a local approving authority may only permit the repair or replacement of *conventional* OSDS. The local approving authority makes the initial determination as to whether a conventional system is sufficient for repair or replacement based on the site. If a conventional system is insufficient, and a nonconventional system is required, MDE must be involved and must approve the final permit.

MDE advises that replacements and repairs to OSDS can be significantly more complicated than new installations. The type of repair or replacement of OSDS is based on several factors, including topography, geology, and hydrology, among other things. Additionally, design parameters are based on wastewater design flow. MDE advises that an existing conventional system may need to be replaced by a nonconventional system, such as BAT, to meet current standards. For example, a conventional system installed in a small site that

is located near a neighboring well, or is close to groundwater, may require a nonconventional replacement or repair.

Water Pollution Control Fund and the Maryland Department of the Environment's Biological Nutrient Removal Program

MDE is authorized to use the Water Pollution Control Fund to provide grants to local governments for the removal of nutrients from the discharges of wastewater treatment plants (WWTPs). Historically, the Biological Nutrient Removal (BNR) Program has been funded with general obligation bonds in the State's capital budget.

MDE advises that the BNR Program's funding priority, as established by policy rather than by statute or regulation, is upgrading publicly owned, major WWTPs that are designed to treat 500,000 gallons per day (gpd) or more of sewage by installing BNR, the first level of nutrient removal. The goal of the BNR process is to remove total nitrogen from about 18 milligrams per liter (mg/l) to an average level of 8 mg/l. The State provides 50% of the funding for BNR upgrades to major WWTPs and 75% of the funding to minor facilities (those designed to treat less than 500,000 gpd). Once facilities have been upgraded to BNR, they are eligible for funding from the Bay Restoration Fund (BRF) for upgrades to enhanced nutrient removal.

Background: According to MDE, there are approximately 420,000 septic systems in Maryland. Of these, 52,000 systems are located within the Critical Area. A conventional septic system removes much less nitrogen than a BAT system. A conventional system delivers approximately 23.2 pounds of nitrogen per year to the groundwater, while an upgraded BAT unit reduces a system's nitrogen load in half. As of August 2016, BRF has supported the installation of nearly 8,127 BAT systems, of which 4,842 upgrades were completed within the Critical Area. Further, 214 homes were connected to public sewerage using BRF.

State Revenues: Special fund revenues increase by at least $105,450 in fiscal 2018, and by at least $140,600 annually thereafter, from the fees assessed for OSDS approved on residential sites. This estimate assumes that 703 residential OSDS are installed outside of the Critical Area each year and pay the required $200 fee.

This estimate does not reflect additional fee revenue that accrues from the $100 per 1,000 square-foot fee assessed for approved OSDS on nonresidential sites under the bill. MDE advises that it does not collect information regarding the square footage of nonresidential sites. However, MDE estimates that approximately 20 OSDS are installed in nonresidential sites annually. Depending on the type of nonresidential site, the square footage of the building served by the OSDS can vary greatly. For example, the average prototype for a convenience store with gasoline service on a 1.4 to 2.0 acre lot is

5,371 square feet. A facility like this pays approximately $500 under the bill. On the other hand, a large fulfillment center may have a 1 million square-foot facility, resulting in fees of $100,000 under the bill. Thus, special fund revenues may be significantly higher than the minimum estimate provided above.

State Expenditures: General fund expenditures for MDE increase by $194,967 in fiscal 2018, which accounts for the bill's October 1, 2017 effective date. This estimate reflects the cost of hiring three staff (two sanitarians to monitor, evaluate, and coordinate with local approval authorities regarding permitting of new OSDS and repairs and replacement of existing OSDS and one natural resources planner to track permits, track fees, provide management relating to the Water Pollution Control Fund, and conduct project tracking for projects funded under the bill). It includes salaries, fringe benefits, one-time start-up costs (including the purchase of a vehicle), and ongoing operating expenses. The information and assumptions used in calculating the estimate are stated below:

- although the bill does not prohibit the use of BAT outside the Critical Area, it is assumed that the authorization to install or replace OSDS without BAT to property owners with property outside the Critical Area means that BAT is likely not used outside of the Critical Area;
- because MDE cannot require a property owner outside the Critical Area to use BAT under the bill, in some cases MDE must use other nonconventional technology to ensure that OSDS provide adequate protection of groundwater and public health;
- approval and monitoring of these other nonconventional technologies results in an increase in MDE's workload (particularly for the replacement or repair of existing conventional systems, which often do not meet current public health and groundwater protection standards, because MDE does not have as much experience with these technologies); and
- local authorities collect the required fees; to the extent MDE must collect the fees, MDE's workload is higher.

Positions	3
Salaries and Fringe Benefits	$157,410
Vehicle Purchase	20,000
Other Equipment/Operating Expenses	17,557
FY 2018 MDE Admin. Expenditures	**$194,967**

Future year administrative expenditures for MDE reflect full salaries with annual increases and employee turnover and ongoing operating expenses.

Special fund expenditures from the Water Pollution Control Fund increase, beginning in fiscal 2018, to provide funding for projects approved by BPW, as specified in the bill. Although the magnitude of any such increase is unknown, for purposes of this fiscal and policy note, it is assumed that the increase in expenditures from the Water Pollution Control Fund corresponds to the fee revenue generated in each year, as discussed above.

BPW can implement the bill with existing budgeted resources.

Local Fiscal Effect: Workloads increase for local governments to (1) distinguish between residential and nonresidential sites and to determine the square footage for permits for nonresidential sites; (2) collect the required fees; and (3) provide information to MDE on OSDS installed outside the Critical Area. Additionally, the repair or replacement of OSDS requires additional review under the bill, since non-BAT advanced pretreatment options for innovative and alternative systems require more MDE oversight than BAT systems. The extent to which this increase in workload affects local government expenditures is unknown, however.

Local government revenues and expenditures increase to the extent that a qualifying project receives funding from the Water Pollution Control Fund as a result of the bill. Local revenues increase to the extent that a local government is reimbursed for costs already incurred for specified projects.

Small Business Effect: For new construction and initial installation of OSDS, the bill likely results in reduced expenditures for any small business that is able to install a conventional OSDS instead of one that uses BAT. However, these savings are likely offset by the fees established under the bill for nonresidential sites. The magnitude of the increase in fees for a given small business depends on the size of the facility but may be significant.

Small business owners that must repair or replace OSDS outside the Critical Area may also be affected. Because an existing OSDS may be in a location that does not meet current public health and groundwater standards, a small business owner cannot necessarily replace an existing system with a conventional OSDS. These small businesses may need to repair or replace OSDS with nonconventional OSDS other than BAT. Although BAT systems are more expensive than conventional OSDS, other nonconventional systems may also be costly.

Additional Information

Prior Introductions: None.

Cross File: None.

Information Source(s): Baltimore City; Montgomery and Prince George's counties; Maryland Department of the Environment; Board of Public Works; Department of Legislative Services

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Analysis by: Kathleen P. Kennedy

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