

Department of Legislative Services
Maryland General Assembly
2011 Session

FISCAL AND POLICY NOTE

Senate Bill 160 (Senator Frosh, *et al.*)

Education, Health, and Environmental Affairs
and Budget and Taxation

Environment - On-Site Sewage Disposal Systems - Nitrogen Removal

This bill expands, from the Chesapeake and Atlantic Coastal Bays *Critical Area* (Critical Area) to the *watersheds* of the Chesapeake and Atlantic Coastal Bays, the current prohibition on installing an on-site sewage disposal (septic) system for a newly constructed building unless the system uses the best available nitrogen removal technology (BAT). As required under current law relating to the Critical Area, the Maryland Department of the Environment (MDE) must assist homeowners in upgrading to a septic system that utilizes BAT with money authorized for this purpose in the Bay Restoration Fund (BRF), if sufficient funds are available. A person who violates the bill's prohibition is subject to existing civil and administrative penalties, which are capped at \$8,000, and enforcement mechanisms.

Fiscal Summary

State Effect: Special fund expenditures increase by \$133,700 in FY 2012 for MDE personnel and contractual costs. Future year estimates are annualized and reflect ongoing operating costs. General fund revenues decrease by about \$404,500 in FY 2012, which reflects the October 1 effective date, and by more than \$2.2 million annually beginning in FY 2013 due to the application under the bill of an existing subtraction modification against income tax revenues. Special fund revenues for MDE may increase to a lesser extent due to the application of existing penalties.

(in dollars)	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016
GF Revenue	(\$404,500)	(\$2,254,900)	(\$2,901,700)	(\$3,598,200)	(\$3,468,700)
SF Revenue	-	-	-	-	-
SF Expenditure	\$133,700	\$126,100	\$132,600	\$139,500	\$146,700
Net Effect	(\$538,200)	(\$2,381,000)	(\$3,034,300)	(\$3,737,700)	(\$3,615,400)

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

Local Effect: Local tax revenues decrease by about \$250,200 in FY 2012, which reflects the October 1 effective date, and by more than \$1.4 million annually beginning in FY 2013 due to the application under the bill of an existing subtraction modification against income tax revenues. Local health department workloads may increase significantly for monitoring and inspection of septic system installation or maintenance; to the extent this workload cannot be handled with existing resources, expenditures increase.

Small Business Effect: Potential meaningful.

Analysis

Current Law/Background: Chapter 428 of 2004 established BRF, which is administered by the Water Quality Financing Administration within MDE. The main goal of the fund is to provide grants to owners of wastewater treatment plants (WWTPs) to reduce nutrient pollution to the Chesapeake Bay by upgrading them with enhanced nutrient removal (ENR) technology. The fund is financed by a bay restoration fee (generally \$30 annually) assessed on WWTP users and users of septic systems and sewage holding tanks.

Of the BRF revenue collected from users of septic systems and sewage holding tanks, 60% must be deposited into a separate account, commonly referred to as the Septics Account, to provide grants and loans to septic system owners for the upgrade of their septic systems, and to implement an education and outreach program. The remaining funds collected from users of septic systems and sewage holding tanks (40%) must be transferred to the Maryland Agricultural Water Quality Cost Share Program within the Maryland Department of Agriculture (MDA) to provide financial assistance to farmers for planting cover crops.

Priority for funding from the Septics Account is as follows: (1) failing systems in the Critical Area; (2) other failing systems; (3) new or replacement systems in the Critical Area; and (4) other new or replacement systems. Originally, grants and loans made from funds within the Septics Account were used to cover up to 100% of the cost of repairing, replacing, or upgrading a septic system to a system utilizing BAT, or for covering the difference in cost between a new conventional system and one utilizing BAT. Chapters 225 and 226 of 2008 expanded the uses of the Septics Account to include covering the cost of replacing multiple septic systems in the same community with a new community sewerage system that meets ENR standards and other specified conditions.

Chapter 280 of 2009 prohibits a person from newly installing or replacing a septic system on property in the Critical Area unless the installed system utilizes BAT. MDE is

required to assist homeowners in upgrading a septic system with money authorized for this purpose from the Septics Account if sufficient funds are available; Chapter 382 of 2010 requires MDE, through calendar 2012, to pay 100% of the cost difference between a conventional septic system and a system utilizing BAT for those homeowners required to replace a failing system in the Critical Area under Chapter 280 of 2009. In addition, Chapter 280 of 2009 created a subtraction modification against the personal income tax for the cost of upgrading a septic system, less any assistance provided, for anyone required to install a BAT system under that Act.

As of December 31, 2010, the Comptroller had deposited approximately \$315.2 million into BRF as a result of fees collected from WWTP users. With respect to fees collected from septic system users, the Comptroller had deposited approximately \$39.3 million into MDE's Septics Account and had transferred approximately \$35.0 million to MDA's Cover Crop Program.

Since January 1, 2010, MDE has implemented income-based criteria for septic upgrade grants as a form of economic means testing, which also complies with the legislative intent expressed in Chapter 382 of 2010. According to MDE, this economic means testing will not apply to top priority failing systems in the Critical Area, and MDE has instructed local agencies (which now wholly implement the septic system upgrade program) to implement their programs accordingly. For homeowner-occupied primary dwellings, grant awards are based on federal income tax brackets, as follows:

- homeowners in the 10% to 15% tax bracket receive grants for 100% of costs;
- homeowners in the 25% tax bracket receive grants for 75% of costs;
- homeowners in the 28% tax bracket receive grants for 50% of costs; and
- homeowners in the 33% to 35% tax bracket receive grants for 25% of costs.

As part of its federally mandated Watershed Implementation Plan (WIP) process, MDE has estimated that 3,000 septic system upgrades in Maryland will be completed through calendar 2011 and is planning to upgrade 600 systems annually from 2012 to 2017, with a goal of upgrading a total of 5,700 systems between 2010 and 2017. The upgrades planned for 2012 through 2017 are estimated to provide an annual nitrogen reduction to the Chesapeake Bay of 51,186 pounds as part of Maryland's commitment to the federal Chesapeake Bay Total Maximum Daily Load (TMDL), which is currently reflected in the final Phase I WIP. This amounts to less than 1% of the total nitrogen reduction needed to meet the WIP requirement for 2017. However, the overall contribution of septic system upgrades to achieving the final nitrogen reduction requirement in WIP is much greater, at about 15% of the final 2020 target load.

To meet the goals of the Chesapeake Bay TMDL, MDE also plans to connect 930 failing septic systems to WWTPs with ENR technology. Current funding is sufficient to connect 704 failing systems by the end of 2011, and 226 additional systems are expected to be connected by 2017 with funding from the Maryland Water Quality Revolving Loan Fund and supplemental assistance grants.

State Expenditures: BRF administrative expenditures increase by \$133,702 in fiscal 2012, which accounts for the bill’s October 1, 2011 effective date. This estimate reflects the cost for MDE to hire one administrative staff person and one natural resources planner for regulatory development, training, and to assist counties with septic system inspection, installation, and maintenance oversight. The estimate also reflects the cost of contracting with a private vendor for implementing a web-based monitoring system, which research and experience with septic systems utilizing BAT indicates is essential to ensure proper maintenance and to track failing systems. The estimate includes salaries, fringe benefits, one-time start-up costs, and ongoing operating expenses.

	<u>FY 2012</u>	<u>FY 2013</u>
New Positions	2	
Salaries and Fringe Benefits	\$90,247	\$122,843
Contractual Services	35,000	0
Operating Expenses	<u>8,455</u>	<u>3,252</u>
Total FY 2012 and 2013 State Expenditures	\$133,702	\$126,095

Future year expenditures reflect full salaries with 4.4% annual increases, 3% employee turnover, and 1% annual increases in ongoing operating expenses.

Current law specifies that reasonable costs for MDE to implement the septic system upgrade program may not exceed 8% of the funds deposited into the Septics Account. The additional expenditures required under the bill do not cause administrative and operating costs to exceed that limit. Special fund expenditures for grants do not increase under the bill because the fund is fully subscribed, as described, in more details below.

State Revenues: Assuming that Septics Account revenues remain at roughly \$8.5 million annually and that the average cost for a septic system upgrade to BAT is \$13,000, the Septics Account can fully fund about 650 upgrades annually. Under current BRF septic system prioritization, upgrades for new systems outside of the Critical Area are ranked as lowest priority. MDE estimates that about 2,000 septic systems statewide are repaired or replaced annually, including 240 systems in the Critical Area. These 240 systems receive top priority and full grant funding, encumbering an average of about \$3.1 million annually. Even under income-based grant criteria, the remaining

\$5.4 million is not expected to be sufficient to assist in the upgrade of all failing systems. Therefore, it is not expected that funds will be available from the Septics Account to fund the cost difference between traditional systems and those utilizing BAT for new septic system installations in the State, even under the bill.

Assuming no funding from the Septics Account is available to assist with the installation of new septic systems utilizing BAT, then the owners of all newly installed septic systems in the affected watersheds are eligible to subtract the full estimated cost difference of the septic system installation from their federal adjusted gross income under the bill. Based on projected new housing completions and data from the U.S. Census Bureau regarding the percentage of new homes served by septic systems, general fund revenue losses from the application of the existing subtraction modification are estimated to be \$404,500 in fiscal 2012, which reflects the bill's effective date, growing to about \$3.5 million by fiscal 2016. The value of the average subtraction modification for each septic system owner is estimated at \$1,014. These estimates are based on projected housing completions statewide; it is assumed that the number of new buildings to be constructed outside of the two affected watersheds is negligible.

Small Business Effect: Approximately 1,500 businesses are currently involved with the installation of septic systems in Maryland. Given that systems utilizing BAT currently represent a small share of all installations in Maryland, some businesses may not be equipped to handle their installation, while others with relevant experience may enjoy a competitive advantage. In addition, small business developers may incur additional costs due to the increased costs of septic system installations under the bill. However, some or all of this cost increase may be passed on to homebuyers.

Additional Information

Prior Introductions: None.

Cross File: HB 177 (Delegate Lafferty, *et al.*) - Environmental Matters.

Information Source(s): Charles, Carroll, Frederick, Garrett, Harford, Montgomery, and Worcester counties; Maryland Department of the Environment; Comptroller's Office; U.S. Census Bureau; Department of Legislative Services

Fiscal Note History: First Reader - February 11, 2011
ncs/lgc

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