

Department of Legislative Services
 Maryland General Assembly
 2019 Session

FISCAL AND POLICY NOTE
Enrolled - Revised

House Bill 190 (Delegates Lafferty and Qi)
 Environment and Transportation Education, Health, and Environmental Affairs

Environment - Failing On-Site Sewage Disposal System - Definition

This bill defines “failing on-site sewage disposal system.” The bill may not be construed to (1) preempt any local ordinances or laws that establish a more stringent definition or (2) alter an existing enforcement referral method established under a delegation agreement between the Maryland Department of the Environment (MDE) and a local health department, as specified.

Fiscal Summary

State Effect: General fund expenditures increase by \$312,100 in FY 2020; future years reflect annualization and ongoing costs. General fund income tax revenues decrease beginning in FY 2020 from the application of an existing subtraction modification.

(in dollars)	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024
GF Revenue	(-)	(-)	(-)	(-)	(-)
GF Expenditure	\$312,000	\$267,800	\$276,200	\$285,200	\$294,600
Net Effect	(-)	(-)	(-)	(-)	(-)

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

Local Effect: Local expenditures increase, likely significantly, to oversee additional installation and repairs of septic systems. To the extent that State income tax revenues decrease, local income tax revenues also decrease. Local septic system permit fee revenues may increase. **This bill imposes a mandate on a unit of local government.**

Small Business Effect: Meaningful.

Analysis

Bill Summary: “Failing on-site sewage disposal system” means an on-site sewage disposal system (commonly referred to as a septic system) or a cesspool, or a component of a septic system or a cesspool, that is a threat to public health due to the potential for direct contact between sewage and members of the public, significant noncompliance with the standards and conditions of the permit (for a permitted system), or a failure to prevent (1) sewage from reaching the surface of the ground; (2) sewage from backing up into a structure due to slow soil absorption of sewage effluent; (3) sewage from leaking from a sewage tank or collection system; (4) unless specifically authorized by a groundwater protection report approved by MDE before January 1, 2019, groundwater degradation; or (5) surface water degradation.

Current Law/Background: MDE’s Onsite Systems Division provides technical assistance and direction to local health departments and local approving authorities for the implementation of delegated programs for septic systems and individual wells. According to MDE, there are approximately 420,000 septic systems in Maryland, and of these, 52,000 systems are located in the Critical Area.

The term “failing on-site sewage disposal system” is not currently defined in statute or regulation. However, failing septic systems are referenced in statute and regulations with regard to septic system upgrades and funding from the Bay Restoration Fund (BRF), as discussed below.

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

Pursuant to current regulations, a person may not construct or attempt to construct a septic system without first obtaining a permit from the appropriate approving authority. A person also may not alter a septic system or cause it to receive any increase in flow or change in the character of wastewater unless permitted. A person must obtain an appropriate septic system 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 a septic system 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 a septic system. 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 septic systems based on the use of a property, wastewater design flow, and

site characteristics such as topography, geology, hydrology, soil descriptions, and soil permeability.

MDE advises that replacements and repairs to septic systems can be significantly more complicated than new installations. The type of repair or replacement of a septic system 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 one with best available technology for nitrogen removal (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.

MDE advises that it does not charge permitting fees for septic system permits, but that many local health departments do.

Delegation of Approval Authority

MDE delegates the authority to issue permits to construct and repair conventional septic systems to local approving authorities. Nonconventional septic systems are required when the specific site characteristics mean that a conventional septic system, 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.

As with new construction, a local approving authority may only permit the repair or replacement of a *conventional* septic system. 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.

Groundwater Protection Reports

Generally septic systems need to have a minimum four-foot unsaturated zone below the bottom of the treatment system to adequately treat effluent. However, more permeable soils may require greater unsaturated depths than less permeable soils that have higher clay content. Many areas within the Maryland Coastal Plain province, especially on the lower Eastern Shore, have seasonally high water table at depths that cannot provide the four-foot treatment zone. According to MDE, groundwater protection reports were written for Caroline, Dorchester, Queen Anne's, Somerset, Talbot, Wicomico, and Worcester counties to allow septic-tank discharge directly into shallow aquifers under

specified conditions. These reports were adopted in the 1980s, and MDE reports that no changes have been made since.

Bay Restoration Fund – Generally

Chapter 428 of 2004 established BRF within MDE. The main goal of BRF is to provide grants to owners of wastewater treatment plants to reduce nutrient pollution to the Chesapeake Bay by upgrading the systems with enhanced nutrient removal (ENR) technology. The fund is also used to support septic system upgrades and the planting of cover crops. As a revenue source for the fund, Chapter 428 established a bay restoration fee on users of wastewater facilities, septic systems, and sewage holding tanks.

Bay Restoration Fund – Septic System Upgrades

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, (1) to provide grants and loans to septic system owners for the upgrade of their septic systems; (2) to implement an education and outreach program; (3) for administration and enforcement of septic system laws and regulations; (4) for financial assistance to low-income homeowners for operation and maintenance costs (including pump outs); and (5) for the development of septic stewardship plans. 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 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 and (2) other failing systems that MDE determines are a threat to public health or water quality. Among other specified uses, funds from the Septics Account can be used to cover up to 100% of (1) the cost of upgrading a septic system to BAT; (2) the cost difference between a conventional septic system and one that uses BAT; (3) the cost of repairing or replacing a failing septic system with a system that uses BAT; (4) 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; or (5) the cost of connecting a property served by a septic system to a wastewater facility meeting specified levels of treatment.

Requirement to Install a BAT System versus a Conventional Septic System

Pursuant to Chapter 280 of 2009, a person is generally prohibited 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 with the upgrade from a conventional

septic system to a system that utilizes BAT with money authorized for this purpose within the BRF Septics Account, if sufficient funds are available. There is also a subtraction modification against the personal income tax for the cost of upgrading a septic system, less any BRF assistance provided. Civil and administrative penalties apply to violations of these provisions; violators are subject to a maximum fine of \$8,000.

Regulations require septic systems that utilize BAT (as opposed to conventional septic systems) only for new construction in the Critical Area unless (1) the system has a design flow of 5,000 gallons per day or greater or (2) the local jurisdiction has required septic systems utilizing BAT outside of the Critical Area in order to protect public health or the waters of the State. Regulations define “new construction” to exclude the renovation, repair, or change of use of an existing residence or other building, unless the residence or building is located in the Critical Area and the approving authority finds that the residence or building’s existing septic system is inadequate to serve the proposed changes.

Determination that a Septic System is Failing

There is no specific definition of a “failing on-site sewage disposal system.” Instead, the determination that a system is failing is flexible, and is at least partially based on why the system is being evaluated for failure. For example, MDE advises that to determine whether a septic system is failing for the purposes of BRF funding to install a BAT system, a septic system must be backing up into a residence or to the surface of the ground in order to qualify. When determining whether an area qualifies for BRF funding for a community sewer line extension, MDE determines the number of failing septic systems in the area based on the number of repair permits issued, lot sizes, availability for replacement area on each property, history of failures, adequate treatment zones, groundwater levels, soil conditions, and the inability to meet required setbacks from water supply wells, among other things. MDE notes that there are several reasons that a system could fail. For example, a system could fail due to hydraulic or technical issues, or a system could fail because the system is underdesigned for its current or proposed use. Sometimes a system is close to failure, but can be revived if minor household uses are changed.

MDE advises that under the bill’s definition of a failing system, an inspector would need to determine the depth of a seepage pit and the groundwater depth in order to determine if adequate treatment exists. MDE also notes that groundwater levels fluctuate seasonally, and determining whether a system is failing under the bill’s definition would require additional monitoring and data collection.

According to MDE, a significant number of currently functioning septic systems, particularly in counties that do not have variances under a groundwater protection report, would likely fall under the bill’s definition of a “failing on-site sewage disposal system.”

State Revenues: To the extent that a conventional septic system determined to be “failing” under the bill’s definition needs to be replaced with a BAT system, general fund income tax revenues decrease beginning in fiscal 2020 from the application of the existing subtraction modification. Since it is unknown exactly how many conventional septic systems are failing under the bill’s definition, and how many require a BAT system as a result of this bill alone, a reliable estimate of the decrease in general fund revenues resulting from the application of the existing subtraction modification is unknown.

State Expenditures:

Septic System Permitting and Inspections

General fund expenditures increase by \$312,008 in fiscal 2020, which accounts for the bill’s October 1, 2019 effective date. This estimate reflects the cost of hiring four environmental health specialists within MDE to (1) address septic system repairs and replacements for nonconventional septic systems; (2) conduct inspections and soil evaluations; (3) collect data and monitor required reports; and (4) handle any appeals stemming from local health department determinations. It includes salaries, fringe benefits, one-time start-up costs (including the purchase of vehicles and cell phones), and ongoing operating expenses. The information and assumptions used in calculating the estimate are stated below:

- the new definition of “failing on-site sewage disposal system” triggers the determination that a significant number of septic systems in the State are failing, which results in the need to replace or repair these systems;
- replacements and repairs can be significantly more complicated than new installations and require MDE intervention;
- the workload associated with evaluating, designing, and inspecting repairs and replacements to nonconventional failing septic systems doubles the workload for MDE’s Onsite Systems Division, which is currently staffed by four individuals;
- MDE staff will need to conduct statewide inspections and investigations; and
- existing MDE staff cannot absorb the additional workload resulting from the bill.

Positions	4
Salaries and Fringe Benefits	\$188,818
Vehicle Purchases	88,000
Other Operating Expenses	<u>35,190</u>
Total FY 2020 State Expenditures	\$312,008

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

BRF Septics Account

Overall BRF finances are not affected; however, the bill likely results in an increase in applications for funding from the Septics Account by homeowners whose septic systems are determined to be failing as a result of the bill. It is assumed that any grants provided to assist these homeowners would have been used for other allowable uses of the Septics Account in the absence of the bill.

Local Revenues: To the extent that State income tax revenues decrease, local income tax revenues also decrease. As discussed above, the magnitude of any decrease in local income tax revenues is unknown.

In addition, MDE advises that many local health departments charge permitting fees for septic system permits. Accordingly, given the increase in septic system repairs and replacements that are anticipated under the bill, local permit fee revenues increase. However, the magnitude of any such increase is unknown.

Local Expenditures: As discussed above, local governments are delegated authority to oversee many aspects of the installation and repair of septic systems. The bill is anticipated to result in a significant number of septic systems determined to be failing, which triggers the replacement or repair of additional septic systems. Thus, local expenditures increase, likely significantly, to inspect, evaluate, and issue additional septic system permits for conventional systems.

Small Business Effect: Small businesses in the septic design, construction, and repair industry, including those that install and maintain BAT systems, likely benefit to the extent that a significant number of septic systems in the State need to be repaired or replaced as a result of the bill.

For any small business owner that needs to replace or repair a failing system that, in the absence of the bill, would otherwise be considered to be properly functioning, expenditures increase. Because some conventional systems likely need to be replaced with nonconventional systems, including BAT systems, which are more expensive than conventional systems, affected property owners, some of which may be small businesses, incur increased costs related to the purchase, installation, and maintenance of these systems.

Finally, MDE notes that septic system inspections often occur at the time of property transfer, and failing septic systems under the bill are likely flagged during a property transfer. MDE advises that septic system inspections at the point of property transfer are time sensitive, and the evaluation process for repairs can be labor intensive and time

consuming. Further, if groundwater levels must be determined, monitoring can sometimes take up to one year to collect. Thus, property transfers may be delayed and more expensive.

Additional Information

Prior Introductions: None.

Cross File: None.

Information Source(s): Charles County; City of Havre de Grace; Maryland Department of the Environment; Maryland Association of County Health Officers; Maryland Department of Health; Department of Legislative Services

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