

Department of Legislative Services  
Maryland General Assembly  
2011 Session

FISCAL AND POLICY NOTE  
Revised

House Bill 347

(Delegate Lafferty)

Environmental Matters

Education, Health, and Environmental Affairs

---

**Environment - Nitrogen Removal Technology - Evaluation and Ranking**

---

This bill requires the Maryland Department of the Environment (MDE) to evaluate and rank all best available nitrogen removal technologies for on-site sewage disposal (septic) systems based on (1) the total amount of nitrogen reduction the technology can achieve; (2) the total cost of the technology, including the estimated annual cost of operation and maintenance, including electricity costs; (3) the cost per pound of the nitrogen reduction; and (4) any other information that MDE determines is necessary. The purpose of this ranking and evaluation is to advise local governments and residents regarding nitrogen reduction technologies for septic systems that are approved as eligible for Bay Restoration Fund (BRF) assistance. The bill requires MDE to make the evaluation and ranking available on its website and to provide that information to local governments and residents in relevant correspondence. Every two years, beginning June 1, 2011, MDE must request information necessary to implement the bill from vendors that sell or distribute septic systems with nitrogen removal technology.

The bill takes effect June 1, 2011.

---

**Fiscal Summary**

**State Effect:** Overall finances of the BRF Septics Account are not affected. However, to the extent that the average grant amount increases under the bill's modified selection criteria, fewer grants will be able to be provided. MDE workloads and expenditures may increase minimally beginning in FY 2011 to provide correspondence of the evaluation and ranking and to otherwise implement the bill, but MDE can likely handle any such increases with existing budgeted resources.

**Local Effect:** The bill is not anticipated to materially affect local finances or operations.

**Small Business Effect:** Potential meaningful.

---

## Analysis

### **Current Law/Background:**

#### *BRF Support of Upgrading Septic Systems with Nitrogen Removal Technology*

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 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 Chesapeake and Atlantic Coastal Bays Critical Area (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 the best available technology (BAT) for nitrogen removal, 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 February 28, 2011, the Comptroller had deposited approximately \$328.2 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 \$41.0 million into MDE's Septics Account and had transferred approximately \$36.1 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.

#### *Selection of Nitrogen Removal Technologies*

MDE established a BAT review team to determine which septic system nitrogen removal technologies may qualify for Septics Account funding. The review team accepted four BAT technologies as field-verified and issued to the vendors of these four technologies an invitation for bids to provide a simplified procurement process for local governments and citizens. MDE then selected the two technologies with the lowest fixed unit prices for each region of the State for fiscal 2011.

However, MDE has also sought to preserve the flexibility of grant recipients to select BAT technologies by providing additional procurement options. A grant recipient may use either of the two technologies preselected by the review team for the recipient's region and receive a preapproved grant amount. Another option allows the recipient to

use another MDE-approved BAT technology selected after considering other factors such as nitrogen removal efficiency, electrical cost, and operations and maintenance cost. Under this option, the maximum eligible grant is based on the “low bid” using a local procurement process for that selected BAT. Finally, the third option is to use one of the other two MDE field-verified technologies that are not lowest cost, with the recipient paying the cost difference between that technology and the price of the more expensive of the preselected technologies for that region.

**Small Business Effect:** While the total amount of funding provided from BRF for septic system upgrades does not change under the bill, some small business septic system manufacturers, distributors, or installers may realize additional sales, while others may lose business as a result of the bill’s modification in the ranking and selection of BAT technologies eligible for funding.

**Additional Comments:** To the extent that the average grant amount increases under the bill’s new ranking criteria, fewer septic system upgrades will be financed through the Septics Account. However, if the new criteria result in a more efficient allocation of funding for the removal of nitrogen from septic system effluent, BRF will achieve a greater nitrogen reduction for current Chesapeake Bay restoration efforts.

---

### **Additional Information**

**Prior Introductions:** None.

**Cross File:** SB 372 (Senator Conway) - Education, Health, and Environmental Affairs.

**Information Source(s):** Maryland Department of the Environment, Bay Restoration Fund Advisory Committee, Comptroller’s Office, Department of Legislative Services

**Fiscal Note History:** First Reader - February 14, 2011  
mc/lgc Revised - House Third Reader/Updated Information - March 21, 2011  
Revised - Enrolled Bill - April 19, 2011

---

Analysis by: Evan M. Isaacson

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