

**Department of Legislative Services**  
 Maryland General Assembly  
 2002 Session

**FISCAL NOTE**  
**Revised**

House Bill 8 (Delegate Taylor, *et al.*)

Ways and Means and Environmental Matters

Budget and Taxation

**Income Tax Credit - Nitrogen Removal Technology for On-Site Sewerage Disposal Systems**

This bill allows an individual to claim a credit against the State income tax equal to 50% of the cost of purchasing and installing nitrogen removal technology in the course of repairing, replacing, or modifying an existing on-site sewerage disposal system. The amount of the credit may not exceed \$3,000 and any unused credit may be carried forward for up to three years. Nitrogen removal technology is defined as a system approved by the Maryland Department of the Environment (MDE) capable of reliably achieving a nitrogen removal efficiency of 60% or greater.

The bill takes effect July 1, 2002 and is applicable to tax years beginning after December 31, 2002. The bill sunsets June 30, 2008.

**Fiscal Summary**

**State Effect:** General fund revenue decrease of between \$250,000 and \$750,000 in FY 2004 – FY 2007, as specified by the bill. Expenditure increase of approximately \$49,200 to administer the program. Future year expenditures reflect annualization and growth.

(in dollars)	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007
GF Revenue	\$0	(\$250,000)	(\$500,000)	(\$750,000)	(\$750,000)
Expenditure	0	49,200	51,500	54,000	56,600
Net Effect	\$0	(\$299,200)	(\$551,500)	(\$804,000)	(\$806,600)

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

**Local Effect:** Potential local government expenditure increases associated with system design and permit approval.

**Small Business Effect:** Potential meaningful.

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## **Analysis**

**Bill Summary:** The bill requires taxpayers to submit an application to MDE for approval of the credit by November 1 of the taxable year in which the credit is to be claimed. MDE may not approve total credits exceeding \$250,000 for tax year 2003, \$500,000 for tax year 2004, and \$750,000 for tax years 2005 through 2007. If total credit applications exceed the maximum amount specified for the taxable year, MDE must allocate the credits amongst the applicants in a specified manner. MDE is required to notify applicants by December 15, of the taxable year of the amount of approved credit. Taxpayers are required to attach a copy of MDE's approval certification with the taxpayer's income tax return for the year.

MDE is required to adopt regulations.

**Current Law:** No tax credit for the installation of nitrogen removal technology exists under the Maryland income tax.

**Background:** There are approximately 400,000 septic systems in Maryland, and about one in five households has one. Current septic systems are designed to provide primary removal of solids before disposal through various types of soil absorption systems. They are not designed to remove nutrients, the major threat to the health of the Chesapeake Bay and the State's other water resources.

In August 1999, the Governor created the Septic System Advisory Committee to address concerns relating to nutrient pollution from septic systems. The committee was charged with defining and developing recommendations for an "areas of concern" approach to reducing nutrient pollution from septic systems. Specifically, the committee was asked to: (1) examine the recommendations of the Tributary Team On-site Sewage Disposal System Task Force and the State Water Quality Advisory Committee and develop policy recommendations to further those suggestions and examine the other environmental impacts of septic systems; (2) examine options for reducing nitrogen from septic systems as part of the nonpoint source contributions to surface water; (3) explore methods to delineate local areas of special concern where nitrogen reduction and related measures should be implemented; and (4) recommend strategies to link nutrient reduction initiatives to management of new growth and development.

The committee, in its report to the Governor issued in January 2000, provided several recommendations, including: (1) in areas of special concern, nitrogen removal

technology should be required for all new septic systems and upon repair, replacement, or change in the use of existing septic systems; (2) MDE's on-site sewage disposal regulations should be amended to establish basic criteria for utilizing re-circulating sand filters and denitrifying biological treatment units for nitrogen removal; (3) MDE should develop standard maintenance requirements; (4) MDE's septic system regulations should be amended to include inspection of all septic systems once every three years; (5) shared on-site sewage disposal systems should be addressed; and (6) financial assistance in the form of a tax credit should be provided to owners to install nitrogen removal technology.

**State Fiscal Effect:** In order to receive the credit, the technology must achieve a nitrogen removal efficiency of 60% or greater. Credits in excess of the tax liability for the taxable year may be carried forward for the next three years. The loss of revenue to the State will depend on the number and cost of systems installed each year, whether the entity is an individual or a corporation, and the tax liability of the entity for each tax year.

The final report of the Septic System Advisory Committee indicated that the average capital cost for installing technology to achieve a 50% reduction in nitrogen was \$4,500. The cost of a conventional residential system is between \$3,000 and \$14,000. MDE advises that the cost of replacing or repairing a residential septic system with a system with nitrogen removal technology (60% reduction of nitrogen) described in the bill would add \$3,000-\$7,000 to the cost of a system. Also, conventional business systems can cost as much as \$50,000-\$60,000 depending on the volume and type of waste generated. Also, MDE advises that on-site sewerage disposal systems with nitrogen removal technology require yearly maintenance in order to remain efficient. Maintenance costs could be \$200-\$300 annually. As a result, it is assumed that all systems would qualify for the maximum credit of \$4,900 per system.

MDE reports that local health departments issue 3,000 to 3,500 permits to repair or replace existing septic systems annually. All individuals or corporations repairing, replacing, or modifying existing systems could be eligible for the credit. New systems are not eligible. MDE also indicates that approximately 50 persons each year repair or replace their existing septic systems with septic systems with nitrogen removal technology as proposed by the bill. Based on these figures, general fund revenues would decrease by approximately \$245,000 annually beginning in fiscal 2003.

However, the extent to which the bill acts as incentive for more individuals to install this type of technology, the cost of the bill would increase accordingly. Because the bill places a cap of on the amount of credits that may be approved at \$250,000 to \$750,000 depending on the taxable year, general fund revenues would not decrease by more than the amount specified for the taxable year. In order to reach the \$250,000 limit in tax year 2004, for example, 83 systems would have to be replaced or repaired (assuming each

was able to claim the maximum \$3,000 credit). It is assumed that the revenue decrease would occur in the fiscal year following the tax year in which the credit is claimed (credits claimed in tax year 2003 would reduce revenues in fiscal 2004).

MDE advises that general fund expenditures could increase by an estimated \$49,200 in fiscal 2004. This estimate reflects the cost of hiring one Registered Professional Sanitarian V to administer the tax credit program established by the bill which would include establishing and maintaining an accounting system to monitor credit applications, and working with local environmental health agencies to provide training for local sanitarians who would be approving soil data and inspecting system installations. It includes salaries, fringe benefits, one-time start-up costs, and ongoing operating expenses. Future year expenditures reflect: (1) full salaries with a 3.5% increase in fiscal 2004 and each year thereafter, with 3% employee turnover; and (2) 1% annual increases in ongoing operating expenses.

The Office of the Comptroller advises that it would incur one-time computer programming costs of \$58,400 to add the credit to the tax forms. The Department of Legislative Services advises that since forms and instructions are updated annually, the costs for form changes resulting from this bill could be absorbed within existing resources.

**Local Fiscal Effect:** Local environmental health agencies could experience an increased workload if the credit creates an incentive to repair, replace, or modify existing systems with nitrogen removal technology. Local environmental sanitarians would be involved in reviewing system designs and approving installation permits for these systems since this authority has been delegated to them from MDE. However, at this time, the amount of any expenditure increases associated with increased workload cannot be reliably estimated.

**Small Business Effect:** Small businesses may benefit in two ways from the bill. Those making repairs or replacing existing systems with a system with nitrogen removal technology would be able to claim the credit and therefore reduce their income tax liability.

Businesses that are involved in the repair, replacement, or maintenance of on-site sewerage systems could realize increased revenue should the bill increase the number of existing systems that use nitrogen removal technology.

According to the 1998 Survey of U.S. Business conducted by the U.S. Census Bureau, 79.7% of Maryland firms in the waste mediation industry had fewer than 20 employees.

**Additional Comments:** The Innovative and Alternative Septic System Grant Program administered by MDE was established to make grants to local governments so that local governments could make grants to persons with failed septic systems for the installation of innovative and alternative on-site septic systems. It is possible that the nitrogen removal technology under the bill could qualify under this program. However, MDE advises that this program has not been funded in a number of years.

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### **Additional Information**

**Prior Introductions:** A provision similar to this bill was included in the first reading version of House Bill 8 of the 2001 session. Also, similar bills dealing with tax credits for replacing septic systems were introduced during the 2000 session as Senate Bill 210 and House Bill 283. No action was taken in the Senate or the House on either bill.

**Cross File:** None.

**Information Source(s):** Comptroller of the Treasury (Bureau of Revenue Estimates), Department of the Environment, Department of Legislative Services

**Fiscal Note History:** First Reader - February 4, 2002  
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