

**Maryland General Assembly  
Department of Legislative Services**

**Proposed Regulation  
Department of the Environment  
(DLS Control No. 16-197)**

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## **Overview and Legal and Fiscal Impact**

This regulation alters requirements related to the installation of on-site sewage disposal systems (septic systems) that utilize the best available technology for nitrogen removal (BAT).

The regulation presents no legal issues of concern.

General fund income tax revenues may increase minimally beginning in fiscal 2017. To the extent that this occurs, local income tax revenues also increase minimally. The regulation otherwise has minimal fiscal impact on State or local agencies.

## **Regulation of COMAR Affected**

### **Department of the Environment:**

Regulation of Water Supply, Sewage Disposal, and Solid Waste: Sewage Disposal and Certain Water Systems for Homes and Other Establishments in the Counties of Maryland Where a Public Sewage System is Not Available: COMAR 26.04.02.07

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## **Legal Analysis**

### **Background**

In 2009, the General Assembly enacted Chapter 280 (codified in § 9-1108 of the Environment Article) to require the installation of septic systems that utilize BAT for new construction or replacement systems in the Chesapeake and Atlantic Coastal Bays Critical Area (critical area). In 2012, the Maryland Department of the Environment adopted regulations to expand these requirements beyond the critical area, requiring septic systems that utilize BAT for new construction in the Chesapeake Bay watershed, Atlantic Coastal Bay watershed, and the watershed of any nitrogen impaired water body. The regulations also require BAT for any replacement system on property located in the critical area, which is consistent with the provisions of Chapter 280. Additionally, they require the operation and maintenance of a septic system utilizing BAT by the property owner for the life of the system.

### **Summary of Regulation**

This regulation alters the BAT regulations adopted in 2012.

## **New Construction**

The regulation limits the areas in the State where a person is required to install, or have installed, a septic system that utilizes BAT for new construction, with certain exceptions. As described above, current regulation requires a person to install, or have installed, a system that utilizes BAT for new construction located in the Chesapeake Bay watershed, Atlantic Coastal Bays watershed, or in any watershed of a nitrogen impaired body of water. Under this regulation, septic systems that utilize BAT are only required 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 enacted code to require septic systems utilizing BAT outside of the critical area in order to protect public health or the waters of the State.

Additionally, the regulation alters the meaning of “new construction.” Current regulation specifies that “new construction” includes the renovation or repair of a residence or other building where the approving authority determines the existing septic system is inadequate to serve the proposed alteration or altered building. This regulation provides that “new construction” does not include 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 not adequate to serve the proposed changes.

## **Replacement Systems**

The regulation expands current requirements related to the installation of replacement septic systems. The requirement to install, or have installed, a replacement septic system utilizing BAT in the critical area is unchanged. However, a replacement septic systems with a design flow of 5,000 gallons per day or greater outside of the critical area must utilize BAT as well.

## **Operation and Maintenance**

The regulation requires all septic systems utilizing BAT that are sold in the State to include a two-year operation and maintenance contract and a two-year warranty, which goes into effect at the point of initial installation. A property owner is still responsible for the operation and maintenance of the BAT septic system for the life of the system. The regulation also makes other clarifying and technical changes relating to the operation and maintenance of septic systems utilizing BAT.

## **Legal Issues**

The regulation presents no legal issues of concern.

## **Statutory Authority and Legislative Intent**

The department cites §§ 9-216, 9-217, 9-223, 9-252, 9-319, 9-510, 9-1108, 10-103, 10-301, and 10-304 of the Environment Article as authority for the regulations. Under § 10-103, the Secretary of the Environment has broad authority to adopt regulations to govern the character and location of the disposal of any waste material, including sewage. Section 9-510 requires the

department to adopt, among other things, regulations to control, limit, or prohibit the installation and use of sewerage systems. Similarly, §§ 9-252 and 9-319 authorize the department to adopt and enforce regulations to prevent or correct pollution of the waters of the State.

More specifically, § 9-216 allows the use of septic systems in the coastal plain physiographic region of the State only if (1) the septic system “is recommended by the department as being most appropriate,” and (2) “the Secretary of the department does not determine that the installation of the specific proposed system would be prejudicial to public health, safety, and welfare.” Further, § 9-223 allows the installation of septic systems to service an existing dwelling unit only if the Secretary finds that the system “would be a reasonable solution to sewage problems on the property and would not be an undue risk to the environment or to public health, safety, or welfare.”

Finally, § 9-1108, as previously discussed, requires septic systems utilizing BAT for new construction or replacement systems located in the critical area and requires the department to adopt regulations to implement these requirements. In addition, this section requires the regulations adopted to include provisions “to ensure that appropriate management measures are provided for the operation and maintenance of nitrogen removal technology.”

The remaining cited authority is not relevant to this regulation.

The relevant authority is correct and complete. The regulation complies with the legislative intent of the law.

### **Technical Corrections and Special Notes**

In response to a recommendation from the Department of Legislative Services, staff for the department agrees to alter the Statement of Purpose for the regulation to accurately reflect the current requirements; notably, that neither the current nor the proposed regulation requires BAT for replacement septic systems *outside* of the critical area.

### **Fiscal Analysis**

General fund income tax revenues may increase minimally beginning in fiscal 2017. To the extent that this occurs, local income tax revenues also increase minimally. The regulation otherwise has minimal fiscal impact on State or local agencies.

### **Agency Estimate of Projected Fiscal Impact**

The department advises that the regulation results in a minimal decrease in State and local expenditures relating to implementing and enforcing septic system requirements by repealing the universal requirement that BAT systems be installed outside of the critical area for all new construction, except under specified conditions. The Maryland Department of the Environment’s Water Management Administration administers the State’s septic system program through delegation agreements with local approving authorities, and local authorities enforce the septic

system requirements (including the requirements for BAT). Among other things, the department is required to ensure that nitrogen-removal systems are maintained for the life of those systems. The department notes that, while the number of BAT systems installed each year is expected to decline, the overall fiscal impact on State and local agencies is likely minimal because the department and local approving authorities must continue to oversee and enforce the requirements relating to all septic systems (both conventional and those using BAT). The Department of Legislative Services concurs.

The department further advises that the regulation results in a minimal decrease in State and local expenditures for those agencies that no longer need to install BAT systems on government property. According to the department, the average cost to install BAT for nitrogen removal is \$12,000, and the average cost difference between a conventional system and one with BAT is \$7,500. Additionally, BAT systems have annual electrical costs of approximately \$112, and operation and maintenance costs of \$150 to \$300 annually beginning after the first five years.

In addition to the impacts noted by the department, the Department of Legislative Services advises that general fund income tax revenues may increase minimally due to a potential reduction in the number of claims made for an income tax subtraction modification for the installation of BAT; to the extent this occurs, local income tax revenues also increase minimally.

### **Impact on Budget**

There is no material impact on the State operating or capital budget.

### **Agency Estimate of Projected Small Business Impact**

The department advises that the regulation has a meaningful economic impact on small businesses in the State that manufacture, install, and provide operation and maintenance services on BAT nitrogen-removal systems. The department estimates that manufacturers, installers, and service providers of BAT systems likely realize a loss of business as a result of the expected decrease in the number of BAT systems installed. The Department of Legislative Services generally concurs but notes that conventional septic system vendors may realize an increase in sales in cases where new systems are required.

The department estimates that approximately 703 fewer BAT systems may be installed annually in the State as a result of the regulation. This estimate is based on the average annual number of BAT systems installed outside the critical area from calendar 2013 to 2016. As noted above, the average cost difference between a conventional septic system and a BAT system is \$7,500. Thus, the estimated annual economic impact could approximate \$5.3 million in reduced revenue relating to the sales of such systems. The department advises that there are 15 manufacturers, approximately 1,350 certified BAT installers, and 200 certified BAT operation and maintenance providers in the State that could be affected by the regulation.

Because conventional systems are less expensive than systems with BAT, affected property owners, some of which may be small businesses, benefit from any reduction in costs related to the purchase, installation, and maintenance of septic systems as a result of the regulation. The

department also notes that the regulation likely reduces the cost of new construction outside the critical area, which may spur new construction and benefit small businesses engaged in that construction. The Department of Legislative Services concurs.

### **Additional Comments**

The Department of Legislative Services notes that, to the extent the regulation makes it more difficult for the State and/or local governments to achieve and/or maintain the nitrogen reductions required under the Chesapeake Bay Total Maximum Daily Load, additional reductions from other sectors may be needed.

### **Contact Information**

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