

## Press Release

Media Contacts:

Samantha Kappalman

[skappalman@mde.state.md.us](mailto:skappalman@mde.state.md.us)

Jay Apperson

[japperson@mde.state.md.us](mailto:japperson@mde.state.md.us)

410-537-3003

### **REGULATION PROPOSED TO REDUCE POLLUTION FROM SEPTIC SYSTEMS** *Action identified as necessary to meet federally mandated water quality standards*

BALTIMORE, MD (April 27, 2012) – The Maryland Department of the Environment (MDE) proposed a new regulation today to require nitrogen-removal technology for all septic systems serving new construction on land draining to the Chesapeake Bay and Atlantic Coastal Bays or in other areas where bodies of water are impaired by nitrogen. Existing regulations require nitrogen removal technology for all new and replacement septic systems in the Critical Area.

"Since 2008, we have spent more than \$40 million to retrofit thousands of septic systems in Maryland, but this investment has been completely negated by new septic system installations. Septic systems are one of the few sources for which nitrogen pollution continues to increase," said MDE Secretary Robert M. Summers. "Thanks to the leadership of Governor O'Malley and the Maryland General Assembly, we made great progress during the 2012 legislative session toward limiting the impact of septic system development on Maryland's waters, farmlands and forests. By requiring technology that reduces nitrogen discharges by half or more on more new septic systems, we are one step closer toward reaching our goal of a restored and healthy Chesapeake Bay."

Under the Chesapeake Bay Total Maximum Daily Load (TMDL), Maryland must reduce the nutrients nitrogen and phosphorus, along with sediments, in order to reach water quality standards by 2025. [Maryland's Phase II Watershed Implementation Plan](#), the action plan for achieving this goal, was submitted to the EPA on March 30, 2012.

This [proposed regulation](#) was a recommendation of the Task Force on Sustainable Growth and Wastewater Disposal. It supports, enhances and reinforces the Sustainable Growth and Agricultural Preservation Act of 2012, which will be signed into law on Wednesday, May 2.

The proposed regulation has been submitted for approval to the Joint Committee on Administrative, Executive and Legislative Review (AELR). It also establishes minimum operation and maintenance requirements for the life of the upgraded technology to ensure that these septic systems do not fall into disrepair and damage the environment. Companies who either install and/or maintain the nitrogen-removing technologies will have to complete a course of study approved by MDE and be certified by the manufacturer.

These septic systems on new construction are eligible for funding from the Bay Restoration Fund, but funding may be limited due to the current priorities for the use of the fund. Funding from the Bay Restoration Fund has helped pay for 3,132 septic systems in Maryland to be upgraded with nitrogen-removal technology.



**Title 26 DEPARTMENT OF THE ENVIRONMENT**  
**Subtitle 04 REGULATION OF WATER SUPPLY, SEWAGE DISPOSAL,**  
**AND SOLID WASTE**

**Chapter 02 Sewage Disposal and Certain Water Systems for Homes and Other Establishments in the Counties of Maryland Where a Public Sewage System is Not Available**

Authority: Environment Article, §§ 9-216, 9-217, 9-223, 9-252, 9-319, 9-510, 9-1108, 10-103, 10-301, and 10-304, Annotated Code of Maryland

**.01 Definitions.**

A. The following terms have the meanings indicated.

B. Terms Defined.

[(1)] (1) "Aerobic treatment" means a method which utilizes the principal of oxidation in the decomposition of sewage by introduction of air into the sewage or by surface adsorption of air for a sufficient length of time to effect treatment through aerobic bacterial action.]

[(2)] (1) "Approving Authority" means the Secretary of the Environment or the Secretary's designee.

[(3)] (2) "Aquifer" means any formation of soil, sand, rock, gravel, limestone, sandstone, or other material, or any crevice from which underground water is or may be produced.

(3) "Best Available Technology for Removal of Nitrogen (BAT)" means a technology that has been approved by the Department as a best available technology for removing nitrogen from onsite sewage disposal systems.

(4) "Certified service provider" means an individual who is certified by the Department to perform operation and maintenance on BAT systems.

[(4)] (5)—[(36)] (37) (text unchanged)

[(37)] (38) "Sewage treatment unit" means a device designed and constructed to receive sewage and to provide treatment to reduce organic and inorganic matter and includes septic tanks, BAT, aerobic treatment units, or any other approved devices.

[(38)] (39)—[(46)] (47) (text unchanged)

**.02 General Provisions. (text unchanged)**

**.03 Conventional On-Site Sewage Disposal Systems. (text unchanged)**

**.04 Site Evaluation Criteria.**

A.—C. (text unchanged)

D. Approvals for lots in the Appalachian physiographic province of the State (see the map of "Maryland Physiographic Provinces and Their Divisions" in this chapter), where 4 feet of unsaturated, unconsolidated soil sufficient to attenuate effluent below the subsurface disposal system is not available, may require concurrent approval of the Department of the Environment at the discretion of the [Division of Residential Sanitation] *Water Management Administration*. Training and assistance by the [Division of Residential Sanitation] *Water Management Administration* personnel will be provided at the request of the Approving Authority. In limestone or dolomite areas of the Appalachian physiographic province, deviation from the 4-foot requirement may not be given for new development.

E.—K. (text unchanged)

**.05 Design and Construction of Conventional On-Site Sewage Disposal Systems.**

A.—D. (text unchanged)

E. Residential Septic Tank Criteria. [All on-site sewage disposal systems] *Septic tanks* serving a residential use, *not requiring a BAT system*, shall be sized in accordance with the following criteria and tables. This table provides for use of garbage disposal units, automatic clothes washers, and other household appliances.

Septic Tank Criteria

Number of Bedrooms	Minimum Septic Tank Capacity Below Outlet
2 or less	750 gallons
3	1,000 gallon
4	1,250 gallons

For each additional bedroom,  
add 250 gallons

F. Septic tanks shall be made of materials and constructed in a manner acceptable to the Approving Authority.

G. Institutional Septic Tank Criteria. Minimum septic tank capacities for institutional or commercial installations, *not requiring a BAT system*, shall be calculated according to the following criteria:

(1) Flows of 1,500 gallons per day (gpd) or greater:

$$V = 1,125 \text{ gallons} + 0.75Q$$

where V = minimum septic tank volume

Q = estimated daily peak sewage flow;

(2) Flows of less than 1,500 gallons per day (gpd):

$$V = 1.5 Q.$$

[H. Aerobic units may be used instead of septic tanks and shall be designed using maximum daily flows pursuant to § E and F of this regulation. A reduction in lot size or absorption area requirements is not allowed with their use. All aerobic units shall be made of materials and constructed in a manner acceptable to the Approving Authority.]

*H. Septic Tank Criteria where a BAT system is required per regulation 07. If an approved BAT system includes a septic tank, the septic tank shall be sized in accordance with the requirements of the manufacturer or designer of the BAT.*

I.—P. (text unchanged)

Q. Mound Systems.

(1)—(3) (text unchanged)

(4) Construction of mounds shall be in accordance with the following:

(a)—(c) (text unchanged)

(d) A two compartment septic tank or two tanks in series shall be used for pretreatment for all sand mounds *that do not require BAT.*

(e)—(q) (text unchanged)

(5)—(7) (text unchanged)

#### **.06 Non-Conventional On-Site Sewage Disposal Systems.**

A.—C. (text unchanged)

D. Submission of Proposals. All proposals shall be submitted concurrently to the local environmental health unit and the Department of the Environment for review and approval. The applicant shall follow the following procedures:

(1) The county environmental health office may elect to perform the site evaluation themselves or to request the applicant to retain a professional consultant to prepare a hydrogeological report to demonstrate that the soil properties and ground water conditions at the proposed site will support the use of the proposed system. In either case, the site evaluation should be performed with the assistance of the [Residential Sanitation's] *Water Management Administration's* Regional Consultant of the Department of the Environment. The professional consultant retained by the applicant shall have adequate experience in examining soil properties and ground water, preferably in Maryland. Any available information on the effectiveness of the proposed system in use in similar settings should also be obtained. This information, as well as the hydrogeological report, should be submitted to both the local health department and the Department of the Environment.

(2) System Design.

(a)—(c) (text unchanged)

E.—H. (text unchanged)

#### **.07 Best Available Technology for Removal of Nitrogen (BAT).**

A. *A person may not install, or have installed, an onsite sewage disposal system unless the onsite sewage disposal system utilizes BAT for any of the following:*

(1) *New construction in either the Chesapeake Bay Watershed or the Atlantic Coastal Bays watershed;*

(2) *New construction in any watershed of a nitrogen impaired body of water; or*

(3) *A replacement system to serve a property in either the Chesapeake Bay critical area or the Atlantic Coastal Bays critical area.*

B. *New construction includes those applications where a residence or other building is being altered and the Approving Authority determines that the existing OSDS is not adequate to serve the proposed altered building.*

C. *All new and existing BAT systems shall be maintained and operated for the life of the system through one of the following management measures:*

(1) *The Approving Authority or local government establishes a responsible management entity, acceptable to the Department, to assume operation and maintenance of BAT systems;*

(2) *The Approving Authority requires renewable operating permits that include enforcement provisions, inspections and monitoring; or*

(3) *The property owner maintains a service contract with a certified service provider.*

D. *A BAT system shall be operated by and maintained by a certified service provider.*

(1) *The owner shall ensure that each BAT system is inspected and has necessary operation and maintenance performed by a certified service provider at a minimum of once per year.*

(2) *The Department shall maintain a list of certified service providers.*

(3) Individuals may become certified upon completion of a course of study on operation and maintenance of BAT systems approved by the Department. The course of study must include instruction on how BAT systems function as well as elements on operation, maintenance and repair of BAT systems.

(4) Certification as a service provider for BAT systems may be revoked at any time by the Department for violation of these regulations.

(5) The certified service provider shall report on inspection, operation and maintenance activities to the Department, or the Department's designee, in a manner acceptable to the Department on a yearly basis prior to the yearly anniversary of the date of installation.

(6) The certified service provider must have a certificate of qualification from the manufacturer of the BAT system being serviced.

(7) A property owner may obtain certification as a service provider to maintain their system personally, subject to all the requirements of this regulation pertaining to operating and maintaining BAT systems. .

E. A person who has completed a course of study approved by the Department for the installation of BAT, and has a certification of qualification for installing BAT systems from the manufacturer, must be present on the property while a BAT unit is installed.

F. Within one month of the completion of an installation, a person installing a BAT system shall report to the Department, or the Department's designee, in a manner acceptable to the Department, the address and date of completion of the BAT installation and the type of BAT installed.

G. The owner of an onsite sewage disposal system with a design flow less than 1500 gpd, requiring a BAT system under sections A or B of this regulation, shall have installed:

(1) A BAT system that has been approved by the Maryland Department of the Environment; or

(2) An individually engineered nonproprietary BAT system where a governmental agency or their designee is the responsible management entity or issues renewable operating permits.

H. The owner of an onsite sewage disposal system with a design flow greater than 1,500 gpd, requiring a BAT system under sections A or B of this regulation shall have installed a BAT system that is individually engineered for the site and approved by the Department or the Department's designee.

I. All BAT units shall be made of materials and constructed in a manner acceptable to the Department and the Approving Authority.

**[.07] .08—[.11] .012 (text unchanged)**

