

contracts and leases of equipment in the amount of [\$50,000] \$200,000 or less unless funded with general obligation bond proceeds, which must be approved by the Board regardless of amount;

(f) — (i) (text unchanged)

(2) (text unchanged)

D. — E. (text unchanged)

F. Maryland Port Commission. The Board hereby delegates authority to the Chairman of the Maryland Port Commission for the approval and award of the following procurement contracts within the Maryland Port Commission's jurisdiction:

(1) — (4) (text unchanged)

(5) [Capital] For any single item of equipment or single equipment lease within the procurement authority of the Maryland Port Commission, equipment contracts and leases of equipment in the amount of [\$50,000] \$200,000 or less unless funded with general obligation bond proceeds, which must be approved by the Board regardless of amount;

(6) — (11) (text unchanged)

G. (text unchanged)

H. Department of Public Safety and Correctional Services. The Board delegates authority to the Secretary of Public Safety and Correctional Services for the approval and award of the following procurement contracts for State correctional facilities within the Department's jurisdiction:

(1) — (3) (text unchanged)

(4) [Capital] For any single item of equipment or single equipment lease within the procurement authority of the Secretary of Public Safety and Correctional Services, equipment contracts in support of construction and construction-related services in the amount of \$50,000 or less;

(5) — (9) (text unchanged)

I. — J. (text unchanged)

21.02.05 Department of General Services

Authority: State Finance and Procurement Article, §§4-204, 12-101, 12-107(b)(3), 12-108, and 13-108(a)(1), Annotated Code of Maryland

.04 Commodity Procurement.

A. — B.

C. [Capital Equipment Purchases. The using agency shall complete and submit to the Department of Budget and Management a Form CF-1 for all purchases funded by the General Construction Loan or a capital appropriation. After review and approval by the Department of Budget and Management, the Department shall process these requisitions.] *Repealed.*

D. — G. (text unchanged)

SHEILA McDONALD
Executive Secretary
Board of Public Works

Title 26 DEPARTMENT OF THE ENVIRONMENT

Subtitle 04 REGULATION OF WATER SUPPLY, SEWAGE DISPOSAL, AND SOLID WASTE

26.04.02 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

Notice of Proposed Action

[12-125-P]

The Secretary of the Environment proposes to amend Regulations .01 and .04—,06, adopt new Regulation .07, and recodify existing Regulations .07—,11 to be Regulations .08—,12 under COMAR 26.04.02 Sewage Disposal and Certain Water Systems for Homes and Other Establishments in the Counties of Maryland Where a Public Sewage System Is Not Available.

Statement of Purpose

The purpose of this action is to require nitrogen-removal technology for on-site sewage disposal systems (OSDS) serving new construction in the Chesapeake Bay watershed and the Atlantic Coastal Bays watershed and to require nitrogen-removal technology for OSDS serving new construction in the watershed of any nitrogen-impaired water body. This action also provides for operation and maintenance of nitrogen-removal OSDS. In addition, this action requires nitrogen removal for any replacement system on property located in either the Chesapeake Bay critical area or the Atlantic Coastal Bays critical area pursuant to the requirements in Environment Article, §9-1108, Annotated Code of Maryland. Nitrogen has been identified as a contaminant to both groundwater and surface water. Reducing the nitrogen discharged by OSDS has been identified as an action necessary as part of Maryland's Watershed Implementation Plan in order to meet water quality standards. The Department has determined that requiring nitrogen-removal technology for OSDS is necessary to protect the waters of the State from contamination.

Comparison to Federal Standards

There is no corresponding federal standard to this proposed action.

Estimate of Economic Impact

I. Summary of Economic Impact. Currently nitrogen-removal technology must be included with any new or replacement OSDS installed in either the Chesapeake Bay critical area or the Coastal Bays critical area, basically within 1,000 feet of tidal water. To be certified as a nitrogen-removal technology in Maryland, 5 years of operation and maintenance must be included in the up-front cost system. This proposed action will expand the requirement for nitrogen-removal technology to include all OSDS serving new construction in the Chesapeake Bay watershed, in the Atlantic Coastal Bays watershed, and in the watershed of any nitrogen-impaired water body. The proposed action also requires operation and maintenance of the nitrogen-removal technology for the life of the system.

The proposed action will have economic impacts on State revenue, State agencies, local approving authorities, small businesses, the regulated industry, and the regulated community. The Tax-General Article §10-208 (q) allows a deduction for homeowner out of pocket expenses for installing the required nitrogen removal technologies. This tax reduction applies only to homeowners building new homes and not to developers. The Department is unable to predict what percentage of new homes would be constructed by homeowners eligible to take the tax deduction and therefore cannot predict the loss of tax revenue through this tax deduction.

Impacts to the issuing agency and the local approving authorities will be minimal as no additional staffing is needed to implement the proposal. MDE currently administers the State OSDS program primarily through delegation agreements with local approving authorities. MDE would establish a web-based reporting program for operation and maintenance of nitrogen-removal technologies for OSDS. This would require some manpower and up-front costs related to information technology but have minimal continuing expenses. Local approving authorities will be required to inspect the installation of nitrogen reducing technologies; however, these approving authorities already inspect the installation of all OSDS. Nutrient removal technology will be an additional component usually installed in place of a traditional septic tank. This should be possible without additional staff. Staff would be expected to receive the training necessary to understand how nitrogen-removal systems should be installed and maintained. There will be some cost associated with this training. The proposal will have a positive economic benefit for the business community and regulated industry and a negative economic impact on the regulated community.

II. Types of Economic Impact.

Revenue (R+/R-)		
Expenditure (E+/E-)		Magnitude

A. On issuing agency:	(E+)	Minimal
B. On other State agencies:	(E+)	Minimal
C. On local governments:	(E+)	Minimal

Benefit (+)		
Cost (-)		Magnitude

D. On regulated industries or trade groups:		
Selling, installing, and maintaining new systems	(+)	Significant
E. On other industries or trade groups:		
Sales and installation of electrical and plumbing	(+)	Moderate
F. Direct and indirect effects on public:		
Purchasing, installing, and maintaining new systems	(+)	Significant

III. Assumptions. (Identified by Impact Letter and Number from Section II.)

A. Under existing regulations, MDE's Water Management Administration's OSDS responsibilities include oversight of programs delegated to local approving authorities, technical assistance, and education. In addition, MDE evaluates best available

technologies to determine their suitability for use in Maryland. This proposal would expand MDE's responsibility to include maintaining a system to ensure that nitrogen-removal systems are maintained for the life of the system. MDE would oversee the development of a web-based reporting system to track nitrogen-removal systems and develop a system to maximize compliance of operation and maintenance requirements. Emphasis will be developing a system with a relatively small up-front cost that would use little resources to maintain and operate. This can be accomplished with existing staff after the up-front development effort.

B. To the extent that State agencies may have facilities impacted by the requirements, see F below.

C. Local approving authorities issue permits for and inspect the installation of OSDS. Expanding the requirement for including nitrogen-removal technologies increases the complexity of these activities. While approving authorities already inspect all OSDS installations, the inspections would now have to include the nitrogen-removal technology. Staff would need additional training in order to complete this activity. To the extent that local agencies may have facilities impacted by the requirement, see Note F below.

D. The regulated industry includes vendors who sell nitrogen-removal technologies, installers of nitrogen-removal technology, and service providers who operate and maintain nitrogen-removal technologies. Under existing regulations we estimate approximately 900 nitrogen-reducing systems will be installed per year. The Department estimates a range from 2,000 to 8,000 new and replacement OSDS are installed each year that will need nitrogen-removal technology.

E. Installation of nitrogen-removal technology requires providing electricity and sometimes additional plumbing. Trades people and small businesses would benefit from the requirements of this proposal.

F. This proposal may result in an additional 5,000 nitrogen-removal systems installed per year. The average installation of nitrogen-removal technology costs approximately \$12,000, with electrical use running from \$31 to \$240 per year, and operation and maintenance after the first 5 years costs \$150 to \$300 per year. These costs will have to be borne by property owners.

Economic Impact on Small Businesses

The proposed action has a meaningful economic impact on small business. An analysis of this economic impact follows.

Approximately 5,000 additional nitrogen-removal systems per year are estimated to be installed, resulting in \$60,000,000 per year of new sales.

Impact on Individuals with Disabilities

The proposed action has no impact on individuals with disabilities.

Opportunity for Public Comment

Comments may be sent to Jay Prager, Deputy Program Administrator, MDE/Water Management Administration, 1800 Washington Boulevard, Baltimore MD 21230-1708, or call 410-537-3780 (TTY 1-800-735-225), or email to jprager@mde.state.md.us, or fax to (410) 537-3163. Comments will be accepted through July 15, 2012. A public hearing has not been scheduled.

.01 Definitions.

- A. (text unchanged)
- B. Terms Defined.

[(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) — [3] (2) (text unchanged)

(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 on-site 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)

.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.

(table unchanged)

F. (text unchanged)

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) — (2) (text unchanged)

[H.] (proposed for repeal)

H. *Septic Tank Criteria*. 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) (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 on-site sewage disposal system unless the on-site 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. Operation and Maintenance of BAT Systems.

(1) A BAT system shall be operated by and maintained by a certified service provider.

(2) 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.

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

(4) 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.

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

(6) 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.

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

(8) A property owner may obtain certification as a service provider to maintain the property owner's system, 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 1 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 on-site sewage disposal system with a design flow less than 1,500 gpd, requiring a BAT system under §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 the agency's designee is the responsible management entity or issues renewable operating permits.

H. The owner of an on-site sewage disposal system with a design flow greater than 1,500 gpd, requiring a BAT system under §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.

ROBERT M. SUMMERS, Ph.D.
Secretary of the Environment

