



## Notice of Intended Regulatory Action (NOIRA) Agency Background Document

<b>Agency name</b>	Virginia Department of Health (VDH)
<b>Virginia Administrative Code (VAC) citation</b>	12 VAC 5-640-10 et seq.
<b>Regulation title</b>	Alternative Discharging Sewage Treatment Regulations for Individual Single Family Home Dwellings
<b>Action title</b>	Update and modify the regulations for less than or equal to 1000 gallon per day individual single family home discharging systems to incorporate policy documents and new technology and consider impacts to the Chesapeake Bay Total Maximum Daily Load (TMDL).
<b>Date this document prepared</b>	12/10/2010

This information is required for executive branch review and the Virginia Registrar of Regulations, pursuant to the Virginia Administrative Process Act (APA), Executive Orders 14 (2010) and 58 (1999), and the *Virginia Register Form, Style, and Procedure Manual*.

### Purpose

*Please describe the subject matter and intent of the planned regulatory action. Also include a brief explanation of the need for and the goals of the new or amended regulation.*

The Alternative Discharging Sewage Treatment Regulations for Individual Single Family Dwellings, (12VAC5-640-10 et seq.) apply to all alternative discharging sewage treatment systems constructed and operated to serve an individual single family dwelling with flows less than or equal to 1,000 gallons per day on a yearly average. These regulations operate in conjunction with the Virginia Department of Environmental Quality's (DEQ) General Permit for Sewage Discharges Less Than or Equal to 1,000 Gallons Per Day (9VAC25-110-10 et seq.). The State Board of Health's (the "board") regulations provide details on applications, construction standards and monitoring requirements, as well as administrative procedures for hearings, variances, etc. The board adopted these regulations on July 30, 1992, but the board has not updated them since. The technological and regulatory landscape has changed considerably since 1992. The board is seeking to revise the regulations to reflect technological changes in the field, incorporate numerous policy documents, and consider impacts to the Chesapeake Bay Total Maximum Daily Load (TMDL).

### Legal basis

*Please identify the state and/or federal legal authority to promulgate this proposed regulation, including (1) the most relevant law and/or regulation, including Code of Virginia citation and General Assembly chapter number(s), if applicable, and (2) promulgating entity, i.e., agency, board, or person. Describe the legal authority and the extent to which the authority is mandatory or discretionary.*

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The Code of Virginia at §§ 32.1-12, 32.1-163 and 32.1-164 provides the statutory authority and mandates of the board to protect public health and the environment. Section 32.1-12 authorizes the board to make, adopt, promulgate and enforce regulations that may be necessary to carry out the provisions of title 32.1 and other laws of the Commonwealth administered by it or the State Health Commissioner (“commissioner”). Further, § 32.1-164.A. states that “The board shall have supervision and control over the safe and sanitary collection, conveyance, transportation, treatment, and disposal of sewage by onsite sewage systems and alternative discharging sewage systems, and treatment works as they affect the public health and welfare.” Moreover, § 32.1-164.B mandates that the board promulgate regulations that govern the collection, conveyance, transportation, treatment and disposal of sewage by onsite sewage systems and alternative discharging sewage systems.

### Need

*Please detail the specific reasons why the agency has determined that the proposed regulatory action is essential to protect the health, safety, or welfare of citizens. In addition, delineate any potential issues that may need to be addressed as the regulation is developed.*

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The board has not updated the regulations since the initial adoption in 1992. Since the regulations became effective, the agency has issued numerous policy and guidance documents that interpret and clarify the regulations and articulate procedures for implementing the regulations; these documents will be evaluated and incorporated into the regulations if needed. There are additional technological options available now that are not covered by the existing regulation that would offer more cost effective options to homeowners. The new technologies also offer a higher degree of protection of public health and the environment. Additionally, the potential impact from nutrients from these discharges on the Chesapeake Bay must be evaluated.

### Substance

*Please detail any changes that will be proposed. For new regulations, include a summary of the proposed regulatory action. Where provisions of an existing regulation are being amended, explain how the existing regulation will be changed.*

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The board will review the entire regulation for changes such as correcting references to other regulations, incorporating the agency’s guidance policies, maintaining consistency in definitions, and eliminating sections that overlap with other regulations such as provisions relating to fees and waivers of fees.

The board proposes to modify technological references and design standards throughout the regulation to incorporate available technology. Further, the board will propose clarifications and/or additions to design standards for design flows, chlorine disinfection, disinfection, ultraviolet disinfection, and post aeration. In addition, the board will aggregate design standards where possible.

The board will review 12 VAC 5-640-110 through 340 for consistency with current authorities for issuance of construction and operation permits, variances, enforcement, hearings, suspension and revocation of

permits. In addition, the board will evaluate the provisions of the regulation for consistency with other federal or state laws, statutes and regulations.

The board proposes to modify sections 12 VAC 5-640-350 through 380 on treatment system approval to provide consistency on treatment system approvals between various board regulations.

The board will consider proposing modifications to 12 VAC 5-640-400 to add wetlands as a special class of discharge point and add a new section that provides minimum design standards for this discharge point class.

The board will propose modifications to 12 VAC 5-640-490 through 520 to reflect the revised system approval protocol in sections 350 through 380. The board will also seek approval to allow Alternative Onsite Sewage System (AOSS) licensed operators to provide operation services for these systems in addition to Class IV-licensed Wastewater Works operators.

The board will consider modifications to address the nutrient impact from these discharges on the Chesapeake Bay TMDL.

In addition, the board will contemplate other amendments based on feedback and input provided by the internal and external Technical Advisory Committees and by the general public while the board develops the proposed amendments. Further, the board will examine other amendments, authorized by the Code, which are consistent with the agency’s current policies and procedures and which will better enable the board to carry out its responsibilities for the safe and sanitary treatment and disposal of sewage so as to protect public health and the environment.

**Alternatives**

*Please describe all viable alternatives to the proposed regulatory action that have been or will be considered to meet the essential purpose of the action. Also, please describe the process by which the agency has considered or will consider other alternatives for achieving the need in the most cost-effective manner.*

These regulations are mandated by the Code. The other available alternative is to continue with the current regulations. However, in light of the antiquated technological and regulatory standards contained in the current regulations and in light of the potential redundancies and inconsistencies with other regulations that are contained the current regulations, the board feels that amending the regulations will better enable the board to effectively carry out its public health responsibilities under title 32.1 of the Code.

**Public participation**

*Please indicate whether the agency is seeking comments on the intended regulatory action, including ideas to assist the agency in the development of the proposal and the costs and benefits of the alternatives stated in this notice or other alternatives. Also, indicate whether a public hearing is to be held to receive comments on this notice.*

The agency is seeking comments on the intended regulatory action, including but not limited to: 1) ideas to assist in the development of a proposal; 2) the costs and benefits of the alternatives stated in this background document or other alternatives; and, 3) potential impacts of the regulation. The agency is also seeking information on impacts on small businesses as defined in § 2.2-4007.1 of the Code. Information may include 1) projected reporting, recordkeeping and other administrative costs; 2) probable

effect of the regulation on affected small businesses; and, 3) description of less intrusive or costly alternative methods of achieving the purpose of the regulation.

Anyone wishing to submit comments may do so via the Regulatory Town Hall website, [www.townhall.virginia.gov](http://www.townhall.virginia.gov), or by mail, email, or fax to Marcia Degen, 109 Governor Street, 5<sup>th</sup> floor, Richmond, Virginia 23219, 804-387-1883 (phone), 804-864-7475 (fax), [Marcia.Degen@vdh.virginia.gov](mailto:Marcia.Degen@vdh.virginia.gov). Written comments must include the name and address of the commenter. In order to be considered, comments must be received by the last day of the public comment period.

The agency will hold a public hearing; notice of the hearing will be posted on the Virginia Regulatory Town Hall website ([www.townhall.virginia.gov](http://www.townhall.virginia.gov)) and can be found in the Calendar of Events section of the Virginia Register of Regulations. Both oral and written comments may be submitted at that time.

### Participatory approach

*Please indicate, to the extent known, if advisers (e.g., ad hoc advisory committees, regulatory advisory panels) will be involved in the development of the proposed regulation. Indicate that 1) the agency is not using the participatory approach in the development of the proposal because the agency has authorized proceeding without using the participatory approach; 2) the agency is using the participatory approach in the development of the proposal; or 3) the agency is inviting comment on whether to use the participatory approach to assist the agency in the development of a proposal.*

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VDH will be using the participatory approach in the development of the revised regulations. The agency will convene an internal Technical Advisory Committee initially to develop a working draft of the proposed amendments to the regulation. An external Technical Advisory Committee will then be convened to develop the final proposed amendments to the regulation. All interested parties who would like to participate should contact Marcia Degen, 109 Governor Street, 5<sup>th</sup> floor, Richmond, Virginia 23219, 804-387-1883 (phone), 804-864-7475 (fax), [Marcia.Degen@vdh.virginia.gov](mailto:Marcia.Degen@vdh.virginia.gov).

### Family impact

*Assess the potential impact of the proposed regulatory action on the institution of the family and family stability including to what extent the regulatory action will: 1) strengthen or erode the authority and rights of parents in the education, nurturing, and supervision of their children; 2) encourage or discourage economic self-sufficiency, self-pride, and the assumption of responsibility for oneself, one's spouse, and one's children and/or elderly parents; 3) strengthen or erode the marital commitment; and 4) increase or decrease disposable family income.*

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- 1) The proposed modification of these regulations will neither strengthen nor erode the authority and rights of parents in the education, nurturing, and supervision of their children.
  - 2) The proposed modification of these regulations will neither encourage nor discourage economic self-sufficiency, self-pride, nor the assumption of responsibility for oneself, one's spouse, and one's children and/or elderly parents.
  - 3) The proposed modification of these regulations will neither strengthen nor erode the marital commitment.
  - 4) The proposed modification of these regulations will neither increase nor decrease disposable family income.

**Periodic review**

*Per Executive Order 14 (2010), each existing regulation shall be reviewed **at least once every four years**.*

***If this NOIRA is not the result of a periodic review of the regulation, please delete this entire section.***

*If this NOIRA is the result of a periodic review, please (1) summarize all comments received during the public comment period following the publication of the Notice of Periodic Review, and (2) indicate whether the regulation meets the criteria set out in Executive Order 14 (2010), e.g., is necessary for the protection of public health, safety, and welfare, and is clearly written and easily understandable.*

Commenter	Comment	Agency response
John Hammond	The regulations should be retained in their current form.	Due to the age of the regulations, the board intends to open the regulations and, at a minimum, update regulatory and technology references, and eliminate conflicts with other regulations that have been promulgated since the adoption of this regulation in 1992.
Robert E. Lee, P.E.	<ul style="list-style-type: none"> <li>• The regulations should be retained due to the potential for serious water quality problems from these discharges.</li> <li>• The regulations should be revised to improve accountability between the two jurisdictional agencies (Virginia Department of Health (VDH) and Virginia Department of Environmental Quality (DEQ)).</li> <li>• The Civil Penalty Regulation currently at the Governor's office needs to be signed to provide effective administration of these regulations.</li> <li>• The regulations should be modified to allow VDH to oversee all facilities covered by the DEQ General Permit for &lt;1000 gpd domestic discharges and not just the individual single family home subset because the discharges in this category are not receiving proper oversight from DEQ.</li> <li>• Incorporate wetlands as a discharge point option and spray irrigation (&lt;1000 gpd currently allowed under a MOU with DEQ</li> </ul>	<ul style="list-style-type: none"> <li>• The board agrees that the regulations should be retained due to the potential public health and environmental impacts.</li> <li>• Enforcement coordination between the two agencies and within VDH will be evaluated and improved where possible.</li> <li>• The board supports the adoption of the Civil Penalty Regulation.</li> <li>• The expansion of the applicability of the design standards in these regulations to all facilities permitted through DEQ's General Permit would provide for greater consistency in the design of these smaller systems. Expansion of the Board's inspection and oversight authority would have to be evaluated in regards to existing authorities and available staff.</li> <li>• The board will consider the addition of wetlands as a potential discharge point in the regulation revisions. Spray irrigation cannot be added to this regulation as a DEQ General</li> </ul>

	for residential systems)	Permit is not issued for those facilities. The board is considering adding the spray irrigation design to the Sewage Handling and Disposal Regulations 12 VAC 5-610-10 et seq.
Stephen M. Johnson, P.E.	<ul style="list-style-type: none"> <li>• Specific minimum criteria for UV disinfection should be added and the use of UV over chlorine should be encouraged.</li> <li>• Consideration should be given to making this permit applicable to all discharges less than or equal to 1000 gpd.</li> <li>• Clarification of the paperwork required by both agencies is needed.</li> </ul>	<ul style="list-style-type: none"> <li>• The board intends to add ultraviolet disinfection (UV) with appropriate minimum standards as a viable disinfection alternative. VDH does not support or encourage one viable alternative over another.</li> <li>• The expansion of the applicability of the design standards in these regulations to all facilities permitted through DEQ's General Permit would provide for greater consistency in the design of these smaller systems. Expansion of the board's inspection and oversight authority would have to be evaluated in regards to existing authorities and available staff.</li> <li>• The board will make revisions to clarify paperwork requirements.</li> </ul>

The regulations are necessary for the protection of public health, safety and welfare. Failure to have adequate design standards for these small discharges will affect public health and the environment due to inadequate treatment and disinfection. Due to the age of the regulation (1992), a number of inconsistencies have arisen that affect the clarity of the regulations. The regulations will be amended so that they are based on the best reasonably available and reliable, scientific, economic, and other information concerning the need for, and consequences of, the regulations. The regulations will be amended so that they are designed to achieve their intended objective in the most efficient, cost-effective manner. In addition, the regulations are in accordance with statutory provisions related to impact on small businesses. Further, the regulations do not adversely impact existing and potential Virginia employers and their ability to maintain and increase the number of jobs in the Commonwealth.

**Small business impact review**

*Pursuant to § 2.2-4007.1 E and F each existing regulation shall be reviewed **at least once every five years** to ensure that it minimizes the economic impact on small businesses.*

***If this NOIRA will not include a review of the entire regulation for small business impact, please delete this entire section.***

*If this NOIRA will include a review of the entire regulation for small business impact, please include, pursuant to § 2.2-4007.1 E and F, a discussion of the agency's consideration of: (1) the continued need for the regulation; (2) the complexity of the regulation; (3) the extent to which the regulation overlaps, duplicates, or conflicts with federal or state law or regulation; and (4) the length of time since the regulation has been evaluated or the degree to which technology, economic conditions, or other factors have changed in the area affected by the regulation. Also, include a discussion of the agency's determination whether the regulation should be amended or repealed, consistent with the stated objectives of applicable law, to minimize the economic impact of regulations on small businesses.*

These regulations specifically are only applicable to individual single family home dwellings and hence would not have a direct impact on small businesses.

- (1) It is necessary to retain these regulations to provide design, operation, and maintenance standards for these small discharging systems.
- (2) The regulations are currently fairly complex, and the board intends to simplify the regulations where possible.
- (3) The board intends to eliminate any provisions of these regulations that overlap, duplicate or conflict with federal or state laws or regulations in this proposed regulatory action. These regulations do work in conjunction with 9 VAC 25-110-10 et seq. and clarification on how these regulations function in cooperation with the DEQ regulation is needed.
- (4) The board has not amended this regulation since its original adoption in 1992. The technology available for treating small wastewater flows has changed and expanded considerably since 1992. The regulations do not include the range of options now available.

VDH's Division of Onsite Sewage and Water Services, Environmental Engineering, and Marina Programs has evaluated the regulations and has determined that they do not impose any unnecessary economic burdens on small businesses. Furthermore, the board will review the proposed amendments to ensure that they do not impose any unnecessary economic burdens on small businesses.