



## Virginia Department of Planning and Budget **Economic Impact Analysis**

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**12 VAC 5-610 Sewage Handling and Disposal Regulations**  
**Department of Health**  
July 31, 2014

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### **Summary of the Proposed Amendments to Regulation**

Pursuant to Chapter 202 of the 2013 *Acts of Assembly*, the Board of Health (Board) proposes to incorporate requirements for the use of gravelless material<sup>1</sup> and drip dispersal<sup>2</sup> in onsite sewage systems in this regulation. The legislation specifies that the regulations shall include the following requirements:

- i) *Specifications for the physical construction of chamber and bundled expanded polystyrene effluent distribution systems including minimum exterior width, height, effluent storage capacity, and structural capacity;*
- ii) *Requirements for a permeable interface between chamber and bundled expanded polystyrene effluent distribution systems and trench sidewall soil surfaces for the absorption of wastewater;*
- iii) *Criteria for the allowable slope, maximum length, minimum sidewall depth, and minimum lateral separation of chamber and bundled expanded polystyrene effluent distribution system absorption trenches;*

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<sup>1</sup> Gravelless Material means a proprietary product specifically manufactured to disperse effluent within the absorption trench of an onsite sewage system without the use of gravel. Gravelless material may include chamber, bundled expanded polystyrene, and multi-pipe systems.

<sup>2</sup> Drip Dispersal means an onsite sewage system that applies wastewater in an even and controlled manner over an absorption area. Drip dispersal components may include treatment components, a flow equalization pump tank, a filtration system, a flow measurement method, supply and return piping, small diameter pipe with emitters, air/vacuum release valves, redistribution controls, and electromechanical components or controls.

- iv) *Criteria for substituting chamber and bundled expanded polystyrene effluent distribution systems for gravity percolation trenches and gravel and crushed stone low pressure systems;*
- v) *Criteria for determining the minimum area requirements for chamber and bundled expanded polystyrene effluent distribution system absorption trenches; and*
- vi) *Such other requirements pertaining to the promulgation of chamber and bundled expanded polystyrene effluent distribution system regulations for onsite sewage systems as may be deemed necessary by the Board.*

The Board's proposed regulatory amendments include these requirements and criteria.

## **Result of Analysis**

The benefits likely exceed the costs for all proposed changes.

## **Estimated Economic Impact**

Since 2002, the Virginia Department of Health (VDH) has approved through policies gravelless material as an acceptable means of dispersing effluent. VDH has also approved through policies drip dispersal as an acceptable means of transmitting effluent. The Board's proposed, requirements, specifications, and criteria are similar to those set by VDH in practice; although there are some differences. Placing the requirements, specifications, and criteria in regulation will be beneficial in that it will increase clarity for the public.

In practice VDH has required a \$100,000 letter of credit and a 5-year limited warranty from manufacturers for approval of use of their gravelless (i.e., plastic) systems. VDH believes that the 5-year limited warranty has not been a binding constraint. In other words, it is consistent with what the manufacturers offer anyway. In the 15 plus years that this program has existed, there have been no instances where they have been a need to access any of these letters of credit to pay for failed manufactured product.

Under the proposed regulations, neither the letter of credit nor the warranty will be required. There are currently five manufacturers who have approved gravelless systems, and consequently each hold a \$100,000 letter of credit. Manufacturers will save the cost of

maintaining the letter of credit, approximately \$3,250 per year per firm, under the proposed regulations.

In practice VDH has allowed up to 50% reduction in drainage field while using gravelless system, but required an informed consent form signed by homeowner. Under the proposed regulation the drainage field can be reduced by at most 25%, but no signature from the homeowner is required.

## **Businesses and Entities Affected**

The proposed amendments may affect applicants for onsite sewage system construction permits and businesses providing services related to onsite sewage systems; onsite soil evaluators, professional engineers, onsite sewage system installers, and product manufacturers. Applicants and service providers are only affected when gravelless material or drip dispersal components are selected.

In calendar year 2013, VDH processed approximately 13,000 applications. The agency estimates that there are approximately 400 licensed individuals providing site evaluation and design services for onsite sewage systems. Additionally, there are approximately 215 individuals licensed to install onsite sewage systems. The vast majority of these service providers are small businesses. There are also 5 potentially affected manufacturers.

## **Localities Particularly Affected**

The proposed amendment does not disproportionately affect particular localities.

## **Projected Impact on Employment**

The proposed amendments are unlikely to significantly affect employment.

## **Effects on the Use and Value of Private Property**

The proposed elimination of the letter of credit requirement will save manufacturers approximately \$3,250 per year.

## **Small Businesses: Costs and Other Effects**

The proposed elimination of the letter of credit requirement will reduce costs for small manufacturers of products used to disperse effluent within the absorption trench of an onsite sewage system without the use of gravel.

## Small Businesses: Alternative Method that Minimizes Adverse Impact

The proposed amendments will not adversely affect small businesses.

## Real Estate Development Costs

The proposed amendments are unlikely to significantly affect real estate development costs.

## Legal Mandate

**General:** The Department of Planning and Budget (DPB) has analyzed the economic impact of this proposed regulation in accordance with § 2.2-4007.04 of the Code of Virginia and Executive Order Number 17 (2014). Section 2.2-4007.04 requires that such economic impact analyses determine the public benefits and costs of the proposed amendments. Further the report should include but not be limited to:

- the projected number of businesses or other entities to whom the proposed regulatory action would apply,
- the identity of any localities and types of businesses or other entities particularly affected,
- the projected number of persons and employment positions to be affected,
- the projected costs to affected businesses or entities to implement or comply with the regulation, and
- the impact on the use and value of private property.

**Small Businesses:** If the proposed regulatory action will have an adverse effect on small businesses, § 2.2-4007.04 requires that such economic impact analyses include:

- an identification and estimate of the number of small businesses subject to the proposed regulation,
- the projected reporting, recordkeeping, and other administrative costs required for small businesses to comply with the proposed regulation, including the type of professional skills necessary for preparing required reports and other documents,
- a statement of the probable effect of the proposed regulation on affected small businesses, and
- a description of any less intrusive or less costly alternative methods of achieving the purpose of the proposed regulation.

Additionally, pursuant to § 2.2-4007.1, if there is a finding that a proposed regulation may have an adverse impact on small business, the Joint Commission on Administrative Rules (JCAR) is notified at the time the proposed regulation is submitted to the *Virginia Register of Regulations* for publication. This analysis shall represent DPB's best estimate for the purposes of public review and comment on the proposed regulation.

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