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

<b>Agency name</b>	Virginia Department of Health (Department)
<b>Virginia Administrative Code (VAC) Chapter citation(s)</b>	12VAC5-635
<b>VAC Chapter title(s)</b>	Rainwater Harvesting Systems Regulations
<b>Action title</b>	Rainwater Harvesting Regulations
<b>Date this document prepared</b>	June 8, 2020

This information is required for executive branch review and the Virginia Registrar of Regulations, pursuant to the Virginia Administrative Process Act (APA), Executive Order 14 (as amended, July 16, 2018), the Regulations for Filing and Publishing Agency Regulations (1VAC7-10), and the *Form and Style Requirements for the Virginia Register of Regulations and Virginia Administrative Code*.

### Brief Summary

*Provide a brief summary (preferably no more than 2 or 3 paragraphs) of the subject matter, intent, and goals of this regulatory change (i.e., new regulation, amendments to an existing regulation, or repeal of an existing regulation).*

The Rainwater Harvesting System Regulations (Regulations) are new regulations to provide standards for the use of rainwater harvesting systems, including systems that collect rainwater for human consumption. The Regulations will promote the use of rainwater as means to reduce fresh water consumption, ease demands on public treatment works and water supply systems, and promote conservation.

### Acronyms and Definitions

*Define all acronyms or technical definitions used in this form.*

ARCSEA      American Rainwater Catchment Systems Association  
ICC            International Codes Council  
VUSBC       Virginia Uniform Statewide Building Code

## Mandate and Impetus

*Identify the mandate for this regulatory change and any other impetus that specifically prompted its initiation (e.g., new or modified mandate, petition for rulemaking, periodic review, or board decision). For purposes of executive branch review, "mandate" has the same meaning as defined in Executive Order 14 (as amended, July 16, 2018), "a directive from the General Assembly, the federal government, or a court that requires that a regulation be promulgated, amended, or repealed in whole or part."*

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House Bill 192, 2018 Acts of the Assembly Ch. 817. The 2018 Virginia General Assembly enacted House Bill 192, which amended § 32.1-248.2 of the Code of Virginia (Code) to require the Board of Health (Board) to adopt regulations regarding the use of gray water and rainwater. Regulations pertaining to gray water will be addressed in revision of the Sewage Handling and Disposal Regulations (12VAC5-610). Regulations regarding use of rainwater are required to (i) describe the conditions under which rainwater may appropriately be used and for what purposes; and (ii) provide standards for the use of rainwater harvesting systems, including systems that collect rainwater for use by commercial enterprises but do not provide water for human consumption, as defined in § 32.1-167.

## Legal Basis

*Identify (1) the promulgating agency, and (2) the state and/or federal legal authority for the regulatory change, including the most relevant citations to the Code of Virginia and Acts of Assembly chapter number(s), if applicable. Your citation must include a specific provision, if any, authorizing the promulgating agency to regulate this specific subject or program, as well as a reference to the agency's overall regulatory authority.*

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Section 32.1-12 of the Code permits the Board to make, adopt, promulgate, and enforce regulations and provide for reasonable variances and exemptions therefrom as may be necessary to carry out the provisions of Title 32.1 of the Code. Section 32.1-248.2 of the Code requires the Board to adopt regulations regarding use of rainwater and standards for the use of rainwater harvesting systems, including the conditions under which rainwater may be appropriately used and for what purposes.

## Purpose

*Describe the specific reasons why the agency has determined that this regulation is essential to protect the health, safety, or welfare of citizens. In addition, explain any potential issues that may need to be addressed as the regulation is developed.*

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Rainwater has been harvested and used for centuries in the Commonwealth in the absence of guidance or regulation addressing the protection of human health. In recent years, the harvesting

and use of rainwater for non-potable purposes has occurred under the Department's March 31, 2011, Virginia Rainwater Harvesting & Use Guidelines (GMP-2011-01), and in accordance with the requirements of the VUSBC, and the International Plumbing Code.

Over the past decade, rainwater harvesting systems have become more common across North America. Officials responsible for inspecting these systems have voiced their need for more detailed design parameters to ensure safe implementation of these systems to protect public health. New information and research has improved understanding of risk to public health associated with rainwater harvesting. For example, the ARCSA and the ICC have developed standards for the use of harvested rainwater based on this new information and research. In turn, the Regulations can address this new information and research, including standards based thereon.

Water used for human consumption in Virginia is currently provided from permitted waterworks and from private wells, both programs regulated by the Department. However, a demand for another source of water supply exists where public source and groundwater availability is limited. For example, groundwater limitations may occur (i) as a result of natural scarcity or contamination, or (ii) in coastal areas under threat of inundation or salt water intrusion. In addition, rainwater harvesting is an emerging technology with early adopters having interest in natural resource protection. Therefore, the Department believes it is necessary to establish reasonable public health and safety regulations for rainwater harvesting used for human consumption to meet these needs and interests of citizens of the Commonwealth.

## Substance

*Briefly identify and explain the new substantive provisions that are being considered, the substantive changes to existing sections that are being considered, or both.*

The following substantive provisions are being considered for inclusion in the Regulations:

- Definitions as necessary for consistency with the Code of Virginia, other regulations and uniform code documents related to rainwater harvesting, storm water, the VUSBC, and current industry standards;
- Reference to administrative processes to reflect current law and to provide consistency with other Department regulations;
- Identification of reasonable exemptions from the Regulations (e.g., rain barrels);
- Develop standards for water safety plans;
- Establish criteria to acknowledge nationally recognized standards and certifications – including, but not limited to, the American Society of Plumbing Engineers, National Sanitation Foundation, ARCSA, ICC, and American Society of Sanitary Engineering – for approval of rainwater harvesting components and certification of persons involved in the design, installation, inspection, repair, and maintenance of rainwater harvesting systems;
- Develop standards for rainwater harvesting performance objectives;
- A requirement that rainwater system components meet national lead-free standards;
- Develop standards for rainwater harvesting collection parameters;

- Develop standards for drought response;
- Develop standards for rainwater harvesting conveyance system requirements;
- Develop standards for rainwater pre-filtration;
- Develop standards for harvested rainwater storage;
- Develop pump and filtration parameters;
- Develop disinfection and other treatment parameters;
- Develop water quality parameters for systems used for human consumption;
- Develop inspection, operation, and maintenance requirements for rainwater harvesting systems;
- Develop cross connection prevention and backflow prevention standards;
- Develop system permit requirements; and
- Develop alternate compliance pathways for rainwater to be used in applications for human consumption and applications not for human consumption.

### **Alternatives to Regulation**

*Describe any viable alternatives to the regulatory change that were considered, and the rationale used by the agency to select the least burdensome or intrusive alternative that meets the essential purpose of the regulatory change. Also, include discussion of less intrusive or less costly alternatives for small businesses, as defined in § 2.2-4007.1 of the Code of Virginia, of achieving the purpose of the regulatory change.*

Section 32.1-248.2 of the Code requires the Board to adopt regulations regarding the use of rainwater and to provide standards for the use of rainwater harvesting systems, including systems that collect rainwater for use by commercial enterprises but do not provide water for human consumption, as defined in § 32.1-167. The alternatives considered were:

- Adaptation of the Department’s Virginia Rainwater Harvesting & Use Guidelines (GMP-2011-01) from guidance to regulation, but only for uses not including human consumption.
- Development of new regulations.

The Department concluded that although a straightforward adaptation of the existing guidelines would comply with § 32.1-248.2 of the Code, it would not fully address the goals implied in the statute. In addition, it would not represent an avenue to address the demand for potable water supply where no other water source is feasible. Further, it would not be consistent with mandates elsewhere in the Code relative to resource protection and management (for example, groundwater management areas). This proposed action includes potential benefits for small businesses, primarily, but not limited to, manufacturers and sellers of rainwater harvesting systems and system components, plumbers, electricians, and water quality laboratories, as it will clarify requirements for system design, installation, operation and maintenance, and water quality standards.

### **Periodic Review and Small Business Impact Review Announcement**

*If you wish to use this regulatory action to conduct, and this NOIRA to announce, a periodic review (pursuant to § 2.2-4017 of the Code of Virginia and Executive Order 14 (as amended, July 16, 2018)), and a small business impact review (§ 2.2-4007.1 of the Code of Virginia) of this regulation, keep the following text. Modify as necessary for your agency. Otherwise, delete the paragraph below and insert "This NOIRA is not being used to announce a periodic review or a small business impact review."*

This NOIRA is not being used to announce a periodic review or a small business impact review.

## Public Participation

*Indicate how the public should contact the agency to submit comments on this regulation, and whether a public hearing will be held, by completing the text below. In addition, as required by § 2.2-4007.02 of the Code of Virginia describe any other means that will be used to identify and notify interested parties and seek their input, such as regulatory advisory panels or general notices.*

The Virginia Department of Health is providing an opportunity for comments on this regulatory proposal, including but not limited to (i) the costs and benefits of the regulatory proposal, (ii) any alternative approaches, and (iii) the potential impacts of the regulation.

Anyone wishing to submit written comments for the public comment file may do so through the Public Comment Forums feature of the Virginia Regulatory Town Hall website at: <https://townhall.virginia.gov>. Comments may also be submitted by mail, email or fax to Anthony W. Creech, P.G., Environmental Technical Programs Manager, Virginia Department of Health, Office of Environmental Health Services, 109 Governor Street, Richmond, Virginia 23219, 804-864-7470 (Office), 804-864-7475 (Fax), [anthony.creech@vdh.virginia.gov](mailto:anthony.creech@vdh.virginia.gov). In order to be considered, comments must be received by 11:59 pm on the last day of the public comment period.

A public hearing will not be held following the publication of the proposed stage of this regulatory action.