



townhall.virginia.gov

Notice of Intended Regulatory Action (NOIRA) Agency Background Document

Agency name	Virginia Department of Health
Virginia Administrative Code (VAC) citation(s)	12VAC5-590 <i>et. seq</i>
Regulation title(s)	<i>Waterworks Regulations</i>
Action title	Amend and update the <i>Waterworks Regulations</i>
Date this document prepared	June 28, 2017

This information is required for executive branch review and the Virginia Registrar of Regulations, pursuant to the Virginia Administrative Process Act (APA), Executive Orders 17 (2014) and 58 (1999), and the *Virginia Register Form, Style, and Procedure Manual*.

Subject matter and intent

The planned regulatory action is a comprehensive update of the *Waterworks Regulations*, including Part I – General Framework for Waterworks Regulations, Part II - Operation Regulations for Waterworks, and Part III - Manual of Practice for Waterworks Design. Part IV will be incorporated into Parts II and III, and appendices will be deleted or incorporated into the body of the regulations. This regulatory action will reorganize much of the content in Part II into smaller sections to improve clarity and readability, but will not change the requirements in the regulations that are necessary for the state to retain primary enforcement responsibility for waterworks in Virginia.

The intent of the regulatory action is to amend and update the *Waterworks Regulations* to ensure they are clear, concise, and technically correct, which will facilitate the permitting, design, construction and operation of waterworks in Virginia.

The goal of the regulatory action is to establish requirements for the basic design, construction, and operation of waterworks and to set enforceable standards for water quality to ensure waterworks provide safe and reliable drinking water that protects public health.

Legal basis

§ 32.1-169 of the *Code of Virginia* provides that the Board of Health (board) shall have general supervision and control over all water supplies and waterworks in the Commonwealth insofar as the bacteriological, chemical, radiological, and physical quality of waters furnished for human consumption may affect the public health and welfare and may require that all water supplies be pure water. In exercising such supervision and control, the board shall recognize the relationship between an owner's financial, technical, managerial, and operational capabilities and his capacity to comply with state and federal drinking water standards.

§ 32.1-170 of the *Code of Virginia* authorizes the board to promulgate regulations to govern waterworks, water supplies, and pure water to protect the public health and promote the public welfare. These regulations shall include criteria and procedures to accomplish these purposes.

§§ 32.1-167 through 32.1-176 of the *Code of Virginia* provide additional details regarding the board's authorities and responsibilities for regulating waterworks in Virginia.

Purpose

The purpose of this action is to amend the *Waterworks Regulations* to update and clarify the requirements for planning, designing, constructing and operating waterworks, necessary to protect public health by supplying safe drinking water to Virginians.

The board promulgated the *Waterworks Regulations* in 1991 and significantly amended them in 1993. Sections of the *Waterworks Regulations*, primarily the definitions (12VAC5-590-10) and Part II, have been amended as needed to incorporate federal requirements in the *Safe Drinking Water Act* (42 UCS § 300f et seq.) and National Drinking Water Regulations (40 CFR Parts 141, 142, and 143) that are necessary for the state to retain primary enforcement responsibility for waterworks in Virginia. The Virginia Department of Health-Office of Drinking Water, the Waterworks Advisory Committee to the State Health Commissioner, and a Regulatory Advisory Panel consisting of waterworks stakeholders, collectively recommend that Parts I and III of the current *Waterworks Regulations* be updated in the areas of waterworks' permitting, design, and construction, and Part II be amended to clarify operationing requirements and improve readability. This regulatory action will follow the recommendations and also incorporate: current water treatment processes; current monitoring and control technologies; changes to water consumption patterns resulting from shifts in consumer use and water-saving plumbing fixtures; changes to source water quality and availability due to increased water demands; and new state laws and regulations governing source water supply planning and withdrawal.

Substance

The proposed amendments revise the order in which information is provided; add new sections to expand or clarify existing provisions or incorporate new provisions; delete sections in whole or in part, to remove obsolete information and duplication; revise reference and/or citations to be current; and correct sentence structure, grammar, spelling, and typographical errors. Substantive changes include but are not limited to:

Part I - Provisions for Waterworks Regulations

1. Revise, add, or delete definitions.
2. Add units of measurement.
3. Add new section on the Waterworks Advisory Committee.
4. Add a new section on relationship to the Virginia Uniform Statewide Building Code.

5. Add a new section on administrative proceedings and update enforcement requirements to be more consistent with the APA and Title 32.1 of the *Code of Virginia*.
6. Clarify and streamline the permit process, including the requirements for obtaining a construction permit.
7. Add requirements and circumstances for issuance of a temporary operation permit.

Part II - Operation Regulations for Waterworks

8. Move and consolidate all water quality standards, maximum contaminant levels, action levels, treatment techniques, and maximum disinfectant levels and goals to first section of Part II.
9. Revise and clarify the procedure for determining surface water influence of groundwater sources.
10. Reorganize and move content of 5 large sections (370, 410, 420, 530, 545) into several new, smaller sections.
11. Revise and clarify the classification of waterworks, operator requirements, and operator attendance.
12. Add new sections for abandoning and reactivating wells.
13. Move and revise operation report content requirements from Appendix G.
14. Revise and clarify cross connection control program requirements.

Part III - Manual of Practice for Waterworks Design

15. Update design water demand and waterworks capacity requirements.
16. Revise and clarify metering, building design, layout, and laboratory design requirements.
17. Revise and clarify new source development requirements for surface water and groundwater sources, including springs.
18. Delete safe yield definition for surface water sources.
19. Clarify well construction requirements and well classification.
20. Distinguish and clarify construction, testing and capacity requirements for wells located in designated groundwater management areas (9VAC25-600) .
21. Revise and clarify water treatment processes. Add new sections for membrane filtration, bag and cartridge filtration, pre-engineered package treatment units, powdered activated carbon, disinfection processes using chloramines, chlorine dioxide, ultraviolet light and ozone.
22. Clarify design requirements for pump stations and equipment.
23. Distinguish atmospheric and pressure storage tank design requirements.
24. Add new section on water loading stations.

Part IV- Exceptions for Noncommunity Waterworks

25. Move content to applicable sections in Parts II and III and repeal this part.

Appendices

26. Appendix A - Repeal.
27. Appendix B - Extract relevant content and move to Part II. Repeal appendix.
28. Appendix C - Repeal.
29. Appendix D - Repeal.
30. Appendix E - Repeal.
31. Appendices F, H, J, K have been repealed; No change.
32. Appendix G - Revise content and move to Part II. Repeal appendix.
33. Appendix I - Revise content and move to Part II. Repeal appendix.
34. Appendix L - Extract relevant content and move to Part II. Repeal appendix.
35. Appendix M - Repeal.
36. Appendix N - Add reference in Part III to federal regulations for Best Available Treatment of inorganic and organic compounds. Repeal appendix.
37. Appendix O - Extract relevant content and move to Part II. Repeal appendix.
38. Appendix P - Add reference in Part III to federal regulations for Best Available Treatment of radionuclides. Repeal appendix.

Alternatives

The no-action alternative to revising the *Waterworks Regulations* would allow waterworks permitting, operation, and design requirements to remain unclear, conflicting, or unaddressed, and outdated practices would continue.

A partial revision of the *Waterworks Regulations*, to incorporate provisions that currently exist in policy or guidance, is one alternative. However, a partial revision would not address many of the shortcomings that the full reorganization and revision would provide.

For the reasons previously stated, we are proposing to update all sections of the *Waterworks Regulations*.

Public participation

The agency is seeking comments on this 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, and the 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 of Virginia*. Information may include: projected reporting, recordkeeping, and other administrative costs; the probable effect of the regulation on affected small businesses; and the description of less intrusive or costly alternatives for achieving the purpose of the regulation.

Anyone wishing to submit comments may do so via the Regulatory Town Hall website (<http://www.townhall.virginia.gov>), or by mail, email, or fax to Bennett K. Ragnauth, 109 Governor Street, Room 627, Richmond, Virginia 23219, fax: 804-864-7521, phone: 804-864-7502, bennett.ragnauth@vdh.virginia.gov. Written comments must include the name and address of the commenter. In order to be considered, comments must be received by midnight on the last day of the public comment period.

A regulatory advisory panel will be appointed to assist in decision-making with regard to the proposed regulations.

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